It has been established that the neoliberal creed arising in the interwar and early postwar years, despite its strong rejection of economic planning, also entailed a rejection of laissez-faire liberalism. This article argues that recent attempts at construing early neoliberalism as thus being a more nuanced or moderate creed than later iterations are nonetheless flawed. The “dual argument” of early neoliberalism indicated a new approach to market liberalism in which the state was not seen as the market’s opposite but rather its precondition. This important move is obscured by the language of moderation and nuance. In place of “the radicalization thesis,” the second part of the article considers Philip Mirowski’s concept of a “double-truth doctrine” and argues that an appreciation of the state for social and economic governance is a common feature of different neoliberalisms, which nonetheless differ in their preferred policy suggestions for the use of state power.
I. INTRODUCTION

In 2010, the German economist Hans-Werner Sinn argued on the pages of *Die Welt* that there was such a thing as a “true” neoliberalism, which not only differed from the “radical concepts of Milton Friedman and the Chicago School,” but constituted its exact opposite (genaue Gegenteil) (Sinn 2010). Sinn is a proponent of the German ordoliberal school, whose leading lights were instrumental in founding the Mont Pelerin Society in 1947, together with members of the Austrian School of economics and the Chicago School among others. Recent scholarly interest in the even earlier 1938 Walter Lippmann Colloquium, which included many of the same actors, has led to a gradual understanding of “early neoliberalism” as a category in its own right, which differs from later iterations of the creed, partly due to the importance of ordoliberal ideas (Audier and Reinhoudt 2019; Schulz-Forberg 2020). Die Linke politician Sahra Wagenknecht has also held up the thinkers of the ordoliberal Freiburg Schule as moderate alternatives to modern-day “American neoliberalism,” claiming in her 2011 book *Freiheit Statt Kapitalismus* that even the left could find important tools in the works of ordoliberals such as Walter Eucken and Ludwig Erhard, in order to oppose American neoliberalism and invent a “creative socialism” (Wagenknecht 2012, p. 61). For both Sinn and Wagenknecht, then, the early neoliberalism of the ordoliberal kind offers a more moderate—or, for Wagenknecht, even a progressive—alternative to what they perceive as the American version thereof, because it opens space for the state to play a constructive role in economic management.

While it is true that early neoliberalism entailed a rejection of the policies of laissez-faire, I argue in this article that adjectives such as “radical” (or its antonym “moderate”) are beside the point when discussing the ways in which different branches of neoliberals have historically accepted and even embraced the state as an important actor in modern economies. This article takes a historical approach to show that a “dual argument” indicating both that economic planning led to totalitarianism and that laissez-faire liberalism was unable to stop such a development was central to how early neoliberals developed new ideas about the importance of markets and the role of modern states vis-à-vis them. In the first part of this article I show, with special references to the 1947 founding conference of the Mont Pelerin Society and its build-up, that the somewhat contradictory dual argument lies at the heart of all branches of neoliberalism, and is not something that separates ordoliberalism from other strands.¹

The idea of ordoliberalism as a more moderate and more “true” type of neoliberalism is propagated by present-day ordoliberals in policy circles and in the media, but it also has a scholarly basis in academic works coming both from the same people and the think tanks with which they are associated, and also from historians not belonging to the ordoliberal group. In the second part of the article I argue against what I call the “radicalization thesis” about the historical development of neoliberalism after its early phase in the interwar and early postwar years. This narrative, in which the difference between ordoliberalism and other strands of neoliberalism is that the former holds on to a nuanced view about the role of the state in a market economy whereas the latter becomes

¹ One possible exception would be the anarcho-capitalist and libertarian movements that make up one branch of US-based contemporary “Austrianism” (Wasserman 2019; Jensen 2022).
a laissez-faire creed, risks losing sight of the continuing importance of state power for neoliberalism in practice. In conceptualizing the early neoliberal embrace of state power as a sign of nuance or moderation, it also misses the historical importance of this key intellectual move. In place of the radicalization thesis, I consider the merits of a notion put forward by Philip Mirowski that neoliberals instead have subscribed to a “double-truth doctrine,” in which deeply held epistemic commitments concerning the virtue of ignorance in a market society allow for neoliberals to claim the mantle of laissez-faire without actually adhering to such principles (Mirowski 2013, pp. 68–80). At the end of the article, I argue briefly that the most important difference between Chicago School and Freiburg Schule neoliberalism lies in their diverging approaches to the question of how the state ought to operate vis-à-vis markets, not in whether or not the state has a crucial role to play at all. The contribution of this article is thus to improve upon academic discussions of neoliberalism by way of a historical approach to doctrines.

II. THE DUAL ARGUMENT

Against Economic Planning

The first aspect of the neoliberal dual argument is the notion that “economic planning” was the main culprit of the rise of totalitarian dictatorships in Europe in the 1930s, and that state-led “interventions” in the market order can be expected to lead to such outcomes as a general principle. That the concept of totalitarianism figures so prominently in the economic writings of early neoliberals and that this tyrannical state of affairs is blamed not only on socialism but indeed also on social liberalism indicate the extent to which neoliberals intended their creed to be profoundly different from that of left-leaning “new liberals” who wanted to use the state to supplant or supplement the mechanisms of markets. The Walter Lippmann Colloquium in 1938 was an important precursor to the founding meeting of the Mont Pelerin Society in 1947, (Denord 2007; Audier 2008), and even before the colloquium in Paris, Friedrich Hayek and Lionel Robbins at the London School of Economics had read Walter Lippmann attentively for some time due to a series of articles in the Atlantic Monthly in 1936 and 1937. These articles were in fact chapters from Lippmann’s upcoming book The Good Society (Jackson 2012, pp. 55–56), and although biographer Craufurd Goodwin has described the eclectic Lippmann as a “lifelong Keynesian” (Goodwin 2014, p. 51), The Good Society became a foundational neoliberal text, precisely because it spelled out the dual argument clearly and coherently. Lippmann argued that attempts to subordinate the market economy to centralist planning had been the defining feature of Italy’s and Germany’s descent into dictatorship, likened the fascist states to their supposed arch-enemy the Soviet Union, and labeled them all “Totalitarian regimes” (Lippmann 2004, pp. 54–91), a discourse that had by that time already come into a fair amount of use by non-communist leftists exiled from Germany (Jones 1999). Writing of the “necessary absolutism” of totalitarian regimes, Lippmann claimed: “They [collectivists] speak of the chaos and the confusion of free regimes and feel inspired to eliminate the interaction of all the numerous private interests of individuals, groups and classes, of local and regional communities. Collectivists are profoundly monistic in their conception of life because they regard variety and competition as evil” (Lippmann 2004, p. 56). According
to Lippmann, these broader concerns with the lack of freedom, which had indeed been on the agenda also of previous liberals, could be reduced to a question of economic freedom, as these problems were all due to the impossibility of economic planning in peace time: “Planning is theoretically possible only if consumption is rationed. For a plan of production is a plan of consumption. If the authority is to decide what shall be produced, it has already decided what shall be consumed. In military planning this is precisely what takes place: … A planned production to meet a free demand is a contradiction in terms and as meaningless as a square circle” (Lippmann 2004, pp. 101–102). It was this intellectual error and contradiction in terms, inherited from the planning regimes of World War I, that was bound to set collectivism and economic planning onto a slippery slope towards totalitarianism. Lippmann wrote: “There is nothing in the collectivist principle which marks any stopping place short of the totalitarian state” (Lippmann 2004, p. 52).

