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Capitalization

A Cultural Guide



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Fabian Muniesa, Liliana Doganova, Horacio Ortiz, Álvaro Pina-Stranger, Florence Paterson, Alaric Bourgoïn, Véra Ehrenstein, Pierre-André Juven, David Pontille, Başak Saraç-Lesavre and Guillaume Yon, *Capitalization: A Cultural Guide*, Paris, Presses des Mines, Collection Sciences Sociales, 2017.

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Preamble

This book originated in the basement of the École des Mines de Paris, in the seminar room in which gatherings for the Centre de Sociologie de l'Innovation are typically held—and known to a few as the birthplace of actor-network theory. On October 18, 2011, participants in a research workshop were trying to come to terms with a strange assignment: “Describe an act of capitalization (one page).” Why such an odd task? The purpose was laudable. In a world cluttered with incantations on capital, capitalists and capitalism, it was quite a refreshing idea to test the old house recipe of turning things into processes, nouns into verbs, capital and its “isms” into an act. But the result was deplorable. Participants left the seminar frustrated, if not clueless and disoriented, with the impression of having missed something important—both the fragile specificity of an act of capitalization (what it is, exactly) and its significance for understanding what is happening (what it does to the world). This book is the result of a collective attempt to reconcile these feelings.

Fabian Muniesa had previously started to put together a few ideas with the broad aim of exploring the performative meanders of the world of business, which had opportunely translated into research funding from the European Research Council in early 2011 (Starting Grant no. 263529). Liliana Doganova, Horacio Ortiz, Álvaro Pina-Stranger and Florence Paterson joined the project, and the team quickly stumbled upon the problem that is formulated in this book. The circle then expanded to include Alaric Bourgoin, Véra Ehrenstein, Pierre-André Juven, David Pontille, Başak Saraç-Lesavre and Guillaume Yon, who had encountered different variations of the problem of capitalization in their respective investigations. The authorial collective is now disbanding as a result of the vagaries of professional life (some are no longer at the Centre de Sociologie de l'Innovation), but with the idea that the insights gained from this joint venture should now be unleashed in separate directions, multiple versions and contrasting uses, a network of intertwined references, critiques and capitalizations.

Our list of acknowledgements is quite long. It includes, first and foremost, fellow researchers at the Centre de Sociologie de l'Innovation who were ensnared into this conversation at some point or another: Madeleine Akrich, Michel Callon, Antoine Hennion, Brice Laurent, Alexandre Mallard, Cécile Méadel and Vololona Rabeharisoa. Doctoral students and postdoctoral fellows did also provide feedback and inspiration: Marie Alauzen, Mathieu Baudrin, Alexandre Camus, Clément Combes, Quentin Dufour, Ksenia Ermoshina, Pierre Gueydier, Julien Merlin, Francesca Musiani, Trine Pallesen, Jean-Baptiste Pons, Laurence Tessier, Martín Tironi, Thomas Vangeebergen, Alexandre Violle and Kathleen Zoonnekint. Parts of this project also were discussed, privately or publicly, with numerous colleagues who contributed their advice and support: Ivan Ascher, Kristin Asdal, Jens Beckert, Christian Bessy, Kean Birch, Luc Boltanski, Alice Bryer, Laure Cabantous, Ève Chiapello, Kimberly Chong, Annie Cot, Barbara Czarniawska, Will Davies, Joe Deville, Emmanuel Didier, Marie-Laure Djelic, Ali Douai, Arnaud Esquerre, Patricia Falguières, Michel Feher, Thomas Ferguson, Marion Fourcade, Pierre François, Daniel Fridman, Martin Giraudeau, Keith Hart, Penny Harvey, Claes-Fredrik Helgesson, Isabelle Huault, Sheila Jasanoff, Sarah Kaplan, Jeanne Lazarus, Adam Leaver, Élisabeth Lebovici, Marc Lenglet, Vincent-Antonin Lépinay, Andrew Leyshon, Javier Lezaun, Roni Mann, Giuseppe Mastruzzo, Bill Maurer, Afshin Mehrpouya, Renate Meyer, Peter Miller, Sabine Montagne, Daniel Neyland, Alexandra Ouroussoff, Paolo Quattrone, Kane Race, Ramón Ramos, José Santiago, Shao Jing, Michele Spanò, David Stark, Talha Syed, Nicholas Tapp, Signe Vikkelso, Christian Walter, Frederick Wherry, Zhang Hui and Zhu Yujing. We finally need to thank the persons that helped with the editorial process and the practical organization of the venture: Silvia Dekorsy, Catherine Lucas, Sandra Rodrigues and Kara Stephenson Gehman.

