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Sawyer's Theory of Social Causation: A Critique

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Abstract

This article critiques R. Keith Sawyer's theory of social causation from his 2005 book *Social Emergence*. It considers his use of analogy with the philosophy of mind, his account of individual agency, the legacy of Emile Durkheim, the concepts of supervenience, multiple realization, and wild disjunction, and the role of history in social causation. Sawyer's theory is also evaluated in terms of two examples of empirical research: his own micro-sociological studies into group creativity; and Margaret Archer's macro-sociology of education systems.

Keywords: diachronic, multiple realization, social causation, supervenience, synchronic, wild disjunction

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I INTRODUCTION

This article is a critique of the theory of social causation advanced by R. Keith Sawyer in his 2005 book *Social Emergence: Societies as Complex Systems*. In *Social Emergence* and contemporaneous articles, Sawyer proposed an approach to a key challenge of sociological theory - namely, to provide ‘an account of the individual-collective relation’ (Sawyer 2003a, 203) – based upon insights derived from an analogous relation within the philosophy of mind between physical brain-states and mental properties. Hence, just as some philosophers have defended the reality of mental causation against the implications of reductive physicalism, so Sawyer defended the reality of social causation¹ against a reductive interpretation of methodological individualism (MI).² In terms of social ontology, his theory is a form of what he called ‘nonreductive individualism’ (NRI).³

Sawyer’s work is not only theoretical; he is also an empirical researcher and has always insisted that causation, ‘cannot be debated strictly on a theoretical level’ (Sawyer 2012, 272) and that, ‘for any given sociological phenomenon the extent to which individualism or collectivism is a useful part of the complete explanation must be determined through empirical study’ (Sawyer 2003a, 219). If this is correct, then there may be no a priori justification for privileging either an MI account of causation for empirical research or, on the other hand, a collectivist (or holist)⁴ account – the reason being because, again, the nature of causation may, following Sawyer, only be decided through methods of specific inquiry.

¹ Social causation is usually referred to just as ‘causation’ for the sake of brevity.

² The abbreviation MI is used from this point on in the text.

³ The abbreviation NRI is used from this point on in the text.

⁴ For the sake of conciseness, this article refers to ‘collective’ and ‘collectivist’ rather than ‘holist’ and ‘holism’.

Pursuing this line of argument, this article offers two examples of empirical research as a way of critiquing Sawyer's theory. The first is Sawyer's own qualitative research into 'group creativity', specifically, acting and improvisation in the theater (Sawyer 2003bc; Sawyer 2005, 170-188); the second is Margaret Archer's (1979/2013) historical sociology of the development of state education systems in four countries between 1789 and 1975. These examples are chosen for three reasons: first, because they provide a combination of micro-sociological (Sawyer) and macro-sociological (Archer) perspectives; second, because Sawyer maintained that his theoretical work was 'inspired' by his own empirical research (Sawyer 2002a, 559); and third, because Sawyer claimed an affinity between his theory and Archer's critical realism (Sawyer 2003a, 218-219) whilst at the same time criticising her account of causation (Sawyer 2001, 570). Archer (2013, 21-22) subsequently responded to these criticisms. The dialogue between Sawyer and Archer, therefore, provides an interesting aspect of the critique of Sawyer.

The structure of the article follows a sequence of exposition, critique, and evaluation. The next two sections provide an exposition of Sawyer's theory (II) and discuss some critiques (III) including Sawyer's use of philosophical analogy, his approach to individual agency, the legacy of Emile Durkheim, the concepts of supervenient causation, multiple realization and wild disjunction, and the role of history in causation. Concluding remarks (IV) suggest which elements of Sawyer's theory remain of sociological value.

II EXPOSITION

Sawyer advanced his theory in a series of articles in the early 2000s, culminating in the publication of *Social Emergence* in 2005.⁵ His starting-point was a central problem of sociological theory: 'the tension between individualism and collectivism' (Sawyer 2002a, 551),

⁵ The articles preceding the book are significant because Sawyer conceded (2005, 65) in *Social Emergence* that their content appeared there in only a 'condensed version'.

often referred to as the ‘individualism-holism debate’ (see Zahle 2016). Sawyer clarified this tension by reference to ‘the slippery concept of emergence’ (Sawyer 2001, 551-553), which emphasised how the claim that collective phenomena are emergent from the actions of individuals is compatible with both MI and collectivism. Emergence as a concept is ‘slippery’, Sawyer argued, because its core idea, that the collective is related to the composition of its parts, can be interpreted epistemologically and ontologically. If it is interpreted epistemologically, then collective phenomena are compatible with MI insofar as they are interpreted as the aggregate of individual actions which exist, qua psychological properties, ‘in’ the minds of individuals who then orientate their actions towards the social meanings of the collective. This type of MI is associated canonically with the work of Max Weber (Weber 2013). It seems clear, though, that this epistemology rests upon a prior ontological commitment: the axiom that, in sociological terms, ‘only individuals exist’ (Sawyer 2002a, 537).

However, as Sawyer pointed out, emergence can also be interpreted in a way conducive to collectivists. Sawyer’s examples here included Archer and Roy Bhaskar (1994). According to this reading, what emerges at the collective level is not only irreducible to the individual level but exercises causal power, or in Durkheim’s (1895/1982) terms, ‘external constraint’, over individuals through a process of ‘downward causation’. In this schema, downward causation stands in contrast to the ‘upward causation’ of MI. Moreover, when downward causation enters the picture it is no longer possible to interpret collectivism just epistemologically, as a descriptive short-hand which is predicated upon a more fundamental, or ‘rock bottom’ (Watkins 1971, 271), ontology expressed in terms of individual action. For, insofar as causation is predicated upon the actions of real social forces, collectivism is only intelligible if it is based upon an ontology of social properties which exist, as Durkheim claimed, *sui generis*, over and above the individual.

