Futures Studies: From Individual to Social Capacity

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Abstract

Futures study is not yet well established at the social level. Given the unstable conditions of the late 20th century, and the challenging outlook of the early 21st, this is a serious oversight. The paper considers how futures studies can be progressively developed through five distinct layers, or levels. First is the natural capacity of the human brain/mind system to envisage a range of futures. Second, is the clarifying, enlivening and motivating role of futures concepts and ideas. Third are analytic gains provided by futures tools and methods. Fourth is a range of practical and intellectual applications, or contexts. When each of these levels functions in a coordinated way, grounds for the emergence of Futures Studies as the social level can clearly be seen. The paper concludes with a brief summary of a preferred future that would arguably be within reach if futures studies were to progress along such a path from individual to social capacity.

Introduction

At first sight the future is a highly problematic field of study. How, it is asked, may one study something that doesn't exist? Futurists respond to this basic challenge in various ways. For example, they may point out that Futures Studies deals with intangible phenomena - as do aesthetics, law, ethics and religion. Others suggest that Futures Studies is essentially about how present-day ideas, feelings, goals etc. influence the future. Still others focus on the creation of 'surrogate' -, or 'interpretative' knowledge about the future that takes the place of future facts. In this latter view the future can be said to exist - not as an empirical, measurable realm, but as one of vision, will, understanding and interpretation. Hence Futures Studies is more closely related to the social sciences (and vice versa) than to the so-called 'hard' sciences. It is therefore reasonable to think of the future as 'a principle of present action', because this highlights the way past, present and future interacts.

For most people, however, 'the future' remains a vague and unfocused abstraction. While stereotypical images of futures are widely available in popular culture, few people take them seriously or consider the much wider range of images and social trajectories that are available. Equally, the rich links between values, paradigms, ways of knowing and the future are overlooked - even by some futurists. Thus, for the majority, the future might as well be 'an empty space' for all the effect it has on their daily lives and decisions, their personal and professional behaviour.

It is for such reasons that governments around the world still maintain their short-term time-horizons up to the next election, with little or no thought for the longer-term. For the implications, that is, of the major shifts under way, the period of fundamental transition collectively facing us in the 21st century and the plight of future generations. How, then, could this apparent abstraction, 'the future' be made more real, more accessible, more a part of daily life? How can a technology-obsessed culture reign in its dynamism and listen to the more subtle

voices of the natural world and the needs of future generations? I do not think that such outcomes can be achieved by threats, gloom-and-doom posturing, or any expectation that governance will be transformed in the near future. A different strategy is needed: one that recognises the *layered quality* of futures understanding. This cannot be legislated into existence. However, this paper explores the view that it can be built up layer-by-layer over a period of time (see Figure 1, appendix).

Level 1: Human capacities and perceptions

A sound place to begin is with individual human capacities. It is evident that the human brain-mind system is richly endowed with the capacity not just for primary consciousness (seeing only what is directly available to the senses) but with *reflexive understanding in time.* This higher-order consciousness is characterised by the ability to remember and to learn, to roam consciously throughout a rich, complex, extended present, to understand responsibilities and consequences, and to speculate on futures yet to come. Edelman characterises it this way. He writes:

> The freeing of parts of conscious thought from the constraints of an immediate present and the increased richness of social communication allow for the anticipation of future states and for planned behaviour. With that ability come the abilities to model the world, to make explicit comparisons and to weigh outcomes; through such comparisons comes the possibility of reorganising plans. Obviously, these capabilities have adaptive value. [1]

Human beings therefore have an *innate* capacity for speculation, foresight, modelling and choosing between alternatives. They are not stranded, willy-nilly, in a deterministic world. Rather, they are consciously located in a socially created, but self-actualised, matrix of structures, understandings and forces. It is for such reasons that human beings are able to think not only about 'the future' but futures plural. Unlike the human body, which is necessarily constrained in time by the close coordination of biology (respiration, digestion, protein synthesis), the human mind, imagination and spirit are free to roam at will among a stunning array of different worlds and world-views, past, present and future. They can also communicate directly with future generations.

Crudely put, the 'wiring' of the brain/mind system is sufficiently complex and inclusive to permit at least three kinds of journeys. It routinely permits consideration of past environments that the body and perceptual apparatus were never present to experience directly. It supports knowledge and understanding of significant contexts in the historical present which are displaced in space (eg. Chernobyl, Bosnia, Okalahoma City); and it enables the forward view - a potentially panoramic outlook on a vast span of alternative futures. Figure 1 therefore includes capacities and perceptions as two of the 'building blocks' of futures study in general and the future generations perspective in particular. The ability to think ahead is grounded in these features. It is an *emergent capacity* of this complex, elegant system. This is why all normal persons are fundamentally capable of foresight, forward thinking and responsible behaviour focused on long-term considerations. In contrast to the professional (and professionalised) work of, eg, forecasters and scenario analysts, one does not need a Ph.D. and an academic base in order to engage in long-term thinking.