What the following pages offer is certainly neither a research monograph nor a systematic theorization of the matter at hand. Our aim consists rather in formulating a problem and examining the terms in which it can be properly dealt with. The discussion draws from empirical vignettes that are grounded in a number of investigations. Chapter 3 is based on research carried out by Liliana Doganova on the history of financial valuation methodologies in the United States of America and Europe. The case study used in Chapter 4 is

part of Véra Ehrenstein's research on a carbon offsetting reforestation project in the Democratic Republic of the Congo, which included field observations and interviews with project participants in 2010 and 2011. Chapter 5 draws from an extensive study by Álvaro Pina-Stranger on biotechnology milieus in France, for which he used both qualitative and quantitative methodologies, including 125 face-to-face interviews conducted in 2008 with managers of biotechnology firms and 20 with managers of venture capital firms. The materials used in Chapter 6 come from Liliana Doganova's research on the comparative sociology of technology business models developed between 2005 and 2015 and based on a series of case studies documented through interviews with entrepreneurs and investors and analysis of corporate material. The illustrations provided in Chapter 7 are based on the participatory ethnography carried out by Alaric Bourgoïn in a management consulting firm in France from 2010 to 2013. Chapter 8 is informed by studies on scientific authorship and bibliometric policy conducted by David Pontille since the late 1990s, and which include an extensive literature review on authorship strategies. The insights communicated in Chapter 9 originate in anthropological research carried out by Horacio Ortiz, which comprised participant observation in brokerage and asset management companies in New York and Paris between 2002 and 2004, professional accreditation as a financial analyst and experience as a finance instructor in business schools in Paris and Shanghai from 2008 to 2015. Chapter 10 draws from Guillaume Yon's archival research on the policy and economics of the French public electric utility in the 1950s and 1960s, carried out between 2011 and 2015. Chapter 11 is based on Pierre-André Juven's sociology of the managerial and financial reforms of public hospitals in France in the 1990s and 2000s, which draws from interviews with managers, accountants, consultants and civil servants. The problems examined in Chapter 12 are illustrated with evidence gathered by Başak Saraç-Lesavre for her investigation of nuclear waste management policy in the United States, with interviews with relevant actors and archival analysis carried out between 2011 and 2015.

The book does not aim at providing an extensive synthesis of these various research endeavors. It rather seeks at distilling a particular problem or, in other words, at *problematizing* capitalization. Its pages are marked by a particular writing style, which corresponds to the authorial group's

response to that challenge. Problematizing capitalization is no easy task if one wants to fulfil at once the expectations of specialized scholarly scrutiny and the project of a more accessible form of sensitization. Problematizing something is certainly in part about defining, explaining, modeling and criticizing it. But only in part, because in order to keep the problem alive—ductile, strange and surprising, fully available for further thought—the professorial tone needs sometimes to provide some room for drift and wander. A travel guide strikes us as the right metaphor: it can of course be more or less authoritative, but fellow travelers are always reminded that the magic they get, they get it principally from the travel, not from the guide.

Chapter 1

A Few Lineaments

*"The orchard produces the apples;
but the value of the apples produces the value of the orchard."*
– Irving Fisher, *The Rate of Interest*, 1907, pp. 13-14

What does capitalization mean? Where is it and what does it do? How can we make sense of it? And why do we need to make sense of it at all? Answering these questions requires some preparation. In this chapter, we first present a preliminary characterization of capitalization: a pervasive form of valuation that propels a consideration of return on investment and shapes our world accordingly. We then clarify how we have chosen to cope with it: as a practical process, an operation that we tackle from a pragmatist angle. Finally, we identify a few possible sites in which this operation can be investigated.

