

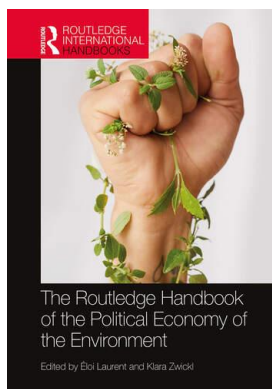
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THE HISTORY OF ENVIRONMENTAL AND ENERGY ECONOMICS THROUGH THE LENS OF POLITICAL ECONOMY

Antoine Missemer

Introduction

Adopting a political economy perspective when exploring the history of economic thought leads to opening the eyes to new insights. The challenge is no longer simply to read past ideas, paradigms, and theories from the point of view of their intellectual roots and of our understanding of economic processes. The political context, the distributional effects of the proposals, and their underlying social questions become important. On energy and environmental matters, which involve systemic issues (i.e. all sectors of the economy are impacted) and which cover ethical and political concerns (polluter-pays-principle, intergenerational equity, etc.), political economy perspectives seem particularly relevant. Basically, three different ways of intersecting the history of economic thought and political economy can be considered.

First, it can mean focusing on the authors and corpuses that historically claimed to be part of ‘political economy’ in the old sense of the term. In 1615, Antoine de Montchrétien was one of the firsts to use the expression ‘political economy’ (*‘économie politique’*). At the time, the word ‘economy’ was generic, used for all sorts of good management or organization of things. The addition of the adjective ‘political’ served to show the national dimension, subject to the sovereign’s wishes, of the production and distribution of wealth (Schabas and De Marchi 2003). Economists were *political* economists until the end of the 19th century, when a new generation of scholars, later called the marginalists, pushed for renaming their discipline ‘economics’, in order, according to them, to leave aside values and ideologies to focus on allegedly purely scientific questions. The relevance and realism of such a project are questionable, obviously. But it means that a first way of articulating the history of economic thought with political economy is to focus on early economic ideas, from the physiocrats in the 18th century to the late classical economists in the 19th century. In that period, energy and environmental issues were not addressed in the same way as today. People talked about their surroundings but not *the* environment, and energy sources were examined separately (wood, coal, waterpower) without a global view of *energy issues*. This does not prevent the historian of ideas to explore the articulation between early political economy and the natural world: Linnaeus’s ‘economy of nature’, Ricardo’s rent theory, John Stuart Mill’s conception of nature, and W. Stanley Jevons’s

coal question are all examples that have attracted attention (Christensen 2004; Schabas 2005; DesRoches 2015; Wolloch 2016; Missemmer 2017). Generally speaking, one may also notice that political economy emerged around the same moment as early environmental concerns, in the context of Western proto-industrialization (Albritton Jonsson 2013; Warde 2018; Kelly 2019). Examining this co-occurrence can be insightful.

A second intersection between the history of economic thought and political economy, ignoring the chronological split of marginalism, leads to deal with all corpuses, ancient and modern, that paid attention to political, institutional, and social concerns in their analysis of economic processes. In environmental and energy affairs, this covers corpuses that were interested in the unequal access to natural resources, in the distributional consequences of energy policies, in the detrimental effects of the polluter-pays-principle, in the social embeddedness of environmental economics, and so on. The historian of ideas is thus led to explore, for instance, socio-energetics in the early 20th century, John Kenneth Galbraith's incursion into environmental issues in the 1960s–1970s, and the roots of modern social ecological economics (Spash 1995; Douai and Plumecocq 2017; Franco 2018; Chirat 2020). The idea here is to examine only a part of past economic thought, that which dealt with questions dear to political economy as it is defined today.

The third and last option is to consider more traditional episodes in the history of economic thought and to reanalyze them through the lens of political economy. In terms of environmental ideas and theories, this means coming back to classic texts in the mainstream history of natural resource economics or externalities to show what a political economy sight can bring to our understanding of the discipline. Examples here are numerous, from the enigma of the disappearance of land from the production function, to the institutional networks that influenced the research conducted at Resources for the Future (RFF) in the 1950s–1960s, including the motives that led Harold Hotelling to establish his famous theoretical 'rule' in 1931 (Czech 2009; Banzhaf 2019; Franco, Gaspard, and Mueller 2019; Gaspard and Missemmer 2019; Ferreira da Cunha and Missemmer 2020). That way of intersecting the history of environmental and energy economics with political economy may be the most stimulating one, because it forces us to look at corpuses in a different way, to highlight the contributions of a political economy perspective to our understanding of the history of economics.

