Researching the future: method or madness?

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Abstract

This paper examines the methodological issues behind futures studies, questioning whether it is possible to claim a futures study as methodologically ‘sound’, and critiquing how futures methodology fits within the methodological paradigms currently recognised in the research field. The extent to which futures methodology can be considered a paradigm in its own right is also examined as are the assumptive foundations of future studies. While all the evidence raises many questions as to the form of futures methodology, the lack of clarity does not make a futures study invalid or unreliable, and hence sensemaking from the chaos of futures ‘data’ does ensure that futures studies can be based on method rather than madness.

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How does one research the future? The very notion of researching the future is a paradox. The word research lies within the time boundaries of the past and the present so to research the future appears a logical impossibility. Attempts to ground the methodology in any single paradigm or set of constructs proves a fruitless task. Indeed, it becomes apparent that when undertaking research into an area that is something new, in the future, which could constitute a new field of research, fundamentally a new methodology needs to be created. This paper discusses how the development of a futures methodology is an on-going process which cannot be bounded by the limitations of strict rigour, but is nevertheless a rigorously sound approach to carrying out research.

When researching the future, no one method is appropriate in isolation. While quantitative methods such as forecasting, extrapolation and time series may prove useful if there is raw numerical data to work with, a hypothesis cannot be tested and proven as is the case in many quantitative studies. Given the nature of ‘the future’ itself, raw quantitative analysis needs contextualising and interpreting in light of the assumptive future constructs, and the assumptions themselves need examining for ‘assumption drag’ so that underlying trends and wave patterns are accounted for [1].

1. Paradigmatic analysis

It is questionable in itself whether ‘futures studies’ is an adjective or a noun. In one sense futures studies describes a field of work with a common interest, while in the other it is a discipline in its own right. It may have started in one vein and developed into the other, such that the group of work described as futures studies over time has become established as a discipline in itself. Slaughter [2] maintains that the explicit focus on the negotiation of meanings is one of the key propositions of critical future studies, so the question of whether ‘the study’ is termed as an adjective or a noun is part of the critical process of the study itself.

Bell [3] introduces futures studies as “a new field of inquiry that involves systematic and explicitly thinking about alternative futures” (sic). While Futures Studies has only been recognised as a specific area of study quite recently, Bell [3] traces its roots back to the 16th century. Utopian writing provided the foundations for futures studies. When Thomas Moore

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wrote ‘Utopia’ in 1915 he founded a new genre of literature. Moore’s Utopia was based in the same time frame but a ‘distant’ place. Prior to this, in 1795, the Marquis de Condorcet sketched the ‘Progress of the Human Mind’ looking at the same place but a ‘distant’ time. Thus far utopian writings were centred either in the same place but a future time, or the same time but a future place. Marx and Engels arguably attempted to construct their utopia in the current time and current place. While futures studies should not be works of fiction, stories do have a place in futures methodology. Slaughter [2] suggests that stories should be regarded as powerful explanatory devices as they model human reality in novel and useful ways.

The use of stories and constructing simulations for a virtual futures experience play an important part in futures methodology. They have their origins in the related fields of the interpretative perspective and speculative writing [2]. Markley [4] uses a process of guided cognitive imagery in teaching and learning about the future, suggesting a four part approach. Firstly focussing on the current concern before secondly revisioning it into opportunities. Then the various alternative futures should be experienced through a virtual travel procedure, before further exploration takes place regarding alternative realities.

In 1970, Alvin Toffler published ‘Future Shock’ [5], a book of predictions that certainly undertakes the first two elements of Markley’s approach, if not all in places. It became an international best seller and since then there have been proliferation of ‘futures’ books, models, simulations and studies. In 1964 the World Futures Society was established by Edward Cornish, and a new discipline was being developed.

The extent to which Future Studies is indeed a new discipline is questionable. In many respects future studies falls within existing paradigmatic boundaries. Remenyi et al. [6] suggest that “the techniques used for futures research are relatively positivistic in nature but the results may be interpreted in a more phenomenological way”. Dane [7] discusses the scientific approach to research, defining science as “a systematic approach to the discovery of knowledge based on a set of rules that defines what is acceptable knowledge”.

