

SYMPOSIUM ON EXPLANATIONS AND SOCIAL ONTOLOGY 2: EXPLANATORY ECUMENISM AND ECONOMICS IMPERIALISM

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Abstract

In a series of insightful publications, Philip Pettit and Frank Jackson have argued for an explanatory ecumenism that is designed to justify a variety of types of social scientific explanation of different “grains”, including structural and rational choice explanations. Their arguments are put in terms of different kinds of explanatory information; the distinction between causal efficacy, causal relevance and explanatory relevance within their program model of explanation; and virtual reality and resilience explanation. The arguments are here assessed from the point of view of the illumination they are able to cast on the issue of economics imperialism, the project of privileging rational choice as a unifying basis for explanations. While the Jackson–Pettit arguments turn out to be helpful in specifying some of the ontological and pragmatic constraints on economics imperialism, they are also shown to conflate distinct dimensions in the purported explanantia (such as small grain and particular grain, and the macro and the existentially quantified) and thereby to miss an important class of individualist causal process explanations of social phenomena.

1. INTRODUCTION

Modes and styles of explanation abound in the social sciences. Some celebrate this diversity, while others would prefer a more uniform explanatory outlook. At one extreme, some believe economics has

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discovered the correct individualistic rational choice mode and recommend all economists and other social scientists to adopt it to the exclusion of other explanatory modes. This is one version of what is often called economics imperialism (see, Becker 1976; Stigler 1984). Some others are pluralists about the variety of aggregative, historical, narrative, interpretive, functionalist, structural, and rational choice accounts that social scientists manufacture. Such different modes of social explanation are taken to serve different purposes and to complement one another. The confrontation between these two attitudes is customarily conceived as one between explanatory ecumenism and explanatory monism.¹

If these are the attitudes, what are the arguments? In what follows, the focus will be on a species of ontological argument supplemented with pragmatic perspectives. The paper takes as its point of departure my earlier work on economics imperialism and explanatory unification (Mäki, 1990, 2000a, 2000b, 2001) and a series of insightful publications by Philip Pettit, some of them jointly authored with Frank Jackson (Jackson and Pettit, 1990, 1992a, 1992b; Pettit, 1996a, 1996b, 2001, 2002). My (descriptive and normative) account of economics imperialism is in terms of constrained explanatory unification. I take unification to be an undisputed goal of explanation (even though not constituting explanation itself) and economics imperialism as an attempt to implement this goal. The pursuit of this goal has to be constrained, though: among the constraints are ontological, pragmatic, and epistemological considerations. Pettit and Jackson's work may be useful for spelling out the details of these constraints. The present paper attempts to see how much can be learnt from them to that effect, in particular with regard to ontological and pragmatic constraints.

For Jackson and Pettit, the link between ontology and explanation is flexible. They subscribe to an individualistic ontology, but argue for an ecumenical position in matters of social explanation. Given the commitment to the social ontology of holistic individualism (Pettit, 1996a, Chapters 3–4), the question is how one justifies the use of structural and rational choice explanations that both appear to be in conflict with that ontology – structuralism with its individualism, rational choice with its holism. I will provide a concise account of economics imperialism and formulate the question more sharply (Section 2); give a summary of the Jackson–Pettit ecumenical argument (Section 3); raise some critical questions and propose refinements (Section 4); and draw conclusions concerning economics imperialism as constrained explanatory unifica-

¹ This simplifies matters by ignoring at least two facts: that actually there is a variety of specific versions of such abstract explanatory modes, and that such versions sometimes attempt to combine the insights of more than one such mode.

tion (Section 5). Section 3 includes remarks on the interpretation of rational choice theory put forth by Satz and Ferejohn (1994), as it is in some respects similar to the Jackson–Pettit argument.

2. ECONOMICS IMPERIALISM

There are two components in the name: “economics” and “imperialism”. Since our main concern here is with explanation, the explanatory ambition provides the perspective from which we can briefly elaborate these components. The notion of imperialism is analyzed in terms of explanatory unification, while the idea of economics is understood in terms of rational choice explanation.

Economics and rational choice

Following standard practice, I take rational choice to be a core notion in conventional economics. This means that we will actually be discussing rational choice imperialism. There are many ideas of rational choice, thus there are many ideas of rational choice imperialism. To fix a version that will serve the purposes of this paper, I follow Pettit and take rational choice theory narrowly to portray agents, first, to be driven (“to a good extent, if not predominantly”) by self-regarding desires and, second, to conform to something akin to decision-theoretic rationality (Pettit, 1996a, p. 265). Pettit specifies the first assumption by representing rationally-choosing agents quite broadly as pursuing not only economic gain in terms of “action-dependent goods” but also social acceptance in terms of “attitude-dependent goods” (this latter element means a departure from most standard economic models²). The second assumption is clarified by saying that rational choice models depict agents as instrumentally rational black boxes, where ends are taken as given and the deliberations that guide agents in their pursuit of those ends are not considered: the mental processes of adopting and using the means to achieve one’s ends are left in the dark. Pettit says agents are treated as “black boxes” since their mental design is not of interest: such models of rationality “put aside the question of how agents are supposed to think and deliberate as they find their way to action” (Pettit, 1996a, p. 268). The rationality attributed to agents is one of means and outcomes rather than of ends and process.

² Pettit himself notices this and says: “Although attitude-dependent goods are not generally countenanced within the rational choice tradition, there is no reason why they should not be recognised” (1996, p. 266). He appeals to a tradition of including them, from Adam Smith to John Harsanyi.