Friedrich Hayek entered into eager correspondence with Lippmann, and, among other things, Hayek sent Lippmann a list of “the few real liberals known to me,”2 to whom Lippmann sent copies of his book upon completion. Already in 1937, Hayek and Robbins were no strangers to the claim that economic planning led to totalitarian dictatorship. In all likelihood they had, for instance, both attended the Swedish economist Gustav Cassel’s lecture “From Protectionism Through Planned Economy to Totalitarian Dictatorship” at the London School of Economics (LSE) in 1934 (Cassel 1934). The notion that attempts at economic calculation without markets would have disastrous consequences for the social order had also been implicit in the socialist calculation debates in which Hayek and Robbins had both been engaged. On March 12, 1937, Lippmann wrote in a letter to Hayek that he had been inspired by the Europeans to make his own argument:

I am profoundly grateful to you for sending me your book and your papers, but I should want you to know at once that I already possess the book and your papers and have studied it very carefully, and have been very influenced by it…. In a crude way I had discerned the inherent difficulty of the planned economy, but without the help I have received from you and Professor von Mises, I could never have developed the argument.3

The idea that economic planning lay behind the rise of totalitarianism had thus not originated in New York with Lippmann but in Vienna, from where Lionel Robbins had recruited Hayek to come work at the LSE in 1931. Robbins had attended several of Ludwig von Mises’s Privatseminars (Peck 2008) and brought his protégé Hayek to London with the explicit aim of transplanting Mises’s Austrian ideas to an English-language context and build the LSE economics program as a right-wing rival to the social liberal economics taught at Cambridge by John Maynard Keynes (Burgin 2012, pp. 12–32). The expression of Austrian economic theory that most interested Robbins was Austrian business cycle theory, but certainly also the arguments put forward in the socialist calculation debates. Robbins and Lippmann were not the only non-Austrians

interested in these seminal debates, which became central also to the German ordoliberalists and Chicago economists who all joined forces to establish the Mont Pelerin Society in 1947.

According to Erwin Dekker, the Austrian economists involved in the calculation debates considered the rise of socialism and other events of their time as a “revolt against civilization” (Dekker 2016, p. 9). What they attempted to grapple with in disproving the feasibility of socialism and insisting that market mechanisms were bedrocks of civilization was nothing less than “the central problem of modernity” (Dekker 2016, p. 89). That a profoundly new conception of liberalism would be needed to confront such a task should not be surprising, and in what became “the knowledge argument,” Hayek built on Mises in holding forth that markets were essential for modern social coordination and, against market socialists, that they could function in a capitalist society only with private ownership of the means of production (Birner and van Zijl 1994; Innset 2020, pp. 19–36). The centrality of knowledge for the neoliberal argument in favor of markets also has roots in Budapest, the other capital of the dual monarchy, where debates between Georg Lukács and Karl Mannheim on the question of which social groups were able to gain the best view of “social totality” became influential for the early neoliberal Michael Polanyi’s concept of “tacit knowledge” and his critique of scientific planning (Hull 2006).

The book Hayek had sent to Lippmann that the latter had already read and taken great inspiration from was the 1935 edited volume *Collectivist Economic Planning*, in which Hayek translated the German-language socialist calculation debates to English. In his inaugural address at LSE in 1933, Hayek claimed that in his new country there were “very few people left today who are not socialists” (Caldwell 1997, pp. 14), something he sought to rectify with the volume that went on to inspire Lippmann. The tradition of social liberalism, of which Keynes was the clearest proponent at the time, was thus an important target for Hayek. Inspired by thinkers like Thomas Hill Green (1836–1882) and Leonard Hobhouse (1864–1929), social liberals had been arguing against government passivity for quite some time, and Michael Freeden argues that these “new liberals” teased “out of liberalism implicit and underplayed features that created an ideological turn” (Freeden 2005, pp. 4–5). Duncan Bell has argued that the label “liberal” was retrospectively applied to someone like John Locke as late as the 1930s and 1950s, and that he then became “a source of inspiration for an individualist account of political life” (Bell 2014, p. 700). Before this, however, “liberalism” had more social and democratic connotations, especially due to the interventions of Green and Hobhouse. Where the historical context of the interwar years led social liberals to broaden liberalism’s freedom concerns to also include political and social freedoms, neoliberals strongly rejected this and insisted on the primacy of economic freedom. Hayek later referred to the social liberal tradition as “false individualism” (Hayek 1948, p. 2) and even “one of the pacemakers for socialism” (Hayek 1972, p. 398), as he sought to straighten out the blurred lines between liberalism and socialism.

The passionate anti-socialism of the Austrian School of economics has been noted by many observers (Blaug 1962, p. 283), and Hayek later said of Mises’s 1921 book

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4 For a discussion of the ways in which Hayek both built on and diverged from Mises, see O’Neill (1998, pp. 110–120).
Socialismus that it “fundamentally altered the outlook of many of the young idealists returning to their university studies after World War I,” adding: “I know, for I was one of them” (Caldwell 2004, p. 144). Hayek moved closer to fields like law, philosophy, and political science in the late 1930s, a development referred to as “Hayek’s transformation” by Bruce Caldwell (Caldwell 1988, 2004), and Ben Jackson has claimed it in fact happened after Hayek had read Walter Lippmann (Jackson 2012, pp. 47–48). According to Caldwell, Hayek had “restricted himself to making economic arguments” up until his 1938 essay “Freedom and the Economic System” but then changed paths (Caldwell 1997, p. 42). Against this, I would claim that there is clear continuity between Hayek’s and other Austrian economists’ critique of socialism from the socialist calculation debates, and, later, neoliberal claims that economic planning, also of the social liberal variant, leads to totalitarian dictatorship. The socialist calculation debates also mattered greatly to the German ordoliberals, and according to the ordoliberal scholar Stefan Kolev, the strong connections between Vienna and Freiburg indicated that the focus on knowledge meant that the ideas developed by Hayek through these debates could be called a “learning ordoliberalism” (Kolev 2021).

