

Review of *Manufacturing Possibilities* and Response to Review

Henry Farrell, Gary Herrigel

June 23, 2011

## Review (Henry Farrell)

Gary Herrigel's *Manufacturing Possibilities* aims to provide a pragmatist account of major changes in the political economy of advanced industrialized countries. But it also intends to do more than that. It sets out an argument for a pragmatist social science aimed at fostering and furthering experimentation. Some parts of this vision I find intellectually and politically congenial. Like Gary, I'm a pragmatist who thinks that social science is justified only to the extent that it is useful, and should both go together with, and seek to foster, a spirit of open inquiry, and 'bold, persistent experimentation.' But there is a lot in this book that I disagree with too - in particular its account of power and uncertainty - and it is the disagreements that I will focus on.

Before getting to these issues, I should make it absolutely clear that these arguments are far from exhaustive of what the book has to offer. The larger part of the book consists of a detailed institutional history of manufacturing in Germany, Japan and the United States from the post-World War II era on. Gary presents these histories largely as a set of pragmatic debates between different actors, often with different perspectives (for example, the US occupying power had a very different understanding of how industry should be organized to that of either Japanese or German firms). This history is useful not only for its details, but as an illustration of the real fact that actors in different countries (and sometimes within countries) have quite different perceptions of the logic around which industry should be organized, and that these differences count. The relationship between these differences and globalization is a theme of the later part of the book which argues, more or less, that globalized relationships present far more pragmatic opportunities for collaboration, and for adaptation of existing practices in fruitful directions than many European political economists would suspect. There is an argument there with people like Wolfgang Streeck, which is worthy of consideration in itself. There is also, running through the book, a defense of industry against those who perceive it as grim factory floors, moribund smokestack towns and the rest - Herrigel wants to make clear how industry can be vital, innovative, and able constantly to pursue change. He talks about "disintegrated production" in which firms are becoming embedded in global networks of collaborating producers.

All this is very interesting. But Gary has larger ambitions. He wants to argue against the dominant strains in political science and sociological institutional theory, which he sees as narrowly confining, and - more fundamentally - wrong (at least under modern conditions). This is a set of debates that I come at from a very different angle. Herrigel wants to argue (a) that the world is fundamentally characterized by uncertainty and creativity, and (b) that as a consequence of this, power relations don't matter very much in economic affairs. I agree that uncertainty and creativity play a more significant role than most institutionalists recognize - but I don't believe that, to quote Gary, "creativity trumps structural constraint in all dimensions of political, economic and social life," and I think that power inequalities continue to matter a lot. To make my disagreement clearer, I'll first try to reconstruct Gary's argument as best as I can (I am sure that he can correct any misunderstandings in his reply). Then I'll say why I am not convinced by it.

Gary - like Charles Sabel, Jonathan Zeitlin and a small but significant group of other people doing work in political economy, believes that the world of economic production is a "world of possibilities." That is - it is a world which is not fixed statically by economic interests, nor by power relations. Instead, it is a world in which relations of production are inextricably entwined with discourse. It is always possible for people creatively to improve their collective situation by reimagining it. This is a Deweyan world, in which actors are perpetually engaged in experimentation, revisiting not only their means but also their ends as their situation changes.

Gary is ambiguous as to whether this is a typical feature of social existence, or a particular manifestation of modern life. In a passage that gives much of the flavor of his argument, he states that:

We put to the side the question of whether or not this is a general matter regarding the nature of institutional transformation in all times and all places. But the current character of global competition, characterized as it is by virtually permanent technological change and organizational uncertainty, leads to the following boundedly general consideration. Much of the literature on institutional systems, not least the VoC [Varieties of Capitalism] tradition, discusses the historical development of institutional architectures in the imagery of periods of stability marked by dramatic junctures of upheaval and change followed again by a period of stability. One can be critical of this historical imagery as a general matter ... but it seems particularly inappropriate to impose narrative expectations of a coming period of institutional

stability (equilibrium) on the current situation. In large part this is because what stands out about the experiments that one observes today is their self-consciously provisional character. They have been brought into being because actors perceive common problems that are not being addressed by the traditional institutional instruments available to them for the purpose of addressing such problems. Actors are not willing to describe what they are doing as a new order because they are too acutely aware of the possibility that they will have to change again in the current turbulent environment. The distinctiveness of current problems is that they are never definitively resolved. Innovation and cost reduction, and the institutional tinkering and recomposition that they entail, are continuous processes. Old institutional rules today are not only being broken, but new ones are continually being defined and then redefined.

