SOCIAL CAPITAL RESEARCH

Economics Imperialism and Social Capital:
Relationship between social capital and economics

Tristan Claridge
Social Capital Research & Training, Dunedin, New Zealand

Article Info

Received 2 December 2021
Available online 16 December 2021

Academic non peer reviewed
Open-access

Keyworks:
Social capital
Economics imperialism

Abstract

Many scholars use the concept of social capital to emphasise the importance of social processes and factors that have been commonly overlooked by the narrow perspective of neoclassic economic theorising that has come to dominate modern life. However, many conceptual approaches to social capital are loosely based on economic theory and do not stray far from the underlying technical apparatus of neoclassical economics. This has led critics to suggest that the concept of social capital is a form of economics imperialism; the extension of the core ideas of neoclassical economics to other disciplines of the social sciences. This article critically examines the nature of economics imperialism and its relationship to the concept of social capital.

Introduction

During the 1990s, national governments and international agencies such as the World Bank, OECD, and UNDP discovered social capital, heralding it as the 'missing link' in explaining development outcomes and an important factor to build and utilise for improved program performance (Harriss, 2002). This was primarily driven by the World Bank, motivated by mounting criticism of their economistic and asocial approach associated with the post-Washington consensus (Fine, 2003; Schuurman, 2003). However, commentators reported that the World Bank's approach to social capital did not accomplish its intended purpose (Bebbington et al., 2004), with Fine (2007b) suggesting that social capital is part of a new, aggressive, wide-ranging, and yet more palatable and successful phase of economics imperialism. Economics imperialism is the extension of the core ideas of neoclassical economics to other disciplines of the social sciences (Fine, 2002b; Hodgson, 1994). The World Bank's use of social capital effectively allowed them to sidestep important social issues such as race, class, power and conflict, etc.; World Bank economists appropriated the social whilst leaving their economics (Fine & Ortiz, 2016). Thus, the World Bank's use of social capital was an example of economics imperialism (Fine, 2007a).

Economics imperialism is an important trend in development theory as well as social capital, both generally and in application to development specifically (Smith & Kulynych, 2002). It is essential to understand economics imperialism if one is to understand the way social capital is commonly conceptualised and how it is transformed by application to development programming. Similarly, it is important to historically situate the current paradigm within development theory to understand the valid forms of knowledge and how this translates into policy and action. Considering the strong influence of neoliberalism in development, this requires understanding the influence of economics and economics imperialism. There are many different conceptual approaches to social capital, and although most are based on the technical apparatus of economics, other approaches are potentially transformative and could act as a countermovement against economics imperialism in development. A prominent example was the World Bank's progressive social scientists, who attempted to use the concept as a 'trojan horse' to challenge the mainstream development agenda (Harriss, 2002). This article seeks to understand whether there can be a transformative approach to social capital and why the use of the concept of social capital frequently reinforces economics imperialism when often the goal is transformative.

The concept of social capital offers a potential strategy for bridging theoretical and disciplinary divides (Woolcock, 1998), thereby creating new perspectives and new problem spaces (Walters, 2002). The inter- and trans- disciplinarity of social capital promises rich sharing of ideas (Glanville & Bienenstock, 2009; Li et al., 2005), a common language within which to engage one another in open, constructive debate (Lin et al., 2001), and the opportunity to consider processes in a more holistic manner (Halstead & Deller, 2015). However, some authors have suggested the concept of social capital is an attempt to colonise the social sciences with economic thinking - a form of economics imperialism (Fine, 2010; Fine & Green, 2000; Smith & Kulynych, 2002). Some of

Correspondence should be addressed to
Email: tristan@socialcapitalresearch.com

doi: 10.5281/zenodo.8015808

the most fierce and sustained criticism has come from Ben Fine, who has consistently called for the concept to be contested and rejected, with economics imperialism central to these calls (for example, Fine, 2002, 2008, 2010; Fine & Green, 2000). Fine (2010, p.125) claimed that his criticisms of social capital have been "recognised and accepted at a level of 99 per cent or more", including his claims that social capital is complicit with economics imperialism. The majority of approaches to social capital are grounded, explicitly or implicitly, on economic approaches; explicit in the case of Becker (Swain, 2003) and to a lesser extent Coleman (Portes, 2000), and implicit in the case of Putnam through his use of rational choice theory (Jordana, 1999) and game theory (Edwards, 2009). Fine uses the term economics imperialism pejoratively. However, Mäki (2009) encouraged a normatively neutral conception of imperialism. This is important considering economics imperialism is celebrated and promoted by some, for example, Lazear (2000), and criticized and resisted by others, for example, Mansbridge (1990). The application of economic thinking is not inherently problematic and can lead to new knowledge and improved understanding. However, where it displaces or excludes other methods and explanations, it limits understanding and our ability to design and implement effective policy. This highlights the importance of pluralism, as discussed by Fullbrook (2016).

What is economics imperialism?

The meaning of the term 'imperialism' in the context of economics imperialism is an inclination towards explanatory expansion (Mäki, 2009); to expand the domain of phenomena explained by a given theory (Marchionatti & Cedrini, 2017). It is used to describe the nature of certain relationships between disciplines (J. B. Davis, 2016). The analogous use of the term 'imperialism' relates to political imperialism; the territorial expansion of one nation into another (Clarke & Walsh, 2009). The term is not neutral of judgement (Pinto, 2016) since it suggests pejorative connotations, suggesting oppressive domination.

Since the term 'economic imperialism' (without the plural economics) is widely used in the discussion of the economics of nation empires, many scholars discussing the world of ideas and relations between disciplines prefer the term 'economics imperialism' with the plural (Fine & Milonakis, 2009; Mäki, 2009). This is the nomenclature that will be used in this article.

Despite suggesting different moral judgements, the term 'economics imperialism' has a consistent meaning in the literature. It is generally accepted that the term economics imperialism refers to the expansion of economics, or more specifically core ideas of neoclassical economics, to territories that lie outside the traditional domain of the discipline (Carvalho & Rodrigues, 2008; Marchionatti & Cedrini, 2017). Geoffrey Hodgson provided a concise explanation of the term:

> *"'Economic imperialism' implies that the core assumptions of neoclassical economics can and should be applied to a wide variety of fields of study, including politics, international relations, sociology, anthropology, psychology, history and even biology, as well as economics itself. It is based on the belief that the idea of 'rational economic man' is appropriate to social science as a whole." (Hodgson, 1994, p.21)*

The first use of the term 'economic imperialism' was by the New Zealand economist Ralph William Souter in 1933 (Fine & Milonakis, 2009; Marchionatti & Cedrini, 2017; Swedberg, 1990). Fine & Milonakis (2009) identified that Souter published his book immediately following and as a response to Lionel Robbins's book and the theoretical and methodological revolution of the 1920s and 1930s. Fleury (2012) claimed that although the term was coined in 1933, it did not emerge as we understand it today until the 1960s. Marchionatti & Cedrini (2017) supported this, indicating that the term was diffused in the 1970s and 1980s by Chicago School economists and the publications by Radnitzky & Bernholz (1987) and Stigler (1984), who discussed the works of Gary Becker and his relentless application of the "economic approach" to a wide variety of social phenomena. Becker (1990, p.39 cited in Fine (2000)) himself confirming: "'Economic imperialism' is probably a good description of what I do". Despite the term 'economic imperialism' being coined in the 1930s it was not until the 1950s and 1960s that it became a more or less accepted practice by economists, with Gary Becker at the forefront (Fine & Milonakis, 2009). The history of the term, and changes in economic thought that led to its acceptance, will be further discussed in a following section.

Economics imperialism is a form of intellectual imperialism (Ronald H. Coase, 1977) or scientific imperialism (Dupré, 2001). Mäki (2009) suggested there are other types of intellectual imperialism such as evolutionary imperialism, social constructivist imperialism, cultural studies imperialism, and neuroscientific imperialism. For example, evolutionary imperialism may see human deliberation as a Darwinian enabling mechanism (Dupre, 1994) and that while the propositions offered may not be entirely misguided, there is an issue when they suppress viable alternatives (Thorén & Stålhammar, 2018). Another example is the imperialistic tendencies of quantum mechanics in physics. According to Cartwright (1999, p.1), physics 'aspires to account for almost everything … in the natural world' and economics attempts to explain 'almost everything' in the social world (Clarke & Walsh, 2009). Mäki (2009) discussed how there can be various issues of relative prestige and academic power associated with scientific disciplines and research fields. These may relate to methodological, epistemic, institutional, political, or emotional issues (ibid). Imperialism in the context of ideas then relates to the salience and dominance of ideas relative to prestige and power.

Despite the negative connotations attached to imperialism, there is a widely held view that scientific

excellence involves expanding the domain of phenomena explained by a given theory. Therefore expansionism and imperialism are not the same thing (Mäki, 2009). Uskali Mäki advised keeping an open mind as to whether any given form of expansionism is positive or negative and whether disciplinary expansion is consistent with scientific unification and greater explanatory power (Amadae, 2017). Mäki (2009) did not suggest that expansionism suffers from an intrinsic flaw because to strive for higher degrees of explanatory unification is not inherently illegitimate. Mäki's (2009, 2013) epistemic perspective adopted a normatively neutral conception of imperialism that considers the epistemological and moral justifications depend on the situation in which it is used (Thorén & Stålhammar, 2018). Mäki (2013) attempted to establish a framework for distinguishing, in principle, the 'recommendable' from the 'non-recommendable' kinds of scientific imperialism while recognising the difficulties involved in trying to do this in practice. Mäki's typology identified three types of imperialism (scope, style, and standing) and four constraints (ontological, epistemological, axiological, and institutional) (Mäki, 2009, 2013). Mäki's analysis allows for systematic thinking about interdisciplinarity in the social sciences and between the social sciences and physical sciences, such as the cognitive and biological sciences (J. B. Davis, 2012). Mäki (2009) emphasised how expansionism and imperialism are not the same thing, with imperialism being a special case of expansionism and that this leaves room for non-imperialistic expansionism. This analysis highlights the normative nature and meaning of economics imperialism.