By introducing the possibilities of upward and downward causation, Sawyer emphasised how a theory of causation cannot be separated from social ontology and his interpretation of it: NRI. One of the key concepts of NRI is *supervenience*. Making use of the analogy with philosophy of mind, supervenience permitted Sawyer to retain the ontological axiom that ‘only individuals exist’ (Sawyer 2002a, 537) whilst still arguing for the causal power of downward causation.

If ‘only individuals exist’ then that causal power must derive from its ‘supervenience base’ in individual human beings. But Sawyer’s version of NRI is ‘non-reductive’ because he conceived of no a priori reason why the collective level should be reducible to the individual level. This is because of the contrast between *token identity* and *type identity* and an account of supervenience that stressed the existence of *multiple realization* and *wild disjunction* (Sawyer 2002a, 2005).

Token identity and type identity denote two versions of the supervenience relation. Both are committed to a materialist ontology. Token identity denotes a relation of reduction in which a property at a higher level can be reduced down to its physical supervenience base at a lower level: examples from the philosophy of mind include such experiences as ‘being in pain’, which supervenes upon certain neurological brain-states. It seems clear that the token identity relation is implicated in the question of causation: for if each token of the higher level can be reduced down to the lower level upon which it supervenes then it seems reasonable to assume that the higher level is ‘upwardly’ caused by the lower level and not vice versa. If this were true then the higher level would be what Sawyer (2003a, 204) called ‘causally inert’, or ‘epiphenomenal’, and there could be no downward causation.

Epiphenomenalism has been a problematic concept within the philosophy of mind and it is also problematic for collectivists. It was for this reason that Sawyer contrasted token identity with type identity. Conceding that a commitment to materialism entailed a commitment to token

identity, Sawyer nonetheless emphasised its difference from *type* identity. Whereas token identity simply references the fact that psychological and social events can be re-described in the physicalist language of the lower ontological level because they are ultimately physical events, type identity references more complex social phenomena which it would be laborious, or even impossible, to re-describe without a sociological taxonomy.

This latter issue was related to an argument Sawyer derived from Jerry Fodor (1974). The argument is that it is plausible to uphold the autonomy of the ‘special sciences’ on account of the fact that no scientific reduction of the concepts of a higher-level discipline may be reducible to a lower-level discipline. Fodor was chiefly resisting the reduction of psychology to neurology but Sawyer argued from analogy to apply this irreducibility thesis to the relations between sociology and psychology. According to this argument, a sociological ‘type’ is not reducible to its individual components because each instantiation of it may be realized by multiple individual properties. This is the meaning of *multiple realization*: any instantiation of a sociological ‘type’ may ‘be realizable not only by a single compound...but by different - in fact indefinitely many - compounds of individual properties’ (Zahle 2016). This is more than just a reference to social complexity. Sawyer argued not only that sociological ‘types’ supervene upon a multiply realized individual supervenience base but that this base may be *wildly disjunctive*. Again, he followed Fodor’s analysis and argued from analogy: there may be no a priori reason why a multiply realised supervenience base instantiates a relationship of regularity with its emergent level of a scientific status. It may do; but whether it does or does not is an empirical, not a theoretical, question which Sawyer, following Fodor, repeatedly emphasised. Both Fodor and Sawyer stressed that the empirical fact of wild disjunction was a probability rather than a possibility so that the picture of society that emerges is one in which social properties clustered as sociological ‘types’ supervene upon individual properties which are so heterogeneous (wildly disjunctive) that no empirical regularity of a scientific status can

be established between the sociological ‘type’ and the individual supervenience base from which it emerges. Thus, NRI is non-reductive: what resists reduction is the sociological ‘type’ to its individual supervenience base (Sawyer, 2002a, 2003a, 2005).

Sawyer concluded that NRI constitutes a defence of sociological collectivism and, what followed from that, a defence of social causation against the claims of MI. At the same time, NRI remained ontologically individualist. Sawyer called this account of social causation, *supervenient causation* (SC).⁶

SC defends the possibility of downward causation. Sawyer stated this defence in collectivist terms: ‘this account of social causation does not require any commitment to intentionality or agency on the part of individuals’ (2002a, 537) Diagrammatically, Sawyer represented SC in the following way:

Place Figure 1 here.

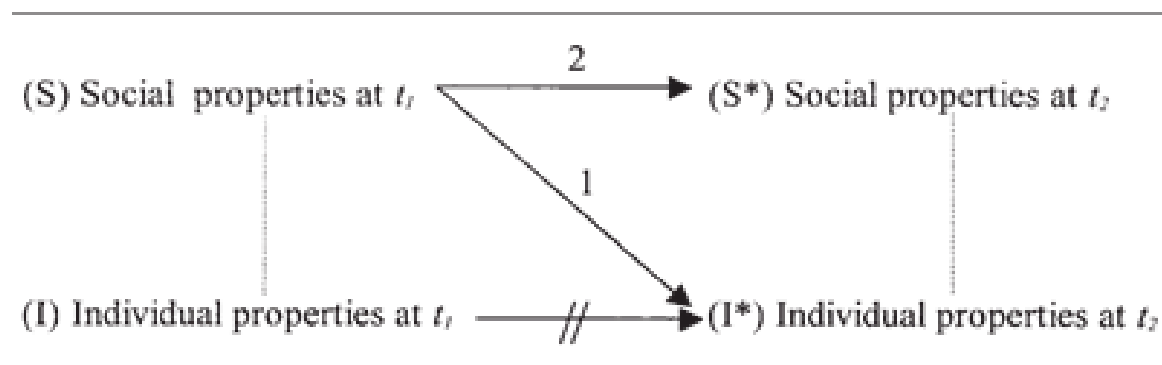


Figure 1: social and individual causal relations. Note: t= time (Sawyer, 2003a: 208)

Two points about this diagram and its arrows (>) of causation are relevant to the critique of section III.

⁶ Supervenient causation is referred to by the abbreviation SC for the rest of the article.

