



# The European Journal of the History of Economic Thought

ISSN: (Print) (Online) Journal homepage: [www.tandfonline.com/journals/rejh20](http://www.tandfonline.com/journals/rejh20)

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**To cite this article:** Christiane Heisse (10 Dec 2024): Whither economics imperialism? Debating Ambrosino, Cedrini and Davis, The European Journal of the History of Economic Thought, DOI: 10.1080/09672567.2024.2433980

**To link to this article:** <https://doi.org/10.1080/09672567.2024.2433980>



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Published online: 10 Dec 2024.



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# Whither economics imperialism? Debating Ambrosino, Cedrini and Davis

Christiane Heisse 

## ABSTRACT

This paper comments on “Today’s economics: one, no one and one hundred thousand,” published recently in EJHET. The original paper offers a welcome discussion of economics imperialism in the recent and contemporary history of economic thought. This response critically interrogates three of its main ideas, that: (i) economics imperialism is a bygone era; (ii) economics experienced a phase of reverse imperialisms; and (iii) economics has therefore become truly pluralist and welcoming of heterodoxy. Drawing on Ben Fine’s theoretical framework and the example of natural capital, I argue that economics imperialism is alive and well, if under the guise of interdisciplinarity.

## ARTICLE HISTORY

Received 7 September 2023  
Accepted 4 November 2024

## KEYWORDS

Economics imperialism;  
natural capital;  
interdisciplinarity; pluralism;  
heterodoxy

## JEL CLASSIFICATION



B00; B41; B50; Q00; Q57

## 1. Introduction

Economics imperialism, the tendency of economics to take over subject matter from other disciplines, is a well-documented phenomenon in the history of economic thought. Yet remarkably, discussion of economics imperialism had all but disappeared from the literature since a spike in interest around 2010 (Fine 2024b).<sup>1</sup> Against this background, it is both a timely and a rare occurrence that this journal recently published a paper debating economics imperialism: “Today’s economics: one, no one and one hundred thousand” by Angela Ambrosino, Mario Cedrini and John B. Davis (2024), ACD hereafter.

ACD’s piece portrays the recent history of mainstream economics as having developed on a trajectory from a monolithic to a pluralist discipline over the past few decades (see also for example Ambrosino, Cedrini, and Davis 2021; Davis 2006, 2022). Central to their argument is that there were three distinct phases characterised by the

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This article has been corrected with minor changes. These changes do not impact the academic content of the article.

<sup>1</sup> There has, of course, been discussion surrounding the dominance of mainstream economics, and the role of economics vis-à-vis other social sciences (ACD discuss relevant articles, and this paper adds to what ACD discuss). However, this was rarely framed in the context of economics imperialism as a conceptual and theoretical framework.

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presence followed by an absence of economics imperialism, taken as analogous to the plot of the Italian postmodern classic novel *One, No One and One Hundred Thousand* (Pirandello 1990), first published in 1926 (see section two for a synopsis of ACD's argument). ACD do usefully, and correctly, point to the growth in applied research fields in economics, many of which draw upon non-economic subject matter. As they aptly point out, economics has become increasingly entangled with other disciplines. While this development is emblematic of a wider trend towards interdisciplinarity across the social sciences, it cannot be properly studied without evaluating whether imperialistic tendencies are involved on the part of economics – and this surely warrants attention in the context of economics imperialism. Refocusing on economics imperialism, as ACD have done, is therefore paramount in interpreting the nature and role of interdisciplinarity in light of the recent shifting and blurring of boundaries between economics and other disciplines. Their taking on economics imperialism offers a long overdue opportunity to assess the state of economics imperialism and its strengths and weaknesses at the hands of three established scholars in the history of economic thought.

However, while I welcome ACD's focus on economics imperialism, I have profound disagreements with their assessment of its presence and significance. Based on these disagreements, this paper critically interrogates three main arguments put forth by ACD. First is the idea that economics imperialism is a thing of the past, a phenomenon which only took place during a closed period and has since disappeared from the economic mainstream. Second is the suggestion that economics has since gone through a period of reverse imperialism, during which other disciplines have established a presence in economics, rather than the other way around. And third is that the identity of economics is becoming eroded in the process.

My disagreement on these points is grounded in another strand of literature on economics imperialism, notably to be found in the writings of Ben Fine (2002a, 2002b; 2011, 2019, 2024a, 2024b, 2024c; see also Fine and Milonakis 2009) with which the authors engage only at the margins. From the vantage point of this alternative interpretation, economics imperialism is an ongoing process which is alive and well, even though it must be carefully interpreted, considering its variegated nature and the increasing "suspension," not discarding, of the mainstream's core principles. This alternative framing of the nature and trajectory of economics imperialism calls into question not only ACD's analysis of economics' recent history, but also the conclusions to which they are drawn, that: economics has lost its identity; it no longer has a core; heterodoxy is being taken seriously by the mainstream; and this is all a positive development for interdisciplinarity.

The rest of this paper is organised as follows. Section two summarises ACD, laying out the basics of their argument. Section three responds to the idea that economics imperialism has become confined to the past and offers an alternative interpretation based on the theoretical framework of Fine and his co-authors. Section four responds to the idea that there has subsequently been a significant period of reverse imperialism. Building on these preceding two sections, section five responds to the authors' conclusion that economics has become a landscape of fragmented "mainstream pluralism," characterised by loosely related subfields of cross-disciplinary ventures which

are influenced by non-economic disciplines of origin, and which take heterodoxy seriously. In section six, I point to examples of where economics imperialism is alive and well - behavioural economics is an obvious candidate, as is the arbitrary use of standard models as story-telling devices (Kapeller 2013), or the increasing popularity of randomised control trials to “improve” the scientific rigour of economic research. But there are more – if sometimes less obvious at first sight – examples in new and important fields, not least at the intersection of economics and environmental issues. I therefore draw on the history of natural capital in environmental and ecological economics to illustrate a field of study in economics in which economics imperialism flourishes, if readily overlooked as such. Acknowledging such ongoing instances of economics imperialism also serves as an entry point for examining how economics imperialism impacts the “external” world outside of the academy. Section seven concludes, arguing that portraying economics as free of imperialism, and rich in interdisciplinary reverse imperialism, is to verge on admiring, not see through, the economics emperor’s new clothes.