Now, I'm a bit disappointed that he doesn't try to answer the question of whether this kind of institutional transformation is a historical universal or not, especially since he has written a book which covers a span of time over which the character of global competition has changed dramatically. But that is an aside. Gary's more fundamental argument is this, as I understand it. First - that a turbulent and unpredictable world renders interests fluid. Actors have no idea where their long term interests lie, since these interests are continually being transformed. Second - that as a direct result of same - power inequalities have no very great significance. Actors do not view their power advantage as being stable or secure, and hence do not rely on it. This leads Gary to criticize rational choice institutionalists - who treat interests as more or less static, historical institutionalists, who think that interests are relatively clear, and underestimate creativity because they are "trapped in a view of institutions as systems of constraining and enabling rules and relations," and economic sociologists, who see institutions as "norms enacted routinely by unreflective actors." In contrast, Gary offers an account in which:

Actors' roles, their identities, the definition of interest, and behavior governing rules are all constituted simultaneously through deliberative interaction and struggle

and

creative action in specific problem contexts redefines oppositions and overcomes constraint

This goes together with a quite particular conception of the role of the social scientist. Her role is not to make predictions, or even necessarily to assert causal statements about the world *ex post*. Instead, it is to look for and publicly identify particularly promising possibilities.

Rather than blending out "deviant" or "marginal" practices in the present and the past through the imposition of leveling market logic or abstract typologies of complementary institutional constraint, the analytical eye should be cast very broadly across the range of social practice looking for possibility . . . One surveys the terrain of action with an eye for promising experiments.

This adds up to a consistent - and in many ways very useful - view of social relations. If one thinks that social, economic and political interactions are fundamentally unbounded, then the best that the social scientist can do is to look for interesting cases that might be the seed for useful changes, and try to encourage them along (and others to emulate them). While I don't agree with the underlying claim, I think that this approach has a lot of value to offer. Social scientists have a weakness for 'just so' narratives. When they look back to history, they tend greatly to over-emphasize the extent to which things *had* to turn out the way that they did, in fact, turn out. This often goes together with an implicit ideological narrative - either a Whig interpretation or its polar opposite. But what it does do is radically to underestimate the ways in which both history, and our present day, are ferments of possibility. If one thinks - as Gary pushes us to think - about society as a concatenation of experiments, some of which will succeed, some of which will not, one *has* to develop an eye for the interesting which most social scientists do not have. Charles Tilly has documented how the social sciences are still in many ways the heirs of the nineteenth century, and the lumbering efforts of social reformers to confront the era's problems with the limited intellectual tools then at their disposal, many of which relied on analogies between the social sciences and deterministic seeming natural sciences. This means that social scientists today are rather like the Victorian clergymen of a hundred and fifty years ago. Even if they have slowly and reluctantly come to recognize that their belief in universally validated

scientific laws is untenable, they are reluctant to give up the intellectual and social trappings associated with this belief. God is dead, but it is distinctly impolite to say so loudly.

Thus, in short, there is something quite valuable to Gary's way of looking at the world. If one looks (or even pretends to look) for universal laws, one is going to miss many very interesting sources of change. Indeed, the most interesting sources of change will likely be found precisely in the exceptions, the bits of social reality that do not fit well with the apparent consensus. Social scientists should, as Gary argues, train themselves to look for these changes.

But should this be all that social science does? While I think that Gary is correct in arguing that social scientists are too interested in stability and equilibrium, I am not convinced by Gary's alternative - of always and everywhere stressing the unboundedness of human creativity. It seems to me to be both overly optimistic (about the disappearance of power relations in a fluid world) and overly skeptical (about the possibility of identifying any regularities in social behavior) at one and the same time. Each of these in turn.

First - are interests and power relations really as fluid as all that? In the bits of the world that I know best, I see a different story to the one that Gary tells. He briefly mentions the reorganization of Italian industrial districts as an example of the kinds of change that he is interested in. When I talked to people in one of the districts that Gary mentions some years ago (the Bolognese packaging machinery district), they gave me to understand that these changes went together with an increase, rather than a decrease, in power asymmetries and hierarchy. As described by the managing director of one firm:

in this field we exist really, when we have the control of the final customer. In manufacturing of industrial or capital equipment like this, if you manufacture capital equipment you have got to have the grip on the customer yourself. What you could say is that there is a space for a small company, but they will supply mostly through the sales organisations of larger companies. That means they are nothing, they can be purchased easily, or destroyed or eliminated.

As best as I can see from the work of other scholars, the shift to greater hierarchy among these firms is a general one, even if it is not always quite so extreme. And, to the extent that relatively stable hierarchy continues to play an important role, power is important.

Perhaps these firms are atypical, or are experiments that are likely to turn out badly over the long run. Certainly, we've seen overly confident judgments about the direction of industrial change go bad in the past (Bennett Harrison's *Lean and Mean* is an excellent case in point). But even if this is so, there is a deeper theoretical problem. It is not at all clear to me that the straightforward relationship that Gary suggests between fluidity of interests and irrelevance of concerns over power is a necessary one.

If one were to think of the theories that Gary critiques, or agrees with, they could perhaps be put into one of four boxes, depending on how they think about fluidity of interests, and importance of power relations. Many rational choice theories both posit that interests are stable and that power considerations are basically irrelevant (this is true of much of the more optimistic work in the not-quite-so-new-anymore institutional economics; e.g. Oliver Williamson). Those sociological institutionalists for whom actors are unreflective, and social life is about cooperation, would fit into the same box. Other accounts suggest that interests are stable (in the absence of exogenous change) and that power relations are important - e.g. rational choice scholars such as Jack Knight and historical institutionalists such as Kathy Thelen. And then, Gary and others in his tradition see interests as fluid, and power relations as unstable too.

