Demonstrated by its influence in Europe and the USA, the “third way” has become one of the most successful theoretical and political strategies in the current period. Developed during the 1990s, its chief proponent Anthony Giddens (Giddens 1994, 1997, 2000) argued that the growth of economic internationalisation and societal diversification undermined the ability of the state (and the statist vision of the social democratic project) to promote appropriate economic and social outcomes. States were no longer able to easily control and direct their economic developments. Keynesian policies collapsed in a blur of austerity programmes. Meanwhile, rigid hierarchical state structures were increasingly incapable of fulfilling the diversifying welfarist needs of the demanding post-modern citizenry. The response to this statist failure was the re-emergence of the neo-liberal economic ideologies embodied by Ronald Reagan and Margaret Thatcher. These movements argued for a significant decline in state activities and enhancement of the marketisation of society. However, despite significant political effort and the successful “retrenchment” (Pierson, 1994) of the British and American welfare states, it became increasingly obvious that unfettered markets would not provide economic success nor acceptable social outcomes. Consequently, Giddens emphasised developing a “third way” which would go beyond the statist-market or Old Left-New Right dualism and openly combine different strategies to obtain desirable outcomes.

Despite its obvious public success, the third way has been criticised for its vagueness, populism and lack of originality. I believe most of these criticisms are correct. However, neither the critics nor Giddens understand why they are correct! The “third way” concept, as developed by Giddens, reflects a fundamental “complexity” shift within the social sciences. Giddens ability to partially recognise and integrate this shift into the theory of the third way gives his work much of its power and coherence. However, his unwillingness to accept the full implications of a complexity frame of reference, allegiance to the left and determination to be “radical” blinds him to the implications of his own thinking. Consequently, he leaves the theory open to the aforementioned criticisms. However, if one can come to grips with the complexity shift, one can go beyond both Giddens and his critics and thus “beyond the third way”.

This paper will attempt to go “beyond the third way” in four main steps. First, it will present a brief review of the “third way” concept tracing its evolution through the work of Giddens and his critics. Second, the paper will provide an overview of the
growing field of complexity theory (a simple title for a broad range of non-linear, complex and chaotic systems theories), briefly tracing its evolution out of a Kuhnian paradigm shift in the physical and natural sciences in the middle of the 20th century and penetration of the social sciences in the 1980s and 1990s. Third, the paper will compare the third way theory and complexity paradigm and argue that the Giddens’ third way recognises many aspects of the growing paradigm shift in the social sciences, but fails to fully embrace their implications. It is this failure which opens Giddens work to the attacks of his critics and hampers his own replies. By going beyond the third way and embracing complexity others can do both.

A Brief History of the Third Way

Defining the “third way” is a notoriously slippery problem. The current use of the term “third way” is often poorly defined, obfuscated by political opportunism and complicated by distinctive national interpretations. As pointed out by a number of authors, the modern term has several historical precedents particularly within debates within the left. For social democrats and democratic socialists from the 1920s onwards, the concept and strategy of a middle or third way between liberal capitalism and authoritarian communism has been part of their fundamental philosophical framework. Moreover, the current use of the term “third way” has been criticised as being a “poorly specified, pick and mix strategy, largely defined by what it is not” (Powell, 1999: 298), “an obfuscatory fog of generalities” (The Economist, 1998).

Politically, the concept clearly fulfilled the needs of “modernisers” in leftist parties looking for an intellectual and theoretical justification for shifting their parties towards the political centre. In the late 1980s and early 1990s the US Democratic Party and the British Labour Party were both struggling to develop a strategy for confronting the political success of the new right. In the British case, the Labour Party electoral disasters of 1979 and 1984 demonstrated that a shift to the traditional left meant political suicide. Likewise, the more extreme market-oriented elements of the New Right were not popular with a large percentage of the traditional middle class swing voters. Political space had been created in the centre. The key was to devise a political strategy which distanced the Labour party from its unpopular traditionalist economic and social policies, embraced some of the popular Thatcherite reforms (constrained trade union rights, budget restraints, inflation control, etc.), and packaged them as a coherent formula for recapturing the “radical centre” of British politics. With the success of the Clinton administration in 1992 and 1996, the Blair victory in 1997 and the Schroeder victory in Germany, the “third way” (or die Neue Mitte) became an influential and widely discussed political strategy and theory.

As mentioned above, intellectually the modern concept of the “third way” has a variety of roots and is not particularly new. However, in order to take the concept seriously and get beyond the political posturing, one should turn to the work of the intellectual forefather of the modern third way concept, Anthony Giddens, and in particular three main books, Beyond Left and Right: The Future of Radical Politics (1994), The Third Way: The Renewal of Social Democracy (1998) and The Third Way and Its Critics (2000).

---

1 Recognising the confusing which surrounded the term, Giddens stated that, “the term third way is of no particular significance… I make use of it here to refer to social democratic renewal” (Giddens 1998: VII).