Imperialism and explanatory unification

Economics imperialism, just like other forms of intellectual imperialism, can be viewed from a number of perspectives, such as from the points of view of psychology, politics and economics of science. Given that our core issue is explanatory ecumenism, we will look at economics imperialism as a challenge to philosophical accounts of social scientific explanation. My idea is a simple one. If economics imperialism is the *analysandum*, the obvious *analysans* is explanatory unification. Explanatory unification is a matter of explaining much by little, it is a matter of a pursuit of explaining a large – and growing – number of types of phenomena in terms of a simple powerful theory (see, Friedman, 1974; Kitcher, 1981). This pursuit is close to being a defining characteristic of the ideal institution of science. The major part of economics subscribes to the ideal of explanatory unification: the more an economic theory explains, the better it is.

Suppose there is some idea of disciplinary boundaries, whether rather intuitive or well defined. We can then draw a distinction between intra-disciplinary and inter-disciplinary unification. In the case of economics, *intra*-disciplinary unification is the currently widely accepted goal of explaining as many economic phenomena as possible – phenomena traditionally regarded as economic, such as relative prices and income distribution as well as business cycles and growth rates – in terms of constrained maximization and equilibrium outcomes. From the point of view of this ideal, it is a strong argument against a suggested economic theory to claim that it fails to unify, or that it unifies less than a rival theory. (On *intra*-disciplinary unification, see, Mäki, 1990 and 2001.)

The idea of *inter*-disciplinary unification is just an extension of the above notion: it is a matter of explanatory unification that does not respect disciplinary boundaries. It is the pursuit of unifying as many types of phenomena as possible regardless of whether they are traditionally viewed as economic or non-economic. It is part of the ambition of economics imperialism to use rational choice theory for this end. Here is a rough definition for our purposes (Mäki, 2000a, 2000b): *Economics imperialism is a matter of a persistent pursuit to increase the degree of unification provided by rational choice theory by way of applying it to new types of explanandum phenomena that are located in territories that are occupied by disciplines other than economics.* In this formulation the “territory that is occupied by a discipline” is to be understood as the class of phenomena that researchers in this discipline have conventionally or traditionally taken as their task to explain. Note also that the formulation puts the definition in terms of pursuit rather than achievement.

This generic formulation of economics imperialism allows us to distinguish two kinds: the substitution and the supplement versions.

Both versions presuppose that there already exist (or potentially exist) one or more non-economic explanatory theories in relation to some domain of phenomena that the non-economic discipline has traditionally occupied.³ *The substitution version* is the radical project of endeavoring to substitute rational choice explanations for the prevailing (or would-be) non-rational-choice explanations, while *the supplement version* more moderately suggests supplementing them without replacement. The substitution version is a pursuit of monistic explanatory suppression, while the supplement version allows for a pluralistic explanatory mixture. Both versions manifest the pursuit of increased degrees of explanatory unification, but the substitution version is the more ambitious and radical of the two in that it purports to take unification further.

The question

We can now put our question on the table. Take economics to be represented by rational choice theory. Take rational choice theory to explain individual behavior and social patterns by portraying agents as instrumentally rational black boxes with nothing but self-regarding desires. Take economics imperialism to be a matter of pursuing increasingly unifying rational choice explanations regardless of traditional disciplinary boundaries. Given all this, is economics imperialism a justified project? Can it be defended in either of its versions, as a project of explanatory substitution or as a project of supplementation? Both versions require that rational choice explanation itself be justified. The substitution version requires that non-rational-choice explanations fail to be justified. The supplement version requires that other kinds of explanation – structuralist, functionalist, etc. – be justified as legitimate.

The Jackson–Pettit arguments for explanatory ecumenism constitute an attempt to resist the substitute version of rational choice imperialism and to justify the more moderate supplement version. The ontology of causation they endorse is such that neither social-structural connections nor rational choice patterns can be taken to capture what really goes on

³ A complex set of issues is here compressed into rather simple formulations. It is clear that one cannot require the prevailing non-economic theories to provide perfectly successful explanations; they only purport to explain. In cases where no non-economic explanations actually exist, we may say that they potentially exist in that the phenomena to be explained are located in the domain of a non-economic discipline and that therefore such a discipline can “enlist” them – can claim them to be among the potential explananda of its (current or forthcoming) theories. For example, prior to Downs (1957), phenomena such as political party convergence and voter turnout were regarded as belonging to the set of explananda of political science, but at the same time, they appeared – or should have appeared – as unexplained puzzles to political scientists.

in the social world; what really goes on is a matter of particular individuals and their detailed psychological aetiologies. This means that, within this ontology, both kinds of explanation are in need of additional justification.

One can assess economics imperialism without questioning the goal of increased degree of explanatory unification as its core. Given this goal, the strategy of metatheoretical evaluation is to impose constraints on the expansionist pursuit and to ask whether any given case meets those constraints (Mäki, 2000a). The *ontological constraint*, generically put, requires that explanatory unification should be taken as far as, and no further than, there is unity of the theoretically conjectured sort in the world. Explanations should unify different types of phenomena by showing that they really are manifestations or forms of one and the same set of entities, forces or causal processes. In other words, expansionist explanation should be an attempt to increase the degree of ontological unification. The *pragmatic constraints* require that the kinds and degrees of explanatory unification pursued should be sensitive to the legitimate interests and purposes of the explainers and explainees involved in various explanatory situations. Explanatory unification should be taken as far as, and no further than, such legitimate explanatory interests permit. Whenever such ontological and pragmatic constraints are not met, the economics imperialism at hand becomes suspect. Whenever they are met, we have an acceptable variant that recognizes its own limits determined by such constraints – limits beyond which further explanatory conquests would be illegitimate. Given this approach, the question can be rephrased: *is economics imperialism a justified project in that it is able to meet the relevant ontological and pragmatic constraints?*

3. THE GROUNDS FOR EXPLANATORY ECUMENISM

In order to assess the aspirations and allegations involved in economics imperialism – in order to refine the constraints we want to impose on it – we will next collect a few concepts and arguments by following in the footsteps of Jackson and Pettit.