A RUDIMENTARY UNDERSTANDING OF CAPITALIZATION

Although we do not posit a straightforward definition of capitalization, we certainly can provide a clear intuition of what it is about. Capitalization is a way of considering something—specifically its value—from a certain angle. In financial parlance, capitalization is about envisaging the value of something in the terms of an investment. Valuing something means assessing the expected future monetary return from investing in it. But the notion of capitalization is also part of ordinary vocabulary and easily acquires meaning outside finance. Hence the wide angle of our interrogation: capitalization has certainly to do with finance proper, but it is also *more* than that.

Capitalizing on something can connote getting the most out of a previous undertaking, augmenting the benefits of action through the strategic use of a previous acquisition, or, simply put, maximizing advantage. One can, for example, capitalize on writing (using bits of an already published article for a book chapter) or on friendship (counting personal social ties as assets for social progress). The notion is indefectibly related, more or less literally, to the mundane idea of *capital*: money, or something comparable, that can be used to make more money, or something comparable. It is also related, perhaps more saliently, to the idea of *discount*: the value of something today depends on the value that can be derived from it in the future. Thus, the value today is deemed smaller than the value in the future (that is, it is discounted), because the future return is uncertain and investing today therefore requires taking a risk. In short, in order to capitalize on something, it must be either considered an *asset*, or turned into one. As a technique for prospective valuation, capitalization characterizes the reasoning of the banker, the financier and the entrepreneur, but can also be seen at work in situations beyond private profit. For example, capitalization methodologies can govern how governments plan actions in the public interest.

Capitalization is almost everywhere. Rules according to which credit is allocated and funding is provided today within society are based on mechanisms of financial valuation that revolve around this principle. All kinds of things—from scientific ventures to development projects, from industrial activities to cultural products, from lifeforms to lifestyles, from creative ideas to disaster protection plans—can be valued today in the light of what financial analysts, asset managers and capital budgeting specialists call the “cost of capital.” That is, by discounting expected incomes, one can estimate how worthwhile it is to finance these things in relation to the uncertainties surrounding their yields, which are calculated based on a so-called rate of interest. Indeed, all kinds of things can be affected and oriented by this valuation process. In some cases, things are created entirely for the purpose of capitalization. And these types of views, purposes and operations can also be recognized in the way we may handle things in what we quite clumsily refer as “ordinary life” (as if the capital investment template had not become ordinary enough). Thinking as an investor—that is, as one who supposedly understands what capitalization

is and knows how to handle it—is not engaged in solely by properly trained businesspeople, but also by students, scientists, residents, shoppers, parents, lovers, patients, officials, employees, artists and indigents. We do not know, as of yet, if this is good or bad but we surely know that it is important. Capitalization can, of course, have many faces, sometimes carrying the traits of blatant opportunism and other times the features of rational allocation. But what is undeniable is that it deeply intervenes in the shaping of our world, and thus deserves critical attention.

Social researchers seek to understand and explain how things are valued, and how several forms of valuation affect the ways in which things are made, made sense of, and practiced. This is particularly true for anthropology and sociology, two areas of social research in which particular attention has been devoted, for example, to commercial valuation—things being valued as they are bought and sold, and hence valued as commodities in the market. It is striking (not to mention frustrating) to observe, however, how the immense continent of valuation which is capitalization has been neglected in anthropological and sociological research. As the development of markets has been often characterized by commentators as a crucial aspect of the spread of capitalism, the focus on commodification or marketization has been repeatedly used, wrongly in our view, as the crux of an analysis of capitalistic valuation. The result is that capitalization proper—a form of valuation that propels, in our opinion, a quite singular form of reality—has been overlooked as a social fact. Why is this so? Perhaps it has been too forcefully naturalized; it exists, but there is nothing wrong with it, or at least nothing that requires any particularly novel investigative undertaking. Or perhaps it has been replaced by a chimeric object, “Capital,” which can represent anything (e.g., power, money, matter, domination, freedom, evil, good, you name it).¹

Our attempt at contributing to this inquiry is not—and could not be—an attempt to establish a model. What we provide here are just elements: elements that may foster further discussion and open avenues for research. If an inquiry into capitalization can be viewed as a collective journey, our project can be thought of as a travel guide. It is certainly incomplete, and its meanders rely on the preferences of the travelers who contributed.

Although it highlights some sites that should not be missed (i.e., social milieus, empirical situations and historical moments, as well as crucial concepts), it does not do so in an exhaustive fashion, and also suggests some incidental excursions to sites that a busy (or more independent) traveler could very well skip. That said, the guide strongly advocates for an attentive attitude and recommends an itinerary for a fairly comprehensive appraisal of the continent of capitalization.

