

Towards a Twenty-First-Century
Sociological Engagement
with the Future



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TOWARDS A TWENTY-FIRST-CENTURY SOCIOLOGICAL ENGAGEMENT WITH THE FUTURE

In this paper I explore some early social science approaches to the future and revisit a sociological perspective that emerged in the United States during the 1960s. It was a perspective that sought to establish the future as a legitimate subject matter for sociology and called itself accordingly, the 'sociology of the future.' I explore the explicit and implicit assumptions that underpin this and earlier approaches to the study of social futures, in order to consider the extent to which these still hold good for the contemporary condition. Where the identified approaches and assumptions fall short, I note some of the changes that might be necessary for sociological engagement with the future to become appropriate to its contemporary subject matter.

Introduction

At the beginning of the twenty-first century ever more extensive futures are being produced by scientific, medical, political and economic practices. Yet, the sciences charged to explain that social world have abdicated their responsibility for the study of this social domain to futurologists, whose primary interest is to develop increasingly sophisticated tools to forecast and model the future. This neglect of the social future as subject matter has created a black hole of knowledge at the heart of the discipline. In contrast to this contemporary lacuna, concern with the future is to be found at the very beginning of the social science enterprise. It is intimately tied to industrialisation and the periods of intense political turmoil between the middle of the eighteenth and nineteenth centuries. French social thinkers in particular were noted for their efforts to aid progress and to participate in the creation of a new social order. These first social scientists were concerned to engage with, identify and shape their history in the making. They were interested not just to understand the future but also to help usher it in and to play their part in creating the good life for the masses.

With the development of sociology as an independent academic discipline, at the turn of the last century, perspectives crystallised around 'function,' 'structure,' 'meaning' and 'action' while concern with the future went out of favour. The social future remained a non-subject until in post-war USA and Europe renewed interest was kindled in the subject. However, for sociology after Durkheim, Weber, Parsons and Symbolic Interactionism, there could no longer be any naïve ushering in of progress. Social science involvement in the future had to be thoroughly theorised and methodologically justified, and any normative stance ethically grounded. Accordingly, sociologists not just reconceptualised their difficult subject matter but also reflected on the impact their proposed approaches would have on the role of the sociologist. However, despite this intensive and extensive concern with the future, during the 1960s and the decade beyond, the wave of interest has ebbed again and the social future is no longer a core concern of sociological thought.

In this paper I explore past sociological approaches to the future and consider their suitability as conceptual and methodological tools to address the contemporary dilemma. Where I find the tradition lacking I ponder what changes might be necessary for sociological engagement with the future to become appropriate to its contemporary subject matter.

In the Beginning

Efforts to control the future, to influence development and to shape the direction of progress are inescapably tied to social organisation in the age of Enlightenment, and industrialisation. With the rise of scientific knowledge and the socio-economic capacity to apply a rational calculus to ever-wider spheres of social life, the future ceased to be the exclusive domain of God(s) and increasingly became pulled into the orbit of social action and concern.¹ The change in knowledge brought with it a change in practice that facilitated a new dynamics of change, with people increasingly able to transcend the socio-economic present and impose their will on both the personal and collective future. The future was therefore no longer a mere continuation of the past but became increasingly a consequence of actions in the present. This was nowhere more apparent than in France's revolutionary period from the middle of the eighteenth to the middle of the nineteenth century. Accordingly, key social thinkers of France spearheaded a form of social science that would help to bring about a desired new world.

In his book 'The Prophets of Paris' historian Frank E. Manuel (1962) describes Turgot, Condorcet, Saint-Simon, Fourier and Comte as thinkers and social commentators with a social mission. All, he suggests, were concerned not just to 'unveil' the future but also to steer it in a particular direction.

They were intoxicated with the future: they looked into what was about to be and they found it good. The past was a mere prologue and the present a spiritual and moral, even a physical, burden that at times was well nigh unendurable. They would destroy the present as fast as possible in order to usher in the longed-for future, to hasten the end (Manuel, 1962, p. 6).

With France in socio-political turmoil, these 'prophets' sought to contribute to the cumulative effect of innovation, to aid progress and to help facilitate a climate of openness for novelty and change.

Given the one-hundred-year span of their intellectual and political activity there clearly were substantial differences between their respective approaches to the future. These, however, paled into insignificance when compared with the wider motivations that guided their work. In addition to their disdain for sameness and social stagnation the 'Prophets of Paris' shared some notable concerns, worthy of our attention. They had politics low on their list of significant agents for change and focused instead on the role of science and technology, morality, aesthetics and spirituality. They abhorred strife and sought peaceful means to the good life. They placed their faith not in revolution but in the perfectibility of human beings, the power of reason, tolerance and love and the vision of a brotherhood of man. They were convinced that true knowledge was achievable only through (empirical) science, which they saw as a collective rather than individualised enterprise. And, most importantly in the context of this essay, they saw themselves as moral agents for change, labouring for posterity and a better future for all, especially the disadvantaged groups of society. Thus Manuel (1962, p. 66) quotes Condorcet, who describes his own mission as 'the task of hastening progress to be one of my sweetest occupations.' Not one of them saw a contradiction between their commitment to science as the path to truth and their normative engagement in the active production of futures they prophesised.