The fine grain preference and causal fundamentalism

A key notion in the Jackson–Pettit account is the one of degree of “grain” in social explanation. They define what they call “the fine grain preference” by the statement, “other things being equal, the more fine-grained an explanation, the better” where finer grain is a matter of more causal detail (Jackson and Pettit, 1992a, p. 1). They then point out that the fine grain preference can be divided into two kinds, the close-grain preference and the small-grain preference. The close-grain preference is

a matter of favoring explanations that provide the detailed mediating mechanisms in causal chains across time. Explanations satisfying this preference will not leave any causal gaps in the temporal chain of events. The small-grain preference, in turn, advises looking for detailed individualistic micro-foundations that will replace any macro-level structural accounts. Small-grain explanations are explanations given in terms of individuals and their properties. Most of the present paper will focus on arguments about the small-grain case. We may say that economics imperialism involves a special case of the small-grain preference.

Jackson and Pettit ask why smaller grained would entail finer grained, or “what is involved in believing that going smaller grained always means revealing more about the fine structure of causality, the fine structure of the wheels that move things” – and they answer that what is involved is the doctrine of micro supervenience: “that the causal relations at more micro levels ... fix the causal relations that obtain at levels higher up, and that the causal relations at the lowest level of all, assuming there is one, fix the causal happening at every level” (1992a, p. 4). In short, “the macro-properties, including the causal-relational properties at the macro-level, supervene on the micro-properties” (1992a, p. 5). It is what Jackson and Pettit call “causal fundamentalism” that is presupposed in the view that smaller grained means finer grained. For the purposes of the present paper, I will call it “causal micro-fundamentalism”: this expression names a view that combines ontological individualism (claiming that fundamental reality lies at the level of individuals rather than at any supra-individual level) on the one hand and causal fundamentalism in a more neutral sense (claiming that there is a fundamental level at which genuine causation operates) on the other.

Explanatory individualism is another name for the small-grain preference. Jackson and Pettit’s major claim is that even though we may endorse an ontological individualism and a causal micro-fundamentalism, explanatory individualism does not follow. One may accept that all causal relations at the macro level are supervenient on causal relations at the micro level, and yet accept macro explanations as perfectly legitimate. In other words, Jackson and Pettit argue that causal micro-fundamentalism does not entail explanatory micro-fundamentalism. Higher-level explanations can be useful even though all causal action takes place at lower levels (or at the lowest level if there is one).

They say that “explanations at different levels of grain may be interesting in different ways, so that individual-level explanations in social theory, for example, may serve to complement rather than replace structural accounts” (1992a, p. 2). But “individual-level explanation” is not to be taken to refer uniquely to rational choice explanation. Even if causal micro-fundamentalism were true, this would not justify rational

choice explanations – they require a justification in the same way as social-structural or functionalist explanations do. Rational choice models are not faithful descriptions of the causal micro processes of mind and society. Yet, like structural models, they can be used to explain. Thus, both social-structural and rational choice explanations require justification for their explanatory relevance, and both can be justified, or so Jackson and Pettit argue. What is the reasoning behind this ecumenical position?

Two kinds of complementary information

Jackson and Pettit argue that “explanations at different levels and explanations at different removes may provide complementary sorts of information on causal process” (1992a, p. 20). They seek to undermine the following argument that links causal micro-fundamentalism to explanatory individualism (1992a, p. 12):

- [1] To explain is to provide information on the causal history of what is to be explained.
- [2] We provide better information on causal history as we identify smaller grain and therefore greater detail in the relevant causal structure.
- [3] Therefore, as we identify smaller degrees of grain in the relevant causal structure, we provide better explanations.

Jackson and Pettit do not question [1] – they subscribe to it. They question the second premise [2]. To point out the defect of [2], they distinguish between two kinds of information about causal history, namely “comparative” and “contrastive” information (1992a, p. 12–13). The mistake of the fundamentalist argument is to assume that the only kind of information relevant to explanation is contrastive information. While it is true that lower-level explanation provides contrastive information, higher-level explanation may provide comparative information that would be lost if all explanation were to be in terms of lower-level factors only. Thus, higher-level explanations can provide information that lower-level explanations cannot: in this respect the two complement one another.

Contrastive information, in reporting the actual causal history, “focuses on differences between the actual world and other possible worlds” while comparative information, in indicating alternative causal histories with the same outcome, “focuses on similarities between the actual world and other possible worlds” (1992a, p. 15). The cracking of the flask provides an illustration. A closed flask contains water whose temperature – the mean kinetic energy of its molecules – is raised to boiling point when the flask cracks. At that point a molecule collides with the molecular bond in the surface of the flask at a velocity that

breaks it. "Learning the explanation of the cracking in terms of this or that molecule increases our contrastive information on the causal process involved; it helps us differentiate the actual-world cracking from more and more possible-world counterparts. Learning the boiling-water explanation increases our comparative information on the causal process. We may already be in possession of the molecular account and be sensitive to what differentiates the actual process at this level. But still, in being made aware of the boiling-water explanation, we learn something new: we learn that in more or less all possible worlds where the relevant causal process is characterized by involving boiling water, the process will lead to the flask cracking." (1992a, p. 15) The same applies to the explanation of an increased crime rate by an increased unemployment rate or explaining it alternatively by tracing the precise changes in motivation and opportunities in the relevant individuals' minds that led them to commit crime. The latter micro explanation provides information about what actually happens, while the former macro explanation informs about what happens in those possible worlds where the condition of increased unemployment prevails; but neither of these two sets of information contains the other (1992a, p. 11).