A PRAGMATIST ANGLE

Our journey has a starting point. This is that capitalization, considered as a particular form of valuation, is best understood as a process, a relationship, a social relation. Capital, we posit, is not a thing in itself—something that one has or has not—but rather a form of action, a method of control, an act of configuration, an *operation*. Hence our shift from the substantive form to the activity: we do not principally examine capital, capitalism or the capitalist, but operations of capitalization.

This perspective is, of course, not uniquely ours. Indeed, if we write that “capitalization, considered as a particular form of valuation, is best understood as a process, a relationship, a social relation,” it is difficult not to refer to Karl Marx and to his point that “capital is not a thing, but a social relation between persons, established by the instrumentality of things” (Marx and Engels 2010b: 743). According to Marx, the process of becoming capital—what we call capitalization—requires specific conditions that were limited, in his views, to the reality of wage labor in an industrial or a colonial society. Our objective is different: we focus predominantly on realities that were hardly part of Marx’s era. But we certainly draw on Marx’s relational intuition.²

In order to further refine our starting point, though, we need to extract that relational intuition from the wider philosophical context in which Marx developed it. The accumulation of money and the transformation of everything into monetary terms occupied the broader intellectual quest of Marx and his contemporaries, as it largely occupies contemporary

concerns about the technicalities of financial investment. Yet, as many commentators have indicated, including Michel Foucault (1966), the characteristic epistemology of Karl Marx (and of Adam Smith, for that matter) still requires an understanding of valuation as a matter of match or mismatch between an object and its representation. A confrontation of labor force or its result in produced objects and services to their social valuations in the form of prices would reveal a mismatch from the perspective of Marx, if not a contradiction. From such a perspective, the prevalence of the problem of the adequateness or inadequateness of value, its truth or falsehood, is inescapable. And this is a problem that our inquiry sets out to avoid.

One important philosophical implication of our broad, pragmatist perspective is that we depart from the problem of false representation, a common problem encountered in the social critique of money, capitalism, and financial valuation alike. Indeed, this problem requires being attentive to the distinction between some kind of value that would be real and some other kind that would not be. We disregard this problem because we focus on valuation as an operation: an operation that is real as soon as it takes place, an operation that produces reality as soon as it has effects. This is, we believe, the crux of our pragmatist take. If there is something we would like to avoid (and to counter, if possible) is the scholarly discourse that claims that the valuation processes that constitute our contemporary global reality are virtual, in the sense of not real. This equates to saying that today's world is not true. But the world is true. And, if we call capitalization virtual, it is in the sense of practical and consequential, not in the sense of unreal.

So our perspective, which is focused on valuation rather than on value, and bypasses the representational quandaries of value, openly embraces a pragmatist angle by acknowledging the constitutive power of valuation, its conditions and effects, and the reality it prompts. Our social inquiry into capitalization is partial to the performative turn that shifts from value to the social work of valuation (Muniesa 2014). Of course, calling something an action, considering it to be a process rather than a fully-formed object, and further calling that action social, often creates

intellectual misunderstandings. So it is important that we clarify from the beginning, aligning our claim with some crucial pragmatist tenets, that talking about social work—not only of valuation and capitalization, but also of signification, abstraction, calculation, commodification, and financialization—does not mean focusing solely on what people think, but means also examining what people do and what happens to them, and also what happens in general to the world (not only to people). An entrepreneur doing what she needs to do in order to make her enterprise valuable in the eyes of a financier, or a potential investor trying to determine how valuable the enterprise may become are both performing this social work of valuation—social in the sense of collective, organized, meaningful and lived.