By applying the rationale outlined by Dane in Table 1, Futures Studies is indeed a science. It is endeavouring to obtain new information within a range of philosophies. Such studies have to generalise from the facts as they are by definition inductive.

Inductive reasoning is a process of generalisation; it involves applying specific information to a general situation or future events… Inductive inferences cannot be proved true, but we need to use them to construct theories until we have evidence to the contrary [7] (p. 32).

The extent to which futures studies are based on consensus is perhaps the most contentious of the elements as many techniques do indeed rely on personal authority. Studies involving Delphi technique, for example, rely on the personal authority of the individuals chosen to participate in the study, but the researcher could maintain distance in the analysis so that their own personal authority does not bias the results. The elements of faith and determinism can be addressed as being the underlying assumptions of futures studies, and a futures study is certainly ‘the best approach we have’ given the chosen area of the research.

Riner [8] (p. 360) reflects on the studies he has carried out in his life and argues that futures studies is a ‘nascent social science’ because it satisfies six criteria of disciplinary organisation:

1. an empirical unit of study—the community being studied, however it may be defined;
2. a central concept—the future image or vision being studied;
3. a model of ‘human’—being holistic, empirical and open ended;
4. a primary method of data collection—even if this is multi-method scenario building;

Table 1
Box 2.1 cited in Dane [7] (p. 32)

<table>
<thead>
<tr>
<th>Science is:</th>
<th>Science is not:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A way to obtain new information</td>
<td>An activity per se</td>
</tr>
<tr>
<td>Described by a philosophy</td>
<td>Defined by only one philosophy</td>
</tr>
<tr>
<td>Generalising from facts</td>
<td>A way to prove theories true</td>
</tr>
<tr>
<td>Grounded in paradigms</td>
<td>Blind acceptance of tradition</td>
</tr>
<tr>
<td>Based on consensus</td>
<td>Relying on personal authority</td>
</tr>
<tr>
<td>A matter of faith</td>
<td>Uncritical faith</td>
</tr>
<tr>
<td>Deterministic</td>
<td>Predestination</td>
</tr>
<tr>
<td>The best approach we have</td>
<td>Refusing to search for a better approach</td>
</tr>
</tbody>
</table>

5. a primary method of data analysis—which would be systematic and rigorous;
6. a primary strategy of explanation—through some evolutionary or whole systems theory.

Wendell Bell is perhaps the most prolific writing on the establishment of futures as a legitimate field of academic study. He proposes as purpose, “to discover or invent, examine and evaluate, and propose possible, probable and preferable futures” [3] (p. 73). Essentially this ‘purpose’ embraces exploratory research (discover, examine and evaluate); descriptive and explanatory research (examine and evaluate); and predictive research (proposing possible, probable and preferable futures). It also has a normative element in terms of ‘preferable’ futures. Bell later goes on to claim that “no theory of society and social change is complete if it does not incorporate the idea of the image of the future” [9] (p.327). This implies that all studies relating to change in society should be futures studies, which either suggests that there have been a number of futures studies carried out using alternative methodologies and research paradigms that still fit the critique of futures studies and hence futures studies is not a new field, or that those studies that are not futures studies are deemed incomplete and hence would be more appropriately finished using futures methodology and futures research paradigms.

Marien [10] contests that one of the ‘disabling myths’ which is limiting the development of futures studies is the notion that futures studies do what no one else does. Where do you draw the line? Marien argues that stating futures studies as a ‘field’ or ‘discipline’ makes it exclusive, which it is not, and that most futurists trained as something else (for example, sociologists or economists) and are hence ‘secondary futurists’.

Marien’s work also highlights the need for futures studies not to be viewed as static but as changing [10]. Huston’s ideas regarding teaching futures studies centres very much on change [11] (p. 436). She has developed a theory of evolving systems which creates an evolving-systems map to elucidate five important insights:

1. The direction of change.
2. The sequence of change.
3. The parameters of change.
4. System migration technique.
5. Emergence and evolution’s traps.
Huston’s work was developed for teaching futures studies at university level, and the focus on change helps make it accessible to anyone from any discipline. However, it assumes you are aware of both the start point and the change that is to take place at the beginning of the study, while some futures studies can start at the end point and work backwards to identify what change should or needs to take place.