Karl Marx did not much rate the work of these French thinkers, yet took a similar stance regarding his commitment to science and the prophetic normative approach to the future. As he insisted in his Thesis XI on Feuerbach, 'Philosophers have only interpreted the world, in various ways; the point is to change it' (Marx, 1977/1845, p. 158). Like his French predecessors and

counterparts, Marx provided visions of how the world could (and should) be different from its present alienated form and identified paths that would lead to the utopian ideal he constructed. Whether or not it was explicitly argued in those terms, in Marx's work, like that of the 'Prophets of Paris,' social theory was indissolubly tied to practice, interpretation to normative conduct, science to politics, and prophesy to product.

This explicitly activist, future-oriented approach to social analysis came to an end with the normative science of Marx and Engels, and was replaced by the more objectivist social science of Durkheim and Parsons on the one hand and the interpretive emphasis in the work of Weber and the Symbolic Interactionists on the other. In the objectivist mode of social science, the normative stance is prohibited and social science promotion of specific futures is militated against. In the interpretative mode, investigations are conducted in the synchronic realm of meaning and social rules² where the past and atemporal present are prioritised as sources of knowledge. In both modes the future is bracketed, if for very different reasons.

It was not until the 1960s that another explicit and intense social science engagement with the future was to be encountered. In the USA this turned out to be a serious commitment to post-Parsonian sociology that extended over a period of 20 years and more. In the UK scientists from across the full range of social sciences received funding from the Leverhulme Trust and the Social Science Research Council to think about the future and to establish the social sciences' contribution to that central aspect of social existence.³ Much of the UK's social science work on the future was concerned with the production of better forecasts and methods for foresight. A key group of US sociologists, in contrast, wanted to achieve more than that. They sought to make the engagement with the future central to the sociological enterprise, that is, to adjust its focus and method to a social world for which the orientation to the future was at the core of social activity. They called their approach 'sociology of the future.' It is this sociological stance I want to investigate before I explore the suitability of its principal assumptions for the analysis of contemporary social futures.

The 'Sociology of the Future'

In 1971 Wendell Bell and James Mau published an edited collection of articles with the bold title *The Sociology of the Future*. In their contributions the editors presented the case for such a perspective, which they differentiated from the forecasting efforts of what is generally known as 'Futurology.' Their claim that systematic engagement with the future was a massively expanding concern in the social sciences generally and in sociology in particular is substantiated in the book by Bettina Huber's annotated bibliography. For a number of reasons I want to take this book as the primary source for my investigation of this particular social science perspective. First, it was produced at the height of twentieth-century social science focus on the future; secondly, it is steeped in the literature of that time and, thirdly, it represents one of the most reflective and conceptually coherent approaches to the subject. It took, what was then and is still today, an anti-traditional stance to the subject and meticulously followed through the implications of its perspective for the discipline of sociology. Most importantly, it is both similar to and different from the approach I want to propose in this paper. This makes it a particularly interesting and challenging work to engage with and discuss.

The 'sociology of the future' was conceived in a distinct socio-historical context. The Second World War was sufficiently far in the past for sociological commentaries on that war, such as those by members of the Frankfurt School, to have become absorbed into the canon. The ongoing socially divisive Vietnam War confronted social scientists with their own positions vis-à-

vis America's foreign policies. The Civil Rights movement was at its height. Existentialism and the humanistic writings of Marx were inspiring the student population. With regard to scientific and technological developments, the first man had been sent to the moon. Nuclear reactors were mushrooming, promising plentiful cheap electricity. Computer power was on the rise, vastly increasing the capacity to calculate and predict. It was a world of rapid transformation where change was expected as the norm and understood as the outcome of deliberate action. The mood was generally forward looking, oriented towards the future. The 1960s were thus fertile ground not only for futurism but also for sociologists to reflect on the nature of their subject matter, their discipline and their role in society. In my consideration of that work I will first detail some of the factual matters as well as some of the explicit concerns and stated assumptions before I explore some of the implicit assumptions and thought traditions that underpin the perspective. The combined key features are then investigated with regard to their suitability to a) explain contemporary approaches to the future and b) aid the production of more just and equitable futures.

In her annotated bibliography Bettina Huber details 245 books and articles written during the 1960s and some ten journals, newly published during this period, all of which were oriented explicitly towards the social future. These publications ranged from analysis to advocacy, and from actual forecasts to methodological issues and the nature of the predictive process. In the light of this flurry of activity Bell and Mau considered the part sociology *was* playing in the process and the role it *could* play, as well as some of the substantive issues that required particular attention. The 'sociology of the future' was developed against a background of Parsonian social theory on the one hand and increasing governmental demand for sociology to provide useful (quantitative) information on the other. Alongside many of their colleagues, the sociologists of the future thought of these two influences as the dual peril of irrelevance and operating as handmaidens to established interests.⁴ The 'sociology of the future,' they thought, would be able to steer sociologists clear of both dangers. Moreover, it had the potential to facilitate disciplinary renewal at the level of meaning, theory and practice. Importantly, it demanded that sociologists reflect on their role and place in society. In the concluding essay Bell summarises the approach in the following way:

[The sociology of the future] represents both a scheme for organizing and analysing the social realities that confront us, and a way of orienting and directing our efforts as sociologists. The study of the possibilities for the future may offer a way out of the present deadly confrontations, a way that allows a happy marriage between the old hallowed values of science and the older, perhaps more hallowed, values of social responsibility. For the scientific study of alternative futures by its very nature combines the search for knowledge with an action orientation (Bell, 1971, p. 328).