### **1.1. A brief summary of Ambrosino, Cedrini and Davis**

To the fore of ACD’s argument is that economics has undergone a series of changes in its relations with other social sciences. They categorise these changes as falling into three consecutive phases in the recent history of economic thought. In the first phase or “epoch of economics imperialism” (ACD, 60), economics had a strong theoretical core and a unified vision of itself as a discipline. During this time, economics expanded into other social sciences, although in a way that upheld a clear distinction between the economic core and the non-economic periphery of social sciences. ACD argue that this was followed by a second period, which saw a complete reversal of what had happened before; now the social sciences encroached on economics, forging an era of “reverse imperialisms” (ACD, 60). During this phase, economics lost its unitary core and instead developed into a loose structure of different schools of thought, influenced by disciplines outside of economics, in what the authors call “mainstream pluralism” (ACD, 60). Finally, a third phase has come during which economics is perceived to have lost its core identity and consists of a plethora of interdisciplinary fields that are entirely influenced by other social sciences in their subject matter. The authors describe this as “hyphenated” economics:

Today’s economics is ‘hyphenated’: economists are in truth social-, happiness-, complexity-, feminist-, behavioural-, experimental-, neuro- (the list is almost endless) economists, hyphens connecting de facto economics to the science ‘of origin’ of these new approaches. [...] Today we might say that an economist is hyphenated or she is not an economist (ACD, 72).

It is worth emphasising how heavily ACD rely on metaphors in crafting their argument in lieu of evidence and context, possibly due to length constraints. Two metaphors two stand out as organising principles of the paper. The first is derived from the classic Italian novel *One, No One and One Hundred Thousand* (Pirandello 1990). The novel follows protagonist Vitangelo Moscarda on a journey of self-discovery as he grapples with the realisation that all social interactions (and thus, how others

perceive him), are complex and multifaceted because each person makes sense of reality in the individual's own unique way. The novel's plot is the leading heuristic through which the authors analyse recent economic thought with the protagonist's discovery of multifaceted reality taken as analogous to economics' development from monolith to fragmentation in journeying through its three phases. At the beginning of the novel, the protagonist assumes that everyone else sees him as he himself does, that there is only "one" of him. The authors take this to be akin to economics under "the epoch economics imperialism" (ACD, 60). As the plot progresses, the protagonist is confronted with the discovery that others see him differently to how he sees himself, realising that there is not one true version of his image and persona, but that on the contrary, no true universal version of him exists ("no one"). ACD take this to be analogous to the era of reverse imperialisms. The novel culminates in the protagonist's realisation that there are in fact countless different versions of him at any given time, i.e., "one hundred thousand," a conclusion which ACD cast onto the current state of economics as decentralised and lacking a unitary core.

The second metaphor on which the authors heavily draw is the idea of open and closed systems, taken from Piero Sraffa's work on commodity production. Here, ACD suggest that if a discipline is a closed system, its theories and method are sufficient for studying social phenomena. Open disciplines, on the other hand, invite contributions from other disciplines that might come in to "close" a discipline's analytical or conceptual gaps (see also Davis 2022). ACD argue that during economics imperialism, economics was more likely to close in on other social sciences, while later phases saw a reversal of this. The need for the Sraffian system to be closed by settling the distributional trade-off between wages and profits is well-known and, no doubt, Sraffa had much more to say about the mutual relations between closed and open systems across economics and the other social sciences. But, even at this early stage, this is readily recognised to be a heavily reduced notion of openness and closure and the relations between economics and the other social sciences across methodologies, methods, and conceptualisations of whatever categories of analysis are included or excluded. Indeed, ACD's treatment of the whole issue is entirely compatible with the framings of mainstream economics as if alternative and critical methodologies of the other social sciences do not exist.<sup>2</sup>

Figure 1 taken from the paper, summarises how these and other metaphors are employed in the context of the three phases. The first column, on the left-hand side, summarises ACD's (60) position on the "epoch of economics imperialism," during which economics had a unitary understanding of itself and closed other social sciences that lay on its periphery. The middle column summarises ACD's era of reverse imperialisms, during which other social sciences close economics, creating a loose landscape of mainstream pluralism. On the right-hand side is the current state of "hyphenated" (ACD, 72) economics, where the authors argue that economics' core has been eroded to the point that it resembles "minarets" that have only a loose connection to one another.

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<sup>2</sup> Extending this line of argumentation to Tony Lawson and Critical Realism in Economics would see the social ontology of economics as (mathematically) closed irrespective of from where the closure derives.

	One	No one	One hundred thousand
<b>ECON in relation to other SSDs</b>	Economics imperialism	Reverse imperialisms	Cross-disciplinary ventures
<b>ECON and SSDs is an open/closed system perspective</b>	ECON “closes” SSDs	SSDs “close” ECON	Social-sciencing of economics
<b>ECON: appearance</b>	Unity, insularity	Mainstream pluralism	Hyphenated Economics
<b>ECON: structure</b>	Rigid, core/periphery	Loose, mainstream/heterodoxy	“Minarets”
<b>The alternative as three phases of economics imperialism</b>	Old (Becker-style) economics imperialism	New (market imperfections) economics imperialism	Newer contemporary (suspension) economics imperialism

**Figure 1.** Economics (ECON) and other social science disciplines (SSDs).

Source: replicated from ACD (73) with author’s addition of final row.

To this table I have added an extra final row which offers a different interpretation of economics’ passage through three phases, casting doubt on the arguments put forth by ACD; the rise in pluralism is alternatively emblematic of the evolution through three phases of economics imperialism, not its discarding after the first phase (Fine 2019, 2024b, 2024c). What ACD take to be “one” is the old economics imperialism; in this first phase there is little discrepancy between ACD’s interpretation, and the alternative interpretation put forth in this response. The disparity comes with the second phase: I suggest that what ACD take to be “no one” is the new (market imperfections) economics imperialism and what ACD take to be “one hundred thousand” is newer (suspension) economics imperialism. In treating the first phase of economics imperialism as if it were *all* of economics imperialism, ACD risk misrepresenting both the nature of economics itself and its relations to other social sciences.

