- 6. See for instance Borup et al. (2006); Brown, Kraft, and Martin (2006); Jasanoff and Kim (2009); van Lente and Rip (1998). In England, an approach known as the "sociology of expectations" is investigating the innovation process using the notion of promissory expectations (Borup et al. 2006).
- Analogically, one may investigate the role of organizational visions, often expressed in "mission statements" in creating imagined futures and orienting decisions.
- 8. Interesting empirical research on the promissory story of the driverless car is presented in Araujo, Mason, and Spring (2014).
- 9. See Chapter 8 for a description of a similar mechanism that drives the dynamics of consumer demand.
- 10. This should also qualify the claim of Sturken and Thomas (2004: 225) that "new social order is possible on the basis of the (heterogeneous) contents of collective-level projections of the future." While expectations are influential, their impact is disciplined by social institutions and existing cognitive and moral frames.
- 11. The translation in Koselleck (2004) is erroneous.

## 8. CONSUMPTION

- 1. The chapter is based on Beckert (2011).
- 2. For work on the valuation of consumer goods, see the contributions in Beckert and Aspers (2011) and Beckert and Musselin (2013) as well as Karpik (2010).
- 3. As Durkheim ([1912] 1965: 261) remarks with regard to totemistic emblems, the value "assumed by an object is not implied in the intrinsic properties of this latter: it is added to them." See also D. Marshall (2010: 64).
- 4. In his essay "Economic Possibilities for Our Grandchildren," Keynes turns briefly to the microfoundations of demand, distinguishing between two types of needs: "those needs which are absolute in the sense that we feel them whatever the situation of our fellow human beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows" (Keynes [1931] 1972: 326). While Keynes sees the first type of needs satisfied "much sooner perhaps than we are all of us aware" (326) the second type he sees as insatiable. This supports the argument that capitalist growth is ever more dependent on positional and imaginary value.
- 5. A few marginal remarks in the book relate vaguely to the economy, but the economy does not receive any systematic treatment.
- 6. The physical performance of goods is often referred to as "functional value" (Valtin 2005) or "utilitarian value" (Richins 1994). These terms appear misplaced to me because they seem to imply that other forms of value in products can emerge without having a function or utility.

- 7. Akerlof's analysis implies that a problem emerges from the asymmetric distribution of information, rather than a question of the social constitution of qualities. Following his reasoning, once everyone knows a good's qualities, an objective basis exists for judging the good and comparing it to all other goods. This fails to account for the fact that judgments of quality are socially constructed, and the criteria used to evaluate product qualities are based on social conventions. These judgments may be objective in cases where physical performance can be easily measured (such as the different chemical compositions of an oil), but in the case of objects so complex that qualities cannot be objectively established, or in cases where aesthetic qualities must be taken into account, quality is not merely measured through quality assessments—it is established by them. This phenomenon may, for instance, be observed in wine ratings (such as Parker's), which influence how consumers assess the quality of wine.
- The distinction between positional and imaginative value is based partly on distinctions among forms of symbolic consumption introduced by Marsha Richins (1994).
- 9. For the sake of avoiding misunderstanding, it should be noted this does not imply that imaginative value is purely individual; to the contrary, preferences are culturally and socially rooted. The point of this distinction is that value does not necessarily emerge from the owner's calculations of how her purchase will position her in a given social space.
- 10. A good's positional performance is public in the sense that symbolic meaning must be attributed to it by a third party in order to classify the good's owner by bestowing a certain social identity upon him. This happens independent of the owner himself, although he may be aware of the positional effects of his purchasing choices and take them into consideration as he purchases. Imaginative value is private, in that the purchaser himself ascribes symbolic meaning, even if the meaning he ascribes reflects moral values and orientations that are socially constituted (Fischer and Benson 2006; Richins 1994). The social positioning of the owner by others' judgments of the objects he possesses is therefore significantly different from the "bridging of displaced meaning" (McCracken 1988: 104) through the imaginative performance of goods. Gambling is a useful example to clarify this difference: possessing a lottery ticket does not lead to social repositioning, but may link its owner to an imaginary in which his social position is transformed.
- 11. Because the purchase of lottery tickets has a defined negative monetary utility—the statistical value of a ticket is only about half of what it costs lottery tickets should be considered to be a consumer product.
- 12. André Vereta Nahoum (2013) has written an excellent dissertation on this topic. He investigated how the Yawanawa culture, which is indigenous to the southwestern Amazon, is projected into the products of an American

cosmetics company that uses the seeds of the native Bixa Orellana plant in its products. The company markets its products using idealized images of the Yawanawa culture, which Vereta Nahoum analyzes as an instance of the commodification of culture.