2 The Swedes were among the first to promote the concept of a “middle way” between capitalism and communism (Childs 1936).
Beyond Left and Right (BLR) was Giddens’ most thorough attempt to create a wide ranging modern philosophy and strategy for the left. Its strength lied in the concept of “manufactured risk/uncertainty”. Following in the footsteps of a number of post-modern authors and sociological intellectual traditions, Giddens argued that, “the world we live in today is not one subject to tight human mastery” (Giddens 1994: 4). This is not due to the complexity of nature or the failure of humankind to master it, but due to “our conscious intrusion into our own history and our interventions into nature” (Giddens 1994: 78). For Giddens, due to the development of industrialisation, globalisation, a post-traditional social order and the rise of “social reflexivity” (Beck, 1992), uncertainty and risk can no longer be externalised to natural occurrences, but are more and more a product of human action and awareness. In other words, despite the hopes of the Enlightenment, where humanity would increasingly entrench its dominance over natural and social conditions, the very pursuit of this dominance had led to the creation of human manufactured uncertainty and risk which altered the fundamental framework of our relationship to the natural world and human social development.

Much of the remainder of the book focuses on the implications of manufactured uncertainty/risk. For example, given no “tight human mastery” over the world and a reflexive society, then the authority and certainty of tradition, science, experts and bureaucratic organisations must be questioned and reinterpreted. For Giddens, one had to be careful not to allow this reinterpretation to lead to a “new medievalism” of back-to-nature green movements (Giddens 1994: 79), a post-modernist attraction to Nietzschean nihilism (Giddens 1994: 252) or a reassertion of “fundamentalism” (Giddens 1994: 6). Nevertheless, recognising the inherently uncertain nature of human existence and the manufactured nature of those uncertainties and risks was essential to establishing a viable and radical new theory and strategy for the left.

The need to recognise and respond to manufactured risk/uncertainty lies at the heart of Giddens’ explanation for and solution to the current crisis of social democracy. For Giddens’ the early appeal and fundamental weakness of the left was that it rested on the belief that, “humanly created problems of history must be humanly resolvable” and that Marxism believed that it had found the fundamental direction of human evolution and its appropriate solution. This basic belief in the ability of revolutionary (later, technocratic) elites to direct and understand human economic and social interaction manifested itself in the planned economies under communism and the belief in planning in the advanced industrial economies in the early post-WWII period. For Giddens, this “cybernetic model” was “reasonably effective as a means of generating economic development in conditions of simple modernization” (Giddens 1994: 66). However, as societies and economies become more complicated and reflexive, the cybernetic model became increasingly dysfunctional. As Giddens wrote:

A modern economy can tolerate, and prosper under, a good deal of central planning only so long as certain conditions hold – so long as it is primarily a

---

3 “Tradition more and more must be contemplated, defended, sifted through, in relation to the awareness that there exists a variety of other ways of doing things” (Giddens 1994: 83).
4 “The prestige of science itself, so central to earlier phases of the development of modern institutions, becomes subverted by that very scepticism which is the motor of the scientific enterprise (Giddens: 1994: 96).
5 “The increasing role that expertise plays in social life intertwines with reflexivity: expertise is no longer the sole prerogative of experts (Giddens 1994: 95).
6 “Marx, as it were, urged the Owl of Minerva into premature flight” (Giddens 1994: 53).
national economy; social life is segmentalized rather than penetrated extensively by globalizing influences; and the degree of institutional reflexivity is not high. As these circumstances alter, Keynesianism falters and Soviet-type economies stagnate (Giddens 1994: 67).

Consequently, with the collapse of the Soviet Union in 1989 and the difficulties of social democracy in Sweden in the late 1980s, often seen as the most developed social democratic society, socialism lost its radical edge and fell back on a static defence of the welfare state. Meanwhile, neo-liberals, espousing the ability of the unfettered market to solve both economic and social ills, “appropriated the future-oriented radicalism which was once the hallmark of the bolder forms of socialist thinking” (Giddens 1994: 73). Interestingly, Giddens defined radicalism as “daring… being prepared to contemplate bold solutions to social and political problems” (Giddens 1994: 49-50).

In order to bring radicalism back to the left he explored the implications of manufactured risk/uncertainty on a variety of policy arenas, particularly the welfare state. He argued that the left had to abandon its traditional defence of the welfare state and replace them with ideas of “positive welfare”. For Giddens, “the welfare state cannot survive in its existing form” (Giddens 1994: 174). Like Keynesian economic ideas, the welfare state performed well under conditions of simple modernisation:

in which ‘industriousness’ and paid work remained central to the social system; where class relations were closely linked to communal forms; where the nation-state was strong and even in some respects further developing its sovereign powers; and where risk could still be treated largely as external and to be coped with by quite orthodox programmes of social insurance. None of these conditions holds in the same way in conditions of intensifying globalization and social reflexivity (Giddens 1994: 149).