Thus, premise [2] will not stand, and explanatory ecumenism can be vindicated. Micro-level explanations are fine for generating contrastive information, while macro-level explanations are better for providing comparative information. But why exactly would either kind of information be worthy of pursuit? In answering this question, we must invoke pragmatic considerations. More on that later.

Explanatory relevance and the program model

Another route to the same conclusion is through the concept of explanatory relevance. This concept can be defined by linking it to that of causal relevance: "to explain an event or condition is to provide some information on properties that are causally relevant to its appearance" (Pettit, 1996a, p. 230). The crucial detail in the account is to show that to be causally relevant a property does not have to be a causally efficacious member in a chain constituting a causal process. Jackson and Pettit argue that even though higher-level properties are not causally efficacious, they may be causally relevant and thus relevant to explanation. What they call the "program model" of explanation is presented to satisfy the need of ascribing causal relevance to higher-order properties even though all causal efficacy lies at lower levels. Causal fundamentalism implies that higher-order properties are not causally efficacious. According to the program model, they can still be causally relevant. A higher-order property is causally relevant just in case it programs for the presence of an efficacious property at a lower level. In this way, a higher-

order property “ensures” that there is a lower-order property responsible for the causal production of the effect. “The analogy is with a computer program which ensures that certain things will happen . . . though all the work of producing those things goes on at a lower, mechanical level” (1990, p. 114). Whatever is causally relevant in this way is also explanatorily relevant. Thus, explanatory relevance is linked to causal relevance, and causal relevance is linked to causal micro-fundamentalism, but only indirectly.

Again, the cracking of a flask provides an illustration. “The rise in the temperature programs for the cracking in the intuitive sense that it arranges things non-causally so that there will almost certainly be a collision which will produce the breaking; alternatively, we may say that it programs for the occurrence of such a productive event.” (1992b, p. 118.) Likewise, while increased unemployment does not as such causally produce increased crime, it programs for the rise in the crime rate by ensuring that individual motivations and opportunities will change so that more crime will be committed. The rise in temperature and the rise in unemployment are macro-level changes that, by way of programming for the relevant micro-level causal processes, acquire derived causal relevance and, thereby, explanatory relevance. Macro explanations of macro outcomes are thereby shown to be legitimate.

Program explanation contrasts with what Jackson and Pettit call “process explanation”: “The process explanation relative to any level identifies actual causes and relevant causal properties. The program explanation identifies a condition such that its realization is enough to ensure that there will be causes to produce the event explained: if not the actual causes, then some others.” (1992b, p. 119) Thus process explanations in the Jackson–Pettit sense trace the actual fine grain causal histories of their explananda, while this is not the ambition of program explanations. This immediately links with the notion of complementary kinds of information: “The process explanation provides information on the causal chain at work in the actual world, the program explanation provides information on the causal chains at work in different possible worlds . . .” (1992b, p. 119). Towards the end of the paper, I will raise questions about this conception of causal process explanation.

Virtual reality and complementary domains of explananda

Suppose the above reasoning justifies social-structural explanations and thereby helps reject the substitute version of rational choice imperialism. Even if this much could be settled by the argument thus far, it would not be sufficient to settle the fate of the supplement version. The question remains of how one can justify rational choice explanations so as to substantiate a supplement version of imperialism.

Pettit suggests that a version of rational choice explanation based on ascribing self-seeking desires to homo economicus whose mental processes of deliberation are put in a black box violates some deeper convictions about human beings. This portrayal violates our common-sense depiction of human beings as articulated in the “inference-theoretic” view of agents: as a matter of folk-psychological fact, people reach the decisions behind their actions by way of explicit or implicit deliberation, thus, there is causally significant life inside the black box ignored by rational choice theory. Furthermore, those deliberations are not predominantly self-regarding, people would rather act on socially justifying reasons. The portrayal of human agents as self-regarding black boxes thus appears flatly false. The black box is empty. (Pettit, 1996a, pp. 233–48; 2001.) Yet Pettit argues that rational choice explains. How does one justify its invocation in explanations? Or how can it be defended as having explanatory force?

Pettit’s defense is focused on the assumption of self-regarding interests.⁴ The defense of the self-interest assumption is based on restricting the explanatory force of rational choice models to a limited domain. Different defenses suggest different intended domains of application. What Pettit calls the “calculative” reconciliation between the inference model and rational choice is based on a domain circumscription: people can be represented as self-interested calculators in their behavior in the market, at least in cultures where such behavior is regarded as socially acceptable. Outside the market, however, it would be wrong to invoke self-regarding considerations alone to explain behavior. Thus, rational choice explanation can be applied to limited ranges of human behavior. (Pettit, 1996a, p. 273) This solution could be taken to suggest that rational choice could be used for explaining phenomena that are traditionally conceived as economic, while it cannot explain non-economic phenomena. It would thus undermine rational choice imperialism.

I have two comments on this suggestion. First, the extension of the term “market” is not fixed. In particular, it is certainly not taken to be fixed by the economics imperialists. In many versions of expansionistic economics, the essential move is precisely to stretch the domain of applicability of the very concept of market to cover areas such as marriage, crime, politics and scientific ideas (see, Becker, 1976; Coase, 1974; Mäki, 1999). This extension is hoped to enable applying rational choice explanations more broadly than just to market behavior traditionally conceived. Second, consider how Pettit describes behavior outside

⁴ The black box characteristic of homo economicus also requires justification but this is not separately articulated by Pettit. I take it that this justification has the same structure as the justifications of social-structural explanations.

the market in this context: he says “outside the market it is rarely taken as acceptable for agents to reach their decisions on the basis of self-regarding considerations alone. The friend, adviser, or politician who defends her initiatives on the grounds that they are in her own interest loses all claim of affection, attention, or respect” (1996a, p. 273). But such a person would not seem to be a rationally choosing agent in Pettit’s own special sense. Such behavior would violate his broad definition of rational choice as being a matter of self-interested pursuit of both economic gain *and social acceptance*. In contrast to his own stipulation, the cited passage seems to suggest (more in line with standard economic models) that the self-regarding considerations deal with economic gain only, to the exclusion of social acceptance.

