INTRODUCTION

On the 10th of January 1934 a private view was held at 51 rue Raynouard in the well-heeled sixteenth arrondissement in Paris. On display were mural paintings by the cubist André Lhote, who was also an art critic at the *Nouvelle Revue française*, and by Robert Delaunay, who was later to design the murals for the air and railway pavilions at the 1937 World Fair. Lhote showed a pair of cityscapes, the first featuring the vertical thrust of a towering Notre Dame viewed from the rue de Pontoise, the second treating the horizontal rhythm of the Auteuil viaduct seen from an automobile factory. A certain industrial aesthetic was also in evidence in the very fabric of the premises in which the images hung. Indeed, the private view was unusual not only in the fact that the exhibition space formed part of the exhibit, but in that it doubled as a housewarming party – 51 rue Raynouard was a concrete apartment block designed by the modernist architect Auguste Perret.

Fellow architect, Le Corbusier, who was among the guests, might well have admired the apartment, for it offered the ultimate in rational living space: moveable partitions allowed functional flexibility in the arrangement of the reception rooms and there was even a gym, where the owners could indulge their interest in the scientific exercise methods of experts such as Georges Demeny.¹ This was a household where entertaining was frequent and where housekeeping methods too followed the principles of rational organization. A carefully maintained filing system recorded the dishes served each day, the guests invited and notes on the likes and dislikes of various acquaintances.² The lady of the house attended classes with the Ligue d'organisation ménagère (League for Household Organization), which applied industrial efficiency techniques to the home, encouraging housewives to monitor energy consumption and calculate the cost of producing meals, just as industrialists calculated the unit cost of their products. With its ethics and aesthetics of efficiency, this apartment was truly – to use a phrase coined by Le Corbusier – a 'machine for living'. It is perhaps not surprising, then, that it was the home of an engineer, a certain Jean Coutrot.

Coutrot was a former student of the prestigious Ecole polytechnique, France's top science and engineering school. He was also a war veteran, whose right leg had been amputated following an injury sustained in bat-

tle in 1915. Having married Annette Gaut in 1917, he became head of the Gaut-Blancan paper company before going on to found one of France's first management consultancy firms, the Bureau des ingénieurs-conseils en rationalisation in 1931. As well as being a notable collector of modern art, he was an energetic publicist and networker, frequenting a host of interwar organizations, think tanks and reviews including the Comité national de l'organisation française (National Committee for French Organization, CNOF), X-Crise, L'Etat moderne, the Plan du 9 juillet group, the Comité central de l'organisation professionnelle (Central Committee for Professional Organization, CCOP) and the Centre national de l'organisation scientifique du Travail (National Centre for the Scientific Organization of Work, known as the COST). What these groups had in common was that they formed part of a movement for 'scientific organization' or 'rationalization' which had focused initially on industry but was ultimately a model for thinking about all kinds of social and economic activity. Much of the rethinking of France's social and economic order that took place in the first half of the twentieth century was informed by the dissemination of models from this movement. And as the example of Coutrot has already hinted, it was not just factories, offices or national economies that were to be planned and rationalized, but homes, minds and bodies.

Historians often think of the period after the Second World War as the key moment in the reorganization of social, economic and political life in twentieth-century France. Indeed, there is no doubt that during les Trente glorieuses - the thirty years of economic growth that followed France's liberation from Nazi occupation - the country not only experienced the rapid expansion of mass production and mass consumption, but saw managers, planners and organizational experts of various kinds take on an increasingly central role in directing economic activity, both in businesses themselves and in government institutions. Two social figures have thus been seen to embody France's transformation in the twentieth century – the *cadre* (the term that came to be used for France's managerial class) and the 'technocrat' (a term particularly associated with the role of highly trained engineers and administrators in the French state). In the light of Kristin Ross's work, we might add to this duo, the figure of the 1950s housewife, usually pictured glowing with pride beside a shiny domestic appliance. It is this new postwar middle-class society embodied by managers and housewives that Ross analyses in Fast Cars, Clean Bodies.³ But where did this 'new man' and 'new woman' come from? To what extent did they have an existence before the war? And, more broadly, how were plans for a new social and economic order constructed before 1945?