Nik-Khah & Horn (2012) identified three distinct positions in the literature: (1) Economics imperialism is a fiction (for example, Vromen, 2009); (2) Economics imperialism is a fact, at least since the advent of neoclassical economics (for example Fine and Milonakis, 2009); and (3) Economics imperialism is a fact, but it no longer predominates as a method of interacting with other disciplines (for example J. B. Davis, 2012).

Proud use of the term

Economists have a long history of using the term economics imperialism as a celebratory account of discipline's alleged methodological and epistemological superiority and the diffusion of economic ideas and methods to other disciplines (Carvalho & Rodrigues, 2008; Nik-Khah & Horn, 2012; Tittenbrun, 2016). Marchionatti & Cedrini (2017) suggested that economists tend to have confidence in their disciplinary autonomy and the 'economics imperialism' narrative. A narrative that portrays the unquestionable superiority of their methods (Fourcade et al., 2015; Lawson, 2017). Edward Lazear (2000) is clearly proud of the label economic imperialism in light of his following triumphalist proclamation (Tittenbrun, 2016).

> *"Economics is not only a social science, it is a genuine science. Like the physical sciences, economics uses a methodology that produces refutable implications and tests these implications using solid statistical techniques. In particular, economics stresses three factors that distinguish it from other social sciences. Economists use the construct of rational individuals who engage in maximizing behaviour. Economic models adhere strictly to the importance of equilibrium as part of any theory. Finally, a focus on efficiency leads economists to ask questions that other social sciences ignore. These ingredients have allowed economics to invade intellectual territory that was previously deemed to be outside the discipline's realm." (Lazear, 2000)*

Lazear justifies the imperialism of economics on the basis of its rigorous methodological framework (Rothschild, 2008). He attributes expansionism to the claim that economics has "a rigorous language that allows complicated concepts to be written in relatively simple, abstract terms" (Lazear, 2000 p.99 cited in Marchionatti & Cedrini, 2017). Where economics is imperialistic on other disciplines, economics often "presents itself hegemonically as being in possession of superior theories and methods, thereby excluding rival theories and approaches from consideration" (Mäki, 2009, p.374). This hubris is based on the belief that the methods of neoclassical economics are more 'scientific' than those used by other social sciences, irrespective of the subject matter (Rothschild, 2008). This claim of being scientific is central to the issue of economics imperialism and will be discussed further in a later section. This belief in scientificity appears to be widespread. Colander (2005) found that most economics graduate students at top-ranking USA universities strongly agree with the statement "economics is the most scientific of the social sciences". This is not surprising considering statements such as the following from leading economists:

> *"The power of economics lies in its rigor. Economics is scientific; it follows the scientific method of stating a formal refutable theory, testing the theory, and revising the theory based on the evidence." (Lazear, 2000, p.102)*

Jack Hirshleifer is commonly seen as a leading and forceful proponent of economics imperialism (Boldeman, 2007; Hodgson, 1994; Nik-Khah & Horn, 2012). He stated:

> *"As economics 'imperialistically' employs its tools of analysis over a wide range of social issues, it will become sociology and anthropology and political science. But correspondingly, as these other disciplines grow increasingly rigorous, they will not merely resemble but will be economics." (Hirshleifer, 1977, p.3-4 cited in Hodgson, 1994)*

Hirshleifer also claimed: "There is only one social science…What gives economics its imperialist invasive power is that our analytical categories—scarcity, cost, preferences, opportunities, etc—are truly universal in applicability…Thus economics really does constitute the universal grammar of social science" (Hirshleifer, 1985, p.53 cited in Boldeman, 2007, p.6).

A number of promoters of economics imperialism were associated with the Chicago School of Economics (Marchionatti & Cedrini, 2017). Nik-Khah & Horn (2012) described how scholars such as Aaron Director, George Stigler, and Gary Becker, under the intellectual guidance of Friedrich Hayek, engaged in a number of imperialistic projects expanding economics to the realm of sociology, political science, and the law. George Stigler (1984, p.311) stated, "So economics is an imperial science: it has been aggressive in addressing central problems in a considerable number of neighboring social disciplines and without any invitations". Gary Becker (1976, p.8) claimed that "the economic approach is a comprehensive one that is applicable to all human behavior". Nik-Khah & Horn (2012), using Mäki's typology, suggested that scholars of the Chicago School practiced not only imperialism of scope but also the more objectionable imperialisms of style and standing. Hodgson (1994) claimed that Chicago is the origin of much of the economics imperialism, citing Elster at the politics department, Coleman in sociology, and Gary Becker and Jack Hirshleifer as prominent members of the 'Chicago School' of economists.

Harold Demsetz suggested that economics engages in more imperialism than reverse imperialism in the following:

> *"The strong export surplus economics maintains in its trade in ideas and methods with the other social sciences is an important indicator of the success of eco- nomics. Not much has been said about the source of this success, but it has been attributed largely to advantages offered to other social sciences by the economics tool kit. … The emphasis here is on the broad scope of phenomena that can be explained with our tool kit." (Demsetz, 1997, p.1)*

These uses of the term economics imperialism are indicative of the confidence that economics has developed through its relative isolation from other disciplines and on the basis of the claimed scientific nature of its methods. For some authors, this is an unacceptable arrogance and hubris that will be explored in the next section.

Pejorative uses of the term

As identified above, expansionism is not necessarily negative and can represent a scientific ideal, however as noted by Mäki, there can be non-recommendable kinds of expansionism that are often termed imperialism. As noted previously, many of the pejorative uses of the term economics imperialism are associated with criticism of economic approaches, which will be addressed in a later section. This section will address the pejorative uses of the term and general problems of non-recommendable kinds of expansionism.

There is little doubt that economics has expanded its scope well beyond its traditional disciplinary boundary to explain other social phenomena in the domain of other disciplines (Pinto, 2016). This is evidenced by the use of the term economics imperialism by prominent economists as discussed above. However, the appropriateness of such imperialism has been a controversial topic, with critics using the term to call for a radical rejection of the trend, for example, Ben Fine and coauthors (2000, 2002b, 2008a; Fine & Milonakis, 2009). A common view, building on Mäki's epistemic approach, is that economics imperialism should be resisted when it is epistemically or morally harmful (Rolin, 2016). The epistemic harms of economics imperialism can include deterministic and axiomatic methodologies that are disconnected from reality (Rothschild, 2008) and impoverished accounts of human action (Dupré, 2001). Moral harms of economics imperialism can include the suppression of viable alternatives (Thorén & Stålhammar, 2018), the failure to respect other scholars (Mäki, 2013), and the violation of autonomy, exploitation, and failures to account for important phenomena in society (Clarke & Walsh, 2013).

Frequently the use of the term is associated with concerns about the application of economic approaches to non-economic phenomena, particularly the appropriateness of 'scientific' methods in the social sciences. The critics who use economics imperialism tend to argue that by starting with assumptions of utility maximisation as the foundation of human action, economics excludes the nuances available in other disciplines and is therefore incapable of interpreting real-world phenomena (Marchionatti & Cedrini, 2017). Barry (2015, p.15) described the problem as the assumptions and value judgements that are "smuggled in and conveniently forgotten". This section will briefly identify the eminent uses of the term, and a later section will deal with the criticism of economic approaches on which these uses are based.

Some of the most vocal authors against economics imperialism include Ben Fine (2000, 2002b, 2008a; Fine & Milonakis, 2009), John B. Davis (2006, 2012, 2014, 2016), John Dupre (1994; Dupré, 2001), Geoffrey Hodgson (1994, 2011) and Uskali Mäki (2009, 2013) although it should be noted that Mäki has called for a normative and epistemic evaluation of imperialism.

Clarke & Walsh (2009, p.203) made the argument that "scientific imperialism causes us to fail to appreciate the irreducibly pluralistic nature of human values". The lack of explanatory power is even identified by imperialists. Fine & Milonakis (2009, p.34) described how "Hirshleifer (1985), as a most ardent economics imperialist of the Becker-type, has recognised that redefining all behaviour as rational or setting aside as non-rational all that cannot be explained, is to have no explanation at all." Rothschild (2008) discussed how economics imperialism often involves a claim of dominance of a given methodology on the basis of its affinity with methods used in parts of physical science and therefore claims to its superiority. Mäki (2009, p.376) suggested that critics of economics imperialism such as Blaug (1992), Green & Shapiro (1994), and Udéhn (1992) argue that "much of it is based on ad hoc moves of introducing empirically unwarranted auxiliary assumptions with the purpose of ensuring that the

model fits with the data".

Carvalho & Rodrigues (2008) stated that economic imperialism is an extreme version of a tendency to universalize and naturalize 'the market' and the egoistic motivations that individuals supposedly exhibit within it. This idealisation of the market disregards the imperfections of human activity and describes a world that does not exist, and that is radically different from the one we inhabit (Boldeman, 2007). Pinto (2016, p.443), describing the economics approach to social epistemology, suggested that "we have good reasons to doubt the appropriateness of the incursion of economics into social epistemology, insofar as economics' attempt at explanatory unification fails to express *significant* human interests" (emphasis in original). Perry-Kessaris (2011, p.403), in describing the extent of economics imperialism in the law and development found that it is "deeper, broader and more troubling than most have suspected".