Yet there is a fourth possible box - one for situations and theories where actors' perceptions of their interests are relatively fluid *and* power relations play an important role. Gary's pragmatic account seems to suggest that this box is empty, or nearly so.

A common worry about a non-structural view that emphasizes creative actors continuously overcoming constraint is that it understates the importance of power relations in social life. This worry is misplaced. The view here does not undervalue power, it conceives of it in a particular way. The pragmatic view has a relational and contextual view of power, rather than a structural one. ... The view in those chapters is that the chronic uncertainty and resultant fluidity of relations in disintegrated production destabilizes power imbalances across the community of producers. This is contrasted to the older Fordist/Chandlerian subcontracting world where the context yielded a relatively stable set of power relations. ... Under those very specific and historically contingent conditions, positions were stable and the location of social, economic, and

political leverage was clear. ... it is still possible to find isolated moments in the flow of industrial action where power relations resemble the older Chandlerian alignments ... But even in the latter cases, there is the crucial difference that neither the customer nor the supplier views their power advantage as stable or secure: Leverage is contextually defined and constantly shifting in both local and foreign contexts as roles and strategies are redefined. Where roles are ambiguous and ties are collaborative, power in the sense of asymmetric leverage is still more elusive.

But is this necessarily so? Gary's colleague at Chicago, John Padgett, seems to me to offer a very different account of power relations, and one in which power flows precisely from ambiguity of interest and of role. In his classic article on the rise of the Medici, he writes about 'robust action' - the means through which Lorenzo de Medici used strategic ambiguity, and a refusal to commit to the one action or the other as a source of leverage except when circumstances absolutely obliged him to. Here, power flows less from secure hierarchical relations, than from careful positioning within a network of actors, and canny use of social relationships to combine a high degree of flexibility with continued indispensability. In this account, power goes hand-in-hand with perpetually shifting strategies and interests - indeed, power is best characterized as the inability of others to pin one down.

This suggests an alternative view of the relationship between stability/instability of interests and relevance/irrelevance of power relations to the one that Gary posits. I would like to have seen some discussion of this. Nor do I see any attention to other accounts that might combine fluidity of interests with power relations. Gary gives short shrift to sociological accounts, which he sees as being all about overwhelming and routinized norms. Yet this is far from exhaustive of economic sociology today. I would like to have seen some discussion of the arguments of action-oriented sociologists such as Neil Fligstein and Carlo Trigilia, who combine an interest in power relations with a strong emphasis on agency. Similarly, it would have been nice to have seen some discussion of scholars interested in the intersection between power and ideas, such as Mark Blyth and Sheri Berman, who would agree with Gary that discourse plays a crucial role in defining actors' identities and mutual relations, but also suggest, for just this reason, that it will be the focus of ongoing and often bitter struggle between actors with sharply antagonistic views of the world.

This suggests that there is a serious challenge to Gary's arguments, which is quite different from the arguments of the rationalists and historical institutionalists whom he is taking issue with. There is a substantial body of work starting from the premise that interests are unstable, but ending up in a very different place. If there is anything to these arguments, then the smooth transition that Gary makes from an argument about the instability of interests to an argument about the effective destabilization of power relations is more complicated than the book would suggest. Under some circumstances, actors will *not* be driven towards discourse and mutual problem-solving. They will instead look to reconstruct network relations so as to insure themselves against a multitude of unforeseeable contingencies, creating relationships under which others are beholden to them, while they themselves remain as unconstricted by others' expectations as possible. This is - to my eyes - at least as plausible a reconstruction of how supply chains are being reorganized in the modern world economy, as Gary's considerably more benign view.

Furthermore, there are significant political implications to one's choice of interpretation. I read Gary's book as being at least in part an implicit reproach to political economists interested in Germany. These scholars have (as Gary describes them) seen challenges to the ways in which the German political economy is organized as implying the weakening or the breakdown of the German social market. Gary argues that at least some of these challenges, are, instead, hopeful monsters - they are experiments which may lead to better outcomes for both workers and for management than over-rigid systems of management-labor consultation. He is implicitly inviting scholars of Germany and Germans to be less suspicious of change in e.g. wage bargaining, and to see it as a potentially dynamic and liberating force.

But here, the implicit premiss is that these changes are being driven less by increases in power asymmetries than by an increasing need for flexibility in the world economy. And this question seems to me to still be open. I do not know that Gary is wrong - but to be convinced that he is right, I would like to see more evidence, differently organized. If he is to convince us that the hopeful monsters - the individual cases that he finds promising - are to prevail over the others which have less pleasant consequences - I think he needs some theory which can convince us that this is likely, or at least plausible. But this is, of course, hard to construct, if one believes that creativity trumps structural constraint. It may be that human creativity is just this powerful, or, at least, that standard structural constraints are ineffective in a capitalism of persistent

experimentation. But I, at least, am not convinced. If Gary seems to me to be quite right to argue that current approaches to institutionalism are insufficiently attentive to the world of possibilities that is out there, I think that his own theory is *too* unbounded to be a fully convincing alternative.