Regarding the social sciences 'hallowed values of social responsibility,' Bell is referring to 'Prophets of Paris' (Manuel, 1962), the founders of the discipline who were so eager to usher in a better future and help shape its direction with their work. Bell and Mau want us to re-connect with this action orientation, which prevailed during the early development of the discipline of sociology, in order that sociologists might be able to transcend mere description and analysis. This important aspect of sociological work was to be supplemented with a more formative stance that would take account of social values and morals. They proposed therefore that we remember 'some of those traditions that seem to have been forgotten' (Bell and Mau, 1971, p. 4), and develop a sociology that seeks to create a better and more just society, which, in turn, requires visions and images of the future.

Bell and Mau point out that even where sociologists do not take on board the action-based approach, their processes of investigation, analyses and reports on findings inevitably change the world they are studying. Sociological knowledge, they insist, is inescapably constitutive

whether or not this fact is acknowledged. They thus urge us to become aware of our inescapable impact on society, to become cognisant of the constitutive power of our knowledge and to take seriously the responsibilities attached to that power. Moreover, given this inadvertent power to change, they suggest that sociologists would be well advised to look beyond the problem of order and explicitly acknowledge their purpose, planning and steering. Their analyses would then fuse structure with action, observation with values, and these in turn with the plans and decisions that form and give shape to the social future. This expanded perspective inevitably transforms sociology into a very different scientific enterprise from the dominant Parsonian one of their time and it fundamentally changes the role of the sociologist.

The new sociologist will see himself⁵ as part of the social reality he studies and will take account of the effects of his actions. He will be a responsible agent of history...

The new sociology will not simply accept existing systems and institutions as they are, but will be oriented toward devising alternatives. It will encompass conflict and dialectics. It will be dynamic and change-oriented. It will deal with the emergent as well as the extant. It will be transcendental.⁶

It will be concerned with values and their achievement and will be sensitive to the consequences of both stability and change with respect to manifest goals and unanticipated consequences...

The new sociology will be humanistically, as well as scientifically, oriented (Bell, 1971, pp. 333–4).

With this novel approach to the study of the social Bell attempts to ease sociologists out of their naïve social science beliefs in objectivity, value neutrality and detachment, and to identify new ways of being systematic in method, diligent in the search for truth and meticulous in attending to the moral duty that accompanies the active participation in the production of collective futures. Accordingly, Bell (1971, p. 334) suggests that this new sociology will be ‘explicitly moral, not just in its commitment to procedure but also in its commitment to bettering the human condition.’

From this perspective, sociologists are ‘future makers,’ inescapably implicated in both the decision-making processes about goals and the various quests to bring about desired ends. Importantly, this makes sociologists not just responsible for their actions in the present but for the outcomes of their actions, that is, the eventual effects of their change-directed work (Bell and Mau, 1971, p. 37). In the light of this, *social scientists can no longer be mere tools for their clients’ desires but have to become judges of the ends to which their knowledge will be put*. As agents of the future, sociologists need to ground their knowledge in the most widely shared and most deeply held social values. For Bell and Mau (1971, p. 38), in addition to ‘human dignity and individual self-fulfilment,’ these are ‘human life, health, security, affection, and level of living.’

The ‘sociology of the future’ was to bring to the fore future-producing aspects of both contemporary society and sociology. This entailed a shift from synchronic analysis of the present and attendant emphasis on prediction based on knowledge of the past towards a more diachronic, dynamic study and analysis of the prospective and projective aspects of social life. This in turn demanded, as I have suggested above, consideration of the implications of our sociological roles as agents for change and reconsideration of earlier questions about commitment and value relevance. Regarding the future, the perspective was underpinned by two primary, explicitly acknowledged assumptions: first, that the future is real only in the present and secondly, that human history is marked by increasing mastery over nature. I will elaborate these in turn as they are important for the discussion that follows.

The first contention is that the locus of reality is the present. This understanding reaches back to the writings of St Augustine in the fifth century AD, who came to the conclusion that the past and future had no existence outside the human mind, where they functioned as memory and expectation respectively. George Herbert Mead (1932/1980) had reactivated this particular understanding of the reality status of past, present and future for sociology. This work privileged the present and accorded it alone reality status, while the past and future were conceived as ideational spheres, as aspects of mind related to memory and anticipation.⁷ Bell and Mau (1971, pp. 6–10) endorse Mead's present orientation, pointing out that the past has been present, the future will be present, and that all possibilities are conceived and actualised in the present. In agreement with Brumbaugh's (1966, p. 649) statement that '*there are no past possibilities and there are no future facts*' (quoted in Bell and Mau, 1971, p. 9) they noted this important difference between the past and future. The distinction, they argue, needs to be taken account of in social studies of the future.