1. **Its Durkheimian influence.** One of Sawyer's articles of the early 2000s was called 'Durkheim's Dilemma' and it was only slightly amended in 2005 in *Social Emergence*. 'Durkheim's Dilemma' re-read Durkheim as an 'emergence theorist' (2002b, 231) and this allowed Sawyer to shed new light on the central formula of *The Rules of Sociological Method* (1982): 'social facts' are therein characterised by the quality of 'external constraint' which they exercise over individuals. For Sawyer, this constituted a theory of downward causation. Expressed in terms of the arrows of causation of Figure 1, S has causal power over I*; that is, S constrains I*, with 'constraint' interpreted to include physical violence at one end of a spectrum and moral persuasion at the other (Sawyer 2002b, 237-238). Significantly, for Sawyer, S's constraint of I* 'does not require a theory of the individual, subjectivity, or agency' (ibid., 232) although, confusingly, 'constraint' also turned out to entail a 'dialectic between downward causation' - the arrow signified by the number 1 in Figure 1 - 'and emergent processes' (ibid., 238) - the dotted vertical lines connecting I to S at time t_1 and I* to S* at time t_2 . The dialectical process needs to be stressed because SC is predicated upon it: in Figure 1, S constrains I* whilst at the same time supervening upon I. That is the core characteristic of NRI. The 'confusion' noted above is discussed further in section III.
2. **The synchronic but *not* diachronic account of social causation.** Somewhat counter-intuitively, Sawyer argued that the antecedent history of a social property played no role in its causation and that only its 'present' individual-level supervenience base possessed causal power. That claim is disputable; but it has an internal logic considered strictly within the terms of the theory. To return to Figure 1: if this is seen as an ahistorical snapshot of a structural moment in time then Sawyer's (2003a, 210) claim that 'supervenience is a synchronic claim' makes sense. The rationale is based on the ontology of NRI and the analogy with ontological materialism within philosophy of

mind. So, just as non-reductive materialism held to the axiom that, ‘there is nothing in the universe other than physical matter’ (Sawyer 2001, 555), so NRI held to the axiom that ‘only individuals exist’ (Sawyer 2002a, 537). Because token identity applied for NRI, every social property must supervene upon individual properties at one particular moment in time and that relation is fundamentally ‘asymmetric’ (ibid., 543): the changes of causal consequence are those occurring in the individual supervenience base. As Sawyer (2003a, 210) described it in terms of Figure 1: ‘I determines S and I* determines S* (dotted vertical lines). But as a synchronic claim, supervenience does not apply to processes of causal determination over time’. As will be seen in the next section, despite Sawyer’s expressions of affinity between SC and Archer’s critical realism, where the primacy of the synchronic over the diachronic elements of causation are concerned, he and Archer sharply diverged.

III CRITIQUE

The analogy with the philosophy of mind

One feature of the articles that preceded *Social Emergence* was the pervasiveness of the analogy with the philosophy of mind. The argument for this was that the ‘mind-brain relation...can be generalized to apply to any hierarchically ordered sets of properties’ (Sawyer 2001, 553). Sawyer was not alone in finding this analogy useful (see Zahle 2003, 78) and his employment of it was instructive. On the other hand, it had limitations, especially the concept of ‘contiguous levels of analysis’ (Sawyer 2003a, 218) connecting the putative ‘levels’ physical/mental and individual/social.

Sawyer’s starting-point was the consensus that ‘all that exists is physical matter’ (Sawyer 2001, 555), and it was from this basis that he endorsed nonreductive materialism from within the philosophy of mind. Because he was transposing to a higher level of analysis – from

physical/mental to individual/social - Sawyer argued that NRI was an analogy at that level of analysis with nonreductive materialism. However, the relation of the physical/mental to the individual/social is, arguably, more than an analogy; it is a relation of subsumption in which ontological individualism within sociology stands to ontological materialism within philosophy in the same way that a species stands to a genus. This point is not just about explanatory 'levels'; it is ontological, because society is constituted of diverse materialities of which individual human beings are just one. Other relevant materialities include: the natural world, technology, language, social groups, and the structures of macro-sociology such as the economy, the State, and the law. The materiality of the law, for example, consists of written-down statutes and the infrastructure of law courts, prisons and legislatures - in other words, not just individual judges, police officers, and so on. Of course, Sawyer was aware of this: the final chapter of *Social Emergence* (Sawyer 2005, 211) outlined his 'emergence paradigm' which extended the 'levels of analysis' to include, at the lowest level, individual properties and at the highest level, social structure, where he located 'written texts' including 'laws' and 'infrastructure'. Yet, despite this, it remained unclear how such structures figured in examples of causation, except that they exercised 'constraint'. Exactly *how* the economy, the State, or the law exercised constraint was never made clear. Sawyer's most persuasive demonstration of SC in action - his own 'group creativity' research outlined below (2003bc) - was a micro- rather than a macro-level example. By contrast, his examples of higher-level social properties, such as 'competitive team sports' (Sawyer 2002a, 549-551), 'being a church' (ibid., 542-551), or the 'sex ratios' of species (Sawyer 2012, 272), were either abstractions or rested upon biological analogies which lacked application in his own research.

Individual Agency

The ‘levels of analysis’ argument had further limitations, related to Sawyer’s confusing account of individual agency. This led to a fallacy of transposition from the physical/mental to the individual/social. On many occasions Sawyer (2003a, 218) affirmed that,

‘although social properties are supervenient on individual properties, the causal force of social properties does not have to be mediated through a conscious awareness of them on the part of individuals. The above analysis applies to any pair of contiguous levels of analysis without any consideration of subjectivity, intentionality, or consciousness’.

The problem here was that the analogy was transposed uncritically. So committed was Sawyer to his ‘levels of analysis’ argument that he failed to see a possible limitation: that certain individual properties – agency, consciousness, intentionality, subjectivity– may *not* be analogous to their ‘contiguous levels’ (physical and social properties). Or: if they appear analogous in their logical form, they are not in their phenomenological content. Thus, there may be a ‘decisive asymmetry between the relation of mental and physical descriptions on the one hand and social and individual descriptions on the other hand’ (Greve 2012, 190-191). It was this that led to the fallacy of transposition from physical/mental to the individual/social:

‘the argument originated in the philosophy of mind to provide an account of how mental facts cause...neurological events, and obviously an individual neuron has no internal representation of the overall conscious state of mind. The analogical argument for SC of the mental does not require a theory of agency or subjectivity, because mental causation is thought to exist even though neurons have no agency. Similarly, SC is an account of social causation in which social properties may cause individuals to behave in certain ways, and it does not require a theory of agency or subjectivity’ (Sawyer 2003a, 218).