So is there anything fundamentally new in futures research methodology? In combining a range of research possibilities, futures studies may well be a legitimate multi-method approach, but there appears to be a need amongst futurists for futures studies to be ‘established’ as a new field in its own right.

This need for legitimate recognition as an independent field of research raises questions as to the motives of the futures researchers. Given the inclusion of futures methods within existing paradigms, the research itself is arguably legitimate so why is there the need for recognition as a separate field? Karen Legge [12] raised similar questions when Human Resource Management endeavoured to identify itself as a separate field from Personnel Management. Essentially, it was argued, that the HRM was ‘old wine in new bottles’ (Armstrong cited in Legge [12]). Ultimately, Legge argues that much of the impetus for the change was self-interest. There has never been a university Chair of Personnel Management, but there are many Chairs of HRM. By recreating itself, personnel management improved its status and visibility as a serious academic subject. Could futures researchers be doing the same thing, and if this is the case, is this necessarily a problem? Slaughter [13] argues strongly for the adoption and expansion of futures studies in universities and colleges to help counter the lack of credibility attached to many futures studies [10].

2. Assumptions underpinning Futures Studies

In his efforts to establish Futures Studies as a paradigm, Bell [8] proposes some assumptions to the field of studies. These assumptions can be critiqued to show many limitations which as a base of assumptions undermine the status of Futures Studies as a discipline:

1. **Time is continuous, linear, unidirectional and irreversible.** This assumption is culturally bound and also conflicts with the theories of quantum physics where more than one time frame operates in the same place and space.
2. **Not everything that will exist has existed or does exist.** This allows for discovery, invention and innovation, and to some extent expresses an obvious state of affairs.
3. **Futures thinking is essential for human action.** This assumption needs further clarification as many human actions occur without a thought to the future. Again there is a cultural assumption here that the ‘here and now’ does not warrant human action, only the future.
4. **In making our way in the world, both individual and collectively, the most useful knowledge is ‘knowledge of the future’.** This is an impossibility. We have no knowledge of the future, and if assumption one is correct, there is no way in which we can have any knowledge of the future. Indeed this assumption is also directly in conflict with assumption five.
5. **The future is nonevidential and cannot be observed, therefore there are no facts about the future.** Does this then mean that all futures studies are works of fiction?
6. **The future is not totally predetermined.** This assumption is useful in legitimising the value of futures studies.
7. **To a greater or lesser degree futures outcomes can be influenced by individual and collective action.** This may be true but it can never be proven. Once an outcome has
occurred we cannot ‘undo’ it and go back and see what would have happened without that influence. The closest approximation would be an experimental design using test groups and control groups, but this could not be carried out into the future without raising serious ethical issues, and nor is it appropriate in this context.

8. The interdependence in the world invites a holistic perspective and transdisciplinary approach, both in the organisation of knowledge for decision making and in social action. Hence futures studies are an approach which can fit holistically within all disciplines and existing paradigms, although again this assumption is culturally dependent.

9. Some futures are better than others. This suggests futures studies is a normative field, yet this element of judgement or utopia does not appear in all discourse, and where it does appear, it is based on the values and interpretation of the present. Bell [14] recognises that utopian writing is “a reaction to what is going on in the world” and tries to legitimise the normative element of futures models by proposing a method for examining moral judgements and value statements. First, has there been commitment to deducibility, that is, do the conclusions follow the assumptions? Secondly, can a causal relationship be established between the model and the value? Finally, what is the epistemic implication? That is, there is a need to test empirically the validity of value statements. This suggests interpretative constructs and paradigmatic analysis within phenomenology. Not all futures studies need to have this normative element. Exploratory studies simply look at plausible futures, ignoring the ‘desirable’ element of a normative study’s focus. Given this, the value element of this final assumption will not hold true for all futures studies.