Against Laissez-Faire

One might expect that the very strong opposition to social liberalism, grounded in the notion that economic planning and state interference in markets were behind the rise of totalitarianism, would lead the neoliberals to advocate a retreat of the state from economic affairs in order to avoid this danger. Yet they did no such thing, and although Karl Polanyi may have been right to quip that “laissez-faire was planned” (Polanyi 1985, p. 147), the neoliberal group forming around Hayek often invoked the idea of laissez-faire as a culprit and explicitly theorized using the state as an integrated part of their market liberalism. Lippmann, for instance, attacked what he called the “latter day liberals” who had “lost the intellectual leadership of the progressive nations” (Lippmann 2004, p. 192), and in passages strangely similar to some of today’s critiques of neoliberalism (when wrongly perceived as a laissez-faire program), he attempted to break down the very idea that the economy was a separate sphere with which politics could not tinker: “The title to property is a construction of the law. Contracts are legal instruments. Corporations are legal creatures. … It is, therefore, misleading to think of them as existing somehow outside the law and then to ask whether it is permissible to ‘interfere’ with them” (Lippmann 2004, p. 269).

The notion that economic planning led to totalitarianism did not cause Lippmann to criticize state involvement in the economy as such. On the contrary, Lippmann argued that laissez-faire liberalism had proven futile in the face of the totalitarian danger. Within the context of this paper, it is important to note that this second, less explored, part of the dual argument was not necessarily born out of moderation or a rapprochement with the social liberals they opposed but rather out of the novel conclusion from the socialist calculation debates that markets were the mediators of modernity, and thus would need state protection from those who did not realize their importance (Bonefeld 2017; Innset 2020, pp. 32–39).

The neoliberals differed from social liberals in their explicit focus on markets organized on the basis of property rights and freedom of contract, and the absolute centrality given to what the attendees of the 1938 Walter Lippmann Colloquium referred
to quite simply as “the price mechanism” (Centre International d’Études pour la Renovation du Libéralisme 1938; Schulz-Forberg 2016). According to Pierre Laval and Christian Dardot, “new liberals” like Keynes or William Beveridge wanted to reform liberalism in two major ways: by abandoning the policies of laissez-faire, and by challenging the dogma of the self-regulating market. Crucially, the neoliberals were on board with the first step of this program but were more circumspect with regards to the second: “while neo-liberals accept the need for state intervention and reject pure governmental passivity, they are opposed to any action that might frustrate the operation of competition between private interests” (Dardot and Laval 2013, p. 47). In their very first meeting in 1938, social questions were very much on the agenda (Schulz-Forberg 2016). However, the continued focus on the mechanisms of prices and markets as the keystone of modern civilization set neoliberalism apart from other contemporary attempts to deal with social problems through a revision of liberalism.5 At the 1938 meeting in Paris, the neoliberals took a vote amongst themselves and discarded terms like “individualism,” “positive liberalism,” and even the especially inappropriate term “left-wing liberalism,” in favor of “neoliberalism” (Jones 2012, p. 35). The label gradually disappeared from use, although it was used approvingly by both Friedman and Hayek (albeit in inverted commas) up until at least the 1960s (Friedman 1951; Kolev 2018, p. 83).

In The Road to Serfdom, published in 1944, Hayek spelled out more clearly than Lippmann some of the stages through which collectivist interference with the market order would lead to something as serious as totalitarianism. This did not mean that Hayek proposed laissez-faire as an alternative to economic planning, however. On the contrary, he wrote that “the question whether the state should or should not ‘act’ or ‘interfere’ poses an altogether false alternative, and the term laissez-faire is a highly ambiguous and misleading description of the principles on which a liberal policy is based” (Hayek 2007, p. 84). He also said: “Probably nothing has done so much harm to the liberal cause as the wooden insistence of some liberals on certain rules of thumb, above all the principle of laissez faire” (Hayek 2007, p. 71). Hayek thus repeated the dual argument first phrased in The Good Society, and in the years following the colloquium, many of the participants would do the same: Louis Rougier’s Les Mystiques économiques: comment l’en passe de démocraties libérales aux états totalitaires? was published in 1938. Wilhelm Röpke posed the argument in Die Gesellschaftskrise der Gegenwart from 1941, and also Civitas Humana from 1944. Michael Polanyi made the argument in The Contempt of Freedom: The Russian Experiment from 1940, and it took Alexander Rüstow another decade and a half to complete his three-volume treatise on these issues as Ortsbestimmung der Gegenwart. This list is by no means exhaustive. Röpke, like other German ordoliberals, talked about actively “setting up the market economy as a system of genuine competition” (Röpke 1948, p. 27), very much like how Hayek, in The Road to Serfdom, attempted to make a distinction between planning for competition and planning against competition (Hayek 2007, p. 90).

Nine years after the colloquium, in April 1947, Hayek was finally able to gather what he had called, at a lecture at Stanford University some three years earlier, “an

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5 There is admittedly a certain slippage between various social and new liberalisms and especially the French version of neoliberalism, which I am unable to get into in this paper.
army of fighters for freedom” (Inset 2021). His proposed name for the organization was “The Acton-Tocqueville Society” because he believed Lord Acton and Alexis de Tocqueville were the only thinkers to have properly understood Edmund Burke’s warnings against the dangers of democracy, and had therefore predicted the phenomenon of totalitarianism.6 As we know, they would later opt for naming themselves after the Swiss mountaintop under which they met: Mont Pèlerin. After an opening address by William Rappard, Hayek gave an emotional speech to the selected attendees about the road ahead for the movement: “This task involves both purging traditional liberal theory of certain accidental accretions which have become attached to it in the course of time, and facing up to certain real problems which an over-simplified liberalism has shirked or which have become apparent only since it had become a somewhat stationary and rigid creed.”7 The then recently deceased Chicago economist Henry Simons had written the pamphlet A Positive Program for Laissez-Faire already in 1934, in which he had claimed, “The representation of laissez-faire as a merely do-nothing policy is unfortunate and misleading” (Simons 1934, p. 3). It was his lead Hayek wanted to follow, and in their internal discussions at that founding conference, the early neoliberals were much less interested in totalitarianism and the problems with socialism than they were in the problems with their own liberal beliefs regarding the use of state power and how to adapt them to a more activist stance, suitable for a different world.