Since it isn't entirely fair to criticize without providing some constructive alternative, let me put out mine (or: more precisely, a simplified version of arguments made in a paper that I and Cosma Shalizi have been writing the last couple of years). There are, as Gary says, a lot more possibilities for change out there than standard institutionalists are prepared to admit. But some possibilities are more likely to prosper and to spread than others. The language of evolutionary theory provides a very helpful way of thinking about this. One has a mechanism (or mechanisms) of *transmittable variation*, which keeps on throwing up new possibilities, and a mechanism (or mechanisms) of selection, which leads some possibilities to propagate much more easily than others.

Gary's theory seems to me to be a theory of variation without any very explicit theory of selection. Variations occur (very often through mutual learning and dialogue), but there are no structural forces deciding which variations succeed and which do not. The best that organizations can do to enhance their survival prospects in this account is to be flexible (a term which is too loosely defined, I think, to really provide the basis for an account of which ways of organizing production will tend to succeed, and which tend to fail).

I would prefer to see a theory that combined both mechanisms of variation and selection. Possibilities emerge - just as Gary and his colleagues argue - as a result of human creativity as well as other factors. Yet not all variations succeed, and (although there is a fair amount of stochasticity), one can arrive at rough-and-ready generalizations as to which variations will be likely to succeed, and which fail under particular circumstances (in the paper that Cosma and I are writing, we argue that both power asymmetries and network structure have important consequences for selection).

An emphasis on mechanisms of variation and selection is entirely compatible with pragmatism - in William James' description, for example:

social evolution is a resultant of the interaction of two wholly distinct factors, — the individual, deriving his peculiar gifts from the play of physiological and infra-social forces, but bearing all the power of initiative and origination in his hands; and, second, the social environment, with its power of adopting or rejecting both him and his gifts. Both factors are essential to change. The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community.

Moreover, as Dewey suggests (1922, pp.202-203), the experimental thinking that the social sciences should adopt requires that those "concepts, general principles, theories and dialectical developments which are indispensable to any systematic knowledge be shaped and tested as tools of inquiry." Without such concepts (among which one might very reasonably include evolutionary theories), social scientists might be able to observe social experiments, but they will have enormous difficulty in "recording and interpreting(organizing) its results." It seems to me that if Gary's pragmatist project is really to succeed, it needs to go further than the claim that creativity trumps constraint. This claim seems to me to both be a much stronger claim than theory and empirics would warrant, and one that if justified actually provides persuasive evidence *against* pragmatist experimentation. If we are not able to make plausible inferences as to why some experiments succeed and others fail, then the most that experiments can provide us with is an extremely limited possibility proof. Without some theory not only of the "power of initiative and origination," but also of how the environment may "adopt" or "reject" new initiatives, we are left with a theory of social change that at best provides very limited pragmatic guidance.

Hence, I would suggest that Gary (and indeed others who share his perspective) think not only about worlds of possibilities, but about the forces determining which possibilities succeed and which fail. It seemed to me that some such account was implicit in some of the earlier work on 'flexible specialization,' but has fallen out in favor of a general emphasis on open-endedness and the boundless power of human creativity. If they did this, I suspect I would still find their approach too open-ended for my own personal liking. Yet I imagine that it would also be more pragmatically useful, even to people like me who did not buy it wholesale - and it would certainly fit quite well with a pragmatist account of evolution (while James does not suggest that evolution is open-ended, he is clearly comfortable with a great deal of contingency). This could, perhaps, serve as a way of bringing power back in, or at least of identifying more precisely the conditions

under which power asymmetries are likely to count, and the conditions under which they are likely to fail. Or, it could focus on quite different mechanisms of selection.

## Response (Gary Herrigel)

I would like to thank Henry Farrell for such a serious and reflective review of my book. It is always an honor and a delight to have one's work taken seriously. Henry makes an array of criticisms of the work, most of which, unsurprisingly, I do not agree with. My sense, however, is that much of the disagreement stems from key misinterpretations of what my position actually is. Consequently, I will begin this response by outlining what I take my own view to be in theoretical, empirical and critical terms. After having done that, I will turn to the specific criticisms proffered by Henry and attempt to show that while his criticisms are (mostly) coherent, in most cases they do not apply to the arguments Manufacturing Possibilities (MP) advances.

*Theoretical arguments in MP:* Reading Henry's review, one gets the impression that MP claims that the industrial world is entirely fluid and devoid of any forms of stability or continuity in social practices. This is not an accurate portrait of the view. In fact, the core puzzle that MP seeks to address is the continual presence of both change AND continuity in industrial political economy. Thus, in addition to change, the work is concerned to account for continuity or the lack of change in industrial practice. It takes it as empirically given that continuity and change exist all the time, in different registers and with different weights in industrial practice. The explanatory challenge in MP is: How to account for change when it occurs; how to understand the persistence of continuity. These are necessarily contextual questions and the specific mixes of continuity and change will vary across time and place.