Sadar [15] claims that the assumptions of futures studies need additions to contextualise them in terms of their historical development. In essence he brings the post-modern vision into the futures debate by claiming that futures studies have been limited by the following:

1. The only worldview, and the associated metaphysics and values, worthy of attention is the western civilisation’s worldview. This has been clearly exemplified by Bells analysis above.
2. There is only one science of nature that is objective, positivist and universal: western science. Hence the culturally bound, narrow definition of science has been applied.
3. Reality, however it is defined, is constructed in the image of the white man. This would equally be argued by feminist researchers.
4. The vast majority of people in the world have no future. Given the current direction of futures studies and their bounded criticality [16], those areas of the world which do not fall within the culturally bound western white male analysis are ignored.

While these may seem a little harsh and directly to the point, Sardar has indeed focused on a trait present in the current futures discourse. When writers consider the digital future, no thought is given to those areas of the world where there is no clean water, never mind digitalisation. Masini [17] highlights democratization as another differentiating factor commenting that “we do not understand what looking into the future means in countries where freedom of action and speech is non-existent” (p. 251). This again highlights the limitations of a normative futures model. It is an inevitable limitation that the ‘preferable’ element is developed on the basis of the authors’ experiences, and they are predominantly western, educated and middle class. Slaughter [18] maintains that recognition of this has been one of the key learning points for futures studies in recent decades. He recognises that “the world ‘out there’ is framed, understood and conditioned through the world ‘in here’” (p. 229).
Yamaguchi [19] poses five inseparable fields of study for future-oriented studies which although developed in terms of a western agenda, do not disregard Sardar’s people ‘with no future’, even if they are beneficiaries rather than contributors initially. Yamaguchi’s FOCAS can be summarised as:

*Wisdom and self-awareness studies*—this includes such ideas as enlightenment, ecological awareness, holistic philosophies and well being. This meets Sardar’s criticism of reality being constructed in the image of the white man, while contributing to Bell’s ideas surrounding influence by any individuals actions and interdependence inviting a holistic approach. Indeed Bell [3] (p. 323) asserts that “humans by their behaviour constantly shape their natural and social environments and in so doing, shape their own future, although not always in ways that they intend or understand”.

*Future-oriented methodological studies*—including chaos theory, statistics, systems theories and so forth. This counters Sardar’s criticism on the definition of science as it opens the door to multi-method approaches and a range of methodical options.

*Human-nature interrelated studies*—including sustainability, communities, and holistic solutions for the environment. This either adds to Sardar’s criticism of the only worldview being western as they have set this agenda to ensure their own sustainable future, or it counters the criticism by ensuring a wider perspective is taken on a holistic basis, viewing the whole planet as the community being studied, with a single environment in need of attention.

*Human-technology interface studies*—including renewable technology, clean energy, information communications and biotechnology. Again, this needs to be broadened to a global scale not to fall foul of Sardar’s criticism that the majority of people have no future.

*Interhuman networking studies*—including cultures, economies and histories. This broader cultural understanding does not feature in Bell’s work, and hence is criticised so strongly by Sardar.

Wager [20] builds the link between history and futures studies, highlighting the role of historians in reconstructing the past and the role of futurists in looking at what may come next. Historians cannot literally reconstruct the past, and futurists cannot literally predict the future. While history may have been written from the perspective of the historian, a futures study does not have to be so culturally limited. Slaughter [2] goes so far as to say that the “essential goal of futures study … is to make the transition from one type of culture to another, while there is still time to do so” (p. 375). He goes on to recognise that discourse is not natural, but is grounded in tradition and communities, and hence it helps to adopt a reflexive posture, knowing what you as an observer are bringing to the process.