In the pages that follow, I address these questions by exploring the efforts of a loose coalition of professionals – including engineers, industrialists, trade unionists, psychologists and domestic scientists – to transform France in the period from the 1920s to the eve of Liberation. For the most part, these people saw themselves as technicians, a term which is broader

and carries more prestige in French (*technicien*) than in English. It is a category that encompasses not just those with hands-on responsibility for machinery or equipment, but the most highly trained graduates of elite engineering and administration schools. Social professionals, vocational guidance advisors and domestic science specialists also claimed the label *technicien* to emphasize the scientific authority of their interventions.

There are a number of reasons why we might take an interest in the way in which technicians sought to invent a new order in twentieth-century France, but one is the fact that their role, particularly as agents of the French state, has often been seen as a barometer of France's fortunes in this period. More specifically, the 'rise' of a new 'technocratic' and managerial elite has long been identified by historians as one of the primary markers of a major historical transition in France from prewar crisis to postwar renewal, from stagnation to renovation. In other words, the story of technicians and their efforts to change France has played an important part in the construction of a bigger story, about the very course of French history in the twentieth century.

This narrative of crisis and renewal, which I will outline in more detail shortly, is in part a product of the way in which two key moments have structured our thinking about the tumultuous period from the First World War to the 1960s. Firstly, the defeat of 1940 and the rule of a collaborationist government based in Vichy, have cast a long shadow over interwar France, as historians have sought to identify the seeds of what has become known as Vichy France. Secondly, though it is less commonly acknowledged, the postwar boom years and the advent of the Fifth Republic (seen as the technocratic regime par excellence) have also informed historians' efforts to identify ruptures and continuities in the decades leading up to France's economic take-off in the 1950s and 1960s. Hence, for thirty years or so following the Second World War, our perceptions of prewar France were shaped by the work of analysts concerned to explain what they saw as French economic backwardness and socio-political stalemate. Historians such as David Landes, Alfred Sauvy and Stanley Hoffmann saw prewar France as predominantly conservative and excessively individualist. The country was held back, it was argued, by an abnormally large peasant and petit-bourgeois population and a risk-averse bourgeoisie that tended (irrationally, it was implied) to put social preservation before economic gain.⁴ Thus, France's aberrational economic development was seen to have contributed to the emergence of a 'stalemate society', a stalemate that would only be broken after the war, as the old peasant and bourgeois France gave way to a new 'France des classes moyennes'.5

According to this view, while an enlightened few offered a different vision of France's future before the Second World War – a technicians' vision of economic dynamism and political effectiveness – these figures remained on the margins of the Third Republic.⁶ While other countries saw great political experiments in the 1930s, France was deemed incapable of such dynamism: 'in a world of motion', wrote Hoffmann, 'France and Eng-

land began to appear [...] like big logs of dead wood'.⁷ This analysis allowed the Vichy period (1940–44) to be seen, not simply as an effect of defeat, but as the product of France's prewar social, political and economic dysfunction. At the same time, as *les Trente glorieuses* unfolded, such interpretations tended to reinforce the idea of 1945 as a historical watershed. Only after the war, it was suggested, was France able to 'catch up', overcome its problems and achieve a social, economic and political organization in sync with history. In this sense, the narrative of a dysfunctional prewar France was part of a narrative about 'modernization'.

Since the 1980s, this story has been amended somewhat. For one thing, historians have tried to take on board the criticism that the concept of modernization erected a single model of economic development as normative for all countries. As a result, they are now more likely to equivocate about the term, flagging it as problematic without departing entirely from its use or underlying assumptions, perhaps arguing in terms of different national 'paths to modernity'. Explicit references to French backwardness have given way, to some extent at least, to the idea of a distinctive French way, a modernization à la française - with the role of technicians and a particular form of state planning being considered as distinguishing features of the French model of modernity.8 The periodization of French economic development has also been revised as historians have reassessed French economic growth in the nineteenth and early twentieth centuries, arguing that the picture was less bleak than previous generations of scholars had suggested.9 Historians of French political economy such as Richard Kuisel and Michel Margairaz have begun to focus less on diagnosing the ills of prewar France and more on identifying the seeds of the country's remarkable 'conversion' to a dynamic state-managed economy in the period before 1945.¹⁰ Both see interwar technicians' groups such as X-Crise (the think tank founded by graduates of the Ecole polytechnique) and the movement for industrial rationalization as laboratories for new forms of economic organization that would be widely adopted in the changed political context of postwar France. This revision has done little to challenge the conceptualization of history as modernization - Kuisel's work in particular remained very much within this logic – but, by highlighting the networks of organizations and individuals who were active in promoting industrial efficiency and economic planning before the Second World War, these studies have undoubtedly given us a stronger sense of the importance of these groups and of certain historical continuities across the interwar years, the Vichy period and the postwar boom.