This chapter adopts this latter option, exploring two specific examples in the history of environmental and energy economics, to show how political economy can enrich our examination of past paradigms, ideas, theories, concepts, and models. The first section discusses the emergence of the concept of natural capital in the 1900s, which can be classically analyzed in connection with the history of capital theory. A political economy perspective adds new information about the context in which the concept appeared and about its implications in terms of the relationship between human beings and the rest of nature. The next section returns to the first experiences of measuring the energy-growth coupling, in the late 1920s, this episode being scrutinized through the history of production theory and through the methodological challenges of inter-index correlations. A political economy view not only sheds light on the context of the emergence of the project carried out at the time, but also leads to a redefinition of the very nature of the project, from an apparently purely energetic to a social and distributional one.

Natural capital in the 1900s

The concept of natural capital is now one of the most used and commented on in sustainability sciences, including environmental and ecological economics. Natural resources and biophysical processes are defined as a self-regenerated capital producing useful services to human beings

for the satisfaction of their needs (DesRoches 2015). The concept of natural capital finds itself at the frontier of ecology and economics, commonly employed in academia but also in public expertise and policy making (Fenech et al. 2003; Helm 2019). It is also a structuring concept for the distinction between weak and strong sustainability: the possibility of substituting natural capital with other types of capital (human, manufactured) is at the foundation of competing views of sustainable growth and of intergenerational justice (Neumayer 1999; Barbier 2019). Because it leads to considering the natural world from the point of view of capitalism and human production processes, the concept of natural capital has also been strongly criticized for participating in the noxious commodification of nature (Sullivan 2017; Smessaert, Missemer, and Levrel 2020). Basically, it is a metaphor, mobilizing the economic lexicon and economic theories to deal with natural resources and ecosystems.

The origins of the concept of natural capital are usually identified in the 1970s–1980s (Akerman 2003; Bell 2005; Nadal 2016), when Ernst F. Schumacher (1973) apparently coined it and when David Pearce (1988) pushed for its adoption by ecological economists. However, deeper historical investigation allows us to find old conceptions of nature very close to that conveyed by the concept of natural capital. Linnaeus's view of the œconomy of nature, in the 18th century, has been related to a capitalistic conception of the natural world (DesRoches 2018). It seems there is even in Adam Smith's *Wealth of Nations* (1776) something reminiscent of a vision of nature in the form of a self-regenerated capital (Wolloch 2020). More directly, the expression 'natural capital' actually already existed in the 19th century, albeit with different meanings from those of today (Missemer 2018). Natural capital was used to gather all agents of production created by God or nature (i.e. natural resources and labor force), or it was employed to denounce the concentration of land property in a few hands. The expression 'natural capital' in our modern sense was born later, though well before the 1970s.

It appeared in the writings of Alvin S. Johnson, who was a young economist in the 1900s and who would become famous a few years later as one of the founding fathers of the New School for Social Research in New York. Johnson wrote a couple of textbooks in the 1900s. In his 1909 *Introduction to Economics*, he clearly posited the distinction between artificial and natural capital:

A generation ago practically all economists restricted the term "capital" to productive wealth that has been produced by industry, such as machines, stocks of materials, etc. Productive wealth, the origin of which cannot be traced to man's industry, was usually classified under the heading "natural agents," or simply under "land" . . . In everyday language men speak of investing capital in land, as of investing capital in buildings or machinery. This usage will be followed in this book; wherever it is necessary to distinguish between the two classes of productive wealth, we shall call the one artificial capital, the other natural capital.

(Johnson 1909, 197)

Johnson elaborated on the role of natural capital in production processes and on its accumulation (1909, 214). His conceptual innovation was noticed by reviewers, who however did not perceive the potential scope of the new concept (Carver 1910). Uses of the expression 'natural capital' were more and more numerous in the 1910s and 1920s, and then decreased in the 1930s, until Schumacher relaunched the concept, probably without knowing about its first life.