Anyway, Pettit himself goes beyond the calculative mode of reconciliation, proposing a “constraining” reconciliation between the inference and rational choice models (Pettit, 1996a, 274–82; 2001; 2002). This view is supposed to make rational choice explanations applicable also in non-market domains, thus, the intended domain of application is supposed to be broader than with the “calculative” reconciliation. On this view, even though the self-interested homo economicus is not *actually* ever present, he enjoys a kind of *virtual* reality. One assumes that agents’ desires have culturally-given aspiration levels, and that whenever those levels are met, behavior is driven by a variety of interests, including other-regarding ones. But whenever the agent is plunged below such a level, she is likely to start deliberating the fact in terms of her self-regarding interests and give them considerable weight in her behavior. (It is noteworthy that this picture is based on an internalist perspective: the agent becomes aware of an aspiration level not being met and starts deliberations so as to balance the various desires. Here the black box characteristic of homo economicus is removed for the purpose of defending the self-interest characteristic.)

Rational choice under the “constraining” reconciliation has its own limits of application. Its intended domain of application is defined by the property of resilience. The invocation of a virtually real homo economicus driven by virtual self-regard will not succeed in explaining the actual emergence or continuation of any phenomenon or pattern. Such explanations would require citing actual causes that are constituents of actual causal processes. Self-regard is a potential cause, a standby cause, and, as such, is, at most, able to explain the resilience of behavioral patterns. Resilient patterns are modally rather than temporally persistent patterns: they are robust under various contingencies. Rational choice explanations can thus be justified as soon as their domain of applicability has been properly circumscribed, once they are understood as answers to restricted explanatory questions: they can be justified as resilience

explanations. (Pettit. 2001; 2002) This vindicates the supplement version of rational choice imperialism.

A note on the Satz–Ferejohn suggestion

The Pettit–Jackson argument has affinities with the suggestions made by Satz and Ferejohn (1994), thus, a brief discussion on the latter may be useful. Satz and Ferejohn argue that rational choice theory can be interpreted in two different and legitimate ways. One view is *internalist*: “rational-choice theory is seen as describing what is actually going on inside us when we reason. . . . mental entities (for example, preferences and beliefs) are thought to be causally related to choice, in the sense of being reasons for an agent’s having made the choice” (1994, p. 73).⁵ Satz and Ferejohn reject the internalist interpretation in favor of an externalist view. They also reject a radical externalism that denies both the existence and causal efficacy of mental entities. Their externalism is of an ontologically moderate variety in that it denies neither. But their *moderate externalism* involves no commitment to any particular view of the internal mental process; internal processes are bracketed. Behavior is not explained in terms of mental entities, but is explained rather as occurring *as if* it were a matter of rationally maximizing preference satisfaction (1994, p. 74–7). It seems fair to say that, even though Pettit does not put it in these terms, the notion of rational choice that he considers is externalist: the internal mental process is black-boxed.⁶

In their defense of rational choice, Satz and Ferejohn make suggestions that are similar to the Jackson–Pettit argument. They formulate the position that they refute as the view that “individuals are more fundamental than social structures, they are the rock-bottom of any explanation. Therefore, where we have an upper-level explanation that can be eliminated in favor of a microlevel explanation, we should always do so. We should, accordingly, replace external rational-choice explanations with internal explanations whenever we can. We disagree.” (1994, p. 83.) While it is not clear whether this denies causal micro fundamentalism, it does reject explanatory micro fundamentalism.

Their defense of rational choice by way of circumscribing the domain of its explananda is also similar to Pettit’s, but it is put in slightly different terms: “We believe that rational-choice theories are most

⁵ Satz and Ferejohn say internalism is the received view of rational choice. This claim seems questionable at least as a claim about many economists’ views; at any rate it runs counter to Pettit’s depiction of rational choice in terms of black-boxing the mental processes of deliberation.

⁶ On the other hand, as pointed out above, Pettit’s defense of the virtual reality of the rationally choosing homo economicus is in terms of the mental process of deliberation and, thus, is inclined towards internalism.

credible under conditions of scarcity, where human choice is severely constrained. In environments without strong constraints, agents will not generally behave as the theory predicts." (Satz and Ferejohn, 1994, p. 81.) Therefore, rational choice explanations apply more naturally to the behavior of business firms and political parties and less to the behavior of consumers and voters. In conditions of severe constraints, rational choice explanations take on the character of equilibrium explanation, explaining the stability of an outcome. In equilibrium explanations, the details of the process leading from one position to another are not relevant: the equilibria are multiply realizable and their stability can be explained without ontological commitments concerning the micro-level process. This is to adopt an externalist interpretation of rational choice. While externalism is presented as suitable for equilibrium explanations, it does not work for other explanatory purposes: "Externalism cannot address questions posed at the level of a single individual's behavior or those questions which concern the origin of a certain structure." (1994, p. 81.) Thus, externalist rational choice has a limited domain of application. This creates space for other modes of social explanation.