Of course technicians and their managerial practices have not only been considered at state level but in the workplace. Though not really concerned with questions about economic 'development' or 'modernization', a growing body of research in labour and business history, and in the history of technology, has also indirectly complicated the picture of a backward France before 1945. Studies by Aimée Moutet, Yves Cohen, Laura Lee Downs and Laura Frader, for example, have revealed the extent to which working practices were being 'scientifically organized' between the wars by engineers, industrial psychologists and other managerial intermediaries.¹¹ Time and motion study techniques were developed and applied, new planning systems adopted, the spatial organization of work analysed, the recruitment and deployment of workers subjected to new forms of aptitude testing – all in the name of efficiency. Whether we call this scientific management, scientific organization, Taylorization or rationalization – all terms that were used at the time to describe this reorganization of work (or aspects of it) – what is not in doubt is that such methods were being applied across a range of sectors in the French economy, from automobile construction to telecommunications, on the factory floor and in the typing pool.

If these histories have extended our knowledge of French workplace practices before 1945 and the work of economic historians has enhanced our understanding of the development of state planning, the role of interwar technical elites has also, since the 1990s, begun to attract the attention of cultural historians. Such studies have focused less on production, planning and the state, and more on ideology, advertising and the development of mass consumption. Marjorie Beale and Robert L. Frost, for example, have added a welcome dimension to the literature by examining the social and aesthetic visions emanating from those who sought to promote scientific mass communication and the mechanization of domestic work.¹² Both link developments in these fields with the movement for industrial rationalization and thus go some way to mapping out an interwar organization project (or set of projects) that extended well beyond the factory and the institutionalization of state planning.

This is an important step. Yet the intervention of cultural historians in a historiography previously shaped largely by economic history and political science, has so far served above all to breathe new life into some rather old ideas. For these historians, what characterized the outlook of French 'modernists' before 1940 was a 'reactionary modernism', a vision of modernity vitiated by what are regarded as nostalgic or reactionary elements - elitism, anxieties about mass society, a desire to reassert gender boundaries. While these interpretations are certainly new in some sense, they have a strangely familiar ring, for they perpetuate the longstanding cliché that the French were peculiarly attached to tradition and that 'the French model' was based on what Landes termed in 1951 a 'modus vivendi' or 'compromise between [...] modern and traditional'.¹³ They measure interwar visions of a rationalized order against an imagined purer (often American) version of modernity and find their French subjects wanting.¹⁴ And while earlier accounts reproached mainstream elites for their backward or conservative mentality, often contrasting this with the forward-looking vision of an enlightened (technically orientated) minority, these cultural histories now suggest that in France (unlike elsewhere, it is implied) even those who were in many ways the agents of modernization were also puzzlingly traditionalist. Such, we are told, is the paradox that is French culture.¹⁵

The question of technicians and their role in political, social and economic life has thus remained at the heart of our stories of crisis and renewal in twentieth-century France for several generations. But these stories have also been shaped by some rather prescriptive assumptions about what constitutes modernity and social, economic or political rationality. Both the earlier generation of political and economic historians, and the new cultural historians have applied a fixed and ahistorical standard for 'modernity' – they imply that there is a normal path of economic and social development, a right way for particular social groups to behave, etc. Moreover, these narratives are characterized by a set of broadly shared assumptions about the direction of history. They reproduce a fundamentally liberal narrative in which history is a movement towards a certain model of capitalism – in this period, Fordism, or some national variant thereof. Indeed, the language of tradition and modernity serves in part to plot national differences along a temporal axis, as though history were a road along which one could only travel forward or back. The analysis is too often conducted as if, to extend Daniel Rodgers' analogy, nations were runners in a race and the job of the historian were to commentate.¹⁶