Describing and explaining the emergence of the concept of natural capital in the early 20th century is within the reach of the historian of economic thought who can focus on the theoretical context in which Johnson wrote his book. Capital theory was then at a momentum. Since

the mid-19th century, capital has always been a subject of controversy among economists, over its definition, its forms (funds, machinery, stocks, etc.), and its role in production. The debates between Austrian and American economists, from the 1880s onwards, were still vivid when Johnson started his academic career. In particular, John Bates Clark (1899) played a significant role in both the renewed capital theory and in Johnson's curriculum – Clark was his supervisor at Columbia University (Samuels 2008). What mattered in Clark's conception of capital was the distinction between the funds of capital and capital goods. These two categories were, according to him, a way of understanding the circulation of capital and its concrete forms in production processes. The common feature of all forms of capital was, in Clark's framework, their capacity to produce things. A sum of money could be considered as capital if it represented productive capacities or was intended for investment. And the concrete assets of a company (machines, buildings, etc.) would become capital goods as soon as they participated in the production process. Johnson inherited from this comprehensive vision of capital, centered on the idea of productivity of the financial and physical assets under consideration.

The other important theoretician who influenced Johnson's general conception of capital was Irving Fisher. This can be noticed throughout Johnson's writings, with explicit references. It is confirmed by the tribute that Johnson (1952) made to Fisher in his autobiography. In the first capital theory controversy, Fisher (1906) had a specific position. He argued that capital had to be defined in a very flexible way, based on the concept of wealth. The important distinction, for Fisher, was not between financial assets and capital goods but between income and capital, that is, flows and stocks of wealth. This perspective implied that any artificial or natural riches could be considered as capital. Likewise, 'resources' and 'assets' were seen as synonymous, opening the door to the application of capital theory to *natural resources* – Fisher described how discounting could be applied to wine, forests, and mines. Fisher did not use the word 'natural capital', but he had a very extensive vision of capital, enabling his readers and followers to include a wide variety of goods and riches into the category 'capital'. Johnson was influenced by this extensive view, seeing it as an opportunity to add new epithets to the word 'capital'.

In other words, Johnson coined the concept of natural capital under the double influence of Clark's emphasis on the productive nature of capital and of Fisher's extensive definition of wealth. All the theoretical conditions were in place to allow Johnson to take the final step leading to the establishment of the concept of natural capital.

The historian of economic thought can find the results of this inquiry sufficient. Johnson's innovation, which appeared firstly as a historical coincidence, finds its explanation in the theoretical context of the time and in Johnson's own intellectual path. Lessons can also be learned for contemporary issues, for a better understanding of the place of the concept of natural capital as a mainstream or challenging concept in economic thought (Missemer 2018). More generally, drawing from capital theory to deal with environmental and ecological issues offers both opportunities and drawbacks (Victor 1991). Scrutinizing the early history of the concept of natural capital provides an interesting hindsight. Should we stop here? We could, but nourishing the history of economic thought with concerns that are dear to political economy can offer a complementary perspective that we would be wrong to ignore.

In the 1900s, when Johnson coined the concept of natural capital, American environmentalism was still in its infancy. It appeared in the mid-19th century through the writings of Ralph W. Emerson, Henry D. Thoreau, and George P. Marsh, who had warned their contemporaries about the destructive powers of the natural world by human activities. As well established now, this early environmentalism gave birth to two competing views in the late 19th century: John Muir's preservationism and Gifford Pinchot's conservationism (Hays 1959; Fox 1981).

Muir, whose ideas participated to the creation of the first national parks in the United States, considered that parts of the natural environment had to be fully protected, with no human intervention at all. Pinchot, who had been trained at the *École Nationale des Eaux et Forêts* in Nancy (France), was a forester more inclined to exploit natural resources, provided it was done in a reasonable, rational way. Those two versions of environmentalism obtained a large political audience after the election of Theodore Roosevelt to the US presidency. Roosevelt's terms, known as the Progressive Era, were based on the will to promote public good and to contain the private, economic interests of trusts. Preservationism and conservationism were two (environmental) ways of incorporating common good into the public agenda.

Until the mid-1900s, Roosevelt oscillated between Muir and Pinchot, consulting both to imagine his policy for natural resources and environmental protection. The famous Hetch-Hetchy controversy, in 1905, disturbed that balance. An engineering project was set up to secure the water supply in the San Francisco Bay area. The construction of a dam in the Hetch-Hetchy valley was envisaged. Preservationists were opposed to the project because the Hetch-Hetchy valley was located inside Yosemite National Park and because it was considered as a particularly remarkable natural space. Conservationists promoted the project, seeing it as an opportunity to improve the living conditions of the people of San Francisco. Roosevelt decided in favor of the dam, and appointed Pinchot to the head of the US Forest Service. Conservationism triumphed over preservationism and took the lead in the design of American environmental policies.