Their present-orientation leads Bell and Mau to propose specific tactics for studying the 'not-yet,' a domain that is not ordinarily amenable to experience. To overcome the metaphysical dilemma they suggest studying 'images of the future,' which are amenable to sociological study in both their individual and collective forms. 'Images of the future' become real in the present insofar as they orient human action. As such, they are facts that can be tested against subsequent events. In a similar way, they argue, present possibilities for the future can be conceived as real. Thus the authors approvingly detail Waskow's (1969) proposal to engage in 'possidiction,' by which he means the search for real possibilities, which is dependent on sociologists' skill of identifying desirable seeds of change that might flourish, given the right socio-economic and political action (Bell and Mau, 1971, pp. 36–7). The task of the sociologist, the authors consequently propose, is to examine the 'actually possible' rather than replicas from the past, which are the subject matter of scientific predictions and projections of trends. Their approach, they argue, has methodological consequences. First, it means importing the future into the present where different possibilities are actualised (thus real) on the basis of images of the future. Secondly, it means that determinism is inappropriate for the sociology of the future since the future remains open until it has become the present. Thirdly, it means that the future is relative to the frame of reference employed. From this perspective, therefore, the future is *a possible, present future, a future that is pictured, planned, projected, pursued, and performed in the present*.

Not quite so much thought, explanation and argument is expended on their second presupposition, which takes as a given fact that human history is marked by a steadily increasing capacity to control nature and shape our social environment (Bell and Mau, 1971, pp. 10–12). While it is acknowledged that earlier societies were also guided by visions of the future, it is thought that fatalism rather than choice tended to be the lot of predecessor societies. Where the options of our forebears were largely restricted to the means for achieving pre-set ends, the authors suggest, members of today's industrialised societies have choices over both the ends and the means of their actions. Only when both the goals and the ways to achieve them become subject to individual and collective volition is there an opportunity to establish new values and norms. This capacity to fashion the world according to our will and desire brings with it the 'burden of responsibility' (Bell and Mau, 1971, p. 12), which applies to citizens and social scientists alike. For sociologists, however, it means additionally that their explanations have to encompass the moral issues involved.

In concluding this brief résumé of the 'sociology of the future' of the 1960s, one can say that it is a perspective rather than a grand theory. It is a way of understanding both the subject matter and the discipline that allows it to be applied to any topic and sub-field of the social sciences. It is explicitly geared towards a social world of accelerating change that is subject

to human intervention and, lastly, it seeks to offer useful information and relevant alternatives for a world under pressure from ceaseless innovation. As such, it demands of the social investigator engagement, commitment and responsibility. It has been developed in response to the dominant functionalist social science of its time and on many fronts takes opposing views regarding matters of ontology, epistemology and methodology. It reinstates critique, control, creativity, imagination, intervention, justice, morality, personal responsibility, spontaneity and values to the sociological tradition without allowing scientific rigour to be sacrificed. It thus seeks to provide its followers with the best that the sociological tradition has to offer.

This best-of-all-sociology approach, however, contains some irreconcilable elements and assumptions that need to be considered before we can examine the 'sociology of the future' for its relevance to the industrialised world at the beginning of the twenty-first century. The first element to be considered relates to the unwavering faith in science as appropriate means to investigate approaches to the future; the second to the commitment to sociology as a moral enterprise. With regard to the commitment to science, I am interested to consider three central assumptions that underpin the scientific enterprise: causality, materialism and the present-orientation. All three pose problems for study of the future and sit uncomfortably with the 'sociology of the future' outlined above. With respect to the moral issues involved I am interested to follow up on the ethical assumptions and on the way responsibility is conceptualised. In what follows I set out to demonstrate that to take sociology's 'future making' seriously requires changes at the very heart of the discipline, changes that cut far deeper than the sociologists of the future had bargained for when they set out the new perspective and contemplated its implications.

The Commitment to Science

As a science, sociology studies a reality that is empirically accessible. It deals with sense data, with things, processes and events that can be quantified and verified, with a world connected by causal relations. In the history of the social sciences in general and sociology in particular, much thought has gone into defining the nature of 'the social' in a way that is amenable to such empirical study and factual treatment that results in evidence. This had been achieved most successfully by functionalist and structuralist methods of study, often grouped together under the term positivism, which meant study of the human social in ways that came as close as possible to the methods of the natural sciences. In contrast, much of the thinking that arose from the *Geisteswissenschaften* in Germany and the work of Symbolic Interactionists in America was a debate with this positivist approach to the study of the human social. Sense-making, meaning, symbolic interaction, values and purposive action were all recognised as integral to the human social and thus, it was argued, had to be encompassed in the study of that world. This, too, entailed formulating the social as fact.

Today, however, the human social includes not just social relations and institutions, social structures and socially constituted meaning, it also encompasses a socially and technologically produced world that is time-space distantiated, to use Anthony Giddens' term.⁸ The spatial part of this expansion is recognised in the extensive work on globalisation in all its many guises. The temporal part, in contrast, still requires attention as this social sphere not only spans the globe but also stretches into open futures.⁹ Moreover, the contemporary globalised social reaches beyond the human world to the natural environment. Much of this world is not material in the conventional sense. It is constituted by the deeds already under way, latent and immanent, which means not yet materialised as symptoms. It is this socio-technically created future, which is of interest to a 'sociology of the future' appropriate to social relations

at the beginning of the twenty-first century. It is the future of processes – chemical, nuclear, biological, genetic, to name just a few – set in motion by socio-political and scientific action. It is the future under way, currently in a phase of development in which it is not ‘matter,’ not sense data in the traditional scientific sense and thus not amenable to empirical study. The actions and processes of this future in the making are ongoing whilst their eventual time-space distantiated outcomes are potential. Once these latent processes materialise as symptoms, it is very unlikely that their causal connections can be established with certainty. Radiation, acid rain, global warming or the effects of hormone-disrupting chemicals, for example, are no longer traceable to their origin(s).