Ben Fine has proposed another analogy for the application of economics to the social sciences; that of 'zombieconomics'. He described this as a new form of economics imperialism based on market and institutional imperfections (Fine, 2009). The explanation for why zombieconomics:

> *"This is because it is both alive and dead at the same time. It is alive in the sense not only of aggressively and crudely, if not savagely, occupying its own territory and subject matter to the exclusion and absorption of competing paradigms but also through its increasing appetite for the flesh of other disciplines that it both infects and converts to its own nature with only limited traces remaining of what has been destroyed. By the same token, it is intellectually dead, having nothing new to offer other than parasitic extension of its principles to new applications." (Fine, 2009, p.888)*

Dupré provided an explanation for how expansionism can result in an idea losing its capacity to provide illumination and thereby becoming a bad idea in application to latter domains. Scientific imperialism is "the tendency to push a good scientific idea far beyond the domain in which it was originally introduced, and often far beyond the domain in which it can provide much illumination" (Dupré, 2001, p.74).

The pejorative uses of the term economics imperialism tend to be on the basis of neoclassic economics lack of pluralism, lack of methodological debate, and the perceived indiscriminate application of established axioms. This could be perceived as unscientific, the opposite of the common claim of economics.

Claims of economics scientificism

As noted above, many of the claims of methodological and epistemological superiority of economics imperialism relate to the claimed scientific nature of economics. Imperialists believe that economics is more developed and more advanced in its theoretical development (Buckley and Casson, 1993 cited in Marchionatti & Cedrini, 2017). Lazear (2000, p.102) stated this claim explicitly in saying, "economics is scientific; it follows the scientific method of stating a formal refutable theory, testing the theory, and revising the theory based on the evidence". Despite these claims, Lazear (2000, p.203) admitted that "the weakness of economics is that to be rigorous, simplifying assumptions must be made that constrain the analysis and narrow the focus of the researcher". Mäki (2009) pointed out that Lazear's claim is an anachronism since most philosophers and scholars of science have long ago pointed out major problems in the project of characterizing the scientific method in terms of formal refutable theory. Therefore Lazear's hubris is largely unfounded (Tittenbrun, 2016).

> *"Economic imperialists may believe that they will emerge victorious. I don't think so, but if they do, theirs will be a Pyrrhic victory, won at the price of an almost complete loss of substance." (Udéhn, 1992 cited in Fine & Milonakis, 2009)*

Despite what economists tell us about the 'scientific' nature of economics, Mäki (2021) outlined how empirical criteria play only a limited role in theory development. Fine (2019) suggested that economic assumptions are often introduced that suit the theory rather than the evidence. Amartya Sen (1996), in commentary of Tibor Scitovsky's (1976) book *The joyless economy,* discussed how the economic approach to behaviour, the assumption of rationality, is not a scientific approach and is actually unscientific since it ignores observed behaviour and makes assumptions on theoretical basis alone. Marchionatti & Cedrini (2017) explained how economics imperialism rests on the ideological (not scientific) hypothesis that the best conception of human experience is that of *homo economicus*. Lawson's (2017) conclusion that successful methods in the natural sciences are generally unsuitable for use in social science runs contrary to the entire aspirational foundation of economics as a 'science'. Fullbrook (2009) suggested that if Lawson's conclusions were applied, it would reform and fundamentally change the entire program of economics. Fine (2009, p.886) stated that "as a discipline mainstream economics is increasingly subject to an esoteric and intellectually bankrupt technicism that is absolutely intolerant of alternatives and only allows for them to survive on its margins".

There is now overwhelming evidence that humans do not act rationally in the sense of following the economic axioms; they systematically deviate from expected utility maximisation (Frey, 1993). This is widely, if not unanimously accepted outside of economics, but economists persist with this fallacy by adding something to account for deviation, such as imperfect markets or non-expected utility, and carry on with the core premise (Fine & Milonakis, 2009). The disconnection between economic approaches and reality has been discussed by prominent economists such as Milton Friedman having stated: "economics has

become increasingly an arcane branch of mathematics rather than dealing with real economic problems", and similarly Ronald Coase "existing economics is a theoretical [meaning mathematical] system which floats in the air and which bears little relation to what happens in the real world" (Snowdon & Vane, 1999 cited in Fullbrook, 2009). This disconnection undermines the claims of economic scientificity since the essence of science is that scientists pursue an understanding of the world (Mäki, 2021). As Coase (1988) suggested, choice theory in economics tends to leave consumers without humanity, firms without organization, and even exchange without markets. Clearly, economists choose the theories they utilise, and they leave others unchosen (Mäki, 2021). Milonakis & Fine (2012) discussed the choice of theories required to support neoclassical axioms and models: "If… the social environment is explicitly and substantively taken into account, then the individual no longer resides in an empty space, and homo economicus loses its theoretical legitimacy, even as a fictitious construction" (ibid, p.483). It has been apparent for a long time that the idea that individuals maximize their utility as a universally applicable theory of human behaviour has become extraordinarily trivial and lacking in content (Hodgson, 1994).

There is a historical context for economics considering their discipline scientific. From the marginalist revolution of the mid-nineteenth century, economics has considered itself methodologically equivalent to physics (Fullbrook, 2009). However, whereas physics develops and selects methods on the basis of the nature of the phenomena that it studies, economics does not (ibid). Despite economics considering itself akin to physics, the scientific practices in each discipline are very different. Morgan (2017, p.162) discussed how physics "has maintained an environment conducive to the combination of truth-seeking as aboutness and an environment encouraging and nurturing a commitment to truth-seeking rooted in actual practice". Meanwhile, economics has narrowly pursued established axioms. Fullbrook (2016) suggested that economics' interest in choice behaviour has, for the most part, been far removed from the spirit of empirical, let alone scientific, inquiry. Mäki (2009) concluded that economics imperialism is too dogmatic and arrogant to be acceptable considering the nature of social setting and the complexities and uncertainties involved in studying it. This is based on a common complaint about economics throughout its history that difficulties such as the degree of abstraction and isolation, the slack between theory and evidence, and the resulting difficulties with controlling theorizing by empirical means have been "evaded by settling on theories that are nothing but imaginary fictions" (ibid, p.376).

Lee Boldeman (2007) suggested an explanation for the appeal of economics maintaining its scientific image:

> *"In our society, however, it is the scientist who has displaced the priest as the moral exemplar and the person who keeps humanity in touch with something beyond us —the 'really real'. This explains the desperate anxiety of numerous disciplines, including economics, to be seen as being 'scientific'. This becomes particularly dangerous when combined with intellectual and spiritual arrogance." (Boldeman, 2007)*

The discussion of economics adherence to scientific principles, or lack thereof, is a discussion with an increasing number of prominent voices. Particularly the work of Fullbrook and Lawson for example, is difficult to ignore or it seems to refute with any valid arguments. Not only was the goal of being scientific ill-conceived, but economics has also failed to uphold scientific ideals and has devolved into deeply flawed practices that are disconnected from reality and the spirit of scientific inquiry.

Disciplinarity and pluralism

Economics imperialism concerns the relationship between disciplines and the appropriateness of expansionism. Key to these concerns is the exclusion and absorption of competing paradigms (Fine, 2009) or anti-pluralism (J. Davis, 2014). John Davis (2014) discussed how anti-pluralism is a force operating in economics to defend specific deep conceptual structures that excludes reasonable debate over what methods of analysis are admissible. He described these conceptual structures and methodological values as 'untouchables', concluding that "pluralism does not operate in any significant way in economics because of certain forces operating in economics that push methodological debate to the side" (J. Davis, 2014, p.496). Fullbrook (2016) suggested that the pursuit of any single framework becomes a straightjacket that tends to exclude and eliminate alternative methods of investigation and means of interpreting reality. Morgan (2017) described this practice as 'anti-knowledge' since theory and methods are produced and reproduced based on fundamental assumptions and restrictions that are profoundly unrealistic. "'Progress' becomes a matter of deviations from profoundly unrealistic initial assumptions and restrictions, and so remains wedded to them" (ibid, p.162). Fine & Milonakis (2012), in agreement with Fleetwood (2006), believed that mainstream economics is in a state of methodological chaos, in part due to the neglect of methodological debate and critique, and the resulting lack of rigour. For Fullbrook (2016), pluralism is not the enemy of truth but instead is the companion of truth-seeking. There does not need to be a conflict between achieving ontological unification and avoiding the suppression of viable alternatives (Thorén & Stålhammar, 2018).

Both Fullbrook (2009, 2016) and Lawson (2017) are aware that the a priori acceptance of theory, without need to justify or renew its connection to reality or relevance, is an impediment to progress in economics (Morgan, 2017). The application of this practice, through economics imperialism, to the rest of the social sciences is a cause for concern for many scholars. Boldeman (2007) discussed how knowledge of social science requires the acceptance of diversity and a

multitude of ways of knowing. He identified that the social sciences are composed of "schools", "paradigms", "research programmes", "approaches", or "theories"; none of which has a monopoly on knowledge (ibid, p.7). This is clearly incompatible with the dominant trends in mainstream economics. What is needed is a reflexive pluralism that is now so evidently lacking in the economic mainstream. There should be openness to alternative ways of seeing and alternative types of knowledge regardless of what is being investigated. The work of Edward Fullbrook on narrative pluralism and Tony Lawson on the ontological foundations of economics are instrumental to improving our understanding of these processes and their importance.

Gross & Simmons (2007) found that economists are the only social scientists who are inclined to disagree with the idea that interdisciplinary knowledge is better than knowledge obtained from a single discipline (cited in Marchionatti & Cedrini, 2017, p.1). Economists tend to view their own discipline as scientific on the basis of its mathematical formalism and extensive use of statistical testing. However, from outside the discipline, the methodology, methods and assumptions of economics are generally perceived as both alien and unacceptable (Fine, 2004). For non-economists the gap between the theoretical 'homo economicus' and the real world is considerable (Rothschild, 2008). This reinforces the separation of disciplines. Fullbrook encourages us to consider that theories rest on abstractions from a complicated reality, so this alone is not reason for rejecting a theory.