MP approaches this problem with a pragmatic theory of social action that draws on the work of the original pragmatists, especially John Dewey and George Herbert Mead, but also more recent figures who have extended the view in important ways, including in particular Hans Joas and Charles Sabel. In the pragmatic tradition, action is always social—interaction (coordination, conflict, struggle etc) defines selves, groups, organizations, associations, nations and international orders. Moreover, within the pragmatic tradition the fact that people act does not have to be explained. The assumption is that social life is active and vital. In his seminal *Human Nature and Conduct*, for example, John Dewey writes:

“The idea of a thing intrinsically wholly inert in the sense of absolutely passive is expelled from physics and has taken refuge on the psychology of current economics. In truth man acts anyway, he cant help acting. In every fundamental sense it is false that a man requires a motive to make him do something” (1922: 118-119).

What needs to be explained, therefore, is not how you get action from inaction, but how action is arranged and governed. For pragmatists, social action is overwhelmingly habitual. Habits are arrangements of practices that people jointly develop to resolve commonly perceived problems. Habits are not unthinking or routine practices; rather they involve thought and consideration in their enactment (think of how a skilled worker draws on a learned stock of knowledge to solve problems in production), they often involve learning and they evolve over time. Habits endure as social practices so long as they succeed in meeting challenges and allowing social action to continue. On this view, then, continuity in social arrangements in industry is habitual—it is evidence of successful habits.

Reflection and creativity come into play in moments when habitual action is disrupted. Disruptions are apparent when tried and true solutions to joint problems are no longer successful. Reflection, creativity and experimentation ensue in an effort to resolve the problem that produced the disruption. Like habits, processes of reflection and creativity are also social. They can be conflictual and involve power imbalances. Reflection and experimentation ends when the problems that gave rise to them no longer disrupt practice. This occurs either because the instigating problem has been resolved, or because it has been defined away through the creation of a new set of relations and practices.

Two core claims about this process of reflection and experimentation are that 1.) imaginative interaction involves reflection on the features of identity, practice and context that seem to have resulted in disruption. This process of analysis, re-evaluation and problem solving invariably redefines roles and interest and causes unforeseen possibilities for action to emerge. The process induces actors to redefine or simply ignore or trump existing rules and constraints. 2.) social change driven by this kind of imaginative interaction is recompositional. In the social processes of reflection actors rearrange, modify, reconceive and reposition

inherited rules, roles and organizational forms as they experiment with solutions to the challenges that they face. Continuity in relations is interwoven with continuous reform and change. Most remarkably, creativity in the recomposition process makes the introduction of entirely new practices and relations possible.

Importantly, MP (following the pragmatists) argues that all of social life in all of its registers, from the most micro to the most macro, is habitual and proceeds in this recombinatory manner, mixing continuity and change. Short of a meteor strike that dramatically changes the climate, or a nuclear holocaust or some other such whole life-world threatening event, disruptions of habitual action are invariably contextual and local. Reflection and experimentation are not processes that involve calling into question all elements of practice or all elements of a personal, group, industry or national or global political economy architecture all at once. Rather, invariably they are targeted and specific kinds of social processes. Many things remain habitual, even as important processes of reflection, experimentation and creativity are taking place. Non-disrupted habits are not constraints. They are successful forms of social action. But, the point about this mix of the presence and absence of habitual disruption is that it provides a very serviceable theoretical framework through which to understand the paradox of the enduring combination of continuity and change in social arrangements.

*Empirical arguments in MP:* The book uses the pragmatic theory of creative social action to describe post World War II processes of industrial recomposition in the US, Germany and Japan in the steel, automobile and machinery industries. The first part of the book is an extended contemporary history of the steel industry's evolutional recomposition since WWII. The arc of the narrative is that in the early post war period, German and Japanese steel producers underwent relatively radical processes of organizational, legal, political and technological recomposition, while the US industry remained relatively stable and engaged in gradual processes of improvement and local innovation. Since 1974, however, the story is inverted. Although all three industries undergo quite dramatic recomposition due to the remarkable and ongoing disruption of global steel markets and technologies since that time, the processes of recomposition in the US are far more dramatic than they have been in either Germany or Japan (and they have been dramatic there!). The focus of all three steel chapters is on the way that disruption induced reflection among US, German and Japanese players produces rule, role and organizational re-composition in the respective industries and political economies. Firms and stakeholders, markets, governance arrangements and regulatory policies all undergo remarkable redefinition and reconceptualization over the course of the period in question.

It is worth noting (and the chapters try systematically to point this out) that the steel story directly contradicts the Variety of Capitalism argument for comparative institutional advantage, where the US is expected to be prone to radical innovation, while the Germans and Japanese prone to gradual innovation and improvement. In the MP steel story, the institutional arrangements do not favor one outcome or another; all the cases exhibit mixtures of gradual and radical innovation and change at different times. Institutions and rules do not constitute constraining and enabling pressures for action in the story.