‘Of course’, Sawyer conceded, ‘there are myriad differences between people and neurons, and collectives and people’, but nonetheless he maintained that ‘the argument holds’ (ibid., 221).

However, one indication that the argument may not hold is the example of his own qualitative studies into group creativity. These also permit an investigation of the extent to which Sawyer’s empirical research supported his theory of SC, an issue made relevant by his repeated assertion that ‘the relation between any given set of higher- or lower-level properties is an empirical question to be determined by empirical study (Sawyer 2005, 69).

Sawyer's interest in social emergence itself emerged from prior studies into micro-level interactions in music and theater performance. Some of these were reproduced as chapter 9 of *Social Emergence* and they were also the theme of two contemporaneous books (2003bc). Their findings demonstrated SC at the micro-level. So, in the case of improvised ('improv') theater performances without rehearsed plots, characters or scripts, Sawyer showed how the individual properties instantiated in each actor's individual 'turn' led to the emergence of the social property of an improvised 'scene', even though no author or actor had pre-designed it. Sawyer pointed out that the emergent social property was caused by the 'collaborative efforts of the entire group' in the form of dialogue and non-verbal behaviours from which 'stable macro-patterns emerge[d]' (Sawyer 2005, 182-184). Sawyer also used this example to reinforce the claim that SC, 'does not require any commitment to intentionality or agency on the part of individuals' (2002a, 557) because the 'stable macro-patterns' of improvised theatre emerged as social properties despite the fact that they were neither planned nor designed by individual actors.

However, the analysis of 'improv' acting highlighted the confusion in Sawyer's account of individual agency. His research identified no less than 'eight different improv games' each 'defined by a unique set of rules' which his actors drew upon to ensure spontaneity on stage (Sawyer 2003b, 238). 'Improv games' required the learning of specific rules, such as 'don't write the script in your head' (ibid., 61), the breaking of which was considered a 'cardinal sin' (Sawyer 2003c, 56). After learning these rules, actors had to then enact them by taking a 'turn' on stage with each actor's individual 'turns' co-creating the overall 'scene'. So, whilst Sawyer convincingly demonstrated SC and the causal power of the 'interactional frame' (Sawyer 2005, 182-184), becoming a 'skilful group performer' (Sawyer 2003c, 9) also required this process of learning and following the rules, which, for an effective 'scene' to occur, had, contra Sawyer (2003a, 218), 'to be mediated through a conscious awareness of them on the part of

individuals'. Thus, the improvised 'scene' exhibited 'property dualism' (Sawyer 2002a, 543): it possessed both social properties (the 'interactional frame') and individual properties (learning and following rules) and therefore demonstrated both downward causation and emergent processes. This is consistent with the theory of SC; but it also required the mediation of individual consciousness and, therefore, demonstrated individual agency. This is not compatible with Sawyer's (2002a, 537) claim that SC 'does not require...agency on the part of individuals'.

Durkheim

The fallacy of transposition also affected Sawyer's interpretation of Durkheim. In fact, there were two incompatible theories that Sawyer derived from Durkheim: one deterministic and stressing solely downward causation; the other 'dialectic' and compatible with SC. It was the deterministic Durkheim that committed the fallacy of transposition, with the 'levels of analysis' argument again to the fore. Thus, in 'Durkheim's Dilemma', Sawyer used the analogy to argue that 'there could be no systematic relations between phenomena at the two levels' (Sawyer 2002b, 242-243), with the individual/social levels configured on the model of the physical/mental levels and causation itself conceived of as primarily downward causation. This version of Durkheim relegated the individual properties of agency and intentionality to the status of 'folk theories' (Sawyer 2003a, 221). At the same time, however, Sawyer also drew on Durkheim to provide a persuasive account of SC. This was a dialectical interpretation: 'Durkheim realized that social constraint occurred within a dialectic between downward causation and emergence processes...a form of constraint that is simultaneously undergoing processes of emergence' (Sawyer 2002b, 238). This interpretation fitted well with Sawyer's own theater research, but the problem remains that even there he was clearly of the opinion that 'agency theories' played little role not only in improvisational theater but more generally

in ‘conversational behaviour’ and he severed the link between intentionality and emergence altogether by insisting that,

‘emergent properties are usually associated with the *unintended* effects of action; effects that are intended are, by definition, not emergent because their origin can be traced to the individual’s motivations and the advanced plans of specific individuals. In spite of the lack of plans and intentions, actors are able to coordinate their actions to generate a plausible, coherent dialogue and stable macropatterns emerge’ (Sawyer 2005, 184 original emphasis).

This, though, did not really cohere with his own research because, although it is true that ‘stable macropatterns’ were not consciously planned by actors in terms of the end-product of the improvised ‘scene’, the actual ‘turns’ of each individual actor, formed part of an intentional process of rule-learning and rule-following. So, despite Sawyer’s many pronouncements that SC did not ‘require any commitment to intentionality or agency’ it could be argued that a more coherent account of SC was the dialectical one. For this account, ‘social constraint’ depends upon ‘a dialectic between downward causation and emergence processes’ with the individual properties of agency and intentionality constituting the ‘emergence processes’. If this account is accepted then it seems logical to equate ‘emergence processes’ with the notion of ‘upward causation’ and to interpret their properties as individual.