## 2. One: economics imperialism out of sight, of mind

This section elaborates on the first point of difference to the original paper, that economics imperialism as a finished business, confined to the past (especially deriving from the Chicago school of Becker, Stigler and the like and glorified by Lazear 2000). ACD’s point of departure is what they refer to as the “epoch of economics imperialism” (ACD, 60). There is reason to believe that this phase in the history of economic thought corresponds to what Fine (2002a) has termed the first phase of economics imperialism. While no exact time demarcation and concrete examples are given,<sup>3</sup> the similarity becomes evident when examining the two main sources on which ACD draw in reference to the epoch of economics imperialism: Stigler (1984) and Lazear (2000), both well-established contributors to first-phase economics imperialism. Stigler’s account reviews economics’ imperialist expansion into several

<sup>3</sup> Aside from general references to the fields of sociology and economic sociology, and to “a while in the 1980s and 1990s” (ACD, 64).

disciplines (law, sociology, political sciences). Almost two decades later, Lazear (2000, 99), in anticipation of its prospective evolution, praised economics' superiority over other social sciences based on its ability to abstract and generalise from the complexities of social reality: "By almost any market test, economics is the premier social science. [...] The economic toolbox can be used to address a large variety of problems drawn from a wider range of topics." Both pieces share a focus on the poster child of economics imperialism, Gary Becker, who amongst other topics treated marriage and the household division of labour as if they were purely the outcome of perfect market transactions.

ACD's characterisation of an early phase of economics imperialism during which economics branched out into several new fields of study by vocally extending its theories and methods onto new subject matter is correct even from the vantage point of its alternative interpretation. This first phase involved economists applying market principles to other, non-economic, subject matter *as if* the market were perfect (Fine 2019). However, despite its own practitioners' thwarted ambitions, this does not necessarily mean that economics imperialism lives and dies with the influence of Chicago. Rather, the first phase of economics imperialism has been followed by a second, and a third, phase, something scarcely acknowledged by ACD other than as economics being the "victim" of reverse imperialism from the other social sciences (closure) as interdisciplinarity progresses.

This is where my reading of the recent history of economics imperialism diverges from that presented by ACD. Economics imperialism did not stop following the era of Becker, it simply moved on as did economics itself. For as the discipline reacted to the Chicago school by focusing on market (e.g., asymmetric informational) imperfections, so did economics imperialism; the first phase was followed by a second phase, or "new" economics imperialism, which no longer proceeded as if the market were perfect. Instead, the second phase invoked market imperfections as a reason to expand economics' areas of application outside of their existing scope. Invoking natural capital to bring "nature" (and ecology) back into economic analysis as a solution to the environment as externality problem is a prime example of second-wave economics imperialism in action (see section six). But similar initiatives are to be found repeated across any number of other fields, such as the new economic sociology, institutional economics, welfare economics, growth theory, new economic history (beyond its own first phase) as well as a plethora of capitals, now tied to market imperfections. While the first phase of economics imperialism was happy to deploy production and utility functions as if in a world of perfect markets, the second phase sees itself as departing the first phase by merely substituting market imperfections for imperfections.

Following this second phase has come a third, and current, phase, or "newer" economics imperialism during which economics imperialism is increasingly characterised by so-called "suspension" (Fine 2019, 2011). Suspension is where economics branches out into new areas of application by relaxing, supplementing or even denying, some of its own core assumptions (behavioural economics' rejection of rationality in the narrow sense of utility maximisation being the leading example), all the while

implicitly retaining them as the standard from which the analysis departs (see Fine 2011 for examples in the context of Neuroeconomics and Freakonomics).<sup>4</sup>

The second and third phases also came with a shift in the use of standard economic models in empirical research, as Kapeller (2013) observes.<sup>5</sup> Standard models rely heavily on unrealistic assumptions, such as perfect information or the *ceteris paribus* assumption. During the first and second phases of economics imperialism, these and more extreme *a priori* assumptions “allow[ed] theories to evade empirical results, by declaring them as invalid for refuting the theorem at hand – either with reference to unexpected exogenous forces or by interpreting conflicting evidence as outside of the theorem’s domain,” 206. This changed in the third phase of economics imperialism when the unrealistic standard model became an idealised point of departure for whatever model specifications are being used to fit the data at hand. Kapeller describes this as “axiomatic variation,” arguing that using the standard neoclassical model as a hypothetical reference point in storytelling, rather than a theory to be tested, shields the mainstream from criticism and props up its paradigmatic power with normative and discursive implications to suit. Together with suspension, this has allowed economics to appear as if it is fruitfully engaging with criticisms of the neoclassical core, while the core is still, at least implicitly, *there*, with further ramifications regarding the extent to which the orthodoxy can(not) engage with heterodoxy (see section five, where this is discussed in the context of behavioural economics).

Admittedly, ACD reference this line of thought in passing, citing Fine and Milonakis (2009) regarding the concept of the new (i.e., second phase) economics imperialism, in a footnote. However, the third phase is not mentioned, and the paper does not further engage with this alternative history of economics imperialism, stating that “even without supporting [Fine and Milonakis’] view, it is evident that economics could appear even more attractive to other social sciences [after the epoch of economics imperialism]” (ACD, 66). Overlooking the potential ongoing impact of economics imperialism in this context may inadvertently undermine the comprehensiveness and accuracy of ACD’s account.<sup>6</sup>

### 3. No one: the impossibility of reverse imperialisms

The second point of disagreement with ACD which follows closely on from the first concerns the idea that the epoch of economics imperialism was followed by “a prolonged phase of reverse imperialisms by other social sciences” (ACD, 61). By reverse imperialisms, ACD are referring to the emergence of a range of new economic fields

<sup>4</sup> Significantly, on occasion, behavioural economics accepts that utility maximisation might not be the norm in practice and seeks ways to modify behaviour for it to become more rational. This gives rise to the neoliberal dilemma at the heart of nudging – how do we make free individuals behave the way we want them to.

<sup>5</sup> Note that Kapeller’s piece does not use Fine’s frame of reference, but it pertains to many of the same issues. I thank an anonymous reviewer for pointing me to this piece.