> *"Neoclassicism is neither a useless nor an inherently intolerant, antiscientific undertaking. Pretending that economic agents are radically different from how they are offers one point of view, even if a narrow one, from which to study economic reality" (Fullbrook, 2016, p.61)*

Driven by the belief in the superiority of a particular form of scientific inquiry, economics has become closed to alternative ways of knowing and other explanations for understanding social phenomena. This anti-pluralism has reinforced the perceived boundaries between disciplines, with economic theorising becoming alien to non-economists and often perceived as grossly disconnected from reality. The imperialism of economics inevitably carries much of the technical apparatus of economics, which tends to limit pluralism and, therefore, potential explanatory power.

Examples of economics imperialism

Several examples of economics imperialism are cited in the literature. Amadae (2017) suggested they include the work of Anthony Downs (1957) on democracy, James M. Buchanan & Gordon Tullock (1962) on social contract, Thomas Schelling (1960) on law and conflict, Michael Taylor (1976) on cooperation, and Russell Hardin (1982) on collective action. Fine & Milonakis (2009) identified three phases of economics imperialism: (1) an old 'as if' market-style associated with Gary Becker, the public choice theory of James Buchanan and Gordon Tullock, and cliometrics; (2) a more 'revolutionary' form of economics imperialism based on the information-theoretic economics of George Akerlof and Joseph Stiglitz, and the new institutional economics of Ronald Coase, Oliver Williamson and Douglass North; and (3) an economics imperialism of 'freakonomics' where economic theory is applied to anything and everything on the basis of the shallowest principles. These stages of economics imperialism will be discussed further in a following section.

While there is no shortage of economics imperialists identified in the literature, there is no doubting the impact of Gary Becker's deliberate efforts from the end of the 1950s onwards to build an "economic approach" suitable for the interpretation of a wide variety of social phenomena (Marchionatti & Cedrini, 2017). Becker's approach "treats all economic *and* social phenomena as if they could be reduced to optimising individuals interacting as far as possible as if a (more or less perfect) market were present" (Fine, 2010, p.17 emphasis in original). Becker clearly changed the cross-disciplinary discussions between economics and the other social sciences, ending what Swedberg (1990) described as the end of an era of mutual ignorance between economists and other social scientists. In the 1950s when Becker started his campaign to treat everything social as if it were a market, most economists were sceptical (Perry-Kessaris, 2011). George Akerlof, commenting on Becker-type analysis, suggested that he learnt to spell 'banana' but not when to stop (Swedberg, 1990, p.73). Swedberg's (1990) *Economics and Sociology: redefining their boundaries: conversations with economists and sociologists* also included comments from other prominent economists:

- Jon Elster (p.238) 'the mindless application of rational choice theory to everything';
- Amartya Sen (p.264) 'Becker's tools have been chosen on the ground of their alleged success in economics, but they are too narrow and do not have much predictive and explanatory power even in economics';
- Thomas Schelling (p.193–4) 'I myself don't find Becker's work so helpful … he is completely satisfied with the traditional economic model of rational behavior … what annoys me about Becker, and maybe your term, "imperialism", somewhat catches it, is that he doesn't think there is anything to learn from outside economics'; and
- Robert Solow (p.276) 'my nagging feeling is that what he gets … oscillates between the obvious and the false' (cited in Arestis & Sawyer, 2004).

Despite this criticism, Becker's claim that the economic approach provides a rigorous framework for the analysis of all social phenomena, his work energised economics imperialism (Hurtado, 2008). Perry-Kessaris (2011, p.405) identified how Becker's economic approach to human behaviour provided an "analytical framework by which parachuting economists could orient themselves in the yet-to-be conquered social wilderness". This had the added effect of further reinforcing the resolute belief in the superiority of the economic method and the confidence for economists

to go forth and apply this method to any context (ibid).

Becker's project and the belief that the principle of utility could be applied to every aspect of human behaviour had the effect of transforming economics into a method of general analysis of behaviour (Hurtado, 2008). Economics was no longer defined according to its subject matter but according to its method (Fine & Milonakis, 2009). As noted previously, debate over economic method and methodology has been almost entirely abandoned by the mainstream (Fine & Milonakis, 2012). This leaves a method that is correct unless proven otherwise and that is not interrogated for its relevance or connection to reality.

Fleury (2012) provided a detailed account of Becker's early interest in social issues and a passing contemplation of changing to study sociology in his undergraduate. However, he persisted in economics and indoctrination into economics and particularly Friedman's price theory at the University of Chicago (ibid). When he was given a joint appointment at the Sociology Department at Chicago University in 1983, this gave, in his view, a signal to the sociology profession that the rational choice approach was a respectable theoretical paradigm (Perry-Kessaris, 2011). Becker eventually received a Nobel Prize for his imperialism (Fine, 2019a).

Gary Becker was a forerunner in the use of social capital, prior even to James Coleman's interest in the concept (Fine, 2010). Becker was already strongly associated with human capital theory, and he saw social capital as a generalization of personal capital (freely chosen experiences) which is itself a generalized form of human capital (which is confined to education and skills) (Fine, 2004). But the intellectual climate at the time, in the early 1990s, was not conducive to Becker's explicit imperialism, and Becker's influence on the conceptual development of social capital is now almost completely ignored (Fine, 2010). Fine (2010, p.43) suggested that Becker was seen as "an embarrassment because of his honest and fanatical commitment to the principle of utility maximisation as the single explanatory factor for all economic and social phenomena in an as-if-perfectly-working market environment". Coleman's (1990) approach, although explicitly based on rational choice sociology, was more palatable although was largely displaced by Putnam's (2000; Putnam et al., 1993) approach that effectively obfuscated the underlying economics. Fine (2010, p.47) stated that "Putnam's break with rational choice is definite but limited".

Writing in 1994, Geoffrey Hodgson commented on the acceptance within sociology of ideas imported from neoclassical economics, citing James Coleman's (1990) work on social capital as involving "rational choice approach applied wholesale to 'sociological' phenomena" (Hodgson, 1994, p.22). Hodgson (1994) suggested that sociology had, up to that point, had strong traditions of theoretical pluralism and of criticism of the rational choice approach, making the positive reception to Coleman's work alarming.

History of economics imperialism and changing economics

Economics imperialism is the result of shifting attitudes on the part of economists regarding the discipline's scope (Davis, 2012). Changing attitudes was the product of increasing confidence in its universality and the belief that economics can explain phenomena not previoulsy within its scope (ibid). Fine (2013) suggested the logical origins of economics imperialism lie in its historical logic, which will be briefly explored in this section. Economics has changed significantly since the Enlightenment and the writing of Adam Smith. For many non-economists, the current state of economics is foreign, possessing a particular language and method, making it difficult to meaningfully engage with. But it has not always been this way. Many authors have thoroughly explored the history of economic thought and documented the key thinkers and their influence over time (for example, see Boldeman, 2007). This section will only briefly identify the key junctures identified in the literature relative to economics imperialism. This historical context is important for understanding how we have come to this point in time and the depth and significance of paradigmatic beliefs. The economic history literature contains extensive discussion and often disagreement about the relative meaning of different scholars' work and the significance and influence of this work on economic thought. While interesting, this article is interested in the broad trends and changes in economic thinking rather than specific details of economic history.

In their description of economic history relevant to economics imperialism Fine & Milonakis (2009) mapped out a broad trend of reductionism within economics followed by expansionism into other social sciences. They suggested that although starting with the broad socially and historically constituted political economy, economics has gone through a period of sustained and radical reductionism, creating a theory that had universal applicability, allowing for its broad expansion (ibid). The key changes in economic thought identified in the literature are the marginalist revolution of the 1870s, the formalist revolution of the 1950s, and the new classical economics of the 1970s (Fine, 2017).

Prior to the marginalist revolution – the political economy

In the time of Adam Smith, John Stuart Mill, and Karl Marx, the economy was treated as part of its wider social and historical context (Fine & Milonakis, 2009). Fine & Milonakis (2009, p.9) believed that "in such a setting, the question of economics imperialism(s) did not arise. More than that, it was irrelevant." Perry-Kessaris (2011) suggested that at this time, the field was dominated by the 'easy mingling' of economic and social topics. Fukuyama's (1995, p.13) observation that "as Adam Smith well understood, economic life is deeply embedded in social life, and it cannot be understood apart from the customs, morals, and habits of the society in which it occurs. In short, it cannot

be divorced from culture". Evensky (2005, p.203) concluded that "Adam Smith was not an economist offering a materialist vision of humankind's progress based on the *homo economicus* assumption". Instead, he suggested that "Smith was a moral philosopher modelling a complex coevolution of individuals within a simultaneous system of social, political, and economic institutions" (ibid, p.203). Hurtado (2008) argued that economics now shares little with its heritage as part of moral philosophy. Amadae (2017, p.143) found that economics imperialism does not date to the origin of the discipline by stating:

> *"Economics imperialism is not that of Adam Smith's supply/demand analysis; it is not the neoclassicals' formalization of diminishing marginal utility; nor is it Keynesianism or macroeconomics. The economic method underlying the late 20th-century domination of economics over other disciplines is specifically the game theory revolution which encompasses expected utility theory as an intrinsic part."*

Therefore, economics imperialism is a relatively recent phenomenon, relative to the Enlightenment and the work of Adam Smith, who is often considered the founding father of economics (Boettke et al., 2006). Fine & Milonakis (2009) identified that imperialism first emerged within mainstream economics in the 1930s but only became influential from the late 1950s. The influence of economics imperialism has continued to increase, with economists themselves remaining "sceptical of its scope and, at least to this extent, respectful of other disciplines, well into the late 1980s" (Fine & Milonakis, 2009, p.9). However, Marchionatti & Cedrini, (2017, p.2), in disagreement with Fine and Milonakis (2009), stated: "to the contrary, we advance the thesis that an imperialist orientation characterizes economics since the dawn of the discipline with Adam Smith". Despite this contrary argument, there is general agreement that economics imperialism has increased in its range and scope since the 1950s.