Level 2: Futures concepts enable a futures discourse

However, the raw capacity of the brain/mind system clearly does not automatically lead to understanding and competence. The rare stories of children raised by animals give weight to the view that to become properly human, the young need to be nurtured within a family and inducted into the symbolic social world of language and culture. So far, so good. Unfortunately, however, those raised in Western, or Westernised cultures, are likely to be imbued with the characteristic Western outlook. Nature is purely utilitarian - it is merely a resource for human use. Growth is seen as an unproblematic and unquestioned good. Science and technology are primary forces in creating 'opportunity' and hence the future. The cultural past is valued and tangible but the future is not similarly regarded. [2]

Critical futures study makes it clear that such embedded cultural commitments are complicit in the emergence of the global problematique in all its many dimensions. Therefore, each generation that takes on such commitments and assumptions, that regards them as natural and normal, perpetuates an unsustainable world order at a very fundamental level. However, as noted, higher-order consciousness is reflexive. It can look clearly on its own pre-suppositions and, where the evidence is clear, change them. This work is obviously not easy, but it is certainly possible over a period of time. As this occurs, so the 'mist' clears, and a diagnosis can emerge about the global plight of humankind. Unfortunately, this is as far as many scholars and others get. Yet the next step is as simple as it is powerful: the development of a personal futures discourse.

It is tempting to see such a discourse as simply a matter of acquiring the appropriate language. There is some truth in this, but it is not the whole picture. As a teenager I read a great deal of SF. Without realising it at the time, I was learning a grammar of futures imagery that subverted the usual default view of the future as a blank space and instead populated it with an immense variety of images, meanings and possibilities. Because of this variety, my relationship to the future became active, rather than passive. For example, I began to wonder why so many fictional futures were populated by cruel aliens, implacably menacing super-computers, rampaging robots and earthly catastrophes. Why, I wondered, could the future not be a desirable place, even in imagination? The answers to such questions led me to the futures field, its rich, inspiring literature and, eventually, to some of the people who created both.

When I later began to explore the world of Futures Studies, I came to see that there was indeed a distinct discourse. As I began to immerse myself in it, so many aspects of the futures dimension began to clarify and to connect with features of the present that implied particular directions, outcomes and scenarios. This provided a new purchase on current affairs. Eventually I could see that society is profoundly affected by a small number of dominant discourses that, in no small way, condition the framing of current issues and concerns - and hence the priorities and directions adopted at any time. One of the dominant discourses is an economic one. It heavily influences how governments govern, allocate resources and make decisions. However, it is predicated on a range of untenable assumptions that have been thoroughly critiqued by

futurists and others. [3] Another dominant discourse, not unconnected with the above, is the commercial one. This is based on equally untenable assumptions. It essentially says: 'buy, consume, use and use up everything you want. Give no thought for tomorrow'. A third discourse is academic. It is deeply conservative and committed to boundary-maintenance. Here future-discounting is very strong. Academia values the past much, much more deeply than the future. One could go on, but I think the point is made.

Set against the above are a number of newer discourses which are engaged in a symbolic struggle for acceptance. For example, a peace discourse, an environmental discourse, and discourse arising from the women's movement. Each attempts to legitimise particular concerns through language.

The futures discourse shares in the need to achieve acceptance and legitimation. But it is less clearly focused on achieving specific cultural goals. The most specific generalisations that could, perhaps, be derived are the need for a shift from short-, to long-term thinking and the notion of sustainability as a social goal. [4] Beyond this, however, it does not appear to be strongly prescriptive. One reason may be that the core concept of 'alternatives' mitigates against such an approach. Yet I think it true to say that the lack of a futures discourse in society is one of the structural impediments to adaptive change. Or, put positively, the wider up-take of the discourse is one of the most powerful strategies for dealing with the apparently intractable dilemmas of the present and near-term future.