As an example, the first session of the conference was called “‘Free’ Enterprise or Competitive Order”8 and was dedicated to this very question. Hayek said it “seems to be much the biggest and in some ways the most important…. It is the field where it is most important that we should become clear in our own minds, and arrive at an agreement about the kind of programme of economic policy which we should wish to see generally accepted.” He added: “Its ramifications are practically endless, as an adequate treatment involves a complete programme of a liberal economic policy.”9 Hayek introduced this session, too, and continued his attacks on contemporary liberalism of both kinds. The movement towards planning, he claimed, was “due, more than anything else, to the lack of a real program, or perhaps I had better say, a consistent philosophy of the opposition groups.” According to him, “the most fatal tactical mistake of many nineteenth century liberals” was to have “given the impression that the abandonment of all harmful or unnecessary state activity was the consummation of all political wisdom” and “that the question of how the state ought to use those powers nobody denied to it offered no serious and important problems on which reasonable people could differ.”10

At the conference, the problem of monopolies was brought out in the first session, as in several others.11 It was emphasized by neoliberals that monopolies hindered competition, and since competition was the main virtue of markets, the problems with laissez-

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6 Hoover Institution Archives (HIA), Friedrich Hayek Collection, Box 61, Folder 8.
7 Het Liberale Archief (HLA), The Mont Pelerin Society, Box 1, Folder 1.
8 Interestingly, Hayek changed the title to “Free Enterprise and Competitive Order” when publishing his introductions as an essay in 1948 (Hayek 1948).
9 HLA, The Mont Pelerin Society, Box 1, Folder 1.
10 HLA, Mont Pèlerin Society, 1.1.
11 HLA, Mont Pèlerin Society, 1.1.
faire were essentially the same as with economic planning: the mechanisms of markets were stifled. The neoliberals thus wanted to use the state in this case, but their goal nonetheless remained more or less the same as traditional proponents of laissez-faire: a society based on the mechanisms of markets. The other part of the dual argument, the strong critique of economic planning as leading to totalitarianism, indicates that early neoliberalism was not some sort of middle ground or “third way” between markets and planning but rather a belief in markets so strong that it validated the use of modern states in the creation of a society based upon their mechanisms.

A key moment in the 1947 founding conference of the Mont Pelerin Society occurred when the word was given to Loren Miller on the penultimate day of the conference during a discussion on agricultural policies. Miller was one of the several American activists who were present at the conference but who rarely participated in discussions with the more credentialed economists present. He was employed at an institution called Bureau of Government Research based in Detroit, but he is said to have persuaded the furniture magnate William Volker to set up the William Volker Fund in 1932. The Volker Fund had paid the expenses of all the American attendees of the first Mont Pelerin Society conference, and the foundation had been run by Miller up until 1942 (Blundell 2001, p. 38). Miller had not raised his voice in plenary sessions before this but proceeded to argue against both Karl Brandt’s and Wilhelm Röpke’s claims that farmers needed special insurance schemes so as to win them over to the case of liberalism. Why should not everyone be insured against the vicissitudes of the markets if farmers could be? he asked provocatively. Ending his short but pointed intervention, he asked what the total sum of all the interventions that had been suggested during the conference really would be: “Wouldn’t that be a planned economy?” Miller, much like Mises had done in earlier sessions, thus brought out the underlying tension in the dual argument. How was it possible to be so violently against economic planning and denounce the state as causing totalitarian dictatorship by interfering with the economy, yet at the same time suggest a series of political measures intended to improve upon the workings of the economy?

That was the approach of the think tank man, and, to a certain extent, Ludwig von Mises. For neoliberals of different schools, however, from Hayek to Eucken to Friedman to Robbins, the dual argument made good sense. Interventions in the market process were wrong but so was laissez-faire. Crucially, this was not a compromise, a sign of moderation, or a tacit acceptance of some social liberal principle. The first aspect of the dual argument shows clearly that early neoliberalism was just as much a rejection of social liberalism as it was of laissez-faire liberalism. In order to create a market-based society, the state had to be put to use, not to supplant market mechanisms but, on the contrary, to protect and nourish them. As Hayek spoke of the difference between ordered competition and a truly competitive order, it remained unclear what the neoliberals really meant by “competition,” but the important common ground found in the dual argument approach nonetheless left space to differ on the question of how states should be used.

12 HLA, Mont Pelerin Society, Box 1, ”Mont Pelerin 1947.”
13 Unfortunately, Hayek’s 1946 essay “What Is Competition” offers few clarifications, although it is a well-founded attack on the neoclassical notion of “perfect competition” (Hayek 1948).
III. POSTWAR TRAJECTORIES

The Radicalization Thesis

I have argued that the founding of neoliberalism as an intellectual creed in the interwar and early postwar years was based on a dual argument directed both against interventions in the economy and against laissez-faire. The point that early neoliberals were against laissez-faire has been made before (Mirowski and Plehwe 2009; Peck 2010; Slobodian 2018), but it is my contention that the concept of the dual argument clarifies the fundamental importance of this rejection and its relationship to the criticism of economic planning. In a time where political turmoil and economic crises made the old liberal idea of natural stability seem utopian, the neoliberal embrace of state power did not entail any rejection of markets but was rather a logical extension of their commitment to market mechanisms as what I refer to as “mediators of modernity”—meaning that markets are seen as the prime institution allowing for social coordination in a heterogeneous, modern society. The early neoliberals’ rejection of economic planning, on the other hand, should be well known. As the bogeyman of “neoliberalism-as-laissez-faire” has lost ground within academe, however, a new bogeyman of early neoliberalism as practically the same as social liberalism appears to be making headway. This in turn seems to be based on the idea that later iterations of neoliberalism somehow turned into that which it initially opposed: a movement for laissez-faire liberalism. In Angus Burgin’s well-researched and otherwise commendable account of the neoliberal movement, The Great Persuasion, we are presented with exactly such a story. Towards the end of the chapter entitled “The Invention of Milton Friedman,” Burgin claims that the politics of Milton Friedman marked a departure from the supposedly more nuanced view of Hayek and other early neoliberals: “To Hayek and the other founders of the Mont Pèlerin Society, Friedman’s ascent within its orbit reflected the collapse of its attempt to integrate a restrained defense of free markets into a traditionalist worldview. In the broader social environment Friedman’s rise portended, and precipitated, the triumphant return of laissez-faire” (Burgin 2012, p. 185). A similar story is put forward by Daniel Stedman Jones in his Masters of the Universe, where he also notes that the same Milton Friedman who in the 1951 essay “Neo-liberalism and Its Prospects” wrote that he considered laissez-faire philosophy to be flawed, described himself as a defender of laissez-faire in an essay on Adam Smith from 1976 (Jones 2012, p. 102).