The second half of the book looks at the secular global trend toward vertical disintegration in the automobile and machinery industry. Two chapters analyze the character of this change on the division of labor in production, the boundaries of firms, their internal and external relations, and the range of strategic possibilities that are open to them in the current environment. Two other chapters look at the consequences that these processes of recomposition in industrial practice are having for governance relations in the US and Germany: industrial policy, vocational training, upgrading processes, as well as industrial relations.

The chapters make the (uncontroversial) macro-historical claim that global competition has accelerated in the last 30 years and that this acceleration forces firms to develop products more rapidly and as a result, prioritize innovation and the continuous reduction of costs. This drives disintegration, but also selects out political-industrial arrangements that are capable of learning, of producing innovation and of accommodating continuous change. Indeed, Chapters 4 and 5 point out that successful firms across the developed world are constructing formal governance practices—what Sabel has called “New Pragmatic Disciplines”—aimed at systematically inducing the disruption of habitual practices within their organizations and among their relations across the supply chain. The resultant processes of reflection and experimentation drive the continuous re-composition of relations across the division of labor. Taking these conditions as given, Chapters 6 and 7 then explore a range of possible arrangements and power alignments surrounding firms and the division of labor that could feasibly be constructed (and that, indeed, are being actively experimented with) in the current environment in the United States and Germany. As in the first part of the book, the chapters in the second part all focus on the way in which continuity and change intermingle and how social processes of reflection, in the context of disrupted habitual practice, produce the recomposition of firms,

roles, stakeholders, regulatory practice and governance mechanisms within the industrial political economy.

*The critical argument in MP:* The book strongly argues that neither rational individualist theories, such as those that exist in mainstream economics or in game theoretic accounts within political science and sociology, nor the various permutations of structuralist institutionalism in political science and sociology are robust enough to do what the pragmatic theory of creative social action can do: that is, account for enduring interpenetration of continuity and change in industrial political economy. The problem with both theoretical traditions is that rather than viewing social life as processual, they view action as episodic and shaped by incentives and constraints. This preoccupation invariably gives rise to explanatory narratives that divide social life into periods of crisis and periods of stability (or equilibrium). As a result, both traditions blend out instability and change in periods they code as stable by emphasizing how rules, underlying structural economic relations or otherwise fixed identities “shape” or provide incentives for particular choices and not others. By the same token, the traditions also blend out stability and continuity during periods they code as involving change because they believe that the lack of rule or underlying structural constraint unleashes ungoverned experimentation and conflict in which seemingly nothing less than raw power shapes outcomes. Hobbes (a war of all against all subdued only by higher force) and Marx (history is class struggle) provide the range of possibilities for the two traditions when they think of change in the architectures of governance in political economies.

My argument, as outlined above, doesn’t rely on the existence or absence of constraint or structure, fixed or unfixed incentives or identities, or the presence or absence of guiding rules to account for social process. It conceives of social life as a moving constellation of enduring and self-recomposing social habits. In MP, the world doesn’t fall apart when rules don’t work or are absent. Rather rules emerge and are defined and redefined by social processes of habitual reflection, experimentation and recomposition. Structures—political, social, economic, underlying or otherwise—are the expression of successful social solutions to jointly recognized problems. When the arrangements of which they are an expression or effect no longer resolve problems relevant to actors, the structures do not (cannot) determine processes of experimentation. Rather, they are available as decomposable resources in the explorative process of social reflection in search of new solutions. This is not a Hobbesian view of the social; nor is it a Marxian (or even Weberian) view. It is a Pragmatic view.

The ambition of MP is to describe social life through an alternative lens that focuses on recompositional possibility and experimentation while eschewing notions of action that rely on the idea that actors are constrained and enabled by “background” or “underlying” rules and structures. MP tries to show that viewing the social and political world of industrial practice in this way both allows one to understand the logic of the interpenetration of continuity and change and to identify a broader range of possibilities for action and governance than is possible within the traditional individualist and structuralist social framings.

## Henry’s criticisms

Now that I have outlined MP’s general architecture and ambition, I would like to turn to directly address Henry’s criticisms of the book. The first thing to do, though, is to point out that Henry’s characterization of my argument is at odds with the way that I understand my argument. That is: Henry claims that “Herrigel wants to argue (a) that the world is fundamentally characterized by uncertainty and creativity, and (b) that as a consequence of this, power relations don’t matter very much in economic affairs.” If you followed the above, it should be clear that I do not think that the world is fundamentally characterized by uncertainty and creativity. I think that the world is processual and that it constantly contains mixtures of enduring and self-recomposing constellations of habits. Uncertainty and creativity play a very important role in MP, but such conditions and processes do not characterize all social action all the time. Rather, uncertainty follows from habitual disruption and gives rise to processes of reflection and creativity. Where habits are not disrupted, there is neither uncertainty nor creativity.