Here again, of course, we are not alone. A number of commentators on Marx's intuition also have expressed discomfort with the epistemology Marx was drawing on, and have offered ways to rectify it through a philosophy of the performative institution. For example, relying to some extent on the insights developed by Cornelius Castoriadis (1975), Jonathan Nitzan and Shimshon Bichler (2009) said that capital is not *about* power, but *is* power. The obscure but clairvoyant endeavors of Félix Guattari and Gilles Deleuze towards a pragmatist understanding of capital, which they considered to be a form of collective enunciation, also serve as a suitable background for a philosophical understanding of capitalization (Deleuze and Guattari 1972, 1980; Guattari and Alliez 1983; Guattari 2011). Numerous contemporary explorations of financialization have engaged with poststructuralist approaches in search of what we think amounts, at least in part, to a performative take on financial templates, and therefore on capitalization (e.g., Lordon 2000; Martin 2002; Froud, Johal, Leaver and Williams 2006; Sunder Rajan 2006; Leyshon and Thrift 2007; Martin, Rafferty and Bryan 2008; Wigan 2009; Aalbers 2011; Krippner 2011; Russi 2013; Davies 2014; Morgan 2014; Styhre 2014; Birch 2015; Chiapello 2015; Deville 2015; Ascher 2016). These and comparable streams of research do indeed stand as reliable traveling companions for an inquiry into capitalization. Our task here is not to refine our route in order to make it unique, but rather to refer to our own traveling scrapbook to see what we can recommend. First, we need to see where we can land.

A CULTURAL VIEW

If capitalization is an operation that takes place, then an inquiry into capitalization requires a description of both the setting and the actions involved. Capitalization is an event, an empirical moment, an occurrence, an action, and should be approached as such. The investigation must rely on an examination of situations such as: a dialogue between a technologist and a venture capitalist, an entrepreneur making sense of a financial formula, a group of consultants discussing the merits of seeing knowledge as capital, or a government accountant learning how to maximize the value of public expenditure. Close examination of the scenery, the narratives that are deployed, the devices that are practiced, and the representations that are mobilized—in short, of *performance*—becomes a critical component of this inquiry.

But capitalization is also about reach, one of global proportions. What a gentrified neighborhood looks like, how a retail chain transforms what people eat and wear in a large region, the reason why one new molecule is developed instead of another, the rationale for planting trees or cutting them, the shape of an energy infrastructure, the motive why banks thrive or fail, and the grounds on which people, money and things move in different directions are heavily marked by the nuts and bolts of capitalization. Attention must be paid to the scope and range of an operation that typically connects distant situations and configures large social realities. Since capitalization translates into the formation of social groups, distribution of resources, and determination of technological and ecological trajectories, our inquiry must trace these formations. This implies delving into the sociology of the organizational configuration of capitalization. One can simply consider, in a pragmatist vein, that a social network or a global standard are events, or situations, that do not require any particular shift in the level of inquiry. But the inquirer definitely needs to move from observing situations happening inside a room to situations happening in a relational database, in a body of technical literature, or in a shared system of standardized rules and hypotheses.

One is tempted, of course, to see here a classical bifurcation of social-scientific sight: the difference between so-called micro and macro levels. And this temptation is fair. But it is important to understand that this is only a matter of where and how one can physically stand as an inquirer, not about levels of reality as such, and most definitely not about hierarchical levels of reality, with a macro-level determining a micro-level, or the other way around. Our inquiry's perspective includes trusting the flatness of the world, which indeed resonates to quite an extent with some precepts once established by Michel Callon and Bruno Latour (1981; see also Latour 1996). Connections between sites, problems, artifacts, events, concerns and actors can indeed be traced and followed—for that is what social inquiry is about—but not easily subsumed under a cleanly hierarchical causal scheme. That would not be our point, anyway.

This means that our journey into capitalization requires an eclectic set of scholarly resources and a catholic understanding of academic disciplinary boundaries. Attention to the sociology of professional work is in order. Capitalization professionals are, most of the time, employees characterized by some kind of socially recognized, historically contingent expertise. This implies looking at capitalization from that angle: a kind of job, performed in a particular kind of organization, in a particular position within a wider system of professions. But the practices of capitalization are generally expressed through the use of technical methodologies. Formulas such as discounted cash flow (DCF), weighted average cost of capital (WACC) or economic value added (EVA) often serve as crucial instruments in these practices, and also as crucial vehicles for the particular forms of reasoning that inform or justify these practices. The study of capitalization thus can rely on the sociological and anthropological examination of technical formalism, currently a relevant topic of research with notable contributions in the area of science and technology studies. Discernment of capitalization in this line of inquiry would tend to focus on the epistemic circumstances in which these tools and concepts are formed, but also on the kind of world that these tools and concepts contribute to forming around them (and, sometimes, for them).

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