The Age of Organization

My ambition in writing this book has been to write a different kind of history of the visions of a new economy and a new society that were developing in France before 1945. Historians like Cohen, Frader and Downs, who have highlighted some of the ways in which techniques of organization constitute and are constituted by relations of power in the workplace, have shown one way of doing this. However, I focus not just on industrial practices but on the ways in which organizers envisaged a new order that exceeded the boundaries of the factory. This is a study of technicians' networks as laboratories for the organization of a new France, but one which defines technicians and their networks more broadly than the previous studies, which focused primarily on the development of economic planning. At the heart of my account lies the scientific organization movement and what might be termed the nébuleuse organisatrice which surrounded it. I am borrowing and adapting the latter term from Christian Topalov, who speaks of the turn-of-the-century social reform groups that gathered around institutions like the Musée social as a nébuleuse réformatrice. These groups came from a variety of political currents and professions but converged around the idea of social reform and the need for social intervention by professionals to cure the ills of industrial society. They were also agenda setters, helping to shape public debate and policymaking about 'the social'. Topalov uses the cloud metaphor to indicate the fluid frontiers of the networks he

sets out to investigate, their varying density and the existence of a certain shared reforming outlook across different groups and sectors.¹⁷ Similarly, while groups like the CNOF might be seen as the backbone of the scientific organization movement in France, other professional milieux and centres of reflection also took up the language and methods of 'organization' or 'rationalization' to formulate their vision of a better social and economic order. Hence we can find organizers in the labour movement, in social Catholic groups, in domestic science education, in applied biology laboratories or vocational guidance centres, among architects and designers, among those who called for reform of the state and among those who frequented the *planiste* groups of the 1930s. Like the turn-of-the-century social reformers examined by Topalov, interwar organizers were agenda-setters, publicists for their cause and sometimes policymakers or government advisors.

It is in this sense that one can speak of the interwar years as part of an 'age of organization'. In adopting this term, I am not endorsing the determinist view, often expressed by organizers themselves, that an age of organization was replacing liberalism and that France must adapt to the new era. Rather, I am registering the centrality of a certain set of ideas and practices in debates about the social and economic order in interwar and Vichy France (and beyond). To conceptualize the period from the 1920s to Vichy in terms of debates about organization has the benefit of moving the discussion away from the hitherto dominant emphasis on backwardness or crisis. This is not to say that there was not a sense of crisis in many quarters, especially at certain points in the 1930s and during the Occupation. On the contrary, there was plenty of crisis talk and it helped bring to the fore a set of interrogations about social, economic and political organization. One can acknowledge the existence of this crisis talk without claiming, as earlier generations of historians did, that there was an objective crisis or dysfunction in the French 'system' which serves (implicitly or explicitly) to explain the defeat. Indeed, by defining the period as one of organization projects I am, in effect, paying more attention to proposed solutions than to perceived problems. Some readers may regret that my eye is trained so resolutely on these projects and the networks from which they emerged, rather than on the reception of these ideas among political and business elites more generally, but following projects and people does at least provide a useful way of looking beyond the conventional chronological watersheds of changes of regime, notably those of 1940 and 1944. Though the present study does not go beyond 1944, I will gesture in the conclusion to some of the postwar afterlives of the trends I identify.

I have argued that the projects that emerged from the *nébuleuse organisatrice* should not be measured against a supposedly objective ahistorical standard of what constitutes modernity. This leads me to formulate a different question: what did modernity mean to particular historical actors in this particular historical moment? Or, to use a language closer to that of the period studied here, how were progress and social and economic rationality understood by those who saw themselves as 'rationalizers' or 'organizers'? And how did this colour the techniques they developed in France before 1945? In attempting to answer these questions, I am trying to develop a different kind of cultural history of 'modernization', one in which the notion of modernity, or the conceptions of progress and rationality that came to be associated with it, are *objects* of analysis, rather than analytical categories.¹⁸ If cultural history has a contribution to make to our understanding of what have conventionally been understood as social, economic and political processes, its usefulness surely lies in part in the light it can shed on the historical construction of meaning in these fields.