<sup>6</sup> Another difference setting the first phase (i.e., the epoch of economics imperialism according to ACD) apart from what came later is that some orthodox economists were vocally supporting it. Lazear (2000) comes to mind, as does Becker, who is quoted in Swedberg et al. (1990, 39) to have said that, “Economic [sic] imperialism’ is probably a good description of what I do”. It is thus possible that ACD only identify economics imperialism when those engaging in it describe it as such. Indeed, this might explain the periodisation of economics imperialism as an era come and gone. However, being out of sight and out of mind does not mean that something is no longer there.



of study, all now firmly established, which share in common that their subject matter originates (at least in part) outside of neoclassical economics. Cited examples of this include new economic sociology, behavioural economics, and experimental methods. Importantly, they argue that this development has shaken the previously firm core of what constitutes economics:

Reverse imperialisms are threatening because they can transform economics into a ‘contestable’ field. The development of behavioural economics, for instance, under the influence of psychology, made economists realise that the choice is not independent of the environment in which it takes place and that (as broader-thinking sociologists already knew) it is influenced by necessity and relative social positions. (ACD, 67).

I argue the reverse is the case; the 30-year “epoch” which the authors identify as reverse imperialisms is better understood as economics imperialism in its later phases and in variegated form. Especially so for suspension, a fluid and ongoing phase of economics imperialism can easily obscure the economics’ neoclassical core by making it appear reformed. Rather than shaking the core of economics, these later phases have served to reinforce the neoclassical core by making economics appear as if reformed and as a sop to critics. Disregarding this possibility risks failing to do full justice to the history of economics in its newer and, as ACD correctly point out, more fragmented and specialised forms (albeit based on varieties of “market imperfections” and ad hoc “suspension” of core, first phase, principles).

There are several grounds for questioning the notion of reverse imperialisms. For one – a minor and linguistic point – the idea that imperialism can simply reverse itself falls short by analogy with empire. If there truly were a reversal in the relationship between economics and other social sciences, then it would have to be demonstrated in terms of power, politics, and the historical legacy of the dismal science. The analogy of reverse imperialisms would have to be supported by a convincing analysis of substantive change and influence of other fields vis-à-vis economics. Yet, there appears to be little consideration, let alone demonstration, that these new, reverse imperialism fields have taken the other social sciences seriously in anything other than a piecemeal, self-serving fashion, and certainly not in their entirety – nor that they moved away substantially from methodological individualism of a special type (utility and production functions again) and varying degrees of mathematical formalism. And where is the thorough analysis of the power dynamics *between* the disciplines which brought about these new fields. More often than not, it is economics which continues to dictate the terms of trade – see, for example, Thorén and Stålhammar (2018) for a compelling account on imperialist dynamics in the case of ecosystem services.

For example, it is surely correct that psychology has influenced economics, and that behavioural economics was created as a result. But the question of scientific imperialism is about who sets the terms for what is to be included in a new field, and what methods are to be employed; in other words, *how* does the combining of disciplines take place? It is true that behavioural economics aspires to work without some of the unrealistic assumptions inherent to neoclassical economics and rational choice. However, scrutinising the theoretical and analytical make-up of behavioural economics leads Berg and Gigerenzer (2010, 162) to conclude that, “the dominant

method in behavioural economics can be better described as filtering observed action through otherwise neoclassical constrained optimization problems with new arguments and parameters in the utility function.” Aside from the suspension of unwanted elements, this continuation takes many shapes, including the addition of new parameters into behavioural models, a focus on improving model fit over its predictive power, and the continued reliance on some unrealistic assumptions such as the commensurability between outcomes. Moreover, the more human-like characteristics of “behavioural man” are found to be taken as an aberration from the ideal behaviour of homo economicus. Based on this and more, Berg and Gigerenzer conclude that behavioural economics’ proximity to its neoclassical origins comes at the expense of incorporating the actual processes of human decision making into economic analysis and, crucially, into any policy recommendations drawn. ACD are remarkably silent on these issues as if any use of the non-economic by economics must be indicative of economics imperialism in reverse (as opposed to the presence of economics within other disciplines).<sup>7</sup> So, it is true that all the new fields quoted by ACD have brought new and different aspects into economics – such as bounded rationality in response to the limitations of perfect rationality. However, the other possible interpretation of this phase in the history of economics is that it is not necessarily a sign of reversal but of an enduring aspect of economics imperialism, for the bringing back in (BBI) of new and different aspects into economics is the bread and butter of economics imperialism (Fine 2019, 2024b). For Fine (2019, 134), the tendency to BBI is the result of economics imperialisms’ “historical logic,” i.e., the methodological consolidation of neoclassical economics first through the marginalist and later through the formalist revolution which saw an “implosion” of content into elegant mathematics at the expense of realistic assumptions. This created the basis for later reintroducing that what had been taken out, except reintroducing it based on the dominant neoclassical framework (tweaking it where necessary to make BBI work).

To understand what exactly ACD mean by the phenomenon they describe as reverse imperialisms, I consulted the text which they quote in this context, Frey and Benz (2004). Upon reading Frey and Benz’s paper, which concerns the history of economics and psychology, I was surprised to find that it is largely congruent with Fine’s position on the implosion and BBI even if it does not use the same terminology. In their discussion of economics and psychology, Frey and Benz (2004, 61) allude to the implosion:

In the beginnings of economics, economists like Smith, Bentham, Edgeworth, Marshall and many others were aware of, and even analysed, the psychological foundations of preferences and beliefs, and acknowledged them as important determinants of human behaviour. Psychological considerations in economics were lost when neoclassical economics started its triumphant progress within the field of economics throughout the twentieth century.