It is not clear what Satz and Ferejohn ultimately think of the internalist version of rational choice. They say that "for many kinds of questions, the internalist interpretation of rational choice is inappropriate; it is often redundant or misleadingly concrete" and that they "do not endorse the externalist approach for all purposes" (1994, p. 86). This would appear to create some space for the internalist version. However, Satz and Ferejohn are impressed by the various criticisms of rational choice by people like Simon, Sen, Tversky and Kahnemann: "If the theory is taken to specify a psychological mechanism, then these criticisms may be fatal." (1994, p. 74) This suggests that rational choice can survive only if interpreted externalistically. It may therefore be surprising to read that they nevertheless "recognize that for many purposes [such as for normative concerns] an internalist, agent-centered perspective on action is crucial" – and by this they mean "a psychological interpretation of rational-choice theory" (1994, p. 87). What is puzzling is that on the one hand they say that internalist rational choice is needed to answer certain questions, while, on the other, they say that the various criticisms of internalist rational choice may be fatal.

Having presented three examples of equilibrium explanations – externalist rational choice explanations where the structural conditions play a prominent role – Satz and Ferejohn combine the perspectives of the Jackson–Pettit argument in the following passage: "In each of these three examples, we could give an internalist account of these phenomena. We could proceed inductively, examining each agent's preferences and beliefs. But certain features of the equilibrium explanation are not captured at the microlevel of agent psychology. In particular, the

stability of the equilibrium explanation is lost: the inductivist psychological explanation does not illuminate why the same results obtain across putatively different microlevel psychologies. In the equilibrium explanation, the stability is explained structurally. Structural conditions constrain and narrow the number of psychological possibilities. These conditions select for compatible microlevel psychologies." (1994, pp. 80–1.) Even though equilibrium explanations "do not point to the actual cause of a particular agent's behavior, they do describe a causal structure. In such explanations, we can replace given individuals with others without changing the structure in which their actions are embedded" (1994, p. 78).

The crux of these passages from the Satz and Ferejohn article appear to be in line with the Jackson–Pettit argument even though they lack the philosophical details and ambitions of that argument. Equilibrium explanations are a species of resilience explanations and rational choice explanations are said to be among them. The Satz–Ferejohn justification of rational choice under moderate externalism combines the complementary information and multiple realizability perspectives in the Jackson–Pettit argument. There are also dubious features in the Satz–Ferejohn account, such as, the claim that internalism advises us to inductively examine each agent's preferences and beliefs. This helps identify a problem that they appear to share with Pettit and Jackson. It is to the identification and remedying of this dubious element that we next turn.

4. A FINER-GRAINED ACCOUNT OF FINE GRAINS

The Jackson–Pettit argument is rich with useful conceptual distinctions. But it also tends to conflate some concepts that are distinct. Whether it would be better to keep them distinct will have to be seen. These conflations are particularly evident in the various examples they present to illustrate their case and to make it more persuasive. Jackson and Pettit distinguish between two kinds of fine grain: close grain and small grain. I suggest that finer grained divisions are called for.

First, they conflate small grain with what can be called *particular grain*. Some of Jackson and Pettit's examples seem unproblematically linked to the case they make about the small-grain preference while others are not. Here are examples of social-structural explanations: "Urbanization explains the decline in religious practice. The restructuring of manufacturing industry explains the fall in trade union power. The increase in the numbers employed explains the rise in inflation." (1992a, p. 9) These can be construed as general explanatory statements connecting two generic macro variables. Neither the variables nor their connections are space-time constrained. However, in their argument

against replacing these explanations with smaller grained accounts, they exit from this abstract framework, suggesting that “it is implausible to hold that social-structural explanations should be replaced by ones that direct us to the responsible individuals” (1992a, p. 9). Now, the “responsible individuals” are in an obvious sense “smaller” than the generic macro variables appear to denote, but they are also more concrete: they are *particular* individuals. Thus, two moves take place simultaneously: towards smaller grain and towards particular grain. This suggests a missing distinction, one between particular small grain and abstract small grain, or token-small grain and type-small grain.

Jackson and Pettit define causal fundamentalism as the idea that genuine causal efficacy is located at lower (or lowest if there is one) micro-levels. This general characterization of causal micro-fundamentalism appears to be neutral between the two kinds of small grain (type-small and token-small), but many of their examples imply putting it in terms of particular grain. They say that they want to keep their notion of causation general and neutral, but obviously the account of causal efficacy in terms of particular grain is not philosophically uncommitted.

A related conflation exists between the macro and the existentially quantified (at times, Jackson and Pettit are explicit that there *is* a difference between the two, see, 1992b, pp. 98 and 125). Here is an example: they say the explanatory micro-fundamentalist is not content with the explanatory statement: “Someone’s coughing irritated the conductor and explains why he looked around. . . . We should . . . give up the someone-coughed explanation of why the conductor looked around if we know that John coughed and can invoke his coughing to account for the conductor’s behavior” (1992a, pp. 9–10). This is again a matter of more particular grain rather than small grain: John is not smaller, in a relevant sense, than the non-particularized “someone”, but just more particular or concrete.

Consider another example Jackson and Pettit often cite: rise in unemployment explains rise in crime. They say that the small grain preference urges us to “give up the increase-in-unemployment explanation if we can itemize the exact changes in motivation and opportunity that led to more people committing crime” (1992a, p. 10). This is unambiguously a matter of recommending smaller grain. But it is ambiguous between token-small grain and type-small grain. Reading it as manifesting the preference for small *and non-particular* grain would be in terms of generic mental make-ups and behavioral propensities without reference to any particular individuals: when triggered by the conditions of unemployment, those small-grain propensities – irrespective of which particular individuals instantiate them – produce increased levels of criminal behavior. Rational choice explanations of crime aggregates can indeed be so construed. Jackson and Pettit, however,

construe this as a particular-grained account in their argument against it: "I can show that the changed motivations and opportunities of such and such individuals led to a rise in crime, without knowing that there was an increase in unemployment or that given there was an increase, it was more or less inevitable that there would be a rise in crime; had the motivations and opportunities of those particular individuals not changed, the motivations and opportunities of others would have done so." (1992a, p. 11) They argue that if we were to stick to the account in terms of particular individuals, we would lose the extra information contained in the account given in terms of just "some" individuals. Likewise, with the cough-conductor example: "If I have only the detailed account of why the conductor turned around – that John coughed – I may lack important information about the event: namely, the information that it would not have mattered if the person coughing had not been John, for the conductor would still have turned around in irritation." (1992a, p. 11) In both examples, two small-grain accounts are compared, one given in terms of particular individuals, the other in terms of some non-particularized individuals. The latter are not social-structural explanations.