The thesis put forward by Burgin and Stedman Jones is thus that the neoliberal movement was radicalized under the leadership of Milton Friedman, who took up the presidency of the Mont Pelerin Society in 1970. Burgin repeatedly contrasts Friedman to his predecessors, who are described with words like “moderation” and “restraint” (Burgin 2012, p. 183). The change is not explained exclusively by reference to Friedman personally, and the importance of the Cold War context is especially emphasized. For example, Stedman Jones notes how variations over Adam Smith’s theory of an invisible hand became “a central ideological claim on behalf of free market capitalism in the Cold War against totalitarian communism and its Western collectivist-cousins” (Jones 2012, p. 108). This is certainly true, but although an ideological climate very different from that of the interwar years may have tempted neoliberals to deploy the laissez-faire rhetoric they had previously criticized, it does not sufficiently explain how American neoliberals could so easily abandon one of their two core precepts.
A group who nonetheless actively subscribes to the radicalization thesis are the German ordoliberals. As members of the Mont Pelerin Society who write scholarly articles on the history of their own movement, they hold a peculiar role as both the peers and the object of study for a historian of the neoliberal movement such as yours truly. Due to the continuous influence of ordoliberals on economic policies in Germany and in the EU as a whole (Hien and Joerges 2017), they are also political actors in the present moment of European politics, as evident by, for instance, the comments of Hans-Werner Sinn quoted in the introduction of this article, something that should be kept in mind when considering their interpretation of the history of the neoliberal movement. The so-called Hunold affair in the early 1960s (Hartwell 1995, pp. 100–133), which led to the resignation from the society of both its erstwhile secretary Albert Hunold and then president Wilhelm Röpke in 1962, is held up by this group as a turning point for the neoliberal movement and something of a defeat for German ordoliberals within the Mont Pelerin Society at the hands of American economists (Plickert 2008). Ordoliberals like Röpke and Eucken had been influential members of the society in its early years, but, according to the ordoliberal version of the story, their influence waned as neoliberalism moved away from its characteristic dual argument approach, towards a laissez-faire approach that they, too, connect with the USA and the influence of Milton Friedman.

Somewhat curiously, if they were so opposed to these developments, ordoliberals nonetheless remained within the organization. In a recent interview the influential German economist Lars Feld, currently the director of the Walter Eucken Institut, claimed that the presence in the Mont Pelerin Society of ordoliberals such as himself may “balance the society,” and he expressed hopes for an ordoliberal revival within the organization at the expense of an old guard of “think-tankers” (Hippe 2021, p. 52). Feld also claimed in the same interview that what had happened already in the 1960s was that “Röpke realised that the Mises-group conquered Hayek (because of their shared history), and that he therefore returned to classical liberalism” (Hippe 2021, p. 50; my translation). A similar sentiment is expressed in a recent paper by Lars Peder Nordbakken, who is connected to the ordoliberal NOUS network, which is based in Freiburg and led by Feld and Karen Horn. Under the headline “Liberalism beyond Hayek,” Nordbakken claims that The Constitution of Liberty from 1960 represented “a return to liberal minimalism” and “a step backward” as opposed to The Road to Serfdom, thus “creating a moderate version of the old laissez-faire problem” (Nordbakken 2019, p. 13). The connections between Hayek and ordoliberalism have previously been highlighted by contemporary ordoliberal scholars (Kolev 2010), but in Nordbakken’s paper it appears as if the former is now increasingly grouped together with Mises, and therefore seen as a laissez-faire thinker who turned his back on the presumably more advanced insights of ordoliberalism.

The Double-Truth Thesis

While Milton Friedman’s use of the term “laissez-faire” with positive connotations in 1976, as well as in Capitalism and Freedom in 1962 (Friedman 2002, pp. 5–10), does seem to indicate that something had happened to the anti-laissez-faire views of neoliberals, the idea that all neoliberals except the ordoliberals plainly forgot or outright rejected the original dual argument position leaves a lot to be desired. In fact, it would
make sense only if one had (mis)interpreted the neoliberal rejection of laissez-faire as a sign of moderation or “restraint,” as so many of the thinkers and scholars both within and outside the ordoliberal group who have been cited above appear to be doing, when it could instead be seen as a position born out of a radical belief in markets as the only possible mediators of modernity.

An observer who follows the early neoliberals’ own explicit view of laissez-faire as no less than an absurd impossibility is the economist and historian of sciences Philip Mirowski. Through several works on what he calls the Neoliberal Thought Collective, he has argued that far from forgetting their attack on laissez-faire, neoliberals remained true to the principles of the dual argument, yet changed the ways in which this was communicated. According to Mirowski, there is a “double-truth doctrine” at play, which allows neoliberal thinkers to have one esoteric truth for insiders and a different, exoteric truth intended for mass consumption. Mirowski claims that this is not to be seen as a trait of cynicism but rather something that “grow[s] organically out of the structural positions that motivate the thought collective” (Mirowski 2013, p. 68). The implication is that the double-truth doctrine is in fact a logical consequence of seeing markets as superior processors of information and of the epistemological positions regarding the importance of ignorance for a functioning market order that flow from this core neoliberal principle. According to Mirowski, this in turn leads to several “double-truths” regarding the endeavor of rationally promoting the virtues of ignorance, and that of advocating for an open society from within a closed organization. The starting point of it all is the tension embodied in the dual argument. It is within the problems of arguing against state “interference” in markets while also arguing that the state is vital for markets where what Mirowski calls “double-truth” actually begins:

The Neoliberal Thought Collective tamed many … contradictory conceptions of the “good society” … by trying to have it both ways: to stridently warn of the perils of expanding state activity while simultaneously imagining the strong state of their liking rendered harmless through some instrumentality of “natural” regulation; to posit their “free market” as an effortless generator and conveyor belt of information while simultaneously strenuously and ruthlessly prosecuting a “war of ideas” on the ground; asserting that their program would lead to unfettered economic growth and enhanced human welfare while simultaneously suggesting that no human mind could ever really know any such thing, and therefore that it was illegitimate to justify their program by its consequences; to portray the market as something natural, yet simultaneously in need of solicitous attention to continually reconstruct it; to portray their version of the market as the ne plus ultra of all human institutions, while simultaneously suggesting that the market is in itself insufficient to attain and nourish transeconomic values of a political, social, religious, and cultural character. (Mirowski 2013, p. 69)

In later works, Mirowski has brought in a connection between Hayek and Leo Strauss, who was at the University of Chicago at the same time, to explain how Hayek might have moved towards a double-truth doctrine in the years shortly after the first Mont Pelerin

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14 For a useful definition of the Mont Pelerin Society ecosystem as a “neoliberal thought collective,” see Plehwe’s introduction in Mirowski and Plehwe (2009, pp. 1–42).
Society meeting in 1947. Strauss emphasized esotericism in the theory of politics, and the importance for many political thinkers throughout history of concealing their text’s true intentions, which were accessible only as secret truths for the select few (Mirowski 2014, pp. 28–31). This springs from the fear of persecution, but the idea that economists in particular have to hide their insights from the general public is not alien. It is, for instance, present in Paul Samuelson’s contention that the doctrine of balanced public budgets is a myth, told by economists in order to curb public spending and avoid anarchy (Blaug 1995). The notion of such a “noble lie” comes from Plato, but Mirowski needs neither him nor Strauss to explain the logic of how the neoliberal view of markets can countenance a double-truth approach. The neoliberal arguments for markets had been a “knowledge argument” ever since the socialist calculation debates, where it was proposed that no human or group of humans could ever obtain all the knowledge that emerges spontaneously from the market order. The epistemic limitations of humankind are what makes economic planning so dangerous. Already in The Road to Serfdom, Hayek therefore wrote of the imperative to “yield to forces which we neither understand nor can recognize” and “submission to the impersonal and seemingly irrational forces of the market” (Hayek 2007, pp. 204–205). If human ignorance and the acceptance of it are important prerequisites for a functioning market order, Mirowski suggests that it follows that the exoteric communication of the neoliberal movement can differ from its esoterically held beliefs.

Through the notion of a double-truth doctrine, Mirowski argues that American neoliberals have routinely portrayed themselves as believers in laissez-faire and opponents of any state “interference” in markets, even if they are not, and that this is a function of deeply held epistemic commitments. But if ignorance is a virtue of market society, why bother convincing people at all? Such a point was put to Milton Friedman by none other than his fellow Chicago economist and president of the Mont Pelerin Society between 1976 and 1978, George Stigler, who instead believed that economists were more influential when working on technical matters for an audience of experts (Nikhah 2017). Never one to mince words, Mirowski writes of the differences between the two that “Friedman was the public face, Stigler the clan fixer. For the former, the MPS was just another debating society; for the latter, it was the executive committee of the capitalist insurgency” (Mirowski 2013, p. 77). Friedman enjoyed winning public debates, whereas Stigler, and possibly also Hayek, was more interested in wielding power and influence through other means. There is a notion that only a select few, such as George Stigler and Friedrich Hayek, really understood what was going on, and that people like Milton Friedman, not to mention various think tankers in what Mirowski refers to as the “outer shells” of the Neoliberal Thought Collective’s Russian Doll structure, were at least half-ignorant of how their claims to laissez-faire were incompatible with the fundamental precepts of their ideological program as expressed through the dual argument.

The more important point in this respect is nonetheless that none of them particularly minded being seen as proponents of laissez-faire, neither by their wealthy donors nor by the general public, even though their earlier writings indicate that they knew perfectly well that their doctrine rested on the use of states and a dual argument decrying both economic planning and laissez-faire. The idea of a double-truth doctrine offers up an explanation as to how American neoliberals could end up laying claim to the mantle of laissez-faire, when neoliberal doctrines such as monetarism, public
choice theory,\textsuperscript{15} and the somewhat more vague current known as “supply side economics” all included important roles for the state in creating and safeguarding a social order based on the mechanisms of markets—these being, for instance, the key role of central banks within monetarist doctrine, and the importance of state support for producers in supply side economics.\textsuperscript{16} For American neoliberals, then, the dual argument led to a double truth. If there was radicalization here, it lay not in turning to laissez-faire but in pretending to do so.

\textit{Using the State without Antitrust}

German ordoliberals, however, remained open about their cautious embrace of state power in the service of market mechanisms. The most famous difference between Chicago School neoliberalism and German ordoliberalism is thus the vital role ascribed to antitrust policy within the ordoliberal framework, something noted already by Michel Foucault in the late 1970s (Foucault 2008). While it is true that Chicago School economists like Aaron Director eventually moved away from the position they had originally shared with ordoliberals in 1947, what this reveals is not necessarily a turn to laissez-faire on the part of Chicago economists but a different way of interpreting the logic of the market from that of the rules-focused ordoliberals. Much has been written about the Chicago School’s shift on patents and competition law and the so-called Free Market Study that lay behind it (Van Horn 2009; Nik-Khah and Van Horn 2016), and it is perhaps the clearest instance in which the Chicago School parted ways with ordoliberalism. Whether or not the Chicago School thereby also parted ways with what Sinn has called “original neoliberalism” is perhaps a question of interpretation, but since they nonetheless remained committed to the use of strong states in service of market mechanisms, I would argue against it. As economists working within the neoclassical mainstream, Chicago School economists, almost by definition, accepted an important role for the state in managing the economy, and Friedman saw economics as an empirical science in the service of policy-making (Stapleford 2011). As mentioned, most iterations of Friedman’s famous monetarist doctrine, for instance, would naturally presuppose a state actually regulating the money supply (although Friedman himself supposedly thought a mathematical equation could do the job) (Friedman 1962). This was not the old-fashioned gold-standard doctrine that Mises adhered to, because as the Chicago economists developed a somewhat different appreciation of the speculative character of markets from that of both Mises and the ordoliberals, they also saw the need for a state that could regulate the money supply according to the needs of the market, instead of having it fixed to a quantity of precious metals. The embroilment within the neoclassical tradition is perhaps the main thing separating the Chicago School economists from various Austrians, including Hayek, and it is also what led to Mises acolyte Murray Rothbard at one point to decry Friedman as nothing less than a “statist” (Rothbard 2002). Compared with Rothbard’s repurposing of Austrian ideas into so-called anarcho-

\textsuperscript{15} It would be imprecise to label all forms of public choice theory as “neoliberal,” but most forms do grow out of the works of MPS president James Buchanan (Johnson, Marciano, and Mosca 2021).