Further on in their account, Frey and Benz tacitly acknowledge that the rise of behavioural economics relies on tokenish BBI. This is evident in a section on “The

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<sup>7</sup> The unconsidered cliometric revolution, and its aftermath, offers a stunning example of economics imperialism across all of its three phases, within both economics and economic history (Fine 2024a).

return of psychology,” which refers to “*importing* aspects and insights from other social sciences, like psychology” and argues that “there are a great number of ideas from psychology which have been fruitfully introduced into economics” (Frey and Benz 2004, 68, emphasis in original). The paper concludes that “in the future, many other concepts and ideas will be fruitfully borrowed from psychology in order to make economics a more inspiring science” (Frey and Benz 2004, 78). Like ACD, Frey and Benz do see this phase of bringing psychology back into economics as distinct from earlier, more blatant, economics imperialism. To a point, I agree with this. One of the aspects setting apart the first phase of economics imperialism from what came later (especially from the third phase) is that the “economic imperialists” were much more vocal about the perceived supremacy and universal applicability of economics. However, Frey and Benz do not describe this as a reversal of what came before, nor do they use the words “reverse imperialisms.”

A third, and perhaps the gravest reason for questioning the idea of reverse imperialisms is that there are simply too many examples of economics imperialism having taken place during the same period of time; social capital was studied in depth (Fine 2010, 2024b) but one could also look at any number of fields, such as the new economic history, the new institutional economics, the new economic sociology, or the economics of the environment as in section six. Taken together, the lack of a discussion of power relations in interdisciplinary ventures, and the clear evidence for economics imperialism – by way of tokenistic inclusion of (psychological) factors as BBI, or in the cases of social or natural capital, for example – casts doubt on the claim that reverse imperialism has ever existed on a grand enough scale in economics to merit its own era in the history of economic thought. Not only has economics imperialism gone from strength to strength as it has moved through its three phases, but one of the few contributions to acknowledge the phenomenon’s ongoing presence does so through seeing it as the reverse of what it is.

#### **4. One hundred thousand: fragmented pluralism, or the emperor’s new clothes**

This section discusses the third point of difference with ACD’s interpretation of the history of economic imperialism. It concerns the implications they draw for their analysis of the current state of economics, 60:

[...] economics is now confronted with the fractured mirror of so-called ‘mainstream pluralism’, that is, the co-presence of a variety of research programmes in the mainstream of the discipline that significantly deviate from the neoclassical core, are pursued by different, often separate communities of researchers, and have their origins outside of economics.

For ACD, this had three related implications that: first, the mainstream is having an identity crisis (having lost its once solid theoretical core); second, the heterodoxy is included and being taken seriously in contemporary economics; and, third, pure economics free of the influence of other social sciences no longer exists. While it is true that there are now many different fields within economics, ACD present light evidence in support of their claims and the evidence points to the contrary through

an economics imperialism lens as opposed to one of reverse imperialism. Once the possibility of “suspension” is considered, the idea of reverse imperialism stands on shakier ground. From this other perspective, orthodox economics is alive and well as is economics imperialism.

ACD’s central conjecture regarding the current state of economics is that its increasing plurality of research agendas has cast economics into an identity crisis: “the current state of fragmentation projects a distorted image of the discipline, in which orthodox economics [...] may no longer recognise itself” (ACD, 60). As a result of reverse imperialism, ACD (65) argue, economics has become so fragmented that “mainstream economics might be on the verge of a nervous breakdown.” However, no evidence is provided in support of these propositions and so it remains unclear what exactly this refers to. The idea that pure economics no longer exists is heavily contradicted by teaching and research at every level, however much it may have been supplemented or suspended in the latest phase of economics imperialism. What about microeconomics and macroeconomics, and econometrics, for instance? They still prevail as the core standard, and every year tens of thousands of aspiring economists around the globe are introduced to economics as consisting of exactly that in their “Econ 101” introductory lecture series.

Similarly, as much as I wish it were otherwise, it is simply false that the heterodoxy has a serious foot in the door of mainstream economics, which the authors imply as “some of the research programs of mainstream pluralism have origins in heterodox economics” (ACD, 61). Were this true, where are the heterodox teachings and departments? Where are the truly heterodox contributions in mainstream economics journals? And where are heterodox categories of analysis, such as capital, power, and class for critical political economy, in the new and inclusive fields cited by ACD, such as behavioural economics? Most likely they are absent, just as Fine (2011) demonstrated for the case of neuroeconomics over a decade ago. Just as with the claim that a “pure economics” no longer exists, the evidence presented by ACD does not convince that the heterodoxy is well-integrated into, and taken seriously by, contemporary economics.

In fact, the opposite appears to be the case, as several recent papers have shown empirically (Fourcade, Ollion, and Algan 2015; Aigner 2021; Aistleitner, Kapeller, and Kronberger 2023; Javdani and Chang 2023), and as many heterodox economists will support anecdotally. ACD are clearly aware of this evidence, and rightfully acknowledge the continued dominance of the mainstream on several occasions. For example, they state that, 68:

Some recent studies (for instance, Aistleitner, Kapeller, and Kronberger 2023, investigating the institutional and geographical concentration of authors and editors of some top economic journals) highlight that mainstream economics is still hierarchical and quite self-contained or that changes [...] regard a tiny minority of frontier research work in the profession, and that the basic tenets of neoclassical economics continue to act as reference models (Salanti 2020).

Moreover, ACD repeatedly draw on Fourcade, Ollion and Algan (2015), whose bibliometric analysis suggest that in the United States, economists continue to perceive themselves as being at the top of an intellectual hierarchy of the social sciences,

leading the authors to conclude that economists as have a “relative epistemological insularity [and] a sense of entitlement,” 91.

It is worth adding two other studies which are not cited in ACD. First is Aigner (2021) who employed social network analysis on a dataset of over 450,000 journal articles in economics, finding that publications and citations in the discipline continue to be heavily concentrated in the mainstream, dominated by a small number of lead authors, and are geographically geared towards the United States. Second are Javhdani and Chang (2023), who surveyed 2425 economists in an online randomised controlled experiment. Their findings revealed a persistent ideological and authority bias in favour of mainstream economics and mainstream economists amongst survey respondents.

Taken together, these studies (and there are more) make it clear that economics is far from truly pluralist, even though, as ACD are correct to point out, it has opened its doors to new subject matter, and spawned a number of new and specialist subfields. The evidence just discussed paints a stark picture of continued dominance on the part of mainstream economics, in terms of models applied but also in terms of institutions and citation patterns. What remains unclear is how the authors reconcile this evidence – of which they are clearly aware and to which they correctly point – with the notion of reverse imperialisms and identity loss on the part of mainstream economics. Any one of the pieces just quoted casts doubt on the conclusion that, “the move from imperialism to reverse imperialism is [...] a culture shock, building up slowly but finally threatening economics’ former identity” (ACD, 61), especially in the absence of evidence in support of such dramatic claims that contradict the daily and lifetime experiences of both mainstream economists and its heterodox critics.