Experts and Technocrats

At times, I will refer to the people I am writing about as 'experts', but I am conscious that 'expertise' too is historically constructed. The conventional narrative of an enlightened minority of competent and far-sighted individuals, struggling against the prevailing ineffectiveness and economic ignorance of politicians during the interwar period tends to overlook this. It is certainly true that the engineer-planners who emerged in the 1930s tended to see themselves as more competent in economic and organizational matters than the existing political and administrative elites, particularly those trained in the law faculties. But Kevin Passmore has argued that Third Republic parliamentarians, often presented as 'notables' whose power rested more on clientelism than competence also believed that the exercise of power should rest on compétence, which for them referred not just to their professional and life experience (often as a lawyer or doctor), but also to a certain ideal of generalism.¹⁹ At the same time, this commitment to generalism, which was shared by many engineers, especially *polytechniciens*, did not preclude the acquisition of specialist knowledge in a particular domain, such as international or financial affairs.²⁰ Thus, when industrial and engineering elites asserted their own competence and dismissed that of lawyers, they were not inventing the idea of government by competence but *reinventing* it in a way that legitimized their own methods. Their claims rested largely on their supposed economic competence, something that tends to be assumed rather than analysed in existing histories. But what made the engineer an economic expert, especially when most economists in France were trained in the law faculties and when the Ministry of Finance could already draw on a highly qualified administrative elite in the form of the Inspecteurs des finances? We can ask the same question about the engineer-organizer or the housewife-manager: all these figures have a history. Hence, when I use the term expert, I am referring to people who positioned themselves as having a certain professional or technical competence and were also recognized by others as having such competence. I am not claiming that they were necessarily better qualified than anyone else to solve the problems they sought to address.

The importance of technical experts in France and particularly their role in the French state have often been conceptualized in terms of the 'rise of technocracy'. Here too one must exercise caution. The term technocrat conjures up a figure whose authority rests on technical/professional competence as opposed to political legitimacy and whose actions are grounded not in a particular social or political ideology but in a concern with effectiveness, rationality and optimization. This usage crystallized in the postwar period. Interwar commentators rarely used the word technocracy and when they did, it had a much narrower meaning: it was the label chosen by Howard Scott and his associates for the doctrine of their little-known American movement, which attracted the attention of some French technicians in the 1930s.²¹ In the 1950s and 1960s, the term became common currency, taking on a new, largely negative, resonance, inherited partly from allegations about a secret network of technicians, known as the Synarchy, which was believed to have operated under Vichy. The influence of technicians in planning and development agencies, and the prevailing political consensus in favour of a drive for increased productivity and technological progress in postwar France fuelled continuing anxiety that the country was being taken over by polytechniciens and énarques (the term used for graduates of ENA, the National School of Public Administration). On the nationalist right, Pierre Poujade railed against the technocratic state, just as he denounced Americanization, seeing both as a threat to the small producers he represented and to their vision of a traditional French way of life. This mythologization of the technocrat rested, as Roland Barthes observed at the time, on an identification of technicians (especially polytechniciens) with abstraction, systems and mechanical reason - the technocrat was thus a figure disconnected from the 'real' and rendered inhuman by an excess of intelligence or mathematical training.²² More moderate and academic voices than Poujade's, such as that of André Siegfried or Jean Meynaud, were also heard in this debate, which was in part a reworking of prewar concerns about the nature of machine civilization, the dehumanising effects of technology and the triumph of quantitative considerations over qualitative ones.²³ Thus, as Gabrielle Hecht has noted, while some technicians had been prepared to try and infuse the term technocracy with a more positive meaning, by the 1960s it had become almost entirely appropriated by their critics.24

Given this genealogy, it is striking that the concept of technocracy has been so widely perpetuated by historians, including those who have taken a broadly positive view of the contribution of technicians to French economic organization.²⁵ Indeed, the idea of technocracy has been particularly prevalent in discussions of technicians at Vichy, where a split is generally identified between technocratic modernizers and social traditionalists, a distinction repeatedly reproduced (albeit with some nuances) since the 1970s in the work of the most authoritative historians of the period – Henry Rousso, Robert Paxton, Julian Jackson.²⁶ The term technocrat often operates as a kind of shorthand in studies that do not seek to examine the thinking of such figures in detail, but it is a shorthand which effectively imports into these studies many of the assumptions that shaped the polemical debates of earlier decades. Thus, the word still calls to mind a narrow technicism, a purely quantitative or abstract outlook, cut off from social and political realities. In my view, then, it is too marked by its polemical origins to be useful as an analytical category. Hence my adoption of the term 'technician' – in the French sense – throughout this book.