Throughout the 1900s–1910s, conservationism became the national doctrine to deal with environmental issues. Pinchot clearly defined his movement as a utilitarian movement, aiming to “the greatest good to the greatest number for the longest time” (1910, 48). This utilitarian, instrumental view of nature spread over all policies and was adopted by scientists, experts, and policymakers from various horizons. In 1908–1909, the National Conservation Commission and the report that came out from it were the climax of the conservation movement, involving representatives of all parts of the American society (National Conservation Commission 1909; Van Hise 1910).

It is in that context that Johnson started his academic career and coined the concept of natural capital. In his textbook, he only mentioned conservation briefly, when detailing the need to encourage “the development of industries that make no drain upon the natural resources of a country” and to retard “the development of industries that destroy such resources” (1909, 367). He met Pinchot once, but this meeting had no direct influence on his conception of nature. However, it is significant that Johnson's general political and intellectual context was marked by conservationism. A utilitarian, instrumental, capitalistic vision of the natural world was in the zeitgeist. This certainly played a role in Johnson's conceptualization.

Other capitalistic expressions dealing with the natural world appeared in the 1900s–1910s, in the conservationist context. Economist Ralph H. Hess (1918, 131) made a clear parallel between the conservation of natural resources and the accumulation of capital. Pinchot himself (1921, 163) talked of the “forest capital” of the United States. And ornithologists involved in the examination of the role of birds in agriculture frequently mentioned the *services of birds* in the same fashion as we talk today about *ecosystem services* in relation to natural capital (Kronenberg 2014).

At the turn of the 1910s, conservationism became more and more invested by people not really familiar with natural resources and the protection of the environment. Conservation soon was used as a generic term to deal with public good and equality. From environmentalism, conservationism became a political doctrine applied to many social subjects, in line with Roosevelt's Progressive Era (Pinchot 1937). Through the lens of political economy, this shows how much Johnson's conceptual proposal was embedded in a utilitarian trend – conservationism – that

went beyond environmental issues, becoming a general ideology. The historian of economic thought is then able to understand with better accuracy the reasons why the concept of natural capital appeared at that moment, and what it conveyed in terms of instrumental views of nature, beyond the mere application of capital theory to natural resources.

Decoupling in the 1920s

Natural capital's invention helps us see the contribution of a political economy perspective to the understanding of the theoretical and political context of ideas. But this is only one part of the concerns of political economists, who are also and mainly interested in the distributional effects of economic processes and in the social and political issues behind the scene of the economic life. Looking at our second example – decoupling – in the traditional history of environmental economics shall allow us to illustrate this latter dimension.

Decoupling refers to the relationship between energy production or consumption and economic output, as measured by GDP. In the light of historical data, if GDP grows at the same rate as energy production or consumption, we speak of an energy–growth *coupling*. If we manage to partially disconnect the two trends, with energy production or consumption growing less rapidly than GDP, we speak of *relative decoupling*. If, finally, we succeed in observing GDP growth with stable or even decreasing energy production or consumption, then we speak of *absolute decoupling*. Decoupling can also be understood in relation to greenhouse gas (GHG) emissions, in the context of climate change mitigation. Historically, the very close coupling between energy and output after the Second World War relaxed in the 1970s, with relative decoupling occurring in some Western economies. However, the feasibility of an absolute decoupling between energy, GHG emissions, and economic growth for the whole world remains controversial (Fischer-Kowalski et al. 2011; Ward et al. 2016; Mardani et al. 2019).

Roots of these modern debates can be found in the 1920s, at the Brookings Institution (Missemer and Nadaud 2020). The geologist and statistician Frederick G. Tryon, joined by a few colleagues, investigated the relationship between energy consumption and economic output, with precise measurements and theoretical concerns regarding the role of energy in production processes. Tryon's seminal article, published in 1927, has sometimes been mentioned in the literature but rarely been examined in detail (e.g. Berndt 1978; Cleveland et al. 1984). Tryon clearly argued that energy as a whole, not only coal, petroleum, or waterpower, had to be scrutinized to see the role it played in economic development. In the opening of his paper, he wrote:

Anything as important in industrial life as power deserves more attention than it has yet received from economists. . . . The great advance in material standards of life in the last century was made possible by an enormous increase in the consumption of energy, and the prospect of repeating the achievement in the next century turns perhaps more than on anything else on making energy cheaper and more abundant. A theory of production that will really explain how wealth is produced must analyze the contribution of this element of energy. These considerations have prompted the Institute of Economics [of the Brookings Institution] to undertake a reconnaissance in the field of power as a factor of production.