It seems, then, that two distinctions or dimensions are conflated into one: the macro-micro dimension and the abstract-particular (or kind-individual or type-token) dimension. That they do not coincide is evident: at the macro level, we can refer to the generic market economy (type) and to the particular economic system of Britain (token); at the micro level, we may refer to rational economic man (type) and to a certain Brian Broker (token). A move from the generic to the particular does not therefore imply the move from the macro to the micro. This means we also have two issues of explanatory information. Comparing the information provided by generic and particular explanations (such as those connecting interest rates and stock prices in the generic market economy with those connecting them in the British economy in the year 2000) is not the same task as comparing the explanatory information provided by macro and micro explanations (such as those connecting interest rates and stock prices directly with those connecting them via the mediation of individual propensities and responses, whether particular or generic).

It seems yet another distinction is needed. Consider the fragility of a glass rooted in its molecular structure. The fragility case seems analogical to one of Jackson and Pettit's social examples: "The restructuring of manufacturing industry explains the fall in trade union power." Like fragility, union power looks like a dispositional property that is rooted in a structure – molecular and industrial, respectively (even though it is obvious that in regard to the tightness of this rooting the two cases are not on a par). Now, it is one thing to refer to union power and another to

refer to, say, the degree of participation in union membership. It may be that the inclination to conflate the macro with the existentially quantified is based on another conflation between two types of macro. We may say that *macro aggregates* include things such as unemployment and crime rates. For such macro aggregates, it does not matter which particular individuals have a certain property. We just add up those that do. We might say that macro aggregates are built upon existentially quantified individuals with a given property. For what may be called *macro structures*, more is needed – namely structure. Union power and industrial structure cannot be constructed just by adding up existentially quantified individuals sharing a property.

The following seem to be important observations. First, existential quantification does not introduce another “structural” *level* in the sense required. “Some molecule” and “this molecule” just like “someone coughed” and “John coughed” signify facts at the *same level*. There are no higher and lower levels here, at least not in the sense we think of them in the case of society-cum-individual or fragility-cum-molecular structure. Second, going more particular grained does not necessarily increase causally relevant information. It is the fact that John *coughed* rather than the fact that *John* coughed that has causal relevance to the behavior of the conductor. And the fact that John *coughed* is the *same* fact as the fact that someone coughed. Likewise, “some molecule” has exactly the same causally relevant properties as the particular molecule that actually broke the flask.

Jackson and Pettit are explicit about the existentially quantified case. They say that according to explanatory fundamentalism “the explanation involving existential quantification – the reference to an indeterminate some – cannot be a proper explanation: it does not invoke an efficacious property ...” (1990, p. 112). They ask us to “consider a higher-order explanation involving existential quantification. Consider the explanation of why a piece of uranium emitted radiation over a certain period, which invokes the property of the uranium that some of its atoms were decaying; this, rather than the more specific property that such and such particular atoms were decaying.” (1990, p. 114.) Note that properties are here attributed to the piece of uranium: the property that some of its atoms were decaying and the property that such and such of its particular atoms were decaying. We may say that they are micro-properties of a macro entity. According to causal micro-token fundamentalism, proper causation and therefore proper explanation takes place among particular atoms, thus only the latter attribution is presumed to be explanatorily relevant. But suppose we do not attribute the relevant properties to the piece of uranium but rather to the atoms constituting it: we attribute micro-properties to micro entities. The relevant property is that of decaying. As soon as we see this, we also see

that this same property can be attributed to both particular atoms and the existentially quantified indeterminate atoms. This means that there is no causally relevant difference between the two: if one is causally efficacious, so is the other. Some atom and a particular atom – as well as some human individual and a particular individual – not only are not at different “levels” but also are causally on a par.⁷

While it is obvious that the Jackson–Pettit argument is not premised on any particular complete account of causation, we can identify some ideas that they endorse.⁸ The following might serve as an entry to one feature of Pettit and Jackson’s underlying metaphysics of causation: “Although not efficacious itself, the abstract property was such that its realization ensured that there was an efficacious property in the offing: the property, we may presume, involving such and such particular atoms.” (1990, p. 114) This suggests that abstract properties are not causally efficacious. On another philosophical outlook, the causal efficacy of abstract properties is no more suspect than the causal efficacy of particulars is for Pettit and Jackson. On this outlook, causation would be a matter of property–property relations, or second-order universals (e.g., Armstrong, 1983; Fales, 1990). Within such a framework, the causal relevance of existentially quantified individuals would not need the sort of defense offered by Jackson and Pettit. This is another way of saying that the identification of their opponent is incomplete – that the argument [1]–[3] above lacks a premise. The missing premise would explicitly rule out accounts of causal relations as consisting of second-order universals. Ruling them out without a further argument means that the argument [1]–[3] has partial bite at most.