As a consequence of this, it also follows that Henry’s strong claim that I think that power relations don’t matter much in economic affairs is also inaccurate. I do not dispute that there are in the industrial world today many stable constellations of habit that involve hierarchy and asymmetries of leverage and opportunity. I do however argue that under conditions of uncertainty, in which habitual behavior has been disrupted, social processes of reflection, and creative experimentation take place in ways that are not (and cannot be) singularly determined by the asymmetries that pre-existed the disruption. Joint exploration of possible resolutions to common problems, interactive experimentation by actors in a context of uncertainty

inherently involves the redefinition of roles and relations in ways that also re-shape relations of opportunity and leverage. Those kinds of power asymmetries are an outcome rather than a constraint in such processes. Importantly, this does not involve a claim about the last becoming first or the meek inheriting the earth: that is, making a claim that power asymmetries do not by themselves determine outcomes is not inconsistent with asymmetries being re-created through processes of social reflection and experimentation. Moreover, it is rarely true that all the habitual dimensions of leverage and role definition that constitute “power” are subjected to disruption or to social questioning. One needs to think of power in a relationally differentiated manner. But when it is unclear how to reproduce habitual social relations, disruption gives rise to reflection and, the claim is, this blunts the force of un-even leverage and creates the possibility for the redefinition of power relations.

But this issue of power is central to Henry’s concern, so it will be useful to address some of his critical arguments and examples directly. Henry elaborates his basic objection to my treatment of power in the power matrix that he presents midway through the review (four boxes framed by the fluidity of interests, and importance of power relations). Henry and I seem to agree on two of the boxes (stable interests/irrelevant power & stable interests/importance of power), but he claims we diverge on the other two. He frames my view as unstable interests/unstable power while he claims the final box (unstable interests/importance of power) for himself while suggesting that I regard that box as an empty one.

Much of this seeming disagreement hinges on what of course one means by “the importance of power”. Henry is not very clear on that. If by that one means that power asymmetry in a relationship is singularly determining for how that relationship is recomposed, even in cases where all the interests and roles of interacting players are (in my language) disrupted, then it is true that I do not embrace that view. I don’t only hold it to be an empty box; I regard it to be an unrealistic and overly unified understanding of power.

Henry thinks that my colleague John Padgett’s argument about Cosimo Di Medici proves the plausibility of his point of view. But this is only persuasive because Henry mis-characterizes the kind of argument Padgett is making. Padgett is a died in the wool structuralist. The point that Padgett makes about the capacity of Cosimo de Medici to exercise robust action (determining power) derives from Cosimo’s position within two distinct and stable network structures in Renaissance Florence. Cosimo has the capacity to make his interests appear to be ambiguous because he is rooted very firmly in a very non-disrupted network structure. In other words, contrary to Henry’s gloss of Padgett’s claim, the argument there does not show that power is being exercised when interests and structures are in flux or uncertain. Power is being exercised from a clearly defined structural position. The interesting aspect of Padgett (& Ansell’s) argument is that Cosimo is only able to exercise power in their account by having no goals – apart from the exercise of power itself. This is the opposite both of a pragmatist reciprocal redefinition of ends and means, and of the standard teleologies of rational action. IF he fits in Henry’s matrix at all, Padgett belongs more in Henry’s second box with the other structuralists. This is true, by the way, of the other literatures Henry believes I need to address—Fligstein, Blyth, Berman etc. All are self-acknowledged deployers of structuralist idioms of constraint to account for action.

It is genuinely unclear that there is an actual example where all related actors have unstable and uncertain interests with respect to one another, where their inter-related roles (structure) are disrupted and yet nonetheless power asymmetries in the relationship account for every aspect of change in the relations. What serviceable conception of power could possibly achieve this? From my theoretical point of view, if uncertain roles and interests stem from the disruption of habitual modes of interacting, two things will very likely be true. First, only some elements or dimensions of the social arrangements of power relations will be disrupted, while other dimensions will continue on (habitually) as before (continuity always mixes with change). Second, the problems that generate the (partial) disruption of power relations will be resolved through social processes of reflection and experimentation. Such processes will invariably involve disagreement, conflict and struggle; but resolution comes when the interacting players all find a way to resolve or recast the problem that gave rise to the disruption.

My position is simply that power asymmetries, especially under conditions of structural and role uncertainty, do not (indeed cannot) determine all aspects of the way in which relations are re-defined. Power (P0) exists before and power (P1) exist after, but to the extent that the habits of leverage and social asymmetry are disrupted, power relations themselves are recomposed with everything else that has been disrupted in the process of change. P0 will not be identical to P1. This is not a claim that suggests that power is non-existent or that leverage does not exist in social life or economic relations. It is an alternative non-structural understanding of power. Henry quotes from a section of MP that explicitly discusses these issues, but he

leaves out my summary position. It seems worth while to fill in the blank here:

The one certainty about power from a pragmatic perspective is that if habitual action is disrupted and collective reflection is induced to resolve a commonly defined problem, then power will be, to some degree, unstable and inconsistent. If there is stability and habitual action, there will be stable power relations. (p.233)

At the end of the day, Henry and I both agree that there is power in the world and that it exists even in seemingly turbulent times. Where we seem to disagree is that I believe when conditions undermine the roles and structural positions that support power asymmetry and leverage, those undermined relations of asymmetry and leverage will not determine outcomes. If Henry believes otherwise, he needs to come up with a plausible non-structuralist counter-example.