\textsuperscript{16} Some of the best examples of this are to be found in Mirowski’s own writings, but see also other quoted works including but not limited to Gamble (1996); Peck (2010); Harcourt (2011); Bonefeld (2017); Slobodian (2018).
capitalism, even Mises appeared as someone who, according to a recent observer, “never questioned the necessity of a strong state to create and uphold a market order” (Jensen 2022, p. 352).

I should add that the reasons for US-based neoliberals’ own claims to laissez-faire in this period may also lie in something as prosaic as money. In his recent book The Marginal Revolutionaries, Janek Wasserman notes that the transplantation of the Austrian School of economics from Vienna to the US during the Second World War entailed a change in fortunes for the only intellectual present at Mont Pèlerin who was actually something of a supporter of laissez-faire: Ludwig von Mises. He had seemed isolated at the first meeting in 1947, but “if unpopular academically, his positions found growing support in business and libertarian circles, since his theory seemed to provide irrefutable proof for their assumptions” (Wasserman 2019, 214). Mises’s views may not have been popular among the other attendees speaking at the opening conference in 1947, but the mostly silent American think tank delegation, of which Loren Miller formed part, saw him as their shining light. In popular myths Mises had stormed out of a discussion with other attendees based in the USA on the boat over to Europe, calling his colleagues “a bunch of socialists” (Rockwell Jr. 1998). Still, a special place is held for him in the neoliberal pantheon, as it was his attacks on socialism in 1920 that had started the socialist calculation debates. Among those present at the 1947 conference who had been critical of Hayek’s dual argument approach from the left, such as Maurice Allais, Michael Polanyi, Karl Popper, Carl Iversen, and Herbert Tingsten, several quit the organization or remained only as inactive members (Innset 2020, pp. 181–184). The one economist attendee who had criticized the dual argument approach from the right, on the other hand, Mises, became an important and active member. At the same time, the messaging of US-based neoliberals gravitated towards the laissez-faire positions of their funders that they themselves did not hold, and Mirowski suggests there is an almost symbiotic relationship between seasoned political operatives, like Stigler and Hayek, and the more “romantic” libertarian groups, especially those descending from Mises.

Mises’s interventions set neoliberals on their path to their new understanding of the market mechanism as the prime mediator of modern social life, which was followed by the other neoliberals’ embrace of state action with the aim of fostering and nurturing said mechanism. Mises did not follow that second move, although he certainly saw a role for a minimal security state (Jensen 2022). His lonely outbursts at the 1947 conference did have a certain logic to them. If the market really was the spontaneously developed order that the neoliberals argued it was, how could states possibly set up laws and systems to improve it? Although they were separated from Mises’s followers in New York and Auburn, Alabama, “the second generation” of Chicago School economists would apply this logic a few decades after 1947 when, in a very different political climate, they turned the ordoliberal doctrine of strong antitrust laws, which they had originally agreed with, on its head, making American neoliberalism into something of a defense for the large corporations and business interests who funded their work (Van Horn and Klaes 2011).

It is beyond the scope of this paper to argue for the many ways in which other forms of neoliberalism than ordoliberalism have also remained true to the dual argument, but suffice it perhaps to say that “laissez-faire” is an odd denomination for someone like Hayek, who spent the decades after the first Mont Pellerin Society conference drafting principles for the constitutions and legislations most beneficial to the workings of markets. In his pre-1947 writings, Hayek clearly did not think that markets arose and
functioned on their own accord if only states got out of the way, and he did not simply forget that fundamental insight in works like the 1960 *The Constitution of Liberty* (Hayek 1972) and the 1972–73 *Law, Legislation and Liberty* (Hayek 1998). João Rodrigues has also done valuable work showing how both Hayek and even Friedman worked specifically on the vital role of the “non-economic” sphere in supporting a market society (Rodrigues 2018). Although Hayek may have veered both towards Mises and the wealthy US business interests who funded his operations, it is clear that the overarching project growing out of the dual argument—to find ways of using the state “for liberal ends”—stayed with him also in his later works.

This was a basic insight he shared with the ordoliberals, and which owed much to his interactions with them. Far from being an enemy of ordoliberals, Hayek was clearly seen as one of them, and instead of remaining in the US, he accepted the Chair of Walter Eucken at Freiburg University in 1962, staying there until his retirement. Even Mises, the supposed arch-enemy of ordoliberals, received one of his only honorary doctorates in economics from the University of Freiburg in 1964. The animosity between Mises and the group he dubbed “ordo-interventionists” was real (Kolev 2018), but it clearly existed within the space of a neoliberal organization and project with the shared aim of making modern society a market society. In the concluding section of this article, I suggest that the intra-neoliberal differences between the Chicago School and the ordoliberal school lie not in whether or not they want to use the state but in differing interpretations of what the logic of markets really is and thereby in different policy proposals for exactly how the state ought to be used.