Without a futures discourse founded on the critical thinking alluded to above, 'the future' is occluded, hidden, continually just out of sight and therefore out of mind. People therefore just don't think about it. I call this the 'threshold problem'. The many rich possibilities for understanding the global predicament, reconceptualising aspects of it and steering toward consciously chosen outcomes are therefore overlooked. So what can be done? A number of futures scholars have tried to make futures concepts and ideas more widely available in the belief that, in so doing, the social capacity to use and apply the discourse will be enhanced. [5] What evidence is there for this view? It is two-fold. First, there is the personal experience of a dawning awareness followed much later by a progressively deeper understanding. Second, there is the experience of graduate students from around the world who came fresh to futures studies and finished their courses with a much more empowered and insightful view. I do not want to underestimate the problems that students new to futures studies may experience, but I have no doubt whatever of the enabling power of a futures discourse.[6]

Table 1
Sample of futures concepts

alternatives and choices
breakdown and renewal
cultural editing
empowerment
extended present
foresight

futures in education
future generations
reflexivity
social innovations
sustainability
time frames
vision
a wise culture

The most broadly useful futures concepts are those which have a certain 'amplitude'; that is, they can be approached and understood on a variety of levels. They can therefore be introduced to young children as well as adults. For example, the notion of foresight may seem difficult. But it can be approached concretely by observing its use in everyday life (walking, driving, sailing etc.). Later, the notion of a 'loop of futures scanning' can be introduced. Still later aspects of systems thinking and theories of human perception come into view. For these and other reasons, foresight is one of the most productive futures concepts I have ever encountered (which is why I wrote a book about it). Some others are given in Table 1.

It might be objected that not all such concepts are 'owned' by futurists. Quite so. But when they are used in a sustained way and in combination with others, as well as with the other resources available through futures studies they do, I believe, permit *a distinctly futures-oriented quality of understanding* to emerge. It is this which is the goal and purpose of futures educators, rather than the pursuit of any particular future scenario. Thus, futures concepts enable a futures discourse. It is the latter that provides the foundation for an applied futures perspective, rather than techniques *per se*. However, as the following section suggests, methodologies do have an essential role to play in moving from an individual toward a social capacity for futures studies.

Level 3: Futures Methodologies and Tools

If it is innate capacities that make futures thinking possible and futures concepts that enable a futures discourse to emerge, it is the use of tools and methodologies that raises the power of a futures perspective to a new level. Some examples are given in Table 2.

Table 2
Futures methodologies

backcasting
causal layered analysis
cross-impact matrices
Delphi surveys
environmental scanning
forecasting
scenario building

strategic management
trend analysis

It is all very well to articulate futures issues and problems. But at the end of the day discourse alone cannot deal adequately with many broader or more complex futures concerns. For example, take the practical need to assess if a power station or a new major road is, or is not, necessary. To make a sound decision depends not merely on ideas and discourse, but also on the extended treatment of complex sets of data. This is where a purely literary-based discourse reaches its limits: it cannot handle data. But futures methodologies can. That is essentially why they been developed and implemented. Table 2 lists some common futures methodologies that are used to generate, manipulate and evaluate information about the future.

In the case of building a major road or airport, much work would be needed to collect time-series data from the recent past and then subject it to various forms of mathematical extension. It is here that scenarios can also be used to embed the raw data in humanly meaningful contexts, ie, self-consistent pictures of possible futures. From this kind of elaboration emerges a view of the context in which the proposed project can be located. Does it still make sense? Is it 'economic'? Are the trends likely to hold up? What 'system breaks' can be envisaged? And so on. It is clearly a very demanding and sophisticated exercise that requires expert knowledge and understanding. In France the work of Michel Godet, which goes under the heading of 'La Prospective', has carried this kind of approach to its highest level of accomplishment. [7] It is both commercially and intellectually successful, providing many companies with valuable strategic intelligence about their business, products and markets. In other words, the manipulation of large data sets in combination with conceptual sophistication allows a kind of extended analysis to take place that deals successfully with complex practical problems.

There is also another aspect to this level: futures tools. By tools I mean much simpler strategies and procedures to extend understanding in a wide range of situations. Table 3 gives some examples. Such futures tools have been derived from the conceptual and the methodological resources of the futures field by many people: educators, social activists, workshop facilitators and others. Metaphorically speaking they provide a very comprehensive 'tool-kit' for those working with young people or other enabling contexts. Various attempts have been made to make some of the most useful tools available in published form. [8]

Even taken alone such tools can be extremely useful. Take the futures wheel. It is a very simple idea. A possible future event is placed in the centre of a piece of paper. Immediate consequences are traced out in a rough circle. These 'first-order' items are then explored in another ring and so on. Practitioners have found it an ideal starting point to investigate the implications of many topics with people of all ages, from very young children to corporate executives. In other words, it has the 'amplitude' I mentioned above. It can also be used as a mind-map, a counselling tool and a way of exploring assumptions.