The final important criticism that Henry makes both of my book and of the cohort of other scholars (Sabel, Zeitlin—etc) with whom he associates my work is a theoretical one. He suggests that we spend all our time discovering empirically observable experiments and “hopeful monsters”, but at a theoretical level we provide no “selection mechanism” to indicate why the possibilities we identify “are to prevail over the others which have less pleasant consequences”. He then instructs us that we are actually very un-pragmatic in this, as our heroes Dewey and James were very explicit about the need for a mechanism of selection.

Once again, I disagree that there is no mechanism of selection at work in the argument presented in MP—or more broadly in the tradition in which I work. MP argues that the contemporary competitive global environment in steel, automobiles and machinery production is characterized by competition induced shortening product life cycles and resulting inescapable pressures for continuous innovation and constant cost reduction. This feature of the environment selects out social arrangements in the political economy—organizational forms, work organization, supply chain relations, governance structures—that are capable of continuous learning, change and recomposition. For example, in the concluding paragraph of the discussion of power noted above, MP says: “Over time, roles and relationships, both global and local, are in a recurrently recompositional process. In situations of heightened and chronic disruption, such as those that characterize contemporary manufacturing conditions, actors, firms and regions that have proactive strategies and supporting arrangements for participating in processes of continuous reorganization are most likely to succeed.”(p.233)

There are many other places in the text where similar claims are made. For example, Chapter 7 on industrial relations reform in Germany points to an array of open-ended, stakeholder forms of firm and labor market governance and outlines how different arrangements could potentially be successful. It also points to an array of possible arrangements that would be in tension with an environment characterized by continuous organizational, market and technological recomposition. The conclusion there is that if the latter forces win out, their capacity to be successful will hinge on their ability to exercise a degree of control over the environment that appears to be remote.

Thus, if the problem that Henry has with the argument in MP is that the book doesn’t devote theoretical attention to the problem of organizational selection in the current environment, then this is a false problem. The book is very clear on what the mechanisms of selection are. My sense is that Henry actually has two other kinds of objections to the claims that the book makes about possibility.

The first objection seems to be a straightforward empirical one. Henry seems not to believe that industrial markets are characterized by great uncertainty and continuous change. His eye is drawn to examples of stability. My answer to this is that I am not sure that there is really going to be a “fact of the matter” on this issue where exactly X stability is matched to exactly Y instability, such that we can point to the “real” character of the environment and, hence, to the “real” selection mechanisms at work out there. What seems clear, however, is that the conditions MP points to do very extensively exist in the regions and countries that form its subject. As such, the possibilities the book points to in the division of labor, organization and governance are rooted in an actually accommodating environment.

The second objection—and here I speculate in closing—has to do with MP’s straightforwardly normative discussion of possibility. MP thinks that democratic, bottom up, inclusive forms of organization capable of learning and self-recomposition are preferable to top down, closed, bureaucratic forms of organization. These commitments are consistent with pragmatism’s general transformation of modernist ideas of autonomy and freedom into processual commitments to social- and self-development through open ended collaborative learning. MP is objectively, theoretically, skeptical that the latter (top down) forms of organization have

the capacity to thrive in the current environment; but it also normatively prefers the more democratic stakeholder forms of organization.

As a result, MP devotes much more attention outlining the range of possibility for the organizational forms that it likes than it does criticizing the forms of organization that it does not like—although it does quite dutifully do that in nearly every chapter. It could be that this sort of orientation offends a neutral, objectivist scientific sensibility in Henry. MP, he might think, should be trying to get at the fact of the matter. It should be identifying real underlying relations of causal determination. This is what social scientists are supposed to do.

This may be what many social scientists do, but it is not what pragmatic social scientists do. They follow Dewey and James in rejecting the traditional antimony between causal determination and contingency. Pragmatists believe in causality, yet they also believe that in the realm of human social action it is overdetermined. Too many factors flow into action for it to be possible to reliably (or usefully) isolate a limited number of “determining” ones. As I say at the close of MP, this changes the way that students of social life should think about what they do:

Societies are rich assemblages of historically accumulated creativity and recomposition, not coherent complexes of incentives or complementary (and constraining) institutions. It should be the role of social science to bring that to light. It is itself a form of creative action to identify interesting areas of experimentation and attempt to understand the genealogy of resources that actors might bring to bear in their problem solving. The aim of pragmatic inquiry and theory construction is to foster experimentation by pointing to possibilities that are emerging within actors’ experiences. (p234)

MP also points out that this sort of inquiry is “interested” not “objective”:

One surveys the terrain of action with an eye for promising experiments. . . There are many experiments that one cannot uncover and there can be multiple solutions to given habitual crises. Generally, pragmatism wants to uncover those experiments that enhance the capacity of social actors to continuously solve their problems. Mead and Dewey were both great positive democrats in this regard. They believed the more that arrangements allowed for open, capacious social participation in reflection on the possibilities for the resolution of collective problems, the more robust and capable of future recomposition solutions would be. Inclusive collective problem solving—democracy—yields robust but open-ended social development. The pragmatically informed search for possibility involves deep commitment to inclusive self-governance and creative social action. (p234-35)