IV. CONCLUDING REMARKS: INTERPRETING THE LOGIC OF THE MARKET

In a recent review essay, Mirowski writes about “the dominance of German ordoliberal ideas at the inaugural conference” as key to understanding that the whole project of neoliberalism is something much more significant than “merely glosses on a ‘mainstream introductory economics of today’” (Mirowski 2022, p. 194), which is how certain contemporary members of the Mont Pelerin Society now seek to portray it (Caldwell 2022). A few lines later, Mirowski writes: “Yet Ordoliberalism withered on the vine after the 1960s and were [sic] displaced within the MPS both by a distinctly novel Hayekian theory of markets on the one hand, and a Chicago-style American variant of neoclassical theory on the other” (Mirowski 2022, p. 195). In Europe, however, ordoliberalism far from withered, and recent years have seen a proliferation of scholarly work on the importance of ordoliberalism for practical economic policy, both in Germany and for the European integration project (Ptak 2009; Bonefeld 2017; Hien and Joerges 2017; German 2021). Rather than detail how the dual argument front line has shifted over time since 1947, within ordoliberal-inspired European liberalism, on the one hand, and the different versions of American neoliberalism, on the other, I now provide a brief example to illustrate what the differences between German ordoliberalism and American neoliberalism amount to in practice. William Callison has shown how approaches to the 2015 euro crisis revealed profound, continental differences between European and US economic policy, which he traces...
to the seminar rooms of Freiburg and Chicago, respectively. While the approaches differed, they were arguably both based on the dual argument and the foundational neoliberal idea that the state must have a constructive role to play in order to protect, rescue, and nurture market mechanisms. The official American approach, shaped by years of managing the fallout from the 2007–08 financial crisis, was to govern according to the speculative logics of the market, something that included a US push for European institutions to “restructure” Greek debts. Callison interprets this seemingly Keynesian impulse rather as an expression of an American neoliberalism deeply respectful of the speculative logic of financial markets (Callison 2017). Germany, led by ordoliberal finance minister Wolfgang Schäuble, however, was seen instead to advocate an austere, rules-bound, and punitive type of neoliberalism, which made the American Secretary of the Treasury Timothy Geithner describe the former as subscribing to “old testament justice” (Geithner 2014, p. 443).

The idea that ordoliberalism represents a moderate and social form of neoliberalism is questioned by those who see the disciplinarian response of German ordoliberals to the European debt crisis as more anti-social than the American approach to the same issue (Varoufakis 2017). The point to be made here is that both schools of neoliberalism want to use the state in the service of the market, as they always have. Where ordoliberalism differs from its American counterpart lies in the ways in which they want to use the state, and this is linked to differing interpretations of the logic of the market. In line with the dual argument, both versions of neoliberalism want to use the state in the creation and maintenance of a market society, but they differ in how to achieve such a goal. For the American neoliberal, at least those steeped in neoclassical economics of the Chicago School type, how to use the state in the service of markets seems almost to be a constant discovery procedure, not unlike that of markets themselves. If financial markets require enormous government bailouts, as they did in 2008 and after, then so be it. The interpretation of the logic of the market is an ongoing process, open to revision. For the German ordoliberal, however, the logic of the market has already been interpreted once and for all. The underlying principles of what Franz Böhm in 1953 referred to as “the rules of the market” (Böhm 1979, p. 445) have already been arrived at by ordoliberal intellectuals like Böhm, and so the job of economic governance is creating rules based on these—for instance, that of the schwarze null relating to government expenditure—and then making sure these rules are enforced. These are different approaches that can lead to very different policy outcomes, as was the case in 2015. The question, however, is not whether to use the state but rather in which way, built on which interpretation is used of what the logic of the market really is.

Already at the 1947 founding meeting of the Mont Pelerin Society, the tension embodied in the neoliberal dual argument was questioned through the pointed remarks of Loren Miller. Bernhard Walpen referred to early neoliberal organization as “Der Plan das Planen zu beenden” (Walpen 2004)—the plan to end plans, and the neoliberal project of saving the market order from state action by state action represents an intriguing case for any intellectual historian. The early neoliberals tried to combine their critique of economic planning with the critique of laissez-faire by arguing that the main problem with both paradigms was that it led to a corruption of the market mechanisms they thought were essential for modern societies to function. This points to neoliberalism as fundamentally an attempt to make markets the mediators of?
modernity (see Davies 2016), a project that is impossible to understand without properly contextualizing early neoliberal thought to the volatile political and economic situation in the interwar years. The notion of a tension-ridden dual argument underlying early neoliberal thought brings to the fore how neoliberalism began as a novel way of thinking about markets when faced with the civilizational collapse of the 1930s and 1940s, and that this also led to new ways of thinking about how to use states in their service. As the example above shows, there is diversity within neoliberalism, both in theory and in practice, but the nuances are more subtle than some of the discussions cited in this paper make them out to be, and the dividing line is not really one of moderation, and certainly not whether or not to use the state at all.

While the double-truth doctrine is not particularly helpful with regards to German ordoliberalism, it does hold explanatory power when it comes to American neoliberalism, and it should be clear that it is imprecise to describe any neoliberalism (apart from extreme versions of libertarianism) as laissez-faire, also after 1970. This matters, because that is exactly the image we are presented with both by independent historians and by present-day ordoliberals. Even more importantly, the question of laissez-faire or not is often presented as a question of radicalism versus a more moderate form of neoliberalism. But wanting to use the state is not necessarily a mark of moderation. The interventions of early neoliberals such as Lippmann and Hayek and ordoliberals like Eucken and Röpke represent a break in the history of economic thought—a decisive move on the part of market liberals away from the banal question of laissez-faire and towards the question of how to use modern states in the service of markets. In appreciating this, we may also find the seeds of a hope that political economy might be discussed not as an axis from total state planning on one side to an equally totalizing market order without a state on the other. The radicalization thesis loses sight of this hugely important significance of the neoliberal tradition. Instead, neoliberalism post-1970 is understood, wrongly, as laissez-faire, and early neoliberalism is understood, also wrongly, as a more acceptable and nuanced creed akin to the social liberalism most neoliberals strongly opposed.

In the case of current-day German ordoliberals, they appear to be using the radicalization thesis as a means of portraying their own creed as a more socially oriented type of market liberalism than that which in some accounts has dominated at least US economic policy-making for the past decades. That claim could still hold true, but it is nonetheless based on a misrepresentation of the history of the neoliberal movement of which the ordoliberals do form an integral part, despite their criticisms of other branches. Ordoliberals have been positioning themselves as a “third way” alternative since the days of Röpke, but as Gareth Dale puts it: “We can readily agree with the proposition that ordoliberals favoured a third way between extreme (‘laissez-faire’) liberalism and communist planning, but if those two highways are the alternatives, it tells us very little. Almost all traffic was jammed in the third lane” (Dale 2019, p. 1057). The most important lesson to be learned from the neoliberal dual argument and the rejection of laissez-faire that it entails is that the issue is never whether or not the state should play an important part in economic life but rather what the state should do, how, and to the benefit of whom. The recent attempt to argue that ordoliberalism represents a “true” neoliberalism that is more progressive than other neoliberalisms because it accepts a role for the state should thus be seen as unsuccessful.
COMPETING INTERESTS
The author declares no competing interests exist.

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