Table 3
Futures tools

assessing global 'health'
brainstorming
the critique of images of futures
dealing with young people's fears
exploring the extended present
futures wheels
imaging workshops
the loop of futures scanning
questions about futures
simple cross-impact matrices
simple scenarios
simple technology-assessment
simple trend analysis
social innovations process
time capsules
time lines
values clarification

But futures tools do not exist in isolation. They can be assembled in many varied and productive sequences. This is partly why they are such a useful and flexible educational resource. For example, one can begin with an exercise dealing with optimism and pessimism, continue with one dealing with young people's fears, continue again with one on social innovations and end with another using simple scenarios. From this basis, a second sequence could examine some more advanced concepts and ideas: the critique of the industrial worldview, the nature of a wise culture, communicating with and caring about future generations. The subjects and permutations are endless. Clearly such tools involve and complement the use of futures concepts.

Thus futures methodologies and tools greatly enhance the development of a futures perspective by extending the analytic, cognitive and intellectual reach of those using them.

Level 4: Futures applications

All the above would be very limited in scope if such resources were only used in an ad hoc, informal way. But they take on much greater force and power when embodied in specific contextual applications. Some examples of the latter are given in Table 4.

Table 4
Futures applications

critical futures studies
future generations studies
futures in education

futures research institutions
institutions of foresight
strategic foresight
twenty first century studies
university futures departments

There is some overlap here with the implementation of the more sophisticated methodologies, since the latter obviously require a context. But it is the term 'context' that is significant. It does not matter how articulate we may become, or how far-reaching our methodologies may be. If there is no supportive context, such powers will be difficult to sustain; they may wither and die. This is the fate of all-too-many futures-related educational innovations. So the key to this level is the provision of an institutional or organisational milieu where high-level futures work can thrive, develop, be critiqued and implemented. I will now briefly discuss the examples given.

Critical futures study uses the standard tools of scholarship to raise the power of futures thinking to a higher level. [9] However, it cannot take place in isolation. There is no point in gaining insight if the insights are private, unavailable and not susceptible to the very necessary process of disciplinary criticism and feedback. For me the key to implementing some of the insights from critical futures study was to embed them in post-graduate university courses. [10] This had the benefit of testing them against the criteria of tertiary institutions and also against the needs and perceptions of successive cohorts of post-graduate students. It is essential that such work is openly tested and does not become a private indulgence.

Future generations studies is a new field which has emerged from futures studies per se and from the application of particular values within a futures perspective. In this view, future generations are radically disadvantaged by many present trends, structures and practices. Therefore, ways are needed to raise the profile of future generations, to give them a voice, and for contemporary societies to recognise their needs in present-day councils. This necessary social innovation is given even more weight when it is realised that many traditional cultures in the past already understood the necessity of so doing. [11]

More generally, much of the foregoing can be implemented in education at the school and college level. I have always argued that instead of being seen as a brash newcomer, a futures perspective is intrinsic to the tasks of teaching, learning, teacher preparation and professional development (particularly for principals). Schools are in the business of preparing the next generation for life in the early 21st century. They are therefore one of the few social institutions with a social mandate to think long-term, though few of them yet know how to do it. Still, there are signs of progress. As this paper is written, the Board of Senior Secondary School Studies in Queensland, Australia, has started to trial a new, four semester futures syllabus for year 11 and 12 students. I expect this kind of innovation to become much more common as the new millennium draws closer. The opportunities for productive work in this area are much greater than is commonly recognised.[12]

Futures research institutes are organisations purposely designed to facilitate the kind of extended, high-level, data-driven work noted above. They have sprung up in many countries, particularly in the USA, where a combination of wealth, entrepreneurial drive and deep-seated perception of opportunities and problems, has created a critical mass of expertise. Such institutes tend, on the whole, to carry out work for government departments, public utilities and corporate clients. What I all institutions of foresight (IOFs) are closely related to them. They may use some of the same methods. However their values tend to be different and the focus is more in the public interest arena. Depending on how they are defined, there are several hundred IOFs around the world.[13] They exist because perceptive people in all regions have understood the drift of world events, have seen the outlines of the 'great transition' that lies ahead, and have realised that no country should simply drift into this most dangerous and challenging time. This sense independent discovery gives weight to what I think of as a growing 'congruence of insight' about the fundamental problems facing humanity, as well as long-term, systemic solutions. Hence the research institutions and the IOFs play a potentially central role in helping to embed society-wide changes of perception and practice.