Sawyer, therefore, provided one plausible way to make sense of Durkheim’s legacy: ‘social facts constrain individuals, but at the same time they emerge from the actions and interactions of those very same individuals’ (Sawyer 2002b, 238). Returning to Figure 1 and his theater research: the end-product of the whole ‘scene’ (S^*) supervenes upon the individual properties of the individual ‘turns’ signified by the ‘emergence processes’ of the dotted vertical lines connecting I to S and I^* to S^* (upward causation). These comprise the individual properties of agency and intentionality. If these properties are not conceived as having causal power and if the interpretation of Durkheim that is preferred is the deterministic one then it becomes hard to conceive of individual properties as agential in a theory that is not really SC, but is, rather, a

theory of structural determinism. That seems to be an unacceptable conclusion for a theory which took as its foundation the axiom that ‘only individuals exist’ (Sawyer 2002a, 537).

That said, if *Social Emergence* is not interpreted in isolation but as part of a corpus including the other articles between 2001 and 2005 and the group creativity books, there remains a confusion in Sawyer. At one and the same time he advocated a materialism of individuals which dispensed with other materialities, whilst, nonetheless, with part of his interpretation of Durkheim, holding to a theory of which rendered individuals epiphenomenal. One path through the confusion may be to retain the dialectical version of Durkheim; that way SC remains a viable version of social causation which is informed by philosophy but remains empirically plausible.

Multiple Realization and Wild Disjunction

Sawyer’s theater research also raised questions about multiple realization and wild disjunction, questions echoed at the macro-level by Archer’s historical sociology. In the 2013 Introduction to her *Social Origins of Educational Systems*,⁷ Archer pointed out that despite the empirical detail in her 800-page long history of the emergence of ‘state education systems’ (SES),⁸ such minutiae did not warrant the invocation of ‘wild disjunction’. Certainly, the comparative history of English, Danish, French, and Russian education between 1789 and 1975 was multiply realized within and between each society; nonetheless, Archer considered the application of Sawyer’s concept of wild disjunction to be ‘wildly inappropriate’ (Archer 2013, 22). Archer understood multiple realization in terms of ‘action sequences’ the interactions of which could be ‘systematically related to the development of state education systems and to

⁷ Hereafter, just referred to as *Social Origins*.

⁸ State Education Systems are just referred to as SES (or SESs to signify use in the plural) from this point on in the text.

their relational organizing structures' (ibid.). But 'wild disjunctures', she insisted, 'never enter the picture' (ibid.).

The centrepiece of Archer's history was the supplanting of premodern systems of theological pedagogy by modern systems of state-directed education, which were demarcated into those that were centralized (France and Russia) and those that were decentralized (England and Denmark). This led to distinctive patterns of interaction involving social groups, centrally the State and, for example, the emerging teaching profession, who were in contrasting ways trying to 'bring about educational change' (ibid., 421). Although the development of 'multiply integrated state systems' (ibid., 245) was complex, especially in decentralized nations such as England, Archer showed how the political activism of the teaching profession was 'systematically related' (ibid., 22) to educational change in the period following the Education Acts of 1902, 1918, and 1944 (ibid., 501-640). So, for Archer's historical sociology, it was a case of multiple realization but not wild disjunction.

Sawyer's theater research, in fact, led to a similar conclusion, this time at the micro-level. The empirical referents of Sawyer's study – small groups of actors and their communication patterns – were not as complex as Archer's and it is questionable whether even multiple realization applied let alone wild disjunction. Sawyer, though, certainly demonstrated SC: the end-result of an improvised 'scene' could not be explained by the individual properties manifested by each actor's 'turn'; it also required the emergent social property of the 'interactional frame' constraining the actors. But, as Sawyer showed, the relation of the individual to the social properties was eminently detectable via qualitative research. It is true that he identified no less than 'eight different "improv" games', which his actors drew on as learning resources; in that sense, a 'scene' was multiply realized. But Sawyer was equally clear that his research had 'been able to identify regularities that explain many of the interaction

patterns of these dialogues' (Sawyer 2003b, 240) so that, to paraphrase Archer, wild disjunction never entered the dramaturgical picture. These examples suggest that wild disjunction may not be as 'characteristic of the relationship between the social and the individual' (Sawyer 2003a, 216) as Sawyer contended. They also suggest that its absence need not undermine the causal relevance of SC.

This is not to say that Sawyer failed to theorize scenarios where multiple realization and wild disjunction might *not* apply. On the contrary, in a 2004 symposium on the philosophy of Mario Bunge, he argued that an individualistic explanation could be appropriately applied to a social property if the individual properties on which it supervened were 'meaningfully related' (Sawyer 2004, 268). However, this created another inconsistency with his theater research: given that he clearly identified meaningful regularities between his improvised 'scenes' as a social property and the rule-following individual properties upon which they supervened, then the individual properties could hardly be said to be wildly disjunctive. But Sawyer did not infer from this - as he might have done given his arguments from the Bunge article - an MI explanation of 'improv'. On the contrary, he still insisted that the 'collaborative efforts of the entire group' exhibited SC (Sawyer 2005, 182; see also Sawyer 2012, 274). So, despite his theoretical position that wild disjunction was a probable feature of SC, it seems that social properties could be causally effective even when wild disjunction did not 'enter the picture.'

This analysis suggests that wild disjunction as an aspect of Sawyer's theory should be discarded. Nonetheless, it is worth probing further Archer's remarks apropos SESs and wild disjunction. In practice, Archer's history dealt relatively little with individual properties; insofar as individuals were part of her narrative - for, example, H.A.L. Fisher, the Liberal Education Minister and architect of the 1918 Education Act in Lloyd George's government - they were invariably treated as representatives of a social group (in Fisher's case, a political

party) in interaction with other groups (for example, local authorities, who were hostile to the 1918 Act) (Archer 2013, 599-602). On the other hand, Archer acknowledged that what she called the ‘incremental pattern’ of twentieth century educational change in decentralized systems like England (ibid., 699-710) partly depended upon ‘personal [pedagogical] experiments on the part of individual teachers’ (ibid., 702), which through the ‘political manipulation’ of their representative groups (such as their trade union, the National Union of Teachers [NUT]) resulted in ‘macroscopic change’ (ibid., 701-702). Mindful of such empirical facts, Archer’s discussion of the individualism-collectivism debate in the 1979 Introduction to *Social Origins* did *not* dismiss MI; rather, she accepted that, ‘the actions of individuals are the causal origins of complex phenomena’ (ibid., 64), but because in the case of SESs, ‘we are unable to know what the causal chain is’ (ibid.) then the reductive approach was held to be ‘unconvincing when dealing with large-scale complex problems’ (ibid., 40). Although, unlike Sawyer, Archer was not sympathetic to the use of philosophical analogy, these comments do sound something like wild disjunction, so the fact that they ‘did not enter the picture’ may have been as much to do with a macro-sociological commitment to the ‘study of groups and institutions’ (ibid., 53) as it was to a rejection of the ontology of wild disjunction. Methodologically, given the requirements of an 800-page history, it is hard to see what the explanatory relevance of wild disjunction could possibly be, although this does not rule it out on ontological grounds.