The marginalist revolution of the 1870s

The marginalist revolution marked the classical-neoclassical transition (Birken, 1988; Kjosavik, 2003), displacing the political economy of the likes of Smith, Ricardo and Marx with the conception of optimizing individuals that was to become neoclassical economics (Fine, 2017). Jackson (2013, p.7) stated that "the atomism, rationality assumptions, static theories, market-clearing equilibria and focus on resource allocation were alien to the classical school".

Hodgson (2011, p.357), in analysis of Fine & Milonakis (2009) and Milonakis & Fine (2009), surmised that the authors claimed that the marginalist revolution eventually led to:

a) the adoption of methodological individualism;
b) the depiction of the individual as a rational, utility-maximizer;
c) the depiction of the individual as "asocial" and the removal of the "social" from economics;
d) the removal of the historical dimension from economics;
e) increasingly deductivist and ahistorical approaches to theory; and
f) a narrower redefinition of economics as the science of prices and the market.

It should be noted that Hodgson (2011) did not fully agree with these conclusions, but this list provides a good summary of Fine's & Milonakis' position. It should also be noted that the marginalist revolution was not a sudden event but a gradual and incremental process from the 1830s to at least the 1890s, with the term "marginalist revolution" not invented until well into the 20th century (Hodgson, 2011).

According to Fine (2008a) the marginalist revolution gave rise to the "technical apparatus associated with a utility function to explain demand and a production function to explain supply, and corresponding marginal utility and productivity". Milonakis & Fine (2009) identified the important influence of thinkers such as William Stanley Jevons (1835–82), Léon Walras (1834–1910) and Carl Menger (1840–1921). Fine (2019b) leans more towards the influence of Marshall rather than Jevons, Menger and Walras, particularly because Marshall's *Principles* [1890] detailed the technical apparatus and was the main microeconomic textbook until the end of the 1930s. During this period, economic theory developed a foundation of rationality, equilibrium and methodological individualism (Srakar et al., 2020). Milonakis & Fine (2009) identified that marginalism involved a triple reductionism: (1) an individualist reductionism, (2) an asocial reductionism, and (3) an anti-historicist reductionism. This period also consolidated the emerging divisions between economics and the other social sciences (Fine, 2007a), with economic sociologists such as Weber and Durkheim worried at the asocialisation and ahistoricisation of the increasingly dominant approaches (Perry-Kessaris, 2011).

Isolation and reduction – perfecting the new economic method

Fine & Milonakis (2009) discussed how after the marginalist revolution, the economic became synonymous with rationality, defining the social as the residually non-rational. This process was driven by the aim of economics building an 'exact' science, and this meant isolation from other social spheres (Milonakis & Fine, 2009). This narrowing of economics created the space for the emergence of sociology and other social sciences to deal with the non-rational aspects of human behaviour (ibid). During this period, 'sociologists increasingly shied away from economic topics – which they perceived to be the domain of professional economists' (Swedberg & Granovetter, 1992, p3-4 cited in Perry-Kessaris, 2011, p.404). Once separated, attempts to create some unity between them seemed doomed to fail, for example, Weber's and Schumpeter's program of social economics (Fine & Milonakis, 2009). Also, in this period, Robbins's (1935 [1932]) definition of economics as 'the science which studies human

behaviour as a relationship between ends and scarce means which have alternative uses' inspired the first use of the term economics imperialism by Souter (ibid).

The formalist revolution of the 1950s

It took time for the technical apparatus associated with neoclassical economics, in the form of an increasingly formalistic, axiomatic and deductive analytical framework, to become both perfected and fully accepted within the discipline itself (Fine & Milonakis, 2009). As discussed above, this involved "a prodigious reductionism across a number of dimensions" (ibid p5). Fine (2019b, p.134) described this a "process an *implosion* – for it involved making whatever assumptions are necessary to be able to derive meaningful results, assumptions such as fixed individuals, preferences, endowments, technologies, single motivation, fixed goods, etc., even technical assumptions within its own frame such as no externalities, increasing returns, concavities and imperfect competition" (emphasis in original).

The 1930s saw neoclassicism become dominant within economics (J. B. Davis, 2012). By the Second World War, the marginalist principles had been developed, accepted, and professionally adopted within economics (Fine & Milonakis, 2009). Milonakis & Fine (2012, p.484) stated that "*all* of the basic principles on which the formalist revolution was built, such as individual optimization and equilibrium, were children of the marginal revolution" (emphasis in original). Fine (2017) suggested that "macroeconomics took precedence over microeconomics as the leading field in deference to Keynesianism but, following what was called the formalist revolution of the 1950s, the mathematical methods of microeconomics increasingly held sway over macroeconomics as well".

Mark Blaug (1999, 2001, 2003) dubbed the decade after the Second World War as the formalist revolution in economics. This involved a preference for the form of an economic argument over its content reliance on mathematical modelling (Blaug, 2003). This and the increasing emphasis on microeconomics further consolidated the division between economics and the other social sciences (Fine, 2019b). Fine & Milonakis (2009, p.8) identified that by the 1950s economics had become sufficiently distinctive from other disciplines that "any expansion of its scope became blatant across multiple criteria of disciplinary divides, subject matter, method and conceptual content, etc.".

Fine (2013) discussed how for the first half of the 20th century, microeconomics, and its implosion of technique described above, was only a small part of economics, with (Keynesian) macroeconomics, applied economics, institutional economics, along with a range of more inductive and applied fields. Microeconomics was perceived to be totally inadequate for systemic analysis (ibid). The collapse of the post-war boom and the stagflation of the 1970s saw microeconomics gaining primacy in the discipline (ibid).

Ben Fine, through various publications, has suggested that economics imperialism has progressed through multiple phases with different characteristics. These phases will be discussed briefly below.

The 1st phase of economics imperialism

The establishment of microeconomics following WWII provided the technical apparatus for the first phase of economics imperialism (Fine, 2019b). It seeks to apply the technical apparatus of microeconomics not only to the market context (supply and demand) but to other economic and social problems (Fine, 2019b). However, the intellectual dominance of Keynesianism at this time suppressed the potential reach of this phase and many scholars within, and external to economics remained sceptical (ibid). Fine & Milonakis (2009) suggested that even economists remained sceptical of the scope of economics outside the discipline and, at least to this extent, respectful of other disciplines well into the late 1980s. However, the logics of economics imperialism was already emerging since once rational action is accepted as the basis of human experience, as it must in neoclassical economics, it must also be applied to other areas outside of economics. If this is not the case, then from the perspective of economic thinking, individuals must suffer split personalities – acting rationally in relation to the market but abandoning such rationality in other areas of life (Fine & Milonakis, 2009, p12).

The new classical economics of the 1970s

The 1970s saw the rise of the monetarist counterrevolution most closely associated with Milton Friedman (Fine, 2019b). At this time, microeconomics was colonising the discipline of economics and pushing macroeconomics, and the various applied fields of economics were infiltrated or squeezed out (Fine, 2019b). Fine (2013, p.376) stated that "what are now standard elements in the economist's toolkit—such as game theory—were appropriately treated with suspicion for their destructive implications for the consistency and meaning of notions such as rationality". The change in attitude within economics is highlighted by the following: "In 1945 or in 1950, if you had seriously proposed any of the ideas and policies in today's standard neo-liberal toolkit, you would have been laughed off the stage or sent off to the insane asylum" (George, 1999).

The 2nd phase of economics imperialism

The second phase of economics imperialism was built on a market imperfections foundation (Fine, 2019b). While the first phase treated the non-market as if market, the second phase treated non-market as if it were a response to market imperfections (ibid). This was far more widespread and palatable from the perspective of other social sciences since it did not reduce everything to the market (ibid). This process is articulately summarised by Fine & Milonakis (2009, p.9):

> *"According to this new phase and form of economics imperialism, social entities emerge as a result of, and as a response to, the existence of market imperfections, especially informational ones. By this means economics has been enabled to address the social not as the extension of the perfectly working market but as the response to its imperfect working. Thus, economic and social structures, institutions, customs, habits, culture, and apparently non-rational behaviour, are explained as the rational, possibly collective, sometimes strategic, and often putatively path-dependent, responses to market imperfections. By this means, mainstream economics has readdressed the social, allowing itself to appear more attractive to other social sciences."*

These changes gave rise to "the new economic sociology, the new welfare economics, the new institutional economics, the revitalisation of the new economic history (led by Douglas North with the startling claim that institutions matter), the new growth theory, and the shift from new to 'newer' development economics (and from Washington to post-Washington Consensus)" (Fine, 2019b, p.138). However, it required bringing back much of what had previously been omitted by the reductionism required to create the technical apparatus in the first place (Fine, 2013). Microeconomics and market imperfections allow any economic and social variable to be incorporated on the basis of optimising individuals (ibid).

The 2nd phase of economics imperialism did not mean that the technical apparatus of economics had been abandoned or even compromised in any way. The ontological foundations of mainstream economics remained unchanged and resolutely defended by the orthodoxy. This was the early part of what Fine (2019b) called a trend of "suspension" where the exclusive preoccupation with optimisation can be suspended but not discarded. This "suspension" is the third phase of economics imperialism discussed below.

The 3rd phase of economics imperialism

By now, the technical apparatus of economics has become so strongly and unquestioning deployed it can incorporate inconsistent assumptions or conceptualisations and largely avoid criticism. This allows for "mixed theories in the formulation of the loosest of models – throw in variables and estimates, dovetailing with increasing presence of econometrics which allows a corresponding shift in meaning of model from theory to an equation or six" (Fine, 2019b, p.139). The lack of methodological debate that is typical in current economics, and the associated unquestioning acceptance of methodological individualism and utility maximisation, allows economics imperialism to proceed with ignorance. Fine (2019b, p.142) stated that:

> *"With the latest phase of economics imperialism as suspension, we are all pluralists now – although it is commonplace to find that mainstream economists accept pluralism in principle (or as a strategic response to what is perceived to be uninformed grumbles) whilst the practice is to reject alternatives as unscientific by some unspecified criterion."*

The axioms remain present and implied, and the contradictions created by the inclusion of other factors or variables are rarely addressed. This is precisely what is common in the social capital literature, especially that which attempts to be 'scientific' by following the economic ideal.