Consequently, the attempt by the welfare state to combat stable external risks, for example unemployment insurance, may lead to contradictory outcomes such as welfare dependency rather than encouraging a return to work. Thus, the left defence of the welfare state is ultimately doomed to failure. Without abandoning the “providentialism”, that history has a particular direction, of the leftists programme, accepting the new conditions of manufactured risk/uncertainty and reforming its thinking, particularly in regards to its last defensive stronghold (the welfare state), the left will never regain its historical radicalism.

Giddens’ next book, The Third Way (TTW), was a remarkably wide selling book which summarised and popularised his thinking in BLR and extended the third way to a wide variety of policy implications. However, as with any type of summary, the fullness and complexity of his thinking was significantly reduced. The impact of globalisation and the new individualism were discussed and emphasised. Unfortunately, out went the chapters on the diverse tendencies and contradictory philosophies in both the left and right and in came simplistic theoretical stickmen. Much of the book focused on particular third way policies ranging from the role of state and civil society, to responses to ecological issues, global governance and international development. Repeatedly, he emphasised the difference between third way policies and traditional left-right policies. Whereas the left focused on the state and the right on the market, the third way argued that it is necessary, “to go beyond those on the right ‘who say the government is the enemy’, and those on the left ‘who say government is the answer’”(Giddens 1998: 70). Likewise, the third way advocated a “new mixed economy” that promoted a “synergy between public and
private sectors, utilizing the dynamism of markets but with the public interest in mind” (Giddens 1998: 100).

Regarding the welfare state, Giddens again argued that the third way charted a middle path between the antagonism towards state activities by liberals and an uncritical faith in it by socialists. The current welfare state “isn’t geared up to cover new-style risks such as those concerning technological change, social exclusion or the accelerating proportion of one-parent households” (Giddens 1998: 116). It needs to adopt a “positive welfare” approach and transform itself into “social investment state”. A positive welfare approach implies that the welfare state needs to help combat the classical external risks and promote society’s ability to adapt to manufactured risks. In order to do this it needs to become “dynamic and responsive to wider social trends”, “promote risk-taking by individuals” and “invest in human capital wherever possible” (Giddens 1998: 117). Consequently, according to Giddens:

Positive welfare would replace each of Beveridge’s negatives with a positive: in place of Want, autonomy; not Disease but active health; instead of Ignorance, education, as a continuing part of life; rather than Squalor, wellbeing; and in place of Idleness, initiative”(Giddens 1998: 128).

In his most recent book, The Third Way and Its Critics (TTWC), Giddens did an excellent job of summarising the critics of the third way, but an ineffective one of addressing these criticisms. He condensed the multitude of responses to the third way down to six main categories. First, The Economist and Jeff Faux (Faux, 1999) argued that the third way was “an amorphous political project, difficult to pin down and lacking direction” (Giddens 2000: 22). Second, Alan Ryan (Ryan 1999) and others (Driver and Martell 2000) countered that there was nothing new about the Third Way. It was merely the reassertion of an earlier British tradition of New Liberalism. Third, traditional Marxists such as Stuart Hall (Hall 1998) and Oskar Lafontaine (Lafontaine 1998) argued that it was “primarily a rationalization for political compromise between left and right, in which the left moves closer to the right”(Giddens 2000: 11) and therefore fundamentally conservative. Fourth, academics and politicians in Continental Europe (Levy 1999 and Lightfoot 1999) argued that it was fundamentally an Anglo-Saxon project and “was of little use to societies that are further along the road to social justice and more comprehensive welfare provision” (Giddens 2000: 24). Fifth, it had no distinctive economic policy. Sixth, it had no distinctive environmental policy. Lastly, there was one more criticism which Giddens mentioned but did not specifically reply to, Ralf Dahrendorf’s point that the Third Way harboured an “authoritarian streak” (Dahrendorf 1999).

In response to the first criticism Giddens adopted two main strategies, emphasising the third way’s distinctiveness from left and right and a laundry list of policies. Throughout the book Giddens continuously oversimplified left-right arguments and divisions. The left tends to “habour such profound doubts about the market” (Giddens 2000: 35) and “operate with an unreconstructed notion of the state” (Giddens 2000: 55) while the right argues that “markets should almost everywhere stand in place of public goods” and takes no responsibility “for the social consequences of market-based decisions” (Giddens 2000: 32-33). Consequently, the third way is coherent and distinctive because it lies between these two extremes. This was then supported by listing a wide variety of policies that were supposed to be distinctive from the left and right and therefore demonstrate its internal coherence and logic. This is a particularly weak reply since the left and right are much more diverse than a simple market-state dualism would imply. Furthermore, the policies which
Giddens espoused were already being pursued by centre-left and centre-right parties for a number of years.