Synchronic and diachronic

Finally, there remains the issue of history and causal relations. The context of this issue is Sawyer’s relation to Archer.

Sawyer saw an affinity between SC and Archer’s critical realism (Sawyer 2003a, 218-219). This included commitments to sociological collectivism and scepticism about MI. Given that

Archer's historical sociology of the 1970s was a major research programme, Sawyer was correct in recognizing a shared understanding that 'the resolution of the emergence question requires empirical research' (Sawyer 2001, 569). But it was over the causal status of history that they sharply diverged.

Sawyer argued that SC mandated a synchronic account of social causation. Archer's diachronic account of 'morphogenesis' or 'emergence over time' (ibid., 570), was dismissed because it did not cohere with his 'philosophical account' (Sawyer 2001) of SC. Viewed through the lens of historical sociology, Sawyer's account seems excessively hermetic. Expressed in the language of Figure 1:

'even though social property S [at time t] is emergent from a process that occurred at $t-1$ and before, it must nonetheless be supervenient on individual properties at time t due to token event identity...the supervenience account of token event identity requires a present synchronous account' (ibid.).

If such a view were correct it would render 'analytical histories of emergence' (Archer 2013, 19) in the case considered here Archer's history of SESs, of only contextual, but not causal, significance. But is it correct? The answer is probably no, and there are theoretical and empirical reasons for it.

Figure 1 depicts an abstract model of social causation. It is an ahistorical snapshot of a structural moment in time and, as such, it is possible to contest it in terms of E.P. Thompson's critique of those 'sociologists who have stopped the time-machine' and, modifying Thompson, to claim that Sawyer had forgotten that social causation is a 'happening' that only occurs 'in the medium of time' (Thompson 1965, 357). There was some of Thompson's exasperation in Archer's response to Sawyer in 2013 (Archer 2013, 21-22).⁹ But her substantive rejoinder was

⁹ The other antagonist in Archer's 2013 Introduction to *Social Origins* was Dave Elder-Vass who she accused of erecting a dichotomy between the synchronic and the diachronic (Archer 2013, 22-24). However, in most respects, Elder-Vass's core claim (2010, 6) that, 'social structure is best understood as the causal power of social groups' is very close to Archer's theory as outlined here.

to emphasise how causation was always connected to ‘agential “doings”’ from which social properties emerge, exercise constraint and are reproduced and resisted, as she said, ‘second-by-second’ (ibid., 23) ‘in the medium of time’. Archer repeatedly emphasised how ‘the theories we develop to account for education and educational change are theories about the educational activities of people’ (ibid., 30). If histories of emergence are histories of the ‘activities of people’ and causation is comprised of such activities, then it is possible to see, contra Sawyer, how there could be a continuity between the diachronic and the synchronic and how the latter as Archer claimed would be ‘incomprehensible without allowing for this continuity’ (ibid., 23). The diachronic and synchronic aspects of causation are continuous, she argued, because both supervene upon the activities of individuals and groups.

On its own, that last sentence is a truism; but *Social Origins* also provides many examples of this ‘activity-dependence’ (ibid., 22) of causation and gives empirical substance to Archer’s ‘continuity’ thesis. Again, one example is the emergence of the teaching profession in England following the Education Act of 1902. What are now called primary and secondary school teachers emerged from the decentralized SES in the twentieth century with a ‘better bargaining position’ (ibid., 439) vis-a-vis the central State compared to the previous period. This was further enhanced in the intervals between the main legislative landmarks of the century, partly through the collective agency of the NUT. Thus, through a process of ‘internal initiation’ (ibid., 426) based on the causal powers wielded by the teachers themselves, they achieved advances in pay, autonomy, and professional status. At the same time, however, and again via legislation, the State itself partly achieved ‘the unification and systematization’ of the SES through provision of a common ‘educational ladder’ between primary, secondary, and tertiary education which aspired to ‘the equalization of educational opportunity’ (ibid., 807-809). Archer characterized the interactions of the school teachers and the State as one of ‘centrifugal’ versus ‘centripetal’ forces (ibid., 803-808).

In this contest between two forms of constraint - between ‘push’ and ‘pull’ factors - which is the synchronic element and which is the diachronic? The question seems easy to answer if Sawyer’s Figure 1 is consulted, for the diachronic elements would have to be placed to one side because ‘supervenience does not apply to processes of causal determination over time’ (Sawyer 2003a, 210) and, instead, the focus would be on single events, for example, those surrounding the publication of the Plowden Report in 1965 which Archer regarded as the ‘pinnacle of the liberal NUT influence over professional values’ (Archer 2013, 588). Methodologically, this seems justifiable; for Sawyer (2002a, 541) argued that it was ‘events which are the relata of causal transactions’ - but, nonetheless, this would not seem to be an effective way of delivering a *history* of emergence unless a sociologist was willing, as Thompson (1965, 357) advised them, ‘to throw across the time-switch again’ after the analysis of one specific ‘event’. Here, it has to be borne in mind that, for Archer, what characterized decentralized SESs compared to centralized SESs was that social change occurred gradually in the former according to an ‘incremental pattern’ in the absence of revolutionary change (Archer 2013, 697-710). This pattern was *both* synchronic and diachronic. Archer argued that once a diachronic process resulted in an emergent SES then this new higher-level property had a synchronic effect:

‘to me, “one of the main antecedent effects of structures... consists of dividing the population... into those with vested interests in maintenance and change according to the positions in which they find themselves involuntarily”. This is how the diachronic segues into the synchronic and the latter is incomprehensible without allowing for this continuity’ (Archer, 2013: 22-23).¹⁰

Archer, then, was wary of erecting ‘a wall between the diachronic and the synchronic’ (ibid., 23) for which the emergence of a new social structure was diachronic and what came after was synchronic. Hence, she theorised diachronic and synchronic processes as ‘both always in play’ (ibid.) and she fleshed out the empirical detail of this interaction. Thus, in the case of the

¹⁰ The secondary reference here is Archer quoting from herself in *Realist Social Theory* (1995, 203)

Plowden Report, the negotiating strength of the NUT, instantiated in the previous decades, was a causal factor in achieving ‘the high water mark of professional normative consensus’ (ibid., 588) but this resulted, synchronically, in a new, emergent situation in which the ‘relevant population’ was ‘redivided’ again (ibid., 24). In this situation the teaching profession responded to its success with a ‘polarization of values’ (ibid., 763): some, under the impetus of the 1960s counter-culture, sought further radicalization whilst others sought only to maintain their gains. The State, by contrast, tried to win back central authority through political manipulation and by effectively halting the power of the NUT by the use of ‘polity-directed changes’ (ibid., 642-657). For Archer, what was ‘continuous’ in the interactions of these push/pull tendencies were the ‘educational activities’ of, on the one hand the State, and on the other hand, the NUT. But there was no dichotomy between diachronic processes and synchronic events because after the Plowden Report, diachrony, in the form of the NUT’s bargaining power, did ‘not cease’ but continued to form a part of the ongoing ‘relational organizing’ of the SES (ibid., 24). This is what Archer meant by the continuity of the diachronic and the synchronic.

This analysis indicates that Archer, unlike Sawyer, had no difficulty theorising materialities other than individuals. Without ignoring the activities of individuals such as teachers, her history was predicated upon the interactions of collectives (for example, political parties, the NUT), the State (polity-directed policy) and the law (the Education Acts). Legislation and policy were analysed as higher-level properties emergent from the social interactions of competing social groups within the context of the ‘relational organising structures’ which comprised the SES.

One final question is whether *Social Origins* is compatible with SC? This question concerns the relationship between empirical research and theory, which so exercised Sawyer. Given her remarks in the 1979 Introduction that ‘the actions of individuals are the causal origins of complex phenomena’ (ibid., 64) it would seem that NRI applied although it was social

properties rather than individual properties that were the emphases of Archer's analysis. Archer's history seems compatible with NRI provided NRI is conceptualised as a subsumed category of ontological materialism. SC, though, is more problematic. Insofar as SC depends upon wild disjunction, Archer expressly denied its application to *Social Origins*. But if one could conceptualise a 'rock bottom' individualistic account of the development of SESs in four countries over a period of nearly two centuries, it undoubtedly would be so heterogeneous as to count as wildly disjunctive. It would also be far longer than 800 pages. But, of course, Sawyer had a much more specialised meaning in mind derived from Fodor and a particular perspective on scientific concept-formation. Again, Archer's SESs are clearly multiply realised but this did not imply wild disjunction. On the contrary, Archer was clear that 'long-term regularities' (ibid., 803) could be identified between push and pull factors and these constituted a 'continuous tension between diversification and standardization' (ibid.). Sawyer thought that the acceptance of SC depended upon the 'token identity' thesis but Archer could easily accept this, considered as a general commitment to materialism. As a more specific commitment to a particular philosophical perspective, as a sociologist, she largely ignored it. It did not 'enter the picture'.

IV CONCLUDING REMARKS

Given the above critiques, the final question concerns what remains of sociological value in Sawyer's theory of SC? These concluding remarks are organised in terms of those aspects of his theory which should be retained, modified, or discarded.

To begin with the last aspect first. The most serious casualty of the critique is wild disjunction. It is the concept most closely aligned to the philosophical account of causation but the one that would seem to have the least empirical application in terms of the research projects considered here. Neither Archer nor (surprisingly) Sawyer required the concept in delivering their

findings; nor did their findings infer the concept's necessity. Wild disjunction, then, may have minimal sociological value, although the empirical evidence offered in this article is limited to the research analyzed. In itself, this does not rule out the possibility that society is so ontologically complex as to be wildly disjunctive in nature, nor that the causes of some social phenomenon are themselves so heterogeneous that they resist analysis in terms of empirical regularities. If Sawyer (2012, 272) was right that questions of causation 'cannot be debated strictly on a theoretical level' then ongoing evaluation of its heterogeneity (or not) may have to proceed on a case by case basis. Judged solely on the research analysed here, however, the prospects for wild disjunction are not high.

Multiple realization fares slightly better. It is certainly possible to see the main referents of both Sawyer's and Archer's research - the 'scene' in Sawyer, SESs in Archer - as multiply realized, in terms of improvised 'turns' in the former and 'relational organising structures' in the latter. But only in the former does this correspond to multiple realization as derived by Sawyer (2001) from his 'philosophical account'; that is, as a social property that is multiply realized in individual properties. This works well for 'improv' theater where the 'scene' is multiply realized in each actor's 'turns'; but the concept has to be stretched to work in Archer. Certainly, a social structure such as a SES instantiates social properties which are themselves multiply realized - but not prominently in individual properties. Rather, SESs were multiply realized in other social properties such as the bargaining power of the NUT or the political manipulations of the State. Archer did acknowledge examples of social properties being instantiated in individual properties; but the general picture from Archer is one of social structures instantiating social properties. Again, the notion of multiple realization here owes nothing to Sawyer's philosophical analogy and the analysis of 'big ones into little ones' (SESs into the NUT, the State etc.) is a common methodology of theoretically-informed empirical analysis. If multiple realization is applicable in *Social Origins*, it seems so because of its general analytical,

rather than its philosophical, meaning. The conclusion is that it is not obvious, divorced from its connection to wild disjunction, that the philosophical account of multiple realisation is of sociological value.