Engagement with this social world of futures already set in train, therefore, requires once more a radical rethinking of the nature of a ‘social fact.’ It demands a very different understanding of materiality from the one that has been encompassed thus far by materialist science, on the one hand, and both the positivist and interpretative traditions of sociology, on the other. Such an alternative conception of matter needs to accord reality status to that which is currently excluded or bracketed because it is inaccessible as sense data: the im/material (that is, the material *and* the immanent ‘immaterial’ as indivisible unity), the virtual and latent, the invisible potential that is ‘existing’ and developing out of sight and reach. It needs to conceive the ‘real’ in terms not just of the *products* of actions, that is, their outcomes in the present, but also of the *processes* in their immanence. This is a socio-philosophical task that transcends what the ‘Sociologists of the Future’ had in mind when they formulated their sociological perspective during the 1960s.

The sociologists of the future had recognised that the future was not empirically accessible and thus had resolved to study not the future but ‘images of the future,’ that is, the future transported into the present. Focus on how the future is envisaged, what future ideals and utopias guide social actions in the present, enabled them still to meet ‘the canons of science’ (Bell and Mau, 1971, p. 40). This approach allowed them to sidestep the problem of the immateriality of the future. Today, however, this sideways move seems no longer sufficient for the task at hand. The social psychology of people’s motives, intentions and actions, guided by visions of the future, gives us little purchase on the social world of our making that affects not just our future but that of contemporaries across the globe, as well as that of successor generations of humans and fellow species for thousands of years to come. Denying reality status to the future in progress makes it impossible to encompass potential effects of actions and accompany actions to their time-space distantiated destinations. Moreover, it moves out of reach any institutionalisation of responsibility for time-distantiated actions. The canons of science, as currently practised in mainstream social science, constitute part of the barriers to modes of engagement with the future that are more appropriate to the contemporary condition. Thus, for example, in situations where scientists are tasked to establish the safety of technologies that reach thousands of years into the future and they continue to use methods that project the future on the basis of a known past, social scientists and philosophers have the duty to engage with this problematic state of affairs. Their task is to point out the inappropriateness of the method and to aid the search for new ways to relate to the ‘immaterial real’ of our making, to deeds already under way.

Wilbert E. Moore, a guiding light and mentor of the ‘sociology of the future’ perspective, insisted that the future, not the past, is the cause of the present and suggested that it is sociologists’ blindness to human intentionality, which prevents them from engaging with the future.

The future *is* the cause of the present in substantial degree, and it is only the failure of sociologists to come to terms with human purpose that has hidden this verity from their view (Moore, 1966, p. 770).

I would like to propose that the matter is far more complicated than this and that the difficulty reaches far beyond 'human purpose' and intentionality, deep into the heart of taken-for-granted assumptions upon which the sociological discipline is founded. The issue of causality is rarely discussed in social science texts. Moore's focus therefore presents an important first step because engagement with conceptions of causality becomes essential where the future is to be encompassed in social science analyses.

Explanation of objects in motion requires thinking in terms of cause and effect, that is, causal chains. Consequently, science seeks answers to questions about *how* the present and the future arise from preceding events, that is, the past. To explain the present, and by extension the future, on the basis of the past has the advantage that it brings certainty to what might otherwise be uncertain relations. From a known past we can project the future as trend and probability. As *scientists* sociologists cannot evade past-based causality, the push from the past, since this is the undisputed scientific way of explaining temporal relations.¹⁰

There is, however, another, much older way of explaining causal relations, that is, causality as pull from the future and grounded in 'why?' questions. It is variably known as 'final causes' or 'teleological explanation.' This way of understanding temporal relations is directed to human purposes, intentions, goals and value orientations and most generally to the meaning of action that Moore was referring to above. Here the *future* is regarded to be the *cause* of the present and past. The temporal flow moves in the opposite direction from scientific causality and the certainty gained through past-based causality evaporates with the causality that emanates from the future. Choice, freedom, morality and the fact that humans can act in the light of new knowledge and desires makes future-based causes irreducibly open, uncertain, indeterminate even. In the world of future-based causality the scientific (and political) quest for control becomes inappropriate. Other quests come to the fore. Questions of ethics and aesthetics are given room to flourish.

However, the history of science is marked by a slow eradication of final causes as they were used in Greek Antiquity, in religious thought and everyday conduct through the ages. Interestingly, biology, which needed to retain some sense of goal orientation to explain the directionality from acorn to oak and from chick to hen, had resolved the problem of teleology through explanation by function. This move towards functionalist explanation, in turn, has been eagerly absorbed into the canon of both sociology and anthropology. Function re-embeds sequences in both past and present and the synchronic relation of parts to wholes. In that way certainty and control are (re)affirmed and any reference to a designer god, human values and ideals, and questions about ends or good and evil have been moved outside social science frames of reference. When Moore suggests that sociologists need to take account of purpose and intentionality, that is, the *future* as cause for action, he actually leaves the functionalist territory of sociology.

When sociologists of the future intend to use both knowledge traditions of past- and future-based causality to complement each other, they need to be conscious of the differences and utilise the associated conceptual tools accordingly. This conceptual self-consciousness is important because the differences need to be explained at the point where their work intersects with that of policy makers. If sociologists do not merely want to describe the world but help to change it, then these differences need to be surfaced as a precondition to identifying and showing potential openings for social change. Only with teleological causality is it possible for sociologists to extend themselves into the future, not just for the purpose of taking account of values, goals and aspirations, but more importantly, to place themselves in the future and to view the present from that standpoint. Only with this understanding of temporal relations is it possible to take responsibility for the outcomes of actions, to take seriously the idea expressed

by Hans Jonas (1984/1979, p. 129) in his seminal *The Imperative of Responsibility* that ‘duty springs from the deed already under way.’