Giddens attempted to escape from the second criticism by indirectly agreeing with it, but then arguing, “that was then, this is now”. He agrees that there are linkages between early British ethical liberals and the third way. However, the third way is not a reversion to ethical liberalism because, “ethical liberals wrote before, or during, the rise of socialism as a major political force, whereas we are living after its demise” (Giddens 2000: 86). Therefore, the strategies which modern social democrats devise will be inherently distinct from earlier liberals. This relies on the weak argument that the “post-modern” world is so significantly different from the modern world that even if philosophical ideas look the same, they must be different since the times are different.

The above positions also help to defend the third way against the criticism of a shift to the right. Particularly since Giddens argued that the third way was neither left nor right, it therefore must be something different. Moreover, given the state of globalisation, etc., to be radical is no longer equated with the left; “on the contrary, it often means breaking with established leftist doctrines where they have lost their purchase on the world” (Giddens 2000: 39). Thus, he argues, “a concern for the centre should not be naively interpreted, as the critics do, as a forgoing of radicalism or the values of the left” (Giddens 2000: 44). Here again we see the use of the changing social context argument to defend the third way. The policies may be centrist policies, but because of the different social context, they are really on the left and “radical”.

Fourth, despite agreeing with his critics that most European socialist parties and welfare state regimes continue to be distinctive, he argues that there is “a single broad stream of third way thinking, to which the various parties and governments are contributing” (Giddens 2000: 31). Hence, despite their differences they are all part of a similar trend. The problem which this immediately raises is if this is true, then why should one pay attention to the British third way which has a weak left and welfare state, particularly in relationship to Scandinavia. Giddens weakly replies by arguing that why the third way developed so early and clearly in the US and UK was that both “experienced neoliberal government in ‘full-blooded form’” (Giddens 2000: 32). This made the left in the US and UK more willing to question traditional socialist orthodoxies. Moreover, argues Giddens, those social democratic countries who appear to be the most traditional, particularly Scandinavia, “are likely to be more vulnerable to the changes now happening than countries ‘further back’ on the welfare scale” (Giddens 2000: 34). In essence, he seems to be saying that US/UK weakness made them flexible (i.e. successful), while Scandinavia and others strength made them rigid (i.e. unsuccessful). The obvious problem with this argument is that the US/UK remain the international laggards on many social and economic indicators and hence where is the justification for US/UK flexible success. Moreover, is there any point where weakness becomes failure and strength success?

To respond to the fifth and sixth criticisms of an undeveloped economic and environmental policy he adds whole sections which discuss the supposedly third way policies. These include: the importance of civil society, the good and bad aspects of markets, the mixed role of the state, the “new mixed economy” (Giddens 2000: 52) for economic policy and the need to democratise science, the ecological precautionary principle and the internationalisation of environmental policy. The core problem with his reply is that many centre-left and right parties would agree with most, if not all, of these policies. There is little that is essentially radical/bold about his policy proposals. Particularly on the left, challenging the more ideological and extremist positions on
the left has been the defining feature of 20\textsuperscript{th} century social democracy. Thus, all of his core proposals easily fall within this general tradition.

Finally, Giddens chose not to respond to Dahrendorf’s intimations of an “authoritarian streak” in the third way. This is very telling because it is the most fundamental criticism. Giddens entire theory rests on an understanding of manufactured uncertainty/risk. This implies that no individual or elite actor is capable of understanding the path of history in a scientific sense. However, despite his protestations, the third way implies that it understands the next phase of human development and thus can and should control that development. This is the “radical” element in Giddens’ philosophy. This tendency is clearly elaborated by Dahrendorf:

\textit{The great liberation of the revolution of 1989 was that it ended the dominance of ideological thought systems. There are no longer even first, second and third worlds, only varieties of attempts to cope with economic, social and political needs. The Third Way presupposes a more Hegelian view of the world. It forces its adherents to define themselves in relation to others, rather than by their own peculiar combination of ideas; and other the others have to be invented, even caricatured for the purpose. The point about an open world is that there are not just two or three ways. There are... 101 ways, which is to say, an indefinite number. (Dahrendorf, 1999)}

The success of the third way and Giddens failure to address his critics, particularly Dahrendorf raises two key questions. Why is it so successful, despite its weaknesses? Why is Giddens unable to address his critics, particularly Dahrendorf? The easy answer would be to argue that it success is due entirely to political developments. The theory fit the needs of the “modernising” social democratic parties, was appropriated by them and thereby lifted into the general political realm. Moreover, Giddens is unable to fundamentally counter his critics because he is now wedded to defending the theory, which made him famous, despite its evident weaknesses. However, a deeper answer would recognise that what Giddens has done is partially popularise, through concepts like manufactured risk/uncertainty and the third way, a fundamental shift in our understanding of the human condition. That shift is the movement from a fundamentally linear, Enlightenment, frame of reference to a non-linear complexity frame of reference. As such, he has done a significant service to the nature of popular political and social debate. What makes the third way so intellectually weak is that while Giddens succeeded in popularising the concept he failed to recognise the full implications of a shift to a complexity frame of reference.