(Tryon 1927, 271)

Tryon's project, therefore, was explicit, and it embraced both empirical and theoretical dimensions, from the measurement of the impact of power in everyday life to the amendment of

the theory of production in economics. As the mention of the Institute of Economics makes clear, Tryon's project was related to a broader program set up at the Brookings Institution. There was a tradition there to explore energy issues, from coal to waterpower (Hamilton and Wright 1925; Moulton, Morgan, and Lee 1929). And Tryon's specific undertaking was one among others mentioned in the reports of the organization (Moulton 1929, 17–19). Through many publications, Tryon explored various aspects of energy issues, so including what we now call decoupling (e.g. Tryon 1929; Tryon and Rogers 1930; Tryon and Eckel 1932; Tryon and Schoenfeld 1933).

As with the emergence of the concept of natural capital, it is possible to draw on a classic history of environmental and energy economics to study Tryon's project and proposals. In the 1920s, the theoretical context was marked by many innovations in the field of production theory. Production functions were not stabilized yet, but the tendency was to ignore natural resources and sources of power in the mathematical representations of production. Charles Cobb and Paul Douglas mentioned the need for including "the third factor of natural resources in [their] equations" (1928, 165), but they did not complete the task, and their basic formula would soon become the reference point in production theory without any mention of natural resources or power. It is thus easy to understand Tryon's theoretical ambition, even if it finally did not succeed – energy has so far not become a factor of production in the standard theory.

Tryon's methodological proposals to achieve a satisfying measurement of the coupling between energy consumption and economic output are also worth examining. To show the correlation between the two variables, Tryon needed two series of index, one for energy and the other for production. Regarding the latter, he used Carl Snyder's "index of the volume of trade" (1925). Snyder worked at the Federal Reserve Bank of New York and tried throughout the 1920s to build a synthetic index of production for the United States. He started with extrapolations from a few big cities to arrive at increasingly precise estimates for the whole country. On the energy side, Tryon worked with the young economist and statistician Carroll R. Daugherty from the University of Pennsylvania. He met him in 1924–1925 when Daugherty was still a student, inviting him to work on a yardstick to gather different sources of energy in a single index. Daugherty published his results in 1928. As a 1927 letter from Tryon to Harold Moulton shows, Tryon got access to Daugherty's data before publication. Daugherty focused on "prime movers" (1928, 13), that is, primary energy, and he only took into account movement, not heat, in his calculations. That obliged Tryon to make corrections to Daugherty's index before examining the correlation with Snyder's production index. He included heat in the data, using BTU as the common measurement. And he tried to convert available capacities into effectively used machines. He was finally able to compare his two series of data and to draw two curves on a single graph to highlight the correlation between the variables (Tryon 1927, 277). Tryon concluded that a strong coupling between energy consumption and economic output did exist from the late 19th century to the mid-1920s, observing a slight relative decoupling after 1917.

Interestingly, one may find in Tryon the same methodological difficulties as today to conclude on the exact magnitude of coupling or decoupling and to infer any causal relationship between the variables – a step that would have been essential to him to translate his empirical findings into theoretical proposals regarding the theory of production (Ayres 2001; Cahen-Fourot and Durand 2016). Likewise, Tryon (1927, 281) struggled to explain the lags that he observed between his two series of data, which suggests that modern disputes over the econometric treatments of decoupling are rather due to the very object being studied (the

energy-growth correlation) than to the (now sophisticated) tools at our disposal – uncertainties have not disappeared for a century.

Telling the early history of decoupling in energy economics without convening political economy apparently already provides insightful results, both historiographically speaking and for contemporary research (Missemmer and Nadaud 2020). However, we would be wrong to stop here, once again, because political economy offers a perspective that is likely to shed light on the context of Tryon's project and that also helps us to better define what was the real interest of the Brookings Institution when it funded such a research. In other words, it can lead the historian of thought to shift his or her eyes from his or her initial subject of investigation.

The Brookings Institution was created in December 1927 as the merging of three organizations: the Institute of Economics, the Institute for Government Research, and the Brookings Graduate School of Economics and Government. All these entities participated in the development of institutionalism in the United States (Rutherford 2011). In fact, Tryon was not initially a member of the Brookings Institution. He worked at the US Bureau of Mines and was appointed to the Brookings as a temporary member, from the mid-1920s to 1933–1934. There, he met important representatives of the institutionalist movement: Harold Moulton but also Walton H. Hamilton, Isador Lubin, and Edwin G. Nourse. Institutionalism, in the legacy of Thorstein Veblen, John Rogers Commons, and Wesley C. Mitchell, had the ambition to associate empirical realism with a will to conduct economic and social reforms. We can trace its origins in German historicism and, in a sense, in the old political economy before it was supplanted by marginalism (Hédoin 2013). What mattered in institutionalist studies was to obtain policy-relevant results. The Brookings Institution clearly emphasized this goal in the presentation of its *raison d'être*:

To play its part in connection with the formulation of sound national policies, the Institution will maintain a number of research institutes, covering . . . the whole range of the social sciences. . . . Such cooperative research should tend to bring a new unity to the humanistic sciences, and promote a greater realism in economic, social, and political thought. The investigations of the Institution will be concerned with enduring problems of theoretical significance as well as with questions of more immediate public import.

(Brookings Institution 1928, 3–4)

These contextual elements lead us to conclude that Tryon's decoupling project was embedded in institutionalism, probably hiding the ambition to exert some influence on public policies. This concerned energy policies in the 1920s–1930s. Already in 1924, Tryon indeed argued that exploring energy issues conducted to question the role of federal authorities in the management of power. In particular, he defended the implementation of national tools for monitoring energy policy, which did not exist at the time because of a segmented view of energy sectors (coal, oil, etc. separately). Tryon's authorship in the report *America's Capacity to Produce*, providing an institutionalist response to the Great Depression, can also be considered as a signal of his involvement in policy affairs (Nourse et al. 1934).

More fundamentally, adopting a political economy perspective on Tryon's decoupling project helps us realize the ultimate motives that conducted a small group of scholars, at the Brookings Institution, to work on the relationship between energy and output. When searching for the social effects of economic processes related to energy, the question of the substitution of the labor force by mechanical power soon appears. Daugherty already had this subject in mind

while he worked on his index of energy. And in fact, in his seminal article, Tryon explicitly argued that this was the ultimate question raised by the role of energy in production. What mattered was to estimate “the total consumption of power in all forms, and the aggregate degree of replacement of human labor by power machines” (1927, 273). The Brookings Institution had an interest in energy issues to design sound energy policies. But it certainly also had this interest because of the social question that was behind the scene, that is, the risk to see unemployment increase because of the massive use of mechanical power.

The Great Depression made social issues related to energy even more visible. Tryon (1936, 437) denounced the overspecialization of mining areas, conducting to the appearance of a “stranded population” when the wells and companies shut down. With Margaret H. Schoenfeld, he renewed his call for a federal energy policy to better distribute production capacities and thus better fight against territorial inequalities in terms of access to energy (Tryon and Schoenfeld 1933).

Overall, adding a political economy perspective to the historical examination of Tryon’s project therefore leads us to see a series of social issues that attracted the attention of the protagonists and that we would miss by limiting ourselves to a more classical exegesis, centered on the history of production theory and of decoupling in energy economics. Even more interestingly, the true social question that motivated Tryon and the Brookings Institution – the substitution of labor by mechanical power – leads us to shift our eyes from the history of energy to the history of unemployment and of the fears associated with technical progress, from the Luddites to today’s digital revolution. In other words, it displaces the historical corpus in which to study and locate the Brookings program. This is a major change, which shows the immense role that political economy can play in the historian’s work.

Conclusion

Like any historian’s work, the work of the historian of economic thought is not confined to a frozen narration, once and for all, of past events that would exist fully independently of the way we look at them. Historical investigation means selection and interpretation. The usual reading that can be done of past economic ideas insists on the meanders of economic analysis, which evolved with theoretical advances (and setbacks), in multiple historical contexts.

Looking at the history of environmental and energy economics through the lens of political economy allows us to move our eyes to new insights, emphasizing the political, institutional, and social motives to and consequences of economic processes. As mentioned in the introduction, this lens can be used in different ways, and this chapter has covered only one use, via only two examples among many others. The full benefits of political economy for the historian of economic thought would therefore merit further examination.

Nevertheless, it is already clear that political economy allows us, first, to have a better understanding of the context in which ideas were produced, and second, to redefine certain objects of research, which at first glance seemed to belong to the history of subfield A (e.g. the history of decoupling), but which in fact also belonged to the history of subfield B (e.g. the history of the social consequences of technical progress). Convening political economy is therefore not anecdotal but can profoundly modify the historian’s points of attention.

There is a call today for environmental and ecological economics to mobilize more political economy. This book contributes to this. The history of environmental and energy economics would also benefit from being part of this approach, in order to enrich our understanding of past paradigms, ideas, theories, and models that still structure our contemporary economic conceptions of nature.

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