The portrait of the technician that emerges in the chapters that follow departs in some important ways from the stereotype of the technocrat. For one thing, by delineating a broad nébuleuse organisatrice and considering technicians of household organization alongside their industrial counterparts, I have mapped out a more heterogeneous group of actors than one might normally consider under the heading of technocracy. Of course, I am not suggesting that all these actors enjoyed the same status, either within the rationalization movement or beyond it, but I do contend that we can learn something by considering them together. From its inception, before the First World War, scientific organization was conceived with reference to a set of principles that were deemed universal and therefore applicable to the organization of all human activity. Between the wars, this aspiration to a 'total rationalization' manifested itself in a huge range of publications and initiatives, notably in a concern with 'human problems' that is, with the social, biological and psychological dimensions of organization. Indeed, from the beginning, the science of organization was marked by a strong current of social organicism and by a cross-fertilization of ideas from engineering and the biological sciences. Organizers tended to think in terms of systems and the place of human beings within them and by the 1930s this led to developments which paralleled the resurgence of holism within medicine. Medical holists were critical of what they saw as excessive specialization within their profession and were interested in methods such as homeopathy and eugenics which, in their view, offered a more complete understanding of the relationships between mind and body or individual and environment. The publication of Alexis Carrel's best-selling L'Homme, cet inconnu in 1935 was symptomatic of this trend and the 'humanist' vocabulary it adopted.²⁷ The preoccupation with 'human problems' in the organization movement was associated with a similarly holist outlook, but it is important to be clear about the nature of this holism or scientific humanism. The term 'holistic' is often used today in ways that imply a positive value judgement and it has become associated with a certain idea of individual well-being. The holism of the 1930s was more inclined to regard the individual as part of a wider social system, defining rational solutions as those which met the needs of the system (the business, the social organism, the nation's economy etc). When I speak of the 'holism' of organizational thinking, therefore I am not suggesting that such thinking is 'holistic' in today's sense, and to avoid any confusion, I use the adjective 'holist' to designate currents of thinking that make rhetorical claims to holism.

Uncovering these features of organizational thinking not only allows us to reassess its scope but reveals the extent to which organization was conceived as something that must be embodied. The myth of the technocrat, with its emphasis on mathematical abstraction, has tended to obscure this. In what follows, I will show how organizers sought to eliminate social conflict by harnessing class and gender solidarity for productive ends; how they used applied psychology and physiology to develop techniques for enhancing individual and collective efficiency; how they promised to rationalize the middle-class home by re-educating women's minds and bodies; and how they forged a model of economic planning that was closely linked to the study of 'human problems', including population science. Ultimately, I contend, in the minds of these organizers, the new social and economic order required a new man and a new woman, a psychosocial and, in some cases, psycho-biological transformation of the bourgeoisie as well as the worker. If technicians were prepared to work within governments and regimes of various political colours to achieve these goals, their projects were by no means politically and ideologically neutral. In the final chapter I will consider how this vision of a new order found a place among others that competed and sometimes converged with it in Vichy France. This means that the book is organized in part thematically and in part chronologically. While Chapter One considers the origins of the organization movement and Chapter Five its incarnations in Vichy France, the intervening chapters each consider a particular theme or area of activity in the interwar movement and hence have overlapping chronology. To help readers keep track of individual trajectories I have provided brief biographical profiles at the end of the book.