What is this paradigm shift? How does Giddens work partially appropriate it? And, finally, how does it go beyond the third way? To begin answering these questions one must start with a brief introduction to complexity theory.

\textbf{The Complexity Frame of Reference: From a linear to non-linear paradigm in the natural sciences\textsuperscript{}}

Until recent decades, discoveries in the natural sciences were formulated within a linear paradigm that emerged during the Enlightenment. Descartes and Newton were the principal architects of the new paradigm. The former advocated intellectual rationalism while the latter presented a whole raft of fundamental physical laws. Given this belief in human rationality and fundamental physical order, there seemed to be no limit to the ability of human beings to comprehend and hence control
the natural world. Using reductionist methods that envisioned the whole as the simple methods sum of the parts\footnote{For a discussion of reductionism and a contrasting “integrative approach”, see Capra (1991) and Coveney and Highfield (1995).}, all physical phenomena were assumed to based on a few core laws, change in a smooth and predictable manner and demonstrate high levels of order and predictability. The subsequent phenomenal success of the industrial revolution in the 18\textsuperscript{th} and 19\textsuperscript{th} centuries, which was based on this new scientific approach, and the expansion of the physical sciences into the fields of chemistry, electricity and magnetism, created a high degree of confidence in the power of human reason to tackle any physical situation. By the end of the 19th and the early years of the 20th century many scientists believed that few surprises remained to be discovered.\footnote{S. Hawkings provides an insightful analysis of the way scientific beliefs and methods changed throughout the ages in Hawkings (1988).}

However, during the 20\textsuperscript{th} century the natural sciences began to experience a Kuhnian \textquoteleft paradigm shift\textquoteright\footnote{In The Structure of Scientific Revolutions (1970), Thomas Kuhn argued that "normal" or "mature" science progresses through major shifts, scientific "revolutions", from one paradigm to the next. A paradigm embraces the rules and assumptions and associated problems that require resolution at a particular stage of a science's history. In effect the paradigm defines the envelope within which workers in that field conduct their affairs. When problems are encountered that the paradigm fails to resolve over a long period one or more individuals advance a new paradigm to replace the old regime. A new paradigm is only accepted after considerable, and on the whole healthy, scepticism and resistance, and providing it fulfils its promises. Henceforth, scientists work within the confines of the new paradigm until the next revolution arrives. Examples of "paradigm shifts" include the move from Ptolemaic to Copernican astronomy and from Aristotelian to Newtonian dynamics.} that propelled them beyond the confines of the Newtonian linear paradigm. Not surprisingly, the process was both lengthy and convoluted. Doubts about the current paradigm appeared soon after World War I, although there were earlier indications that a shift was due.\footnote{Poincare, possibly the greatest mathematician and physicist of the late 19\textsuperscript{th} and 20\textsuperscript{th} centuries, voiced disquiet about certain hallowed scientific beliefs of his era and anticipated chaos theory by some 70 years.} Albert Einstein’s theory of relativity, Neils Bohr’s contributions to quantum mechanics, Heisenberg’s uncertainty principle, and the work of many others probed and then expanded the limits set by Newton and Descartes.

It is important to point out that the above pioneers and others who followed them did not prove Newton to have been wrong. Essentially, they demonstrated that some phenomena in physics, and other fields, are probabilistic. The shift within the natural sciences from utter certainty to questions of probability was well established by the early 1930s. But there was a time lag between its adoption by the exclusive niches occupied by particle physicists, cosmologists and mathematicians and its later propagation amongst the rest of the natural sciences. Due to narrow fields of specialisation and other factors, shortcomings of the old paradigm and the emergence of the new paradigm were missed or ignored by many of those working in the natural sciences. Basically, linearity and its reductionist methods continued to be seen by many scientists as the proper and only means for rendering difficult situations more amenable to analysis. For many specific purposes they were quite appropriate.

The process of transformation gathered momentum in the second half of the 20th century. As before, mathematicians and physicists were in the lead, but now meteorologists, chemists, geneticists, and economists joined the fray.\footnote{See Coveney and Highfield (1996) for a detailed history of the tortuous route that led to recognition of complex systems as a major scientific discipline and the role played by computers in that task.} Researchers
became increasingly interested in a family of systems each involving numerous components that interact with each other to influence the whole system in a manner that could not be discerned by observing the activities of the internal elements themselves. Such entities are referred to variously nowadays as nonlinear, complex, dynamical or dissipative systems, to highlight particular aspects of their behaviour (Nicolis and Prigogine 1989 and Kauffman 1996). Those capable of evolution in line with changing conditions are known as adaptive systems. A game of chess is a dynamical system. Moves are made according to simple rules, but the outcome of any game could not be predicted by knowing the rules of interaction and the history of previous moves. On the other hand, a ball falling to the ground under gravity is a linear system. Simple calculations indicate how long it would take to reach the ground. By contrast, and in the words of Gleick, analysing nonlinear systems such as the weather, evolutionary patterns in animals or human social interaction “is like walking through a maze whose walls rearrange themselves with each step you take” (Gleick 1998: 24).