The present-orientation of both focus and method of study, as a third key assumption that permeates scientific approaches to the future, has its roots in the fifth-century writings of St Augustine. In his innovative work on the reality status of past, present and future, George Herbert Mead (1932/1980) suggested (in agreement with St Augustine’s position) that the real future, just like the real past, is unobtainable, that the mind is our exclusive passport to the future. Most importantly for our argument here, he argued that any reality, which transcends the present, must exhibit itself in the present. Although intended as a radical departure from the spatially and quantitatively oriented sociology of his day, Mead’s present-orientation dovetailed neatly with the scientific approach that could access only what was empirically available in the present. When Mead’s perspective is enrolled for the purpose of studying the future through present images, goals, ideals and values, its radical potential is neutralised and the approach absorbed into the conventions of science. The methodological challenge set by Mead’s *Philosophy of the Present*, of working through the difficulty of accessing the ideational, that is, the im/material real in the present, is left unaddressed and the potential for transcending the barriers to new understanding lost. As conventional science, this perspective becomes re-grounded in the ‘metaphysics of the present,’ that is, in the assumption that ‘to be’ is ‘to be present.’

Future studies conducted within this frame of reference seek to discover facts and potentialities in an empirically accessible present, uncontaminated by the temporal vastness that transcends the present and is encompassed therein. The present-orientation provides investigators with a semblance of certainty and control. ‘Real’ certainty and control, however, are ever harder to realise in a world where the unintended consequences far outweigh intended effects and where risks and hazards emerge with increasing regularity as unexpected, unforeseen surprises.¹¹ For sociologists of the future, ‘choice’ and ‘control’ were still unproblematically hitched to each other. That is to say, a future that is increasingly the result of choices and is assumed to be increasingly subject to human control. Today we are only too painfully aware that choice and control are in fact inversely related, that increase in choice seems to be accompanied by a decrease in control. Ulrich Beck’s ‘Risk Society’ is a key example of analyses that identify this inverse relation.¹²

Concluding this brief discussion on the present-orientation of science we can say, when ‘certainties’ emerge as unforeseen problems, past- and present-oriented science seems singularly ill-equipped to deal with them beyond applying more science and more technology. Thus, the assumptions we bring to the study of the future matter. As long as they are left implicit they can act as barriers to progress, unhindered and unchallenged. They need to be surfaced therefore as a precondition to alternative praxis.

Alvin Toffler (1969) in his introduction to a book edited by Baier and Rescher on ‘*Values and the Future*’ introduced the idea of a new social science profession: the ‘value impact forecaster.’ He suggested that such scientists would be exclusively concerned with the study of the material impact of both technological and economic social values. He envisaged this new breed of social scientists to be employed by corporations and institutions, government departments and non-governmental organisations to help with the assessment of the potential impact of future-producing plans and decisions. His proposal arises from deep socio-political concerns.

Only if potential value-impacts are laid bare and open to public discussion early in the game can we achieve anything like democratic control over the technological future...

The presence of such forecasters in the centres of technological research and development would also make scientists and technicians more aware of the social repercussions of their work (Toffler, 1969, p. 29).

Both the demand and the reasons for the demand are central to present concerns. Difficulties arise, however, when Toffler envisages this task to be achieved through the accumulation of vast quantities of data and with the conventional tools of science – materialism, causality and metaphysics of present – supplemented by a dose of imagination, speculation and expert-based techniques such as the Delphi method. These scientific tools may be adequate, to a substantial degree at least, to engage with futures at the planning stage. They are not, however, as I have suggested above, the appropriate conceptual tools to engage with futures in progress or to encompass the potential implications of futures arising from innovative technologies.

Science, from the Latin *scientia*, means systematic study. What constitutes systematic study, however, is rooted in convention and has changed dramatically over time. There is nothing in the concept of *scientia* that would prohibit its extension to teleological causes and a redefinition of materiality that encompasses immanence, in other words the incorporation of the *future present*, not just the *present future*, into the scientific frame of reference. Clearly, it would require changes to the very heart of the scientific methodology as practised today, in order for both the method and implicit assumptions to become appropriate to the contemporary socio-technical subject matter. This change alone, however, would not suffice for rendering the ‘Sociology of the Future’ a viable social science enterprise for the twenty-first century. It would require, in addition, that we pay attention to the moral arguments entailed.

In their efforts to rethink the role of the social scientist, the sociologists of the future sought to combine the methods of science with humanist ethics. It is the moral part of this equation that briefly needs to be addressed before I can draw together the argument for some concluding reflections.

The ‘Sociology of the Future’ as Moral Enterprise

As moral enterprise the ‘sociology of the future’ has several strands to its ethics and includes the following lines of argument. First, following the insights of Kant and of quantum physics more than two hundred years later, it is recognised that our questions frame and delimit the findings of social science research. Closely associated is the appreciation that the very act of investigation impacts on the subject matter, which means that sociologists of the future play an unavoidably formative part in the social future they are interrogating. This places researchers and theorists in a position of inescapable responsibility vis-à-vis their subject matter and their discipline.