- 13. See also Durkheim ([1912] 1965: 243ff.).
- 14. Schumpeter ([1912] 2006: 164) observes that from the moment an entrepreneur begins to seriously engage in a new project, its existence becomes perceptible to her.
- 15. This is not to say that identities are created and maintained through consumption patterns alone, but rather that all social groups make some demands on their members with regard to their consumption patterns, and sanction those who deviate from group norms. However, groups differ widely with regard to their tolerance for deviations and group membership involves more than consumption patterns.
- 16. Such secular-yet-sacred entities also informed later discussions of civil religion (Bellah 1967; Luckmann 1967).
- 17. The mystical and quasi-religious appearance of commodities is also an important part of Marx's analysis of commodity fetishism (Marx [1867] 1977). However, Marx attributes the exchange value of commodities to the employment of labor power in the production process, and he defines as fetishism actors' perceptions of the exchange of goods as a relationship among objects, rather than a relationship among the actors themselves. In the analysis developed here, the mystical character of goods is located in the attribution of symbolic value. Value is thus understood not from the perspective of the production process but from that of market exchange.
- 18. In this sense advertising is not merely manipulative, as a long tradition of cultural criticism maintains (Adorno and Horkheimer [1944] 2002; Galbraith [1958] 1998): it actually constitutes goods' symbolic content.
- 19. Here, one might speculate about whether societies such as the United States, in which class barriers are at least outwardly less forceful, are also societies in which imaginaries of a better future have a greater impact on consumer behavior as well as on investment decisions. If this is true, it may be an entry point in helping to explain growth differences among different countries.
- See, for instance, Felipe Gonzales's excellent dissertation (2015) on the development of the market for consumer credit in Chile.
- 21. According to Belk, Wallendorf, and Sherry (1989: 30), there are four distinct ways the sacred status of goods is maintained: the separation of the sacred from the profane, ritual, bequests, and tangibilized contamination. It would be informative to investigate which types of products are more vulnerable to disillusionment than others. It could be hypothesized that products that can also be defined as investments (art, real estate, jewelry, etc.) are the least

- vulnerable because they can evoke fantasies of increased wealth after their purchase.
- 22. The most comprehensive treatment of the role played by fantasies of a desired, better world is probably Ernst Bloch's *The Principle of Hope* (Bloch 1995). While Bloch focuses on the utopian political potential of the human ability to imagine a better future, he also discusses the experience of consumers daydreaming about new identities as they (window)shop. The transcending—that is, utopian—force of human imagination lies at the core of Bloch's analysis.
- 23. The two instruments of imagination discussed in Chapters 9 and 10 are not the only ones operating in the capitalist economy. More chapters could have been included in this book, for instance on the role of advertising and marketing as instruments for constructing the imaginaries of future satisfaction of consumers. Other instruments of imagination include accounting techniques, business plans (Giraudeau 2012; Doganova and Renault 2008), and business strategies. All these instruments are essential for the generation of fictional expectations regarding future outcomes in capitalist modernity.

## 9. FORECASTING

- Although forecasting is used in other kinds of planning, such as economic development, environmental work, or international relations, these fields lie outside the scope of this book. For examples, see Andersson (2013) and Mallard and Lakoff (2011).
- 2. For a historiography of forecasting see Antholz (2006), Dominguez, Fair, and Shapiro (1988), Martino (1983), Makridakis, Wheelwright, and Hyndman (1998), Tooze (2001), W. Friedman (2014), and Reichmann (2011).
- 3. European countries began using macroeconomic forecasting at roughly the same time. In the United Kingdom, the Cambridge Economic Service was established in 1921. In France, the Statistical Institute of the University of Paris was founded in the same year. In Germany, the *Institut für Konjunkturforschung* (Institute for Business-Cycle Research) was inaugurated in 1925 (Tooze 2001: 103). Specialized institutes of this kind were also developed in Austria, Sweden, and the Soviet Union at this time (Favero 2007: 8).
- 4. I would like to thank Timur Ergen for making this information available to me.
- See, for example, "Top 30 Failed Technology Predictions," http://listverse.com/2007/10/28/top-30-failed-technology-predictions/.
- Dominguez, Fair, and Shapiro (1988) write that even with today's econometric techniques and access to data sets, it would have been impossible to predict the Great Depression.