So, what is going on when ACD (60) describe contemporary economics as “the fractured mirror of so-called ‘mainstream pluralism’”? A fully developed reverse imperialism appears unlikely, nor is genuinely heterodoxy involved. Instead, second and third phase economics imperialism have created an intellectual landscape which is somewhat more diverse than before but which, crucially, does not challenge the central tenets of the orthodoxy (organised around equilibrium, efficiency, mathematical formalism, methodological individualism, and so on) (Fine and Milonakis 2009).

Even if it seems different from what came before, many of the new “hyphenated” fields continue to marginalise other disciplines and to crowd out non-economic perspectives on the systemic aspects of social phenomena, allowing analysis of systemic issues only in reduced and token form. Among other issues, this leaves economic analysis unable to do justice to the complexity of real-world policy challenges, with ramifications for policy discourses. Staying with the example of behavioural economics, the World Bank’s 2015 World Development Report relied so heavily on nudge theory that “[...] poor outcomes [are] consistently blamed on the poor choices people make. Lack of self-control is seen as the fundamental cause of poor outcomes throughout the Report.” (Fine et al. 2016, 654). At the surface, these “new” fields appear to address shortcomings of the neoclassical parsimony, however at the roots, they still carry forth many of the same underlying assumptions. ACD appear to be

mistaking “mainstream pluralism” for a truly reformed, more heterodox, and more progressive economics when at its core, it is more of the same in different form. By blinding the crowds in this way, the economics imperialism inherent in these new fields has, therefore, *strengthened* the position of mainstream economics and not weakened or eroded it, as ACD suggest.

## 5. A telling example: natural capital, the systemic and economics imperialism

ACD’s account does not go into any area of economics in detail – possibly due to length constraints – instead relying on metaphors to craft the argument. While metaphors are no doubt useful expository and even analytical devices, the scarcity of empirical evidence presented in support of claims made for economics’ trajectory remains a telling weakness of the original piece. As an antidote, this section zooms in on one specific example of contemporary economics imperialism in action – natural capital.

The previous sections already touched on other, much more prominent, examples of ongoing economics imperialism in its second and third phases, ranging from behavioural economics, over the Randomista’s randomised control trials, to the new institutional economics, new economic sociology, or the representation of history, institutions and social systems in economics more generally. In this context, natural capital might not be the immediately obvious choice, not even within the realm of the economics of the environment. Yet its inconspicuous character is exactly what makes economics imperialism interesting in this context because it illustrates the way in which economics imperialism can easily be overlooked.

Moreover, the intellectual history of natural capital is an extremely interesting case when it comes to questions of interdisciplinarity, what is orthodox, and what is heterodox. The natural capital literature has often been categorised as broadly falling into two strands – environmental economics and ecological economics – based on differences around the degree of factor substitution between natural and other types of capital (Munda 1997; Åkerman 2003; Richardson 2016; Ignatyeva, Yurak, and Logvinenko 2020). This is taken to reflect wider patterns of difference across the academic landscapes of environmental and ecological economics.<sup>8</sup> However, focussing on economics imperialism reveals that these disciplinary boundaries have become both blurred and eroded over time where natural capital is concerned, resulting in a convergence towards common grounds on the terms of environmental economics. What might appear to ACD to be a watering down of the economic core is better interpreted as part of the second and third phases of economics imperialism (Fine 2019).

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<sup>8</sup> Ecological economics takes the view that social and economic activity is embedded in the planet’s ecosystems and that one, therefore, cannot be understood without the other. This sets it apart from environmental economics, which maintains the analytical separation between economy and environment as derived from neoclassical economics. For an introductory overview of the differences between environmental and ecological economics, see Venkatachalam (2007) for a general account, and Åkerman (2003) for natural capital specifically. See also Röpke (2004, 2005) for a history of where the boundaries between ecological and environmental economics have become blurred.

To begin with, the natural capital concept emerged through economics imperialism. The idea that nature underpins economic activity dates back at least as far as the Physiocrats of the 18th century (Dale 2021). However, neoclassical models had relegated the environment to an outsider's position, where it featured only as a free input into production or as an externality, an unintended consequence of economic activity. As environmental issues became increasingly pressing towards the end of the 20<sup>th</sup> century, economists began to turn their attention to how best to apply economic reasoning to questions of environment and resource governance. Around this time, David Pearce (1988, 599) defined natural capital in the context of sustainable development: "sustainability requires at least a constant stock of natural capital, construed as all environmental assets."<sup>9</sup> Pearce's seminal work ticks (almost) all the boxes of economics imperialism: there was the BBI (of nature into economics, using "capital" as a conceptual vessel); there was the framing of production functions and utility functions (not least to discount future generations); and there was the historical logic (separating nature from the economy only later to BBI on the neoclassical terms). This all took place in environmental economics – a neoclassical offshoot – during the second "market-imperfections" phase of economics imperialism.

After Pearce introduced the concept, it soon branched out beyond orthodox environmental economics (Akerman 2003). Pearce invoked natural capital in a neoclassical production function context, but the bulk of contributions since then have been in ecological economics and interdisciplinary fields such as sustainability science. A Web of Science search on the term "natural capital" in the title, abstract, or keywords conducted in August 2022 returned over 2300 publications since 1990. The journal *Ecological Economics* is host to the largest single share with 171 articles. The next strongest shares are in interdisciplinary journals in the sustainability sciences, namely *Ecosystem Services* (96 articles) and *Sustainability* (94 articles). The number of publications falls below 50 per journal thereafter. More orthodox environmental economics journals are *Environment and Resource Economics*, the *Oxford Review of Economic Policy*, and the *Journal of Environmental Economics and Management* (less than 30 articles per journal). Top ranked mainstream journals such as the *American Economic Review*, the *Journal of Economic Perspectives* and the *Quarterly Journals of Economics* are absent from the list. Today, thirty years after Pearce's seminal contribution, natural capital remains remarkably absent from the core of neoclassical economics.