Change in economics and reverse imperialism

The three-stage account of economics imperialism above is almost exclusively based on the work of Ben Fine and Dimitris Milonakis and commentators on their work. While their work is unique for its elaboration of various stages of imperialism grounded on the logics of historical economic thought, there are various other perspectives about the relationships between economics and other disciplines, including the possibility of reverse imperialism advanced by John B. Davis (2006, 2010). There is no doubt economics is changing, as discussed above with reference to new economic sociology, new institutional economics, behavioural economics, etc. It is, however, not clear what these new research fields mean for the relationship between disciplines and whether the core technical apparatus of economics is changing.

John King (2012) suggested there are four main positions in the literature for the status of change in economics: stasis, involution, fragmentation, or revolution. He stated, "mainstream economics has changed enormously since 1959, and continues to do so. But change is not synonymous with progress: heterodox economists often accuse the mainstream of retrogression, or at least *involution*, as its best theorists increasingly lose contact with reality and prefer to sharpen their mathematical tools rather than dealing with serious real-world issues" (ibid p.55 emphasis in original). Dow (2000) found that the theoretical core of mainstream economics is fragmenting, due in part to game theory and experimental economics reducing the dominance of general equilibrium theory. Colander et al. (2004, p.485) argued that "economics is moving away from a strict adherence to the holy trinity—rationality, selfishness, and equilibrium—to a more eclectic position of purposeful behavior, enlightened self-interest and sustainability". Crespo (2017) discussed the possibility of a "reverse imperialism" occurring which sees the importing of ideas from other sciences like psychology, sociology, neuroscience, biology, anthropology, and ethics. Citing John B. Davis, Crespo (2017 p.6) stated "we are now witnessing a slow reverse process that yields an emerging 'mainstream pluralism' consisting of different approaches that draw elements from different sciences outside economics". This was supported by Wojciechowska (2020, p.100) who stated that "economics is an interdisciplinary science, a science seeking new solutions, open to other academic disciplines". This is at odds with Fine & Milonakis' (2012) position that the core of mainstream

economics is stable, with an extraordinary and intolerant commitment to model building and a familiar technical apparatus built around utility and production functions and methodological individualism.

Several authors acknowledge the difficulty of identifying current trends without the benefit of hindsight. Hands (2015) discussed many of the changes within economics, changes within the orthodox, heterodox, and changes that are difficult to classify. Although many of these changes have been happening for decades, it is too soon to know whether they end up being revolutionary or reformist (ibid). Fine & Milonakis (2012) also suggested it was too early for definite answers and provided only tentative suggestions.

Wider implications of economic thinking

The forces of economics imperialism should not be seen as innocuous operating only in areas of human activity such as academia. For more than 70 years, the theoretical constructions of economic facts have been presented as inevitable and natural (Baldissone, 2008). Carvalho & Rodrigues (2008) discussed how imperialistic discourses has created various metaphors through which a wide range of human interactions are perceived. We should be concerned about this "because the way we look at the world influences how we act upon it" (ibid, p.267). Clarke & Walsh (2013) identified the danger of the limited and distorted conceptions of human experience associated with scientific imperialism becoming self-creating. They stated, "Imperialistic economists and evolutionary psychologists may mischaracterise human behaviour now, but ironically enough, human behaviour may eventually be led to conform to these mischaracterisations" (Clarke & Walsh, 2013, p.350). This can occur when ordinary people are influenced by the discourse of imperialist economics such that they start to think of their own behaviour in economic terms. Clarke & Walsh (2013, p.350) cited the example of marriage, where "ordinary people may well become more likely to marry for money because they will start to think of marriage as an economic arrangement". In this way, the abstractions of economics may shape societal norms and values.

Boldeman (2007) discussed how economics has shaped the dominant vocabulary and created a form of groupthink and narrative frameworks that are used to shape and legitimise public policy decisions. In the same way, the technical apparatus of economics involves considerable reductionism, the influence of economics imperialism operates as blinders that tend to close minds to other influences and other possibilities (ibid). This rigidity of thinking is what George Soros dubbed "market fundamentalism" (Nelson, 2003). Boldeman (2007) preferred the term 'economic fundamentalism' because it focuses attention on economics as a source of extreme ideas. He discussed how the economic account of human motivation is not only incomplete but it also grossly distorted and destructive of human sociability (ibid). Treating "human beings as essentially self-interested utility maximisers misconceives radically the nature of humankind" (Boldeman, 2007, p.9). Similar terms that have been used include 'market ideology' (Self, 1999) and 'market fundamentalism' (Soros, 2002; Stiglitz, 2002). As Fullbrook (2016, p.2) stated:

> *"Scientism is always a farce, but in this case it is one leading humanity towards devastation. We, economists and non-economists, urgently need to understand this intellectual cult threatening us all."*

This was elaborated in more detail by Fine & Saad-Filho (2017, p.697) in the following:

> *"It [neoliberalism] has constrained the latter [the individual] to give their lives an entrepreneurial form, subordinated social intercourse to economic criteria, and neutered the previous structures and institutions of political representation. The ideology of self-responsibility has been especially significant since it deprives the citizens of their collective capacities, agency and culture, appears to value consumption above all else, places the merit of success and the burden of failure on isolated individuals, and suggests that the resolution of every social problem requires the further individualization and financialization of social provision and intercourse."*

Summary of Economics Imperialism

Although there is some disagreement in the literature, it is clear that prior to the marginalist revolution, the lack of clear discipline boundaries made economics imperialism infeasible. The marginalist revolution created the conditions for the eventual imperialism. However, during this phase, the focus was on perfecting the economic method, and this created more isolationism than expansionism. It was not until after the formalist revolution that the methodological tools were sharpened to such an extent that they could be universally applied. However, imperialism did not start in earnest; economists of the time were still circumspect about the validity of their methods and suitability for universal application. It was not until the late 1950s that pioneers such as Becker blazed a path, and not until the 1980s, confidence and normalisation of this approach made it more acceptable. There have been lingering doubters, and the most explicit forms of imperialism, applying unvarnished economic approaches, have been pushed back. Instead, imperialists have used a more subtle and insidious form of imperialism. Nobody really denies the limitations of orthodox economics thinking, as evidenced by the widespread acceptance of Tony Lawson's critique of economic ontology. The suggestion that economics provides an impoverished perspective of human experience is both irrefutable and controversial at the same time. Something that is true is not often controversial, but such is the strength of economic orthodoxy, it is almost immune to criticism since such criticism is ignored.

Social capital and Economics Imperialism

It has been suggested that the concept of social capital is a form of economics imperialism (for example Fine, 2001; Fine & Green, 2000; Smith & Kulynych, 2002). The early conceptual development of the mainstream approaches to social capital were developed by Gary Becker and James Coleman at the University of Chicago and home of the Chicago School – the best-known proponent of economics imperialism (Coradini, 2010; McClenaghan, 2003). Although identified and challenged by various scholars, the dominant social capital approaches remain based on the core neoclassical axioms (for example, see DeFilippis, 2001; Fine, 2010; Foley & Edwards, 1999; Portes, 1998; Woolcock & Narayan, 2000). Law & Mooney (2006b, p.254) suggested that "social capital masks the scent of an unchallenged economic orthodoxy". However, social capital does not have a consistent meaning with several different interpretations to be found in the literature and literally hundreds of different definitions (Engbers et al., 2017). This makes claims of imperialism applicable to many, but potentially not all, conceptual approaches to social capital. Where conceptual approaches to social capital are grounded on the technical apparatus of neoclassical economics it would be reasonable to suggest it is a tool of economics imperialism where it limits or excludes alternative explanations and understandings. The situation is less clear where conceptual approaches to social capital do not explicitly use the technical apparatus. It is difficult to make a clear distinction between what is and is not the technical apparatus, so it is not as simple as identifying the technical apparatus and identifying any use of the technical apparatus in social capital as economics imperialism. The technical apparatus is a broad set of axioms and methods that are not inherently flawed. The knowledge produced from them is one set of interpretations of many possible interpretations. So, for those calling for more progressive approaches to social capital the goal should not necessarily be to eliminate all aspects of the technical apparatus from the conceptualisation of social capital.

Several authors have called for a reconceptualization of social capital using more nuanced conceptions of human agency and more 'social' philosophies of human experience, for example, Bebbington (2007), Cleaver (2005), Mayer & Rankin (2002) and Bruegel et al. (2005). As discussed above, the mainstream understandings of social capital are based on the technical apparatus of neoclassical economics and therefore on an inadequate model of human agency (Cleaver, 2005) and fail to incorporate the nature of human experience beyond instrumental rationality and individualism. "Many more nuanced models of agency exist in social theory which stress the socially situated nature of action which cannot be explained by reference to individual motives alone (Giddens, 1984; Granovetter, 1985; Long, 1990, 2001)" (Cleaver, 2005). It is hoped that this may allow social capital to resolve its numerous conceptual problems and fulfil its often-intended purpose of being corrective to the shortcomings of narrow economic theorising. These more progressive approaches to social capital can be found in the literature. However, they remain underrepresented and elusive. There is work to be done, and it will require collaboration, pluralism, and interdisciplinarity.

References

Amadae, S. M. (2017). Economics imperialism reconsidered. In U. Maki (Ed.), *Scientific Imperialism: Exploring the Boundaries of Interdisciplinarity*. Routledge.

Arestis, P., & Sawyer, M. (2004). *The Rise of the Market: Critical Essays on the Political Economy of Neo-Liberalism.* Edward Elgar Publishing Limited.