Inayatullah [21] uses an approach to futures studies that contextualizes data (the predictive) with the meanings we give them (interpretive) in the light of historical structures of power and knowledge (the critical). He identifies four different levels of reality and ways of knowing in what he terms causal layered analysis. The first level addresses litany, quantitative trends, problems and issues not connected and appearing discontinuous. This sort of reality and knowing is good for the media and politicians. The second level focuses on social causes, the interpretation given to the quantitative data including economic, cultural, political and historical factors. This level looks at how we are interpreting the first level, and what we are doing with the interpretation. The third level addresses deeper concerns with the structure and discourse or worldview that supports and legitimates it. He proposes that discourse can constitute, not just cause and mediate. For example, how many people have died either in the name of God? The final level focuses on metaphor and myth, engaging in deep stories, collective archetypes and the unconscious dimensions of the problem or paradox. This is looking at what is behind level three, how it developed and what
it leads us to do. If this final level of analysis is attained then Sardar’s criticism of futures studies being a western civilization worldview will be countered, if only by the futures researcher understanding that this is the view they are holding and recognising how it is colouring their research.

3. Neutrality and interpretation

In 1911, Dilthey’s thesis that “human discourse and action could not be analysed with the methods of natural and physical science” [22] started the interpretivist traditions, in particular phenomenology. Interpretivists accept that the researcher cannot separate themselves from the research process and bring as much to the encoding and analysis of data as the data itself. Hence the normative rationalisation in futures studies would be expected and anticipated in the phenomenological paradigm and would not be seen as an area of contention. The social construction in which futures writers are framed is that of modern industrial society, based on western rationalisation, science and economic growth [23]. While this may help explain Sardar’s critique of futures studies, it does not justify it.

Hammersley [24] questions the extent to which research in universities can be anything other than a political activity and gives four areas for consideration:

1. *It is implicated in power relations as universities are not autonomous from the state.* This statement relates to the use of universities as vehicles for research, but may become an even greater consideration in the future as corporate links develop further.

2. *It [Research] is autonomous from external power in terms of ideology.* This may allow research to criticise or condemn practices under examination, but again as the corporate element is introduced in the future as a necessary response to funding needs, this autonomy will remain contentious.

3. *Research institutions exercise power on their own behalf and in their own interests.* No institution is likely to publish findings that undermine its raison d’être.

4. *Value judgements are implicated in the research process.* This is presented by Hammersley as an inevitability as all interpretation, deconstruction and analysis is carried out by people who inevitably have been shaped by their prior experiences and this will affect what they see in the data.

5. If research is a political activity, and universities are vehicles for research, it is inevitable that they will be viewed as political institutions. This then raises questions again about the neutrality of a futures study.

4. Futures studies and postmodernism

Futurists do not fall within any single one of the traditional research paradigms. They fall within many of them which is essentially quite a postmodern stance to take. As already mentioned using Dan’s definition of science, a futures study could be considered scientific and this brings it within the realms of positivism. This may not be positivism as the ‘logical positivists’ would pronounce [24], but the twentieth century philosophical positivism which has adapted and learnt from criticism. There are lessons to be learnt from the modern positivists that could apply to Futures Studies within positivism:

1. They remain credible as they accept and deal with criticism.
2. They should not reject natural science as a primary method in social science.
3. They should not abandon the principle of value neutrality as it prevents political ambition.  
4. The importance of clarity of expression.

Philosophy must not be seen as superordinate to empirical research. Research is a practical activity and cannot be governed in any strict way by methodological theory [23] (p. 19).

Postmodernism tries to identify itself as going further than the interpretationist schools of thought within modern paradigms and seeking enlightenment. Janowitz’s view of postmodernism expressed in 1972 did not divide between basic and applied research, nor did it present practical solutions, but saw research as supplying resources that policy-makers and practitioners could use [24] (ch. 7). Hence it provides tools and manuals but does not tell you how to make a table, because directing you to make a table would not be a postmodern thing to do. Indeed, Walker [23] points out that even “defining postmodernism is not the postmodernist thing to do!” The lack of clarity and boundaries to postmodernism allows everything to fall within its reach, which could prove problematic to futures researchers if they are trying to establish themselves as a genre or tradition in their own right.

5. Case study: researching ‘the future university’

Using the subject of the future university as a case study in this paper, it becomes clear that even a subject as defined as this needs a number of elements or strands to be examined in clarifying the research area. In analysing where the future of any research area may be going, an understanding of its history is fundamental. For example, in researching the future university, analysis could take place by mapping and interpreting the British university’s development against the four elements of provision, discourse, time and markets & students.