Notes

- 1. The building also housed Perret's own apartment and studios.
- 2. Interview with Marie Toulouse, daughter of Annette and Jean Coutrot, 2 August 1996.
- K. Ross. 1995. Fast Cars, Clean Bodies: Decolonization and the Reordering of French Culture, Cambridge, Mass: MIT Press.
- D. Landes. 1951. 'French Business and the Businessman: A Social and Cultural Analysis' in E. Mead Earle (ed.), *Modern France*, Princeton: Princeton University Press, 334–53;
 S. Hoffmann. 1961. 'The Effects of World War II on French Society and Politics', *French Historical Studies* 2(1): 28–63; A. Sauvy. 1965–1975. *Histoire économique de la France entre les deux guerres*, 4 vols, Paris: Fayard.
- 5. Hoffmann, 'The Effects of World War II', 62.
- 6. Sauvy in particular saw himself as part of this enlightened few and I will consider his position in this historiography in more detail in the conclusion.
- 7. Hoffmann, 'The Effects of World War II', 33.
- 8. A useful overview of these shifts in the treatment of 'modernization' within economic history can be found in R. Magraw. 1999. "Not Backward But Different?" The Debate on French "Economic Retardation", in M. Alexander (ed.), *French History since Napoleon*, London: Arnold, 336–63. An example of equivocal use of the term can be found in K. Mouré and M. Alexander. 2002. 'Introduction' in Mouré and Alexander, *Crisis and*

Renewal in France 1918–1962, New York and Oxford: Berghahn, 1–13 which revisits Hoffmann's classic framework. On the one hand it is claimed (pp.1–2) that the French 'revolutionary tradition...has made of French experience an exceptional model for political modernization' while 'the French path for economic and social development' was characterized by stability. On the other, the term 'renewal' is offered (p.9) as preferable to 'modernization' because the latter implies an ideal type and a single process of transformation.

- 9. See P. Fridenson and A. Straus (eds). 1987. *Le Capitalisme français, 19e-20e siècle. Blocages et dynamismes d'une croissance,* Paris: Fayard.
- R. Kuisel. 1981. Capitalism and the State in Modern France: Renovation and Economic Management in the Twentieth Century, Cambridge: Cambridge University Press; M. Margairaz. 1991. L'Etat, les finances et l'économie. Histoire d'une conversion, 1932–1952, 2 vols, Comité pour l'histoire économique et financière de la France.
- A. Moutet. 1997. Les Logiques de l'entreprise. La rationalisation dans l'industrie française de l'entre-deux-guerres, Paris: Editions de l'EHESS; Y. Cohen. 2001. Organiser à l'aube du taylorisme: la pratique d'Ernest Mattern chez Peugeot, 1906–1919, Besançon: Presses universitaires franc-comtoises; L.L. Downs. 1995. Manufacturing Inequality: Gender Division in the French and British Metalworking Industries 1914–1939, Ithaca: Cornell University Press; L. L. Frader. 2008. Breadwinners and Citizens: Gender in the Making of the French Social Model, Durham NC: Duke University Press.
- R. L. Frost. 1993. 'Machine Liberation: Inventing Housewives and Home Appliances in Interwar France', French Historical Studies 18(1): 109–130; M. Beale. 1999. The Modernist Enterprise: French Elites and the Threat of Modernity 1900–1940, Stanford: Stanford University Press.
- 13. Landes, 'French Business and the Businessman', 350.
- 14. In Beale's work the standard for comparison is quite explicitly an American one, in this case a rather idealized notion of 'American mass democracy' (p.6), which allows any form of elitism to be considered as unmodern, a throwback to a deeply ingrained French aristocratic culture.
- 15. See also Adam C. Stanley. 2008. Modernizing Tradition: Gender and Consumerism in Interwar France and Germany, Baton Rouge: Louisiana State University Press. R. Kuisel. 1993. Seducing the French: The Dilemma of Americanization, Berkeley: University of California Press and R.I. Jobs. 2007. Riding the New Wave: Youth and the Rejuvenation of France after the Second World War, Stanford: Stanford University Press apply a similar type of analysis to the postwar period.
- 16. D. Rodgers. 1998. *Atlantic Crossings: Social Politics in a Progressive Age*, Cambridge, Mass: Harvard University Press, 73.
- C. Topalov. 1999. 'Les réformateurs et leurs réseaux: enjeux d'un objet de recherche', in Topalov (ed), *Laboratoires du nouveau siècle: la nébuleuse réformatrice et ses réseaux en France,* 1880–1914, Paris: Editions de l'Ecole des Hautes Etudes en Sciences Sociales, 13.
- 18. From two rather different perspectives, Gabrielle Hecht and Kristin Ross have formulated similar questions about the postwar period. See Ross, *Fast Cars, Clean Bodies* and Hecht. 1998. *The Radiance of France: Nuclear Power and National Identity after World War II,* Cambridge, Mass: MIT Press.
- 19. K. Passmore. 2004. 'The Construction of Crisis in Interwar France', in Brian Jenkins (ed.), France in the Era of Fascism, Oxford: Berg, 167–72. Passmore draws here on the work of Gilles Le Béguec, especially Le Béguec. 1989. 'L'Entrée au Palais-Bourbon: les filières privilégiées d'accès à la fonction parlementaire, 1919–1939', unpublished thesis (doctorat d'Etat), Université de Paris X Nanterre.
- 20. We are reminded that lawyers were also experts in this sense in Le Béguec. 2003. *La République des avocats,* Paris: Armand Colin, 147–52.
- 21. O. Dard. 2000. 'Les Technocrates: archéologie d'un concept, généalogie d'un groupe social', in Dard, Jean-Claude Daumas et François Marcot (eds), *L'Occupation, l'Etat fran*-