Apropos the debate over historical causation, Archer would seem to have the best of it. Whilst it could not be denied that history may be productively analysed in terms of ‘events’ - and there is a rich historiographical literature surrounding, for example, the interaction of ‘continuities’ versus ‘discontinuities’ in the work of Michel Foucault (1969/2013) - Sawyer’s Figure 1 would seem to be an inadequate representation of the long-term and comparative history offered by Archer. Elsewhere, in the group creativity books, Sawyer did offer an explicit theorization of the interaction of the synchronic and the diachronic derived from G.H. Mead (Sawyer 2003c, 125-128; Mead 1934). This seemed persuasive for the micro-social scenarios there analyzed but, significantly, it did not find its way into his theory of SC or his critique of Archer. It would be of interest to attempt an integration of this account with something like Archer’s later account of ‘morphogenesis’ although that modification lies outside the scope of this critique.

Sawyer’s customary deployment of the ‘philosophical account’ begs the question of whether his argument from analogy with the philosophy of mind itself emerges as a valuable component of a theory of causation. The issue is inseparable from his ‘contiguous levels of analysis’ (Sawyer 2003a, 218) argument. What this article has called his ‘fallacy of transposition’ signifies confusions at both the ontological and explanatory levels. Ontologically, what Sawyer adopted from the philosophy of mind was non-reductive materialism; but, as he transposed ‘up’ from the physical/mental level to the individual/social level, this became ‘ontological individualism’ (cf. Greve 2012, 2013). Apart from wanting to avoid the reification of social structures, it is not clear why Sawyer chose to give primacy to a narrow version of individualism over materialism in general, but it left him unable to theorise collectives except

as abstractions such as ‘being a church’ (Sawyer 2002a, 542-551). In explanatory terms, he was left with a paradox: the supervenience relation, based upon the analogy with ‘hierarchically ordered sets of properties’ (Sawyer 2001, 553), worked well as an explanation of ‘improv’ theater via the notion of ‘property dualism’; but insofar as this included the agency of rule-following actors this should not have been permissible because of the repeated assertion that SC ‘does not require...agency on the part of individuals’. What Sawyer may have required was a conception of individuals that was not so aligned to a narrow version of MI: candidates here include such notions as ‘inclusive individualism’ and ‘institutional individualism’, both already well-known in the early 2000s (for example, Agassi 1975; Lukes 1968). But as Julie Zahle has pointed out, once the scope of these are granted then the ‘levels of analysis’ argument is weakened; for if individual properties are not confined to an individual-level but, on the contrary, ‘span multiple levels’ (Zahle 2019) then the explanatory efficacy of the levels approach seems no longer persuasive. This, though, does not really undermine Sawyer’s group creativity research: for it is there, much more than in the abstractions of Figure 1, that the value of supervenience and emergence themselves emerge. The emergent social properties of the improvised ‘scene’ depended upon the individual ‘turns’ of the actors on which it supervened. Yet the success of this explanation owes little to the notion of ‘contiguous levels’; it simply requires the materiality of a micro-social world in which individuals instantiate properties that are both individual and social. ‘Property dualism’, then, seems to be the enduring concept of value; not two (or many) ontological levels.

What should be retained from Sawyer are the dialectical reading of Durkheim and his modification of Fodor, the insistence that, ‘for any given social phenomenon, the extent to which individualism or collectivism is a useful part of a complete explanation must be determined through empirical study’ (Sawyer 2003a, 219). Judged in terms of the examples considered in this article, the former provides a flexible framework for both micro- and macro-

research. The claim that ‘social properties of events can be causally related to individual properties’ (Sawyer 2003a , 204) is not radical but it is plausible. It has a double pay-off: it coheres with the ‘dialectical’ Durkheim (causation = ‘a form of constraint that is simultaneously undergoing processes of emergence’ [Sawyer 2002b, 238]); whilst having empirical application in the ‘improv’ situation where the ‘interactional frame’ supervenes upon ‘rule following’ actors. The ‘improv’ situation does seem to share some general features of social interaction in terms of the applicability of ‘property dualism’. If it is a stretch to apply it to Archer, this is because historical processes are not just ‘events’ and because although it could not be denied that the social properties of SESs were instantiated in individual properties, the notion of ‘educational activity’ references a supervenience relation for which ‘groups and institutions’ constitute the appropriate methodological ‘base’. This proves nothing more than that SC, to modify Archer, (ibid., 40) may be ‘unconvincing when dealing with large-scale complex problems’. The consequences of this, however, are disappointing for Sawyer: SC, which was meant to defend ‘sociological collectivism’, may find its best application in the micro-studies at which Sawyer excelled. It remains valuable in facilitating ‘methodologically collectivist explanations for microsocial processes’ (Sawyer 2003a, 224).

With regard to the empirical imperative in Sawyer, there is more that could be said. This concerns the question of the relation between the empirical and the theoretical in a theory of causation. One theme of this article has been that the theory stands in some need of the empirical arbitration of sociological research. It could be objected that that argument itself stands in need of justification and that the required arbitration should be stated, instead, in terms of a fidelity to the nuances of ordinary language usage in the Wittgensteinian tradition (for example, Tsilipakos, 2014, 2015). But if it is granted, Sawyer provided both positive and negative examples of arbitration in action. If theory requires empirical detail, then this should be reflected in the sociological examples chosen. In this respect, Sawyer failed when at his

most abstract - the macro-social adumbrated as ‘competitive team sports’ (Sawyer 2002a, 549-551); the micro-social abstracted as ‘being an argument’ (ibid., 545); causation visualised as Figure 1 - but succeeded in the books on group creativity and in chapter nine of *Social Emergence*. The charge of incoherence in the provision of examples is not confined to Sawyer; it has also been applied to Elder-Vass (Hansson Wahlberg 2014ab; Tsilipakos 2014, 2015). Archer, on the other hand, thanks to the sociological detail of the SES project, rather immunised her future theoretical work against that particular charge.

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