The second strand relates to a commitment not merely to interpret the world under investigation but also change it and actively help to create a better world. Potential accusations of bias are dismissed on the grounds that the commonly held values of health, security, prosperity and liberty, for example, provide the framework within which ‘the better future’ could be identified. In the context of 1960s’ sociology, this activism is daring. Yet, as Moore (1966, p. 772) noted, ‘a little activism of this ambitious kind will do us no harm at all.’

A third strand of the ethics promulgated by the sociologists of the future is represented by the position of Alvin Toffler, who emphasised the importance for sociologists to bring to the fore and explicate the moral choices that are being made on a daily basis when futures are being produced.

Moral neutrality may or may not be a defensible position for a researcher to adopt; moral ignorance is inexcusable. Value-impact forecasting could help make clear the nature of the moral choice being made each time a line of research is opened, a project funded, or an innovation released from the laboratory (Toffler, 1969, p. 29).

Value-impact forecasting was to extend into the future so that the consideration of moral choices could become integrated as routine into the daily decisions and activities of business, politics, education and health professionals, for example. Toffler's formulation of value-impact forecasting can be seen as a precursory idea to the Precautionary Principle, developed during the latter parts of the twentieth century for socio-environmental policy to encompass values and moral questions in decision-making processes in contexts of uncertainty.

In their efforts to incorporate a moral humanism, the sociologists of the future drew on a moral tradition that extends back to Greek Antiquity. Much of the assumptions that underpinned this moral code have become naturalised and are embedded in the deep structure of western moral assumptions. The key elements to this moral code are anthropocentrism and boundedness in time and space. In his seminal book, *The Imperative of Responsibility*, the philosopher Hans Jonas (1984/1979) identifies these ancient premises as follows. First, moral action is conceived as reciprocal and focused exclusively on the intra-human realm. It is concentrated on actions of immediate reach and close proximity in time and space. Secondly, in the ethics of the here-and-now of shared presents, the good had been assumed to be known and what is right undisputed. Thirdly, in the Greek city of antiquity the long-term future was out of human reach and thus beyond ethical concern; it belonged to the non-human sphere of fate and chance, providence and destiny. Finally, human action had no more than a superficial impact on nature's balance and awesome force. That is to say, the strictly bounded transformative power of the citizens of ancient Greece left nature largely unchanged in its formative and creative power.

Today, many of these preconditions to this traditional, implicitly-held western moral code no longer apply. What had been assumed fixed has become subject to change. Consequently, good and evil have become objects of debate and definition. Importantly, the contemporary operational realm of human action extends into a very long-term, open future. With massive expansion of socio-technical reach in time and space and associated long-term environmental impacts, it is no longer appropriate to think and act with reference to neighbours and contemporaries, kin and the next generation of humans only. The changed socio-technical conditions of contemporary industrial societies present new ethical challenges that are rooted in the gap between the power to act and the capacity to know.

Jonas' central argument is that the *imperative of responsibility* has no precedent in the history of ethics and thus requires ethical innovation on many fronts. Since our contemporary technological capacity impacts on nature in a new way – changing the balance of its forces, its regenerative power and its evolution, to name just a few examples – the ethical sphere has to be expanded to match the realm of human influence in both time and space. It has to encompass nature and the universe. It has to reach beyond the present to the techno-future of our making. It has to embrace not just next of kin but generations of potential successors (both human and non-human) as far into the future as our actions are extended by way of influence and impact. Moreover, responsibility for shaping the future in contexts of radical uncertainty presents challenges at the level of theory and practice that were not yet on the sociological agenda of the 1960s. This is where the conventional nature of the ethics, promulgated by the sociologists of the future, falls short of today's target and is no longer adequate to the contemporary condition.

The contemporary imperative of responsibility requires that *responsibility be adequate to the sphere of influence*. This very reasonable demand, however, moves ethics from the tangible sphere of spatially delimited rights and duties to compatriots and contemporaries, towards the open and unlimited realm of beings and organisms unborn and unknowable. This takes today's responsibility into virgin ethical territory. Jonas (1984/1979, p. 107) responds to the obvious difficulty by arguing that due to human spontaneity, the unknown has always been with us and therefore inescapably frames our decisions as an 'invisible co-object.' Non-knowledge and engagement with the unknown, he continues, are 'nothing but the moral complement to the ontological condition of our *temporality*.' Consequently, in encounters with the unknown, it is the spontaneity grounded in human freedom that we are charged to guard and preserve as one of our highest goods. Our moral duty, therefore, is to ensure the future of Being and human spontaneity. The world of *oriented process* rather than the physical world of products, I therefore want to suggest, is the truly human domain of moral knowledge practices. Metaphysics is thus the ground that needs to be regained from the dominance of materialist knowledge.

Today's techno-futures, we can conclude, provide a context for responsibility that is fundamentally new and nothing in the established ethical traditions provides us with the appropriate moral tools to deal adequately with that altered condition. In contemporary industrial (and industrialising) societies the foundations for responsibility have extended from an individual to a collective base, from the exclusively human realm to biotic earth communities and beyond, from social life to techno-spheres, and from social relations in the here-and-now to the time-space distantiated realm of uncertain and indeterminable impacts. Spatial concerns related to ecological footprints thus require expansion to encompass *timeprints*, that is, the temporal reach of actions (Adam and Groves, 2007). These extensions and associated shifts in emphasis warrant change, not just in the understanding of the subject matter of contemporary sociology but also the nature of the discipline on the one hand and the role of the sociologist on the other. From the position of hindsight we can therefore see that the sociologists of the future of the 1960s had been successful in setting the challenges for their successors. Solutions, in contrast, need to be constantly worked on and revised in light of changing conditions.