Admittedly, within the new frame of reference humankind was being asked to accept a large measure of unpredictability. Change in nonlinear systems involves discontinuities, rapid changes as opposed to smooth ones, and persistence, low for instance does not necessarily follow high. That is not a comfortable development for people accustomed to promises of order and control no matter how tenuous. Dynamical systems are comprised of a large number of internal actors that interact locally in what looks like a state of anarchy that somehow manages to create self-organised stable global patterns. The patterns, however, often evolve in ways that could not be modelled for the purpose of predicting the future course of events. Typically, tiny differences in initial conditions might be magnified, through feedback, into large unforeseen developments.

Assimilation of nonlinear systems and their integrative methods into the natural sciences is still in progress. Nevertheless, enough has been learnt about the new methods to command acceptance of their validity as scientific analytical tools (Bar-Yam 1997, Gell-Mann 1994, and Kauffman 1993 and 1996). The new paradigm has expanded beyond physics to include other disciplines. In biology, for instance, animals and plants are now routinely treated as dynamic adaptive systems.

From a linear to non-linear paradigm in the social sciences

The success of the linear paradigm in the natural sciences had a profound effect on attitudes and practices in all sectors of human activity, spreading well beyond the disciplines embraced by the original scientific discoveries. The social sciences were no exception. Surrounded by the technological marvels of the industrial revolution which were founded on a Newtonian vision of an orderly, clockwork universe driven by observable and immutable laws, it did not take much of an intellectual leap to apply the lessons of the physical sciences to the social realm. Adam Smith and David Ricardo claimed to have captured the laws of economic interaction. Karl Marx wedded his vision of class struggle to an analysis of the capitalist mode of production to create the “immutable” and deterministic laws of capitalist development. Academics in all the major fields of social science welcomed the new age of certainty and predictability with open arms. Economics, politics, sociology all became “sciences”, desperate to duplicate the success of the natural sciences. Moreover, this desire was institutionalised through the development of modern universities which created and reinforced the disciplinarisation and professionalisation of the social sciences (Gulbenkian Commission 1996: 7).
The high point of the linear paradigm was reached in the 1950s and 60s, particularly in universities in the United States. Strengthened by the success of planning programmes during WWII and the early post-war period, pressured by the growing Cold War, and lavishly funded by the expanding universities, American academics strived to demonstrate, and hence control, the presumed rational nature of human interaction. This traditional Newtonian approach was clearly expressed in the modernisation theories of the Third World development, the realist vision of international relations, the behaviouralist writings of sociologists, the positivist foundations of liberal economics and the rational plans of public policy experts and urban planners.

Using the Newtonian frame of reference modern social scientists unjustifiably assumed that physical and social phenomena were primarily linear and therefore predictable. They, consequently, applied reductionist methods founded on the belief that stable relationships exist between causes and effects, such as the assumption that individual self-interest is an explanation and/or a model for national level self-interest. Furthermore, based on this linear thinking they assumed that society and social institutions had an “end-state” towards which they were evolving. Hence, economic interaction, democracy, fundamental social orders (communism, capitalism, development), etc. all had final stages towards which they were evolving. Nation-states, societies and even individuals could be positioned along this developmental pathway and policies could be devised to help them towards the next level.

The remarkable dominance of the Newtonian frame of reference is brilliantly captured by a quotation from an early critic of the “scientific” approach in politics argued in 1962:

So deep and widespread is the belief, so eminent and able the believers in the value of the contemporary scientific study of politics, that there is not a little impatience with any attempt to question it... All of us who profess the study of politics are confronted with the prevailing scientific approach, no matter how practical our concern, how slight our interest in methodology, or how keen our desire to get on with the business of direct investigation (Strong 1962: v).

The notable international success of Francis Fukuyama’s book (Fukuyama 1993) which claimed that history had reached its endpoint demonstrated the continued influence of the linear framework.

However, even at its peak countervailing tendencies in the social sciences survived. There is nothing new about questioning the fundamental order and rationality of human existence. A belief in the fundamentally rational and orderly nature of human existence only emerged in the Western philosophical tradition in the 17th and 18th centuries. Before this period, much of the human and physical world embraced unknowable mysteries that were cloaked in the enigmas of religion. During the 19th and 20th centuries, there continued to be a huge variety of potent critics of human rationality from the hermeneutical tradition of Freud and Weber, the post-empicism of Habermas, the pragmatism of Dewey, the French post-modernists and deconstructivists, etc. Consequently, from the 1970s onwards as social scientists continually failed to capture the ‘laws’ of society and economic interaction and were continually frustrated over their inability to do so, they began to significantly question the Newtonian framework. Some reasserted the inherent irrationality of human

---

12 For a review of the role of laws in the social sciences see: Martin and McIntyre 1996, Chapters 3-10.
existence, particularly post-modernist and constructivist thinkers. Others, particularly in economics, held tightly to the Newtonian framework. However, many others drifted towards a middling position between the extremes of a strictly scientific Newtonian framework and the fundamentally irrationalist constructivist one. It is this movement that has led the social sciences to the threshold of a 'scientific revolution' that could shift them into a nonlinear paradigm. More importantly for this article, it is here where the Giddens’ third way has evolved.