The third and unsurprising observation is that the explanatory individualists in real social science do not ordinarily insist on replacing generic explanations in terms of individual types by singular explanations in terms of token individuals. The individualist tradition in the social sciences from Max Weber to Alfred Schutz and Ludwig von Mises and beyond recommends instead the strategy of explaining in terms of types of individuals rather than in terms of particular individuals. For

⁷ Note also that if one wants to make the uranium example analogous to the relevant examples in the social sciences, some reformulation seems to be needed. Consider the alleged impact of unemployment on crime rate and the impact of the interest rate on stock prices. Here we have macro-properties attributed to macro entities. In analogy, the macro-property of half-life may be attributed to uranium. From this “level” we are then invited to move to the existentially quantified individual level of some atoms and some individuals, and from this to particular atoms and individuals.

⁸ It may be that in order to sustain the distinction between process and program – or between causal efficacy and mere causal relevance – a novel account of causation would be needed as no currently available account will do (see, Thalos, 1998). It may therefore be unsurprising that Jackson and Pettit remain uncommitted to any detailed theory of causation.

them, invoking particular individuals in explanations is a matter of doing history rather than theoretical social science. The explanatory individualists in real social science do not usually insist on token individualism: theirs is type individualism. The ecumenical argument against the substitute variant of rational choice imperialism would thus miss the target if it were to focus on explanatory token individualism. Rational choice theorists resist large-grain macro explanations but do not insist on replacing them by particular grain accounts.

There is a related remark concerning process explanations in real social science. Recall that for Jackson and Pettit, process explanations are particular grain explanations: "The process story tells us about how the history actually went: say that such and such particular decaying atoms were responsible for the radiation. A program account tells us about how that history might have been." (1990, p. 117) Recall also that for Pettit rational choice accounts are program explanations that explain resilience of phenomena or patterns at most, rather than their emergence – emergence should be the subject of particular grain treatment. My complaint is the following. In actual theoretical social science, those who claim to be giving individualist process explanations characteristically put them in terms of individual types rather than tokens. Thus, an account of the emergence of money makes reference to typical individual propensities and responses in the ongoing process of market exchange, without making any essential reference to particular token individuals (e.g., Menger, 1892). This is an individualist account, and it is also a process account; as a process account, it can be construed as a causal account; and as a causal account, it can be philosophically interpreted as involving second-order universals (Mäki, 1991, 1992, 1997). I admit that this account is plausibly construed as a program explanation in the sense that it tells us how the emergence of money might have happened. Indeed, the account is often cited as providing "conjectural history" – an expression that accurately captures the "might have happened" feature of program explanation. Yet, it is intended as a rational choice *and* causal process explanation of emergence, and not as a non-process explanation of resilience only. This involves many interesting issues, but one relevant point is that causal process explanation is characteristically joined with type individualism and is not taken to require token individualism. To this one might add that contemporary accounts of causal process explanation in physics do not presuppose causal token-micro fundamentalism (W. Salmon, 1984, 1998; for discussions in the context of economics, see, P. Salmon, 1998 and Mäki, 1998).

5. ECONOMICS IMPERIALISM AS CONSTRAINED EXPLANATORY UNIFICATION

My question was whether economics imperialism is a justified project of explanatory unification in being able to meet certain ontological and pragmatic constraints. I invited Pettit and Jackson to offer their help on this assessment. And, indeed, they seem to be able to offer a helping hand regarding the ontological constraints. One conclusion would seem to be that the Jackson–Pettit argument may be able to identify ontological constraints on economics imperialism for those who subscribe to the version of causal fundamentalism that locates causal efficacy only at the level of particular small grain. For those who do not underwrite this notion, the argument would seem to be in need of adjustment.

On the pragmatic constraints there may be less help forthcoming, even though the direction for where to look for more help is suggested. Recall that micro-level explanations are supposed to generate contrastive information, while macro-level explanations are better at providing comparative information; and that rational choice explanations can be expected to provide resilience explanations at most, not explanations of actual emergence or continuation. Ignoring for the moment the issue of whether these suppositions are correct, the question remains why these kinds of information would be worth pursuing. It is obvious that a pragmatic account of explanation would be needed to explain this, one given in terms of explanatory purposes, interests and questions. The pragmatics of the complementarity of explanations is only spelled out in one sentence by Jackson and Pettit: “We can say that whether one is to prefer a smaller grain or a coarser grain explanation in a given case depends on what one’s perspective or purpose is.” (1992a, p. 16.) Having refuted a position similar to explanatory micro-fundamentalism, Satz and Ferejohn make the same point: “Whether individual or structural accounts of social phenomena are appropriate depends, we believe, on the purpose of the explanation. . . . For some purposes, the appropriate focus is on individual agency and choice. For many social-science questions, however, the appropriate focus is on how social structures and features of the agent’s environment exert constraints on her action.” (1994, pp. 83–4.)

This suggests that the account of explanatory relevance cannot be based on an account of causal relevance only. It would most naturally be given in terms of explanatory pragmatics, in terms of the explainers’ and explainees’ interests and purposes. While macrosociologists and ministries of justice will be interested in explaining crime rates in terms of unemployment rates, individual psychologists and social workers will want explanations given in terms of theoretically understood individual biographies. Different kinds of explanatory information serve different

purposes. That is to say, rational choice imperialism has to be pragmatically constrained: intra- and inter-disciplinary unification should be taken as far as it can, provided legitimate explanatory interests are not violated.

Among the conclusions are the following three. First, while causal relevance is important for understanding explanatory relevance, it is not sufficient. Considerations of pragmatic relevance have to be added to get a more complete account. Second, there are other accounts of causal relevance besides the particular small grain one: those formulated in terms of property–property relations. Without modification, the particular grain view may not be able to account for actual social explanations by social scientists. Third, the ontological and pragmatic constraints that have emerged in the foregoing discussion appear to be such that, at most, supplementary versions of economics imperialism have a chance of meeting them, in the spirit of explanatory ecumenism.

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