Baldissone, R. (2008). Beyond economic fundamentalism. *Real-World Economics Review,* 45, 33–53.

Barry, J. (2015). *What's the Story with Unsustainable Economic Growth?: Understanding Economic Growth as Ideology, Myth, Religion and Cultural Meme*.

Bebbington, A. (2007). Social capital and development studies II. *Progress in Development Studies*, 7(2), 155–162.

Bebbington, A., Guggenheim, S., Olson, E., & Woolcock, M. (2004). Exploring social capital debates at the World Bank. *Journal of Development Studies*, 40(5), 33–64.

Becker, G. S. (1976). *The economic approach to human behavior* (Vol. 803). University of Chicago press.

Becker, G. S. (1990). Gary S. Becker. In R. Swedberg (Ed.), *Economics and Sociology, Redefining Their Boundaries: Conversations with Economists and Sociologists* (pp. 27–46). Princeton University Press.

Birken, L. (1988). From macroeconomics to microeconomics: the marginalist revolution in sociocultural perspective. *History of Political Economy,* 20(2), 251.

Blaug, M. (1992). *The methodology of economics: Or how economists explain*. Cambridge University Press.

Blaug, M. (1998). The Formalist Revolution of What Happened to Orthodox Economics After World War II. In R. Backhouse & J. Creedy (Eds.), *From Classical Economics to the Theory of the Firm, Essays in Honour of D. P. O'Brien*. Edward Elgar.

Blaug, M. (2001). No History of Ideas, Please, We're Economists. *Journal of Economic Perspectives*, 15(1), 145–164.

Blaug, M. (2003). The Formalist Revolution of the 1950s. *Journal of the History of Economic Thought*, 25(2).

Boettke, P. J., Coyne, C. J., Davis, J., Guala, F., Marciano, A., Runde, J., & Schabas, M. (2006). Where Economics and Philosophy Meet: Review of the Elgar Companion to Economics and Philosophy with Responses from the Authors. *The Economic Journal,* 116, F306–F325.

Boldeman, L. (2007). *The cult of the market: economic fundamentalism and its discontents*. ANU Press.

Bruegel, I., Lister, R., & Morrow, G. (2005). *Women and Social Capital*.

Buchanan, James, M., & Tullock, G. (1962). *The calculus of consent*. University of Michigan Press.

Cartwright, N. (1999). *The dappled world:A study of the boundaries of science*. Cambridge University Press.

Carvalho, L. F., & Rodrigues, J. (2008). Are markets everywhere? Understanding contemporary processes of commodificatio. In J. B. Davis & W. Dolfsma (Eds.), *The Elgar Companion To Social Economics*.

Clarke, S., & Walsh, A. (2009). Scientific Imperialism and the Proper Relations between the Sciences. *International Studies in the Philosophy of Science,* 23(2), 195–207.

Clarke, S., & Walsh, A. (2013). Imperialism, Progress, Developmental Teleology, and Interdisciplinary Unification. *International Studies in the Philosophy of Science*, 27(3), 341–351.

Cleaver, F. (2005). The inequality of social capital and the reproduction of chronic poverty. *World Development,* 33(6), 893–906.

Coase, Ronald H. (1977). Economics and Contiguous Disciplines. In *The Organization and Retrieval of Economic Knowledge* (pp. 481–495). Palgrave Macmillan UK.

Coase, Ronald Harry. (1988). *The firm, the market, and the law.* University of Chicago press.

Colander, D. (2005). *The Making of an Economist Redux. Journal OfEconomic Perspectives*, 19(1), 175–198.

Colander, D., Holt, R., Rosser, B., Holt, R. P. F., & Barkley Rosser, J. (2004). *The changing face of mainstream economics*. 16(4), 485–499.

Coleman, J. S. (1990). *Foundations of social theory.* Harvard University Press.

Coradini, O. (2010). The divergences between Bourdieu's and Coleman's notions of social capital and their epistemological limits. *Social Science Information,* 49(4), 563–583.

Crespo, R. (2017). *Economics and Other Disciplines*. Routledge.

Davis, J. (2014). Pluralism and Anti-pluralism in Economics: The Atomistic Individual and Religious Fundamentalism. *Review of Political Economy*, 26(4), 495–502.

Davis, J. B. (2006). The Turn in Economics: Neoclassical Dominance to Mainstream Pluralism? *Journal of Institutional Economics*, 2(1), 1–20.

Davis, J. B. (2010). *Individuals and identity in economics*. Cambridge University Press.

Davis, J. B. (2012). Mäki on Economics Imperialism. In *Economics for Real: Uskali Mäki and the Place of Truth in Economics*. Routledge.

Davis, J. B. (2016). Review of Economics Imperialism versus Multidisciplinarity Economics imperialism versus multidisciplinarity. *History of Economic Ideas*, 24(3), 77–94.

DeFilippis, J. (2001). The myth of social capital in community development. *Housing Policy Debate*, 12(4), 781–806.

Demsetz, H. (1997). The primacy of economics: An explanation of the comparative success of economics in the social sciences - Western economic association international 1996 presidential address. *Economic Inquiry,* 35(1), 1–11.

Dow, S. C. (2000). Prospects for the Progress of Heterodox Economics. *Journal of the History of Economic Thought*, 22(2), 157–170.

Downs, A. (1957). *An economic theory of democracy.* Harper and Row.

Dupre, J. (1994). Against Scientific Imperialism. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association*.

Dupré, J. (2001). *Human nature and the limits of science*. Clarendon Press.

Edwards, L. M. (2009). Social Epistemology Ideational Social Capital and the Civic Culture: Extricating Putnam's Legacy from the Social Capital Debates. *Social Epistemology*, 23(2), 125–144.

Engbers, T. A., Thompson, M. F., & Slaper, T. F. (2017). Theory and Measurement in Social Capital Research. *Social Indicators Research*, 132(2), 537–558.

Evensky, J. M. (2005). *"Chicago Smith" versus "Kirkaldy Smith."*

Fine, B. (2000). Economics Imperialism and Intellectual Progress: The Present as History of Economic Thought? *History of Economics Review*, 32(1), 10–35.

Fine, B. (2001). *Social capital versus social theory : political economy and social science at the turn of the millenium*. Routledge.

Fine, B. (2002a). They F**k You Up Those Social Capitalists. *Antipode*, 34(4), 796–799.

Fine, B. (2002b). Economics imperialism and the new development economics as Kuhnian Paradigm shift? *World Development*, 30(12), 2057–2070.

Fine, B. (2003). Social Capital: The World Bank's Fungible Friend. *Journal of Agrarian Change*, 3(4), 586–603.

Fine, B. (2004). From Bourdieu to Becker: economics confronts the social sciences. In P. Arestis & M. Sawyer (Eds.), *The Rise of the Market: Critical Essays on the Political Economy of Neo-Liberalism* (p. 76). Edward Elgar Publishing Limited.

Fine, B. (2007a). Eleven Hypotheses on the Conceptual History of Social Capital A Response to James Farr. *Critical Exchange*, 35(1).

Fine, B. (2007b). Social capital. *Development in Practice*, 17(4–5), 566–574.

Fine, B. (2008a). Zombieconomics: The Living Death of the Dismal Science in the Age of Neo-Liberalism Ben Fine Paper for ESRC Neoliberalism Seminar, 1st. ESRC Neoliberalism Seminar.

Fine, B. (2008b). Vicissitudes of economics imperialism. In *Review of Social Economy* (Vol. 66, Issue 2, pp. 235–240). Routledge.

Fine, B. (2008c). Social capital in wonderland: The World Bank behind the looking glass. *Progress in Development Studies*, 8(3), 261–269.

Fine, B. (2009). Development as Zombieconomics in the Age of Neoliberalism. *Third World Quarterly*, 30(5), 885–904.

Fine, B. (2010). Theories of Social Capital - Researchers Behaving Badly. In *Theories of Social Capital*. Pluto Press.

Fine, B. (2013). Economics: Unfit for Purpose. *Review of Social Economy*, 71(3), 373–389.

Fine, B. (2017). From One-Dimensional Man to One-Dimensions Economy and Economics. *Radical Philosophy Review*.

Fine, B. (2019a). Post-truth: an alumni economist's perspective. *International Review of Applied Economics,* 33(4), 542–567.

Fine, B. (2019b). Economics and Interdisciplinarity: One Step Forward, N Steps Back? *Revista Crítica de Ciências Sociais*, 119, 131–148.

Fine, B., & Green, F. (2000). Economics, Social Capital, and the Colonization of the Social Sciences. In S. Baron, J. Field, & T. Schuller (Eds.), *Social Capital: Critical Perspectives* (pp. 78–93). Oxford University Press.

Fine, B., & Milonakis, D. (2009). From Economics Imperialism to Freakonomics: The Shifting Boundaries between Economics and other Social Sciences. In *From Economics Imperialism to Freakonomics: The Shifting Boundaries between Economics and other Social Sciences*. Routledge Taylor & Francis Group.

Fine, B., & Milonakis, D. (2012). From Freakonomics to Political Economy. *Historical Materialism*, 20(3), 81–96.

Fine, B., & Ortiz, J. P. D. (2016). *Social Capital: From the Gringo's Tale to the Colombian Reality* (No. 195).

Fine, B., & Saad-Filho, A. (2017). Thirteen Things You Need to Know About Neoliberalism. *Critical Sociology,* 43(5), 685–706.

Fleetwood, S. (2006). Rethinking labour markets: A critical-realist-socioeconomic perspective. *Capital and Class*, 89, 59–89.

Fleury, J.-B. (2012). *Wandering through the Borderlands of the Social Sciences: Gary Becker's Economics of Discrimination.*

Foley, M., & Edwards, B. (1999). Is it time to disinvest in social capital? *Journal of Public Policy*, 19(2), 141–173.

Fourcade, M., Ollion, E., & Algan, Y. (2015). The Superiority of Economists. *Journal of Economic Perspectives*, 29(1), 89–114.