Reflections for the Future

In this paper I sought to show first how some of the base assumptions that underpin scientific knowledge have become inappropriate for grasping time-space distantiated outcomes (present and future) of that knowledge, how the rigorous pursuit of the scientific logic undermines its knowledge base, and how the increase in mastery is accompanied by a decrease in control over outcomes. I have argued secondly, that the contemporary future in the making requires sociological understanding which takes us beyond the important study of human purpose, intention and vision as guide to action in the present to im/material futures in the making, futures in progress, deeds under way. This shift in focus confronts us with the inadequacy of conventional scientific and ethical assumptions. Only when both our scientific and ethical codes are subjected to fundamental revision, I therefore suggested, was the ground appropriately prepared for a social science engagement with the future that is adequate to and appropriate for the contemporary condition.

This proposed renewal of the sociological tool kit has implications for the discipline. First, it makes the sociological enterprise irreducibly normative and the pursuit of 'objective' and 'unbiased' research on the future a misnomer, a contradiction in terms. Accepting this, however, is not enough. We need secondly to acknowledge that the long-honoured tradition of social engineering is no longer appropriate in a globally connected and interdependent world

of time-space distantiated impacts that inevitably transcend their creators' intentions. In the contemporary social context of indeterminacy, the social science promise of an alternative future, subject to human design, is misplaced. And, importantly, the move from interpreter of the social condition to agent for change is no longer unproblematic. What we can and should provide in the circumstances, as I have begun to outline in this paper, is, first, an understanding of the complex interdependencies at work in contemporary socio-technical, socio-economic and socio-political processes; secondly, explication of implicit, taken-for-granted and naturalised beliefs and assumptions and, thirdly, identification of openings for change. The suggestion is that sociologists become aids to a better future without resorting to claims about control over outcomes. Non-linearity, complexity, time-space distantiation, globalised interdependencies and knowledge of processes (not just products) need to accompany conceptual renewal of the traditional present-oriented materialism on the one hand and atemporal humanist morality on the other.

Sociologists are 'future makers' – that was the assertion and the vision, the methodological innovation and the conceptual challenge presented by 'Sociologists of the Future.' In this paper I have identified some areas where this challenge had been left unfinished and others where it had not yet begun to be addressed. The implicit assumptions that guided both the science and the ethics proved to be of particular importance if the vision was to be brought to fruition and the breadth of ideas were to be translated into sociological practice. To embrace this innovative work and apply it to the contemporary condition, however, requires collective effort not just from across the social science perspectives but from the humanities, the arts, the natural sciences and the professional spheres of medicine and technology. Each member of these spheres of knowledge is implicated in the socio-technical future in the making, each challenged to play their part in closing the gap between the relentless production of techno-futures, knowledge of their immanence, and responsibility for *timeprints*, that is, potential time-distantiated outcomes. Future makers need to unite to engage with socio-technical creations, identify society openings for change and construct alternatives to facilitate a more just order for posterity.



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Notes

¹ For historical work that traces this development, see Le Goff, 1980; for sociological work, see Adam, 2004b, especially chapter 6; for a specific focus on the future, see Adam, 2010.

² A notable example of this would be Peter Winch's influential *The Idea of a Social Science* (1958).

³ Examples of UK work would be Bell, 1974; Clarke, 1964; Cole et al., 1973; Dumont, 1974; Freeman and Jahoda, 1978; and Young, 1968. See also a list of relevant committees set up to shape the future across the social domains, listed in Young, 1968, pp. 35–6.

⁴ Alwin Gouldner's *The Coming Crisis of Western Sociology* is the most prominent example of work that resonated with a large number of American and European sociologists who sought a different role for their discipline and actively worked towards a redefinition.

⁵ The book has been written at a time when human beings were still referred to as men, although it contains a footnote explaining that, of course, 'man' refers to the members of both sexes.

⁶ The term is not explained, so I take it to be used not in the strictly philosophical sense but in the more common-sense way of meaning visionary, beyond the present and not grounded in the empirical world of sense data and experience.

⁷ For further details about Mead's *Philosophy of the Present*, see Adam, 1995, 1998 and 2004a; Eames, 1973; Flaherty and Fine, 2001; and Joas, 1985.

⁸ A term introduced by Anthony Giddens in the late 1970s to encapsulate processes and associated impacts that are dispersed across time and space.

⁹ For two attempts at temporal perspectives on globalisation, see Adam, 1995, chapter 5 and Adam, 2002.

¹⁰ This critical perspective on causality as the prime means of explaining temporal relations in no way negates ways of foreseeing the future that are more genuinely future-based in their approach, such as back-casting or the Foresight and Delphi methods, all of which are designed to overcome the problem of prediction in contexts of uncertainty.

¹¹ The social science literature on this phenomenon is vast. Adam, 1998 and 2000; Bauman, 1998; Beck, 1992/1986 and 1996, can serve as exemplars here.

¹² See also Adam, 1998, for a socio-environmental perspective on the subject.

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