From the perspective of ACD, this development could be taken as evidence in support of the argument that, as economics has become increasingly pluralist, it has also become more insular, and lost sight of its core. In their frame of analysis, Pearce's contribution would likely fall into the phase of reverse imperialisms, with more recent contributions on natural capital falling into the phase of fragmented "hyphenated"

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<sup>9</sup> Pearce was not the first to write about natural capital. Schumacher (1974) invoked natural capital in his book *Small is Beautiful*, now a classic text on steady-state economics and degrowth. Others have traced the concept back into the early 20th-century writings of Alvin S. Johnson (Missemer 2018). However, it was Pearce who put natural capital (back) on the agenda of mainstream environmental economic thought and, therefore, I have chosen to take his 1988 contribution as point of departure.

economics.” Framing nature as capital might thus be understood, in this view, as a welcome improvement to orthodox thought and as a useful “cross-disciplinary venture” (ACD, 66) between economics, ecology, and sustainability sciences. That natural capital has over time migrated away from the neoclassical core (with the bulk of contributions now taking place in the more heterodox ecological economics or in interdisciplinary publications, and none in the core of the mainstream) could be taken to lend further support to ACD’s argument of a fragmented economics with an eroded identity.

However, my ongoing research suggests something altogether different, namely that the natural capital’s shift towards ecological economics since 1988 ticks (almost) all the boxes of Fine’s second and third phases of economics imperialism. Through the forces of economics imperialism, the natural capital literature has been making concessions towards the orthodoxy, if sometimes implicit, even in heterodox fields like ecological economics.

In the 1990s and early 2000s for instance, ecological economists created subcategories of natural capital such as critical natural capital (Chiesura and de Groot 2003; Ekins et al. 2003; Ekins, Folke, and De Groot 2003) or marketed and unmarketed natural capital (Goodland 1994), to better deploy natural capital within the paradigm of social and ecological embeddedness of the economy. From the perspective of economics imperialism, this was more BBI, as it sought to enrich the natural capital concept by including more and different ecological or social nuances of environment-economy relations that had previously been left out when Pearce conceptualised natural capital as a single aggregate stock. Adopting natural capital in this way meant that ecological economics ultimately embraced a conceptualisation of the environment from the same toolbox from which it was aiming to set itself free, engaging in further economics imperialism in the process.

These developments were accompanied by an accommodation across formal and informal modes of analysis to make natural capital work in the context of each of the two fields. Pearce had introduced natural capital within the framing of a neoclassical production function. Both sides – ecological and environmental economics – later took natural capital out of production functions and into a multitude of different modes of analysis (see for example Costanza and Daly 1992 for a schematic graphical representation; Ekins, Folke, and De Groot 2003 for multi-criteria analysis; and Dieter Helm 2015 for accounting). Even Helm (2014, 113), one of England’s most prominent environmental economists, came to reject orthodox methods as unfit for purpose at a time when environmental issues were becoming more pressing than ever:

None of [the considerations necessary for answering policy questions] require us to define the optimum amount of natural capital. Not only is the calculation practically impossible, requiring a level of knowledge and detail about the natural world that is well beyond our capabilities, but it is also not necessary. What matters is to identify those assets most at risk, and to focus on these investments in enhancing natural capital with the greatest benefits



Crucially, letting go of the technical apparatus and architecture into which natural capital was born in this way has led scholars to (inadvertently) carry over flaws that bedevilled the original conceptualisation of both capital and nature (as things) into different and new areas of application – a hidden economics imperialism. Those flaws range over the Cambridge Capital Critique (for capital), and the ahistorical and apolitical framing of both capital and the environment irrespective of the Cambridge Critique.<sup>10</sup>

Yet this is rarely acknowledged, and the ease with which natural capital has been presented as conceptually sound in different contexts is typical economics imperialism. Natural capital has become an all-purpose concept to carry “the environment,” just as social capital had been appropriated as an all-purpose concept for “the social” in the early 2000s (Fine 2010), and human capital for educational processes and outcomes. Even though environmental and ecological economists have come to adapt natural capital and employ it in different ways, each of the disciplines concedes to an understanding of nature-economy relations that is firmly rooted in the core of the economic orthodoxy, by employing the natural capital concept.

This takes me to the last point: the natural capital literature ticks all the boxes of what is typically *not* there, or represented only in extremely crude and reductionist forms, when economics imperialism is at play. Framing nature as a capital has consistently excluded the systemic processes, relations, agencies, and structures which shape the interplay between environment and economy under capitalism, as well as the cultural aspects that drive and have driven environmental degradation and responses to it. By connecting the environment and the economy through the exclusive lens of (more or, if mainly, less perfect) market relations, natural capital and other neoclassical framings of environmental issues (carbon taxes and offsetting schemes come to mind) can only ever accommodate additional systemic factors based on the same narrow analytical framework. This has evoked criticism from different sides, including how the economics of natural capital supports the commodification and financialisation of nature and narrows down what policy options are up for discussion in response to environment crises (see for example Buller 2022; Büscher et al. 2012; Coffey 2016; McAfee 1999; Sullivan 2017, 2018), and irrespective of whether entrenched powers will steer or obstruct them.

Despite this, the natural capital concept has moved back and forth relatively seamlessly between different fields in environmental economics, ecological economics, and sustainability sciences. This carried over the flawed assumptions of conceptualising nature as capital over into new areas of application, including “successes” with ecological economics, a field that was initially formed in criticism of mainstream approaches to the environment. A recent review by Thorén and Stålhammar (2018) on Ecosystem Services (a close cousin of natural capital) has found that economics consistently continues to override other approaches within this literature. Based on the arguments just laid out, there is reason to believe that natural capital is similarly

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<sup>10</sup> See Nadal (2016) for a critical account of natural capital, as deployed by neoclassical economic theory, which covers the Cambridge Critique, general equilibrium, and the difficulty of assigning prices to natural capital and ecosystem services. Nadal (2016, 71) argues that the concept’s theoretical basis is so shaky that “the foundations that a policy-relevant model should possess are lacking” in natural capital framings.

skewed towards upholding the principles of neoclassical orthodoxy, even if implicitly so. This privileges a view on the topic rooted in neoclassical analysis over alternatives, in what might appear like healthy interdisciplinary pluralism on the surface. For a topic as urgent as biodiversity and climate breakdown (two policy areas to which natural capital pertains), buying into the idea of a reformed, truly pluralist and inclusive economics is outright negligent if one cares to keep radical alternatives alive (Pirgmaier and Steinberger 2019).