Like the transformation in the natural sciences, the extension of the nonlinear/complexity paradigm will be slow and tortuous and will not disprove linear social science. However, it will significantly refocus the basis for understanding social life and state action. Instead of searching for and trying to impose order, researchers and policy practitioners will look for complex interactions and systems for promoting complexity. In this article there is no space to explore the full development or implications of complexity theory. A brief overview of its general philosophical and methodological aspects is presented in Table One.

---


### TABLE ONE

<table>
<thead>
<tr>
<th>Order (Linear)</th>
<th>Complexity (Nonlinear)</th>
<th>Disorder (alinear)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete rationality</td>
<td>Bounded rationality</td>
<td>Complete irrationality</td>
</tr>
<tr>
<td>Total Certainty</td>
<td>Limited certainty</td>
<td>Uncertain</td>
</tr>
<tr>
<td>Predictability</td>
<td>Limited predictability</td>
<td>Unpredictable</td>
</tr>
<tr>
<td>Linked causes and effects</td>
<td>Causality is indeterminate</td>
<td>Causality is meaningless</td>
</tr>
<tr>
<td>Determinism</td>
<td>Evolutionary change</td>
<td>Chaos</td>
</tr>
</tbody>
</table>

#### Theoretical Foundations:

<table>
<thead>
<tr>
<th>Researchers look for rational foundations to all phenomena</th>
<th>Researchers look for both rational and irrational foundations.</th>
<th>No rational foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no inherent limits to human knowledge. Only constrains are effort and technology</td>
<td>Significant limits to knowledge due to complexity and uncertainty.</td>
<td>No inherent patterns. Knowledge creation is not possible.</td>
</tr>
<tr>
<td>Humanity can develop and improve. Progress is possible and inherent in greater knowledge</td>
<td>Humanity may or may not develop/improve. Progress may be possible, but much more uncertain.</td>
<td>No inherent possibility for development/improvement/progress</td>
</tr>
<tr>
<td>Researchers can obtain predictable and repeatable experimental results</td>
<td>Experimentation is possible but within limited contexts</td>
<td>Experimentation is impossible.</td>
</tr>
<tr>
<td>History is progressive, cumulative, and leads to an ultimate end.</td>
<td>History may progress and display fundamental patterns, but it is also uncertain and tortuous</td>
<td>The concept of history is meaningless</td>
</tr>
<tr>
<td>Based on a progressive vision of expanding human dominance over nature</td>
<td>Based on holistic vision of human and natural interactions, heterogeneity, and uncertainty</td>
<td>Human progress and/or dominance over nature is not possible due to lack of order.</td>
</tr>
</tbody>
</table>

#### Policy Implications:

| Use state to maximise chosen order (communism, market, etc.). The end (chosen order) justifies the means. Anti-democratic. | Use state to create a stable framework within which individuals can maximise individual complexity. Promote strong democracy. | State is incapable of promoting a stable framework. Constant fluctuations undermine individual complexity. Anti-democratic. |

---

**Range of outcomes for Complexity Theory**

Order----Stifling Order----Creative Complexity----Destructive Disorder----Chaos

---

HOW DOES COMPLEXITY DIFFER FROM AND “GO BEYOND” GIDDENS’ THIRD WAY?

As discussed above, the foundation of the third way rests on Giddens’ interpretation of manufactured risk/uncertainty, the nature of social reflexivity, the desire to “go beyond left and right” and his longing to be radical. For Giddens, as human actions have increasingly come to dominate the natural world and humans have increasingly replaced external orderly risks with human manufactured disorderly risks (global warning, nuclear devastation, etc.), the interface between humans and nature has become increasingly complex. This new manufactured uncertainty is further complicated by the increasing social reflexivity of individuals in the post-modern world. Not only do they have to confront manufactured uncertainty, but they are no long willing to believe in or submit to traditional authorities or ideologies. Hence, traditional ideologies of left and right are increasingly outdated and useless in the current age.

On all of these aspects, complexity theory would agree, but go a step further. Yes, traditional ideologies are outdated, manufactured risks have increased and individuals have become more socially reflexive. However, complexity theory would stress that the natural world and external risks were never completely orderly. In fact they have always been complex interaction between humans and nature with unpredictable consequences. Human interaction with the weather and plants and animals, to take just two obvious examples, has led to a multitude of complex outcomes throughout the history of humanity, from the plague to the potato famine. Consequently, there has always been a degree of manufactured risk and human beings have attempted to deal with it in a similar ways. Even in pre-modern societies, human beings attempted to deal with manufactured risks by promoting strategies of social order. Countertendencies to these strategies emerged and even reconciling “third ways”.16 Thus, when critics of the third way complain that it is “nothing new”, they are more correct than they know.