The time element is perhaps the most straightforward in terms of what key events happened with regard to the founding of the elite ‘traditional’ universities, and their expansion into mass higher education providers. However, time can be more difficult to establish with regard to the developments that are driving the sector into the future. For example, when was the first course delivered by ‘virtual’ delivery? When was the first corporate university founded? When were international students first recognised as a separate market with a separate fee paying structure? The answers to such questions are unclear as much depends on interpretation. There is not just the bricks and mortar university sector to consider. There are also corporate universities and virtual universities such as the University of Phoenix in the USA. With regard to the corporate universities both Walt Disney and Motorola claim to have set up theirs first. Both can be right depending on how you choose to define corporate universities. With regard to a virtual university, would the Open University’s broadcasts of materials over the television network be heralded as the start of virtual delivery?

The same lack of clarity can be found in locating the provision. For example, Rooney and Hearn [25] refer to Darwinism in the university sector and the rise of oligopolies but how and where these will emerge is left unclear. While the traditional, stone built institutions can be (literally) mapped, the virtual and corporate embryos are more difficult to trace. This is partly due to a lack of transparency, particularly on the part of the corporate universities, and a lack of visibility on the part of the virtual developments as they are strategically revealed to niche markets in a highly focused and controlled manner. They do not undertake mass marketing to raise general awareness of their existence because their client base has been clearly defined.

An added difficulty of both the time and provision elements is that neither are constants and hence they continually change throughout the progress of the study. New developments become apparent on a weekly basis. One way to rationalise this is through identifying most
of the new developments as being, to a large extent, copies of existing provisions but in different locations and markets. The university sector, its *modus operandi* and bureaucracy, makes it difficult for it to change at any great speed, so minor advancements tend to be seen rather than giant leaps forward. A futures study in another field may have to address the constant change factor differently, and it is a difficult factor to limit.

Raymond William’s [26] cultural analysis, identifying the residual, the dominant and the emergent discourses proved useful in modelling the various discourses existing within the traditional university sector and the educational journals, press and publications which maintain its status quo. An emergent discourse can be a helpful precursor to any futures study. By identifying the emergent model, alternative normative future models can be developed.

Much of the change in the ‘markets and students’ of universities has been the result of external factors. Skolnik’s [27] vision of the future university moves us from being campus-centric to consumer-centric, from local protection to global competitiveness and towards marketing and mergers, all of which are driven from factors outside of the university sector itself. The introduction of student fees into the British university sector has added a new area of debate to the agenda, although payment of fees is common practice in the USA, Canada and many other countries. Manicas [28] sees higher education at the brink in the future as it is no longer affordable, while Duderstadt [29] sees the rising cost of academic excellence and the limits on resources as one of the key challenges of change for the university in the 21st century.

The final element, which spans the other four, is that of mental models. This looks at and challenges the mental models and constructs that have developed in light of the other four analyses. A mental model is the way in which we interpret and make sense of the world. Mental models give us insight into how people interpret evidence presented. In developing his vision of the idea of a university, Sarles [30] states his “concern is that we are asking questions about futurity within a model of the university and knowledge that has been running as much on inertia as substance for quite a while” (p. 408). Getting people to step outside their current mental models into new ones has proven virtually impossible for some people to do, and yet others found it easy. The ability to have vision and holistic understanding is a core competence for futures researchers, and it is questionable whether it is present, or can even be developed, in everyone. While it can’t be learnt like statistical method, the ability to use vision and systematically apply and interpret its meaning adds rigour to a futures study in the same way that quantitative analysis adds rigour to the testing of variables.

While the five strands above may have helped define ‘how’ the future university could be broken down, each also required a multi-method approach to establish the ‘what’ with regard to each strand. Each could be systematically analysed in a number of ways.