Frey, B. S. (1993). From economic imperialism to social science inspiration: 1. Public choice as economic imperialism. *Public Choice* (1986-1998), 77(1), 95.

Fukuyama, F. (1995). *Trust : the social virtues and the creation of prosperity*. Hamish Hamilton.

Fullbrook, E. (2009). *Ontology and Economics* (E. Fullbrook (ed.)).

Fullbrook, E. (2016). *Narrative fixation in economics*. College Publications.

George, S. (1999). A short history of neoliberalism. *Conference on Economic Sovereignty in a Globalising World*, 24, 26.

Giddens, A. (1984). *The Consititution of Society: Outline of the Theory of Structuration*. University of California Press.

Glanville, J. L., & Bienenstock, E. J. (2009). A typology for understanding the connections among different forms of social capital. *American Behavioral Scientist*, 52(11), 1507–1530.

Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481–510.

Green, D., & Shapiro, I. (1994). *Pathologies of rational choice theory: A critique of applications in political science*. Yale University Press.

Gross, N., & Simmons, S. (2007). *The Social and Political View of American Professors*.

Halstead, J. M., & Deller, S. C. (2015). Social capital at the community level: An applied interdisciplinary perspective. In *Social Capital at the Community Level: An Applied Interdisciplinary Perspective*. Taylor and Francis Inc.

Hands, D. W. (2015). Orthodox and heterodox economics in recent economic methodology. Erasmus *Journal for Philosophy and Economics,* 8(1), 61–81.

Hardin, R. (1982). *Collective action*. Johns Hopkins University Press.

Harriss, J. (2002). *Depoliticizing development: The World Bank and social capital*. Anthem Press.

Hirshleifer, J. (1985). The expanding domain of economics. *The American Economic Review*, 75(6), 53–68.

Hodgson, G. M. (1994). Some remarks on "economic imperialism" and international political economy. *Review of International Political Economy,* 1(1), 21–28. h

Hodgson, G. M. (2011). Sickonomics: Diagnoses and Remedies. *Review of Social Economy*, 69(3), 357–376.

Hurtado, J. (2008). Jeremy Bentham and Gary Becker: Utilitarianism and economic imperialism. *Journal of the History of Economic Thought*, 30(3), 335–357.

Jackson, W. A. (2013). The desocialising of economic theory. *International Journal of Social Economics,* 40(9), 809–825.

Jordana, J. (1999). Collective action theory and the analysis of social capital. *Social Capital and European Democracy*, 45–72.

King, J. E. (2012). Sixteen questions for Fine and Milonakis. *Historical Materialism*, 20(3), 39–60.

Kjosavik, D. J. (2003). Methodological individualism and rational choice in neoclassical economics: A review of institutionalist critique. *Forum for Development Studies,* 30(2), 205–245.

Law, A., & Mooney, G. (2006). The maladies of social capital II: Resisting neo-liberal conformism. *Critique*, 34(3), 253–268.

Lawson, T. (2017). What Is Wrong With Modern Economics, and Why Does It Stay Wrong? In *Journal of Australian Political Economy* (Issue 80).

Lazear, E. P. (2000). Economic Imperialism. *The Quarterly Journal of Economics*.

Li, Y., Pickles, A., & Savage, M. (2005). Social Capital and Social Trust in Britain. *European Sociological Review*, 21(2), 109–123.

Lin, N., Cook, K. S., & Burt, R. S. (2001). *Social capital : theory and research*. Aldine de Gruyter.

Long, N. (1990). From Paradigm Lost to Paradigm Regained? The Case for an Actor-oriented Sociology of Development. *European Review of Latin American and Caribbean Studies*, 49.

Long, N. (2001). *Development sociology: actor perspectives*. Routledge.

Mäki, U. (2009). *Economics Imperialism Concept and Constraints*.

Mäki, U. (2013). Scientific imperialism: Difficulties in definition, identification, and assessment. *International Studies in the Philosophy of Science*, 27(3), 325–339.

Mäki, U. (2021). The way the world works (www): towards an ontology of theory choice. In U. Mäki (Ed.), *The Economic World View: Studies in the Ontology of Economics*.

Mansbridge, J. J. (1990). *Beyond self-interest*. University of Chicago Press.

Marchionatti, R., & Cedrini, M. (2017). Economics as social science: Economics imperialism and the challenge of interdisciplinarity. In *Economics as Social Science: Economics Imperialism and the Challenge of Interdisciplinarity*. Taylor and Francis.

Mayer, M., & Rankin, K. N. (2002). Social Capital and (Community) Development: A North/South Perspective. *Antipode*, 34(4), 804–808.

McClenaghan, P. (2003). Response to "social capital: An analytical tool for exploring lifelong learning and community development." *British Educational Research Journal*, 29(3), 435–439.

Milonakis, D., & Fine, B. (2009). *From Political Economy to Economics: Method, the Social and the Historical in the Evolution of Economic Theory*.

Milonakis, D., & Fine, B. (2012). Interrogating Sickonomics, from Diagnosis to Cure: A Response to Hodgson. *Review of Social Economy*, 70(4), 477–491.

Morgan, J. (2017). Independent thinking in an interdependent world: Edward Fullbrook on the state of contemporary economics. *Real-World Economics Review*, 82.

Nelson, J. A. (2003). Why the PAE movement needs feminism. In *The Crisis in Economics*.

Nik-Khah, E., & Horn, R. Van. (2012). Inland empire: economics imperialism as an imperative of Chicago neoliberalism. *Journal of Economic Methodology*, 19(3), 259–282.

Perry-Kessaris, A. (2011). Prepare Your Indicators: Economics Imperialism on the Shores of Law and Development. *International Journal of Law in Context*, 7.

Pinto, M. F. (2016). Economics Imperialism in Social Epistemology: A Critical Assessment. *Philosophy of the Social Sciences,* 46(5), 443–472.

Portes, A. (1998). Social capital: its origins and applications in modern sociology. *Annual Review of Sociology,* 24(1), 1–25.

Portes, A. (2000). The Two Meanings of Social Capital. *Sociological Forum*, 15(1), 1–12.

Putnam, R. D. (2000). *Bowling alone : the collapse and revival of American community*. Simon & Schuster.

Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work : civic traditions in modern Italy.* Princeton University Press.

Radnitzky, G., & Bernholz, P. (Eds.). (1987). *Economic Imperialism: The Economic Method Applied Outside the Field of Economics*. Paragon House.

Rolin, K. (2016). Economics Imperialism and Epistemic Cosmopolitanism. *International Studies in the Philosophy of Science*, 29(4), 413–429.

Rothschild, K. W. (2008). Economic imperialism. *Analyse & Kritik*, 30(2), 723–733.

Schelling, T. C. (1960). *The Strategy of Conflict.* Harvard university press.

Schuurman, F. J. (2003). Social capital: The politico-emancipatory potential of a disputed concept. *Third World Quarterly,* 24(6), 991–1010.

Scitovsky, T. (1976). *The joyless economy: An inquiry into human satisfaction and consumer dissatisfaction.* Oxford University Press.

Self, P. (1999). Rolling Back the Market: Economic Dogma and Political Choice. In *Foreign Affairs* (Issue 3). JSTOR.

Sen, A. (1996). Rationality, Joy and freedom. *Critical Review,* 10(4), 481–494.

Smith, S. S., & Kulynych, J. (2002). It may be social, but why is it capital? The social construction of social capital and the politics of language. In *Politics and Society* (Vol. 30, Issue 1, pp. 149–186).

Snowdon, B., & Vane, H. R. (1999). *Conversations with leading economists : interpreting modern macroeconomics*. Edward Elgar.

Soros, G. (2002). *On Globalization*. Public Affairs.

Souter, R.W. (1933). *Prolegomena to Relativity Economics: An Elementary Study in the Mechanics of an Expanding Economic Universe*. Columbia University Press.

Srakar, A., Sušnik, U., Gonza, T., & Rubinić, I. (2020). How Economists Explain with Mathematics - Or Should They? *Review of Economics and Economic Methodology*, 4(1).

Stigler, G. J. (1984). Economics: The imperial science? *The Scandinavian Journal of Economics*, 86(3), 301–313.

Stiglitz, J. E. (2002). *Globalization and its Discontents* (Vol. 500). New York Norton.

Swain, N. (2003). Social Capital and its Uses. *European Journal of Sociology,* 44(2), 185–212.

Swedberg, R. (1990). *Economics and Sociology: redefining their boundaries: conversations with economists and sociologists*. Princeton University Press.

Swedberg, R., & Granovetter, M. (Eds.). (1992). *The Sociology of Economic Life*. Westview Press.

Taylor, M. (1976). Anarchy and Cooperation. Wiley.

Thorén, H., & Stålhammar, S. (2018). Ecosystem services between integration and economics imperialism. *Ecology and Society*, 23(4).

Tittenbrun, J. (2016). Economic Imperialism. *World Scientific News*, 37, 114–152.

Udéhn, L. (1992). The limits of economic imperialism. In U. Himmelstra (Ed.), *Interfaces in economic and social analysis* (pp. 239–280).

Vromen, J. J. (2009). The booming economics-made-fun genre: more than having fun, but less than economics imperialism. *Erasmus Journal for Philosophy and Economics,* 2(1), 70–99.

Walters, W. (2002). Social capital and political sociology: Re-imagining politics? *Sociology : The Journal of the British Sociological Association*, 36(2), 377–397.

Wojciechowska, R. (2020). Economics open to sociology. Analysis of the relationship between economics and sociology. In A. Żabiński (Ed.), *Entities' Decision in Conditions of Economic Growth*. Publishing House of Wroclaw University of Economics and Business.

Woolcock, M. (1998). Social capital and economic development: Towards a theoretical synthesis and policy framework. *Theory and Society,* 27(2), 151–208.

Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, 15(2), 225–249.