çais et les entreprises, Paris: Association pour le développement de l'histoire économique, 217.

- 22. R. Barthes. 1970 [1st ed. 1957]. 'Poujade et les intellectuels', in Barthes, *Mythologies*, Paris: Seuil, 182–90.
- 23. On postwar social scientists and the debate about 'technocracy', see Hecht's lucid discussion in *The Radiance of France*, 28–38.
- 24. Hecht, The Radiance of France, 34.
- 25. See, for example, G. Brun. 1985. *Techniciens et technocratie en France*, Paris: Albatros; Kuisel, *Capitalism and the State in Modern France* (where Kuisel acknowledges some problems with the term, p.76, but continues to use it). Olivier Dard, having traced the emergence of the term through the Synarchy conspiracy theory, continues to speak of 'la montée des technocrates' and to use the term interchangeably with the more neutral term 'technicien' e.g. O. Dard. 1998. *La Synarchie ou le mythe du complot permanent*, Paris: Perrin, 135–37. He also distinguishes 'les nouvelles relèves technocratiques' from the 'spiritualist' current of *non-conformistes* intellectuals in Dard. 2002. *Le rendez-vous manqué des relèves des années trente*, Paris: Presses Universitaires de France. I have also used the term technocratic myself in the past, albeit in the context of work that sees technicians in a rather different light. In contrast, Hecht studiously avoids the term and speaks instead of 'technologists' and 'techno-political regimes'. See *The Radiance of France*, 15–17, 28.
- 26. R. Paxton. 1982 [1st ed 1972] . Vichy France: Old Guard and New Order, New York: Columbia University Press, 210–20; J. Jackson. 2001. France: The Dark Years 1940–1944, Oxford: Oxford University Press, 148–65; H. Rousso. 1987. 'Les paradoxes de Vichy et de l'Occupation. Contraintes, archaïsmes et modernités', in Fridenson and Straus (eds), Le Capitalisme français, esp. 72–75 and for a more ambivalent version of Rousso's argument in which 'modernization' is sometimes placed in inverted commas but otherwise retained as an analytical term, Rousso. 1991. 'Vichy et la "modernisation''', in J. P. Azéma, D. Barjot et al., Reconstructions et modernisation: la France après les ruines 1918...1945, Paris: Archives nationales, 77–82. Technicians from engineering and industry are not the only kind of 'experts' whose role is highlighted in these studies, but (along with certain hauts fonctionnaires) they are the most associated with modernization.
- 27. On medical holism, see C. Lawrence and G. Weisz. 1998. 'Introduction' and G.Weisz, 'A Moment of Synthesis: Medical Holism in France Between the Wars', in Lawrence and Weisz, *Greater than the Parts. Holism in Biomedicine*, 1920–1950, Oxford and New York: Oxford University Press, 1–22 and 68–93.