What is unique about the Newtonian linear framework of the 18th, 19th and 20th centuries was the degree to which humans believed that they could order their societies. Flushed with the heady success of mechanistic and industrial achievement no problem seemed beyond the grasp of humanity. Social scientists merely wedded this vision to the social realm and produced the fundamental visions of social order, communism and capitalism, which structured the history of the 20th century. From a complexity perspective, both visions of order were never possible. Full-blown communism where the state dominated every economic transaction and full-blown capitalism where the market determined all social interactions were equally unsustainable within the complex interaction between humans and nature. Generally, it was the pursuit of these extreme forms of order which brought about extreme forms of human suffering: the repression, death and suffering which the Soviet peoples experienced, particularly during the 1930s is mirrored in the repression, death and

16 An early example would come from China. Confucianism, which envisioned a strict social and moral code for society and the state, emerged out of an orderly period of Chinese dynastic history in the 6th century B.C. Subsequent challengers, Buddhism and Taoism, thrived during periods of civil unrest and war during the 3-6th centuries A.D. Unsurprisingly, “various attempts were made to harmonize the three schools of thought and to promulgate the idea that they were simply different ways by which to reach the same ultimate goal” (Smith, 1973: 134). Consequently, one could argue that san chiao (the three religions or teachings) was the original third way.
suffering brought on the Third World by World Bank/IMF structural adjustment programmes implementing extreme forms of marketisation on their societies.

At first glance, Giddens’ third way seems to pursue a similar strategy regarding left and right. He is critical of both market and state extremes and produces a raft of policies proposals which blends elements of both. However, he also wants to recapture, for the left, the “future-oriented radicalism which was once the hallmark of the bolder forms of socialist thinking” (Giddens 1994: 73). Here we see the fundamental contradiction at the heart of Giddens’ third way. On the one hand, he wants to break with the “providentialism” (Giddens 1994: 249) of the left which argued that capitalism led to socialism, proletarians were the humanity’s saviours and history had a clear direction. A complexity perspective would certainly agree with this position. On the other hand, his desire to find a radical “new way” that gives the left back its position at the forefront of historical development has clear overtones of earlier 20th century attempts to create a linear order. Hence, by not recognising the full implications of complexity he opens up the third way to criticisms that it is both “amorphous” and “authoritarian” at the same time.

Giddens’ reply to these critics was telling. For his “amorphous” critics, he provides a bigger list of policies, desperately trying to reassert their newness and importance, while ignoring the charges of authoritarianism. A complexity perspective would agree with most of his flexible policy proposals, but argue that there is no clear policy answer to all situations. Beyond creating a stable fundamental order within which individuals can learn, interact and adapt, there is little a state can do. Moreover, complexity does not provide a moral framework for choosing between the different forms of social organisation. From a complexity perspective, one can argue that a society that is stable, open, democratic and encourages complex interaction is likely to be much more successful than a closed strictly ordered society, or a destabilised chaotic one. However, complexity can not predict which type of similar societal organisation (the more market-oriented British, corporatistic Germans, socialistic Scandinavians, etc.) will be more successful than another. From a complexity framework, there are no certain strategies other than the most fundamental ones and as Dahrendorf stressed there are not 3 ways, but 100.

Regarding Giddens continental critics who said they were already pursuing the third way, they are more correct than they know. From a complexity perspective, since there are so many possible “ways”, there is no particular reason why the US/UK, or any other state, should be seen as the leader of the third way. A particular set of strategies may work in one case, but not in another. One can make moral arguments over which system one may prefer, Scandinavian or British, but no state can claim to have the one and only “way”. More fundamentally, there is no reason for the third way to be an inherently leftist strategy. A complexity framework implies uncertainty for both left and right. The two political movements have distinctive values that imply particular policy strategies. Nevertheless, they are both caught within the emerging complexity paradigm. Giddens’ “radical” desire to bring the left back to the “forefront of history”, betrays his inability to break with the earlier Newtonian framework. It may be politically appealing to the left, but is theoretically and practically unsustainable.

CONCLUDING POINTS

A full discussion of the implications of a complexity perspective are clearly beyond the range of this article. Nevertheless, from a complexity framework, the point is not to find the one way (order), but to provide your society with a stable
framework within which it can learn, adapt and interact to maximise its own complexity to find its own way. It does not offer a value or moral structure which prefers one way over another. What it does is put the third way in a larger scientific perspective. It goes beyond the third way by recognising that the third way is only a small indication of a much more fundamental shift in the social sciences and society, a complexity shift. This recognition implies a revolution in our understanding of society and politics. In essence, the future is not a search for a third way, but for any number of “third ways”. It is not a politics of order, but a politics of choice.
REFERENCES