## 6. Conclusion

Economics imperialism is a crucial device for analysing the fuzzy and shifting boundaries between economics and non-economic (social) sciences. Given the rise of interdisciplinarity in general and of cross-disciplinary interests in economics' recent history, ACD's paper is both a welcome and urgent contribution that puts economics imperialism back on the agenda.

ACD correctly identify an era gone by in which economics imperialism was blatant and obvious – whether one calls it a unity of economics as ACD do, or the first phase of economics imperialism, as Fine does. However, in terms of interpreting what has been going on in economics since then, ACD dangerously underplay the role that economics imperialism continues to play in the current, more fragmented, and more interdisciplinary economics, wildly exaggerating (with scarce evidence) the scale and scope of the spaces that have been created for pluralism, heterodoxy and genuine interdisciplinarity. ACD confine economics imperialism to the past and to one crude form by definition, which appears to preclude them from seeing subsequent developments as (varieties of) economics imperialism, also by definition. Misinterpreting the variegated nature of economics imperialism as simply fragmentation, downplays the strong common core across that fragmentation.

By drawing on the work of Ben Fine (2002a, 2002b, 2011, 2019, 2024a, 2024b, 2024c; see also Fine and Milonakis 2009) and giving the examples from across economics more broadly and especially the example of natural capital, I have sought to demonstrate that such a common core does exist. It was previously deployed by market imperfections economics, and this has now been overlain by suspension and arbitrary addition of fragments from across the social sciences (and ecology, in the case of natural capital). Rather than going through a period of reverse imperialism, economics has continued to branch out into the subject matter of other disciplines although less boastfully so, in second (market-imperfections) and third (suspension) phases of economics imperialism. By not fully engaging with these developments, ACD offer an interesting yet one-sided interpretation of economics' contemporary history. Unfortunately, believing true pluralism has arrived does not mean that it is actually there.

This is not to say that the evolving scenario projected by ACD is impossible; in principle, it is of course possible that one day, economics will undergo reverse imperialisms, experience an erosion of its core, and transform beyond recognition into a pluralism that is accepting of heterodoxy. Empirically, however, economics is nowhere near this state at the moment. Several recent studies have found that

economists still see (mainstream) economics as superior (Javdani and Chang 2023; Aigner 2021; Aistleitner, Kapeller, and Kronberger 2023; Salanti 2020). In fact, the recent emergence of new and interdisciplinary fields of study in economics has hardened the core of economics by offering “alternatives” to pure neoclassical analysis that are, implicitly, still grounded in the same approach with add-ons. In some cases, the arrival of new fields has allowed for minor concessions towards other approaches under the pressures of changed and charged circumstances, such as the discrediting from the Global Financial Crisis, demands for pluralism, or escalating environmental crises. However, there simply is not enough empirical support for the claim that these developments equate to a reversal of economics imperialism or have triggered an identity crisis for economics, certainly not in the case of natural capital or environmental economic thought. ACD conclude that “historians could profitably shift their (now conventional) interest for the supply side of economics imperialism, i.e., orthodox economics’ pugilistic attitudes, to the demand side,” 73. This response calls into question not only the veracity of a shift in sides, but also whether either side can tell the full story of economics imperialism in its highly variegated and idiosyncratic forms across the full spectrum of economics today.

This further begs the question if these theoretical considerations have any significant impact on the “real world” and the management of very real (economic, environmental, or other) crises. Bear in mind that there is no direct line to be drawn from academic economics and economic imperialism to the sphere of say, policymaking or even policy discussions. But this does not mean that there is no connection. Far from the notion of economics as a neutral science, the question of who researches what, why, how, and for whom is a political one. Developments in economics (imperialism) are conditioned by what happens outside the academy as much as they, in turn, spill over their theories, framings, and findings to non-academic realms, including policy discourses and practices. Because of economics imperialism’s variegated nature, establishing the strength and direction of the relationship between economics imperialism and its external (societal) impact requires a careful and contextualised assessment.<sup>11</sup>

When it comes to natural capital, for instance, the worlds of academic, policy, and practice are closely connected if far from fully aligned. This means that discussions around, say, substituting different types of natural capital for one another are not simply an abstract, ivory tower idea(l). Rather, they resonate with contemporary business and policy discourses and the wider effort to “green” capitalism (Buller 2022). “Net zero” emission pledges and carbon- or biodiversity-neutral products rely heavily on the idea of substitution between different ecosystems and biophysical processes to deliver on their promises. Take for instance the carbon-offsetting industry, which sells investments in afforestation projects or other types of carbon sinks, including, remarkably, the protection of *existing* (forest) ecosystems to abate additional emissions. These and other products promise compensation for polluting activities ranging from air travel, through carbon-neutral food items, to – most startling of all – “net

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<sup>11</sup> Related to this, an anonymous referee raised the interesting question to what extent developments within economics imperialism have co-evolved with other forms of (contemporary economic) imperialism, as global hegemonies or otherwise. Again, there is no direct answer and would require careful unpicking as an area of research in its own right. At the very least, economics imperialism tends to be complicit insofar as it pushes framings which defend, rather than question, capitalism and its imperialistic tendencies.

zero” oil extraction (Wang et al., 2023). Such initiatives have been accused of green-washing capitalism and delaying actual changes to our economic system, thus perpetuating exploitation of people and planet (K. Anderson, 2012). To the extent they draw their legitimacy from the logic of natural capital and other environment-as-externality framings, economics imperialism props up “climate action” that stands in contrast with climate science and that distracts from systemic questions on climate and biodiversity. Considering these entanglements with very real crises, the importance of seeing economics imperialism for what it is becomes even more vital.

## Acknowledgements

I am grateful for two anonymous referees for their insightful comments.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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