1. *Information in the Public Domain*—newspapers, journals, television and government papers all prove very useful, but by far the most fruitful source is the world wide web. The web is particularly useful for the provision and discourse elements as it was often possible to see future developments on the web before they are presented in a format acceptable for consideration as academic discourse or media friendly. When it comes to digital delivery and the virtual university, the provision is ahead of the discourse. Barnett [31] suggests that universities need new ways of understanding themselves. The lack of censorship, peer review or any form of quality assurance with regard to web based sources does need to be noted, however they are still valid data sources of representations made by the various sites themselves. Even if their reliability or validity would be questioned as a
matter of fact, they must be considered valid as representations of their owners or domains.

2. Attitudes—in any futures study there will be many differing parties who have attitudes and opinions they wish to share with the futures researcher. In the case of the future university these may include academics, students, any locatable stakeholder and/or customer, and those outside of the ‘university’ community such as local accommodation providers, employers, etc. Attitudes are particularly useful in gauging the markets, students and provision elements of the future university study, as well as providing views on the expected or anticipated impacts on future students and current academics.

3. Historical logic—this is an essential element in any futures study as you need to understand how and why you are where you are today as a starting point. Without having developed the historical map of where ‘the university’ has come from, it would be difficult both to map the time element and to understand the rationale behind the competing mental models, attitudes and opinions.

4. Experience—by discussing peoples’ experiences you should start to develop a feel for the subject matter you are dealing with, and some gaps in provision may become noticeable. For example, a number of higher education institutions are developing lifelong learning award frameworks to help develop curriculum and accredit experience and learning which has not been traditionally held within the boundaries of the university’s remit as a result of organisations sharing their experiences with their local university providers.

5. Models of the future—digital, apocalyptic and utopian models of the future all need to be considered in a futures study, although the apocalyptic models should not be pursued in any great depth as these imply that there is no future beyond a certain point in time. The digital model is the one on which future university studies tend to focus most closely. Elements from the others could be considered but can largely be rejected on the basis that they do not fit with the available evidence, trends and changes currently taking place in the higher education sector.

The combining of methods in any futures study arises from the need to find a workable design. As the combinations of questions raised may not have been asked before, the design of a research strategy may not have been considered. Robson [32] maintains “the general principle is that the research strategy or strategies, and the methods or techniques employed, must be appropriate for the questions you want to answer”.

The use of more than one method in research study allows for the data to have been ‘triangulated’. Cohen and Manion [33] suggest that triangulation is particularly useful when trying to achieve a broader perspective, such as when group, scientific data of an objective nature can be used alongside individuals’ data which tends to be more subjective. This, however, does raise the question of validity—is each method employed providing evidence concerning the same construct? The construct being case studied here is wide (the Future University), and the nature of futures approaches are such that they require diversity and alternatives. It could therefore be argued that any data collected within such a study is valid.

The reliability of the data requires separate scrutiny. One of the core elements of the research is time. While the research is being conducted, time is moving on. Data collected on one day could be superseded by data collected the next. This is exemplified by the development in the UK of a national e-university, where newspaper reports changed the proposition on a daily basis over a couple of months, and then the government’s own website suggested something completely different from the press reports. The ongoing time element in any futures study raises concerns around the reliability of the data. The only way that this can be satisfactorily resolved is to say that any such futures study is essentially a snapshot, a
freeze frame, or a moment in suspension where time has stood still and a picture has been taken. Then, as time moves on, the picture starts to change.

6. Conclusions—method, madness and chaos

Essentially futures research is postmodern research, while also being interpretive and scientific. If this multiple approach allows it to distinguish itself as a research tradition in its own right, so be it. In undertaking futures research, the lack of clarity of method and underpinning assumptions can lead to circular arguments with little progress in designing the method. In the end, a truly original futures study is likely to develop its own method by combining a range of methods from a variety of research traditions. This does not make it any more or less valid as a piece of research, simply different. It does not mean that its method is any more or less reliable than other postmodern approaches, it is simply an alternative method. Futures studies are steeped in chaos as they try to make sense of what will happen given diverse sources of data in multiple time frames. No one method will ever suffice in looking at the future, a multiple method approach has to satisfy at present as yet we have no guaranteed crystal balls.

References