- 7. Evaluation studies of predictions are somewhat problematic, particularly in that the criteria for success and failure have not been fully specified. Can a prediction be considered successful if it merely points in the right direction, or must it be precisely accurate? Which is more important, the methodology employed in the prediction or the accuracy of the outcome alone? "The interpretation of 'wrong' economic forecasts depends on the validating systems. The community of economists emphasizes the process; that is, they argue that a good forecast is one that was produced in the right way. For the public, only the results count" (Reichmann 2012: 11). Even if an observed result matches a prediction, it is not clear whether the outcome is the result of the causal mechanisms assumed in the model, or it comes about due to very different mechanisms. If the latter is the case, the model remains inadequate.
- 8. See also Popper ([1957] 1964, 1982).
- 9. Assessments of the failure of macroeconomic and technological forecasts try to distinguish situations in which accurate predictions are more likely to be made from those in which they are less likely. For instance, Davidson (2010) makes use of Samuelson's (1969) notion of ergodic processes. Good historical information about how the economic system works is available for ergodic processes, which makes it possible to use statistical results from those processes to extrapolate a pattern into the future in the form of a forecast. Such information is not available for nonergodic processes. Bronk (2013) argues that predictions become especially unreliable in times of rapid innovations in markets. De Laat (2000) states that "methods that focus on calculus, systems analysis, or any other parameterization, work only in settings in which they can work, i.e. in situations which for the greater part have been constructed and stabilized" (180). Furthermore, and not surprisingly, evaluation studies of forecasts show that the accuracy of predictions declines as the time span of the predictions increases (Kholodilin and Siliverstovs 2009; Taleb 2010).
- 10. This does not mean, however, that forecasts are the product of social judgments alone. As noted above, formal econometric models play a significant role; indeed, the judgments to which forecasters have recourse make sense only in the context of the formal modeling (R. Evans 2007: 693). There is "a broad consensus regarding the value of these instruments in framing interpretative discussions" (Holmes 2009: 400); furthermore, these models are the backbone of the narratives forecasts deliver.
- 11. In this sense, the value of forecasts is based on collective beliefs, which are the result of actors' involvement in discursive processes. In other words, their value is constructed in much the same way as that of money or consumer goods. This kind of value cannot exist independently of actors' assessments of it. Instead, it is the outcome of contingent evaluations of actors in a given field.

- 12. It is worth noting Ludwik Fleck ([1935] 1979) and his discussion of "thought collectives." Fleck argued that knowledge processes cannot be understood as a relationship between a subject and an object; rather, the creation of knowledge takes place through exchanges among multiple actors. His point was not that all participants converge on one perspective, but that the recognition of different perspectives within the field provides a basis from which an actor may form her own perspective. For Fleck, the interaction between scientific experts and an interested lay public also plays an important role in the production of scientific knowledge.
- 13. The fact that heightened economic uncertainty of today's liberalized economies is creating an ever-increasing demand for forecasts and projections highlights an interesting irony. The idea that markets are simply an alternative to planning as a coordination mechanism—as claimed by the Austrian economists cited earlier as well as by other proponents of market liberalization—does not hold. Planning is as central to market economies as it is to any other type of economy, the only difference being that planning in a market economy is decentralized and delegated from the state to the firm, which relies on fictitious projections of profit opportunities, rather than on policy goals, to make decisions.
- 14. Early on, Max Weber ([1906] 1988b) argued that counterfactuals make it possible to recognize causal influences. And Morgenstern (1928: 118) argued that deviations from prognoses can be virtuous because of the learning opportunities they provide.
- 15. Deception (Harrington 2009) occurs when the author of a forecast proclaims a future he does not believe in because doing so gives him an advantage. The behavior of some banks and rating agencies in the period before the financial crisis of 2008 may be interpreted as deceptive. Banks sold highly rated financial products they believed were worthless, and benefited both from the sale and from betting those products would fail.
- 16. In political contexts, forecasts may actually play a part in the governance of society. As Jenny Andersson writes with regard to projections at the RAND Corporation in the 1960s, scientists were "not primarily interested in the accuracy of prediction. Instead it was the communicative, indeed self-fulfilling, aspect of prediction that they found promising" (Andersson 2013: 7). "In futurology, therefore, concepts of scientific observation, and concepts of political action oftentimes seemed to merge" (5).

## 10. ECONOMIC THEORY

1. MacKenzie (2006) formulated the constitutive idea of performativity in the catchphrase "an engine, not a camera," meaning that economic theory is not