Another milieu in which such work may be done is within the strategic planning units of various organisations. While strategic planning has not always lived up to the expectations loaded upon it, most large organisations have discovered that they must try to operate strategically. Those who do not are much more likely to fail. So strategic planning is not likely to be abandoned. It can, however, be improved by opening it up to the kinds of symbolic and methodological resources outlined here, thus creating a new focus on strategic foresight. Too often, for example, it is the case that corporate approaches to futures are epistemologically and ideologically naive, taking, for example, a particular corporate or cultural ideology as 'given' and missing altogether the many options for critical analysis and reconceptualisation upon which lasting social innovations may depend. Some management books fall into exactly this trap, eg., Hamil and Prahalad's Competing for the Future. Others, such as Paul Hawken's The Ecology of Commerce, deal with the coming transition in much more conceptually adroit ways.[14]

The emergence of 21st century studies is potentially significant. A number of national studies have been, and are being, carried out. A conceptual and methodological tool kit has been developed, along with an enviable grasp of the organisational and practical issues which can determine success or failure.[15] It is regrettable that only a small number of nations have so far participated in this program. Many rich Western nations, including Australia, continue to proceed in blissful ignorance of the high-quality international 'conversation' that they are missing. In time, the national studies will form the basis of a global overview of perspectives for the 21st century. It is a prospect that no nation on Earth can afford to overlook.

Finally, there is clearly a role for universities in the development of an advanced futures discourse and the implementation of foresight. It is a matter of profound regret that so few of them have so far understood how thoroughly the prospects for humankind have altered during the present century, and therefore remain preoccupied with history, boundaries, subject areas and 'knowledge for its own sake'. Yet departments of futures studies or futures research in a number of countries are clearly viable; moreover many futures courses are taught from within

parallel disciplines such as science studies, development studies, geography, sociology and politics.

In summary, the implementation of futures thinking lags well behind its conceptual and methodological development. However, as the practicality and applicability of futures studies becomes more widely known, this is likely to change.

The social capacity for foresight

At the human level foresight is a largely undeveloped human capacity that is, nonetheless, used ubiquitously in everyday life. At the organisational level, foresight is much rarer, being subsumed into the limited operations of marketing, strategic planning and organisational development. At the social level, a capacity for foresight barely exists at the present time. The great social institutions: government, business, education, commerce mostly continue as though the particular trajectory of Western culture could continue forever. Specifically, they do not incorporate a clear understanding of the change of scale in human activity and impact that has occurred in recent history. Thus, as Milbrath and others have pointed out, the old trajectory cannot be maintained. Business-as-usual thinking remains the norm. But we no longer live in 'normal' times. It would be easy to conclude that the outlook is therefore hopeless. But that is not the conclusion of this paper, nor the collective one of the field of futures studies.

At first sight the possibility of seeing the future as anything other than a blank, vaguely menacing space, seems unavoidable. Few people have been exposed to futures ideas in their formal education, and few encounter them in later years except in the mostly degraded forms available through popular entertainment and commerce. In the standard view, a common response is to work hard for 'my family', 'my job' or perhaps 'my country', and to stay clear of 'the big picture' because it is too challenging and difficult. In this way, whole populations are de-skilled and disempowered. Most young people grow up fearing the future and therefore early on learn the comforts of denial, evasion and avoidance. However, a wholly different outlook is not only possible, it is feasible and, indeed, much more desirable. I will therefore close this account with a brief summary of a preferred future. Much more work is needed here. Positive visions are in short supply, but they are badly needed to provide the young, in particular, with antidotes to the prevailing mood of pessimism and despair. [16]

A preferred future

In my preferred future, schools and other progressive social organisations take heed of the innate capacities and needs of human beings according to a broader map of knowledge. The latter extends vertically to embrace a number of ways of knowing so that empirical, communicative and transcendent phenomena all have their place.[17] It also stretches out horizontally and embraces aspects of past and future, thereby greatly enriching the present and clarifying the dense interrelationships between them. Elise Boulding's notion of a '200-year present' is very helpful here.[18]

Then, given a clearly deteriorating world outlook, futures concepts are taken up universally, integrated into many different fields and also developed within an advanced futures discourse. The latter influences other discourses - particularly those of politics, business and education. The change is catalytic. Insights which had been mulled over quietly by perceptive people all over the world steadily emerge into the light of day where wider populations can respond to them. The old idea of the future as an empty space fades away and is replaced with a new set of reflexive understandings about the constitution of human cultures and responses in space and time. The future is no longer an abstraction. Rather, a 'grammar' derived from a much wider range of ideas and images becomes widely shared. This strengthens the newly-emerging futures discourse. Suddenly the human race begins to grasp the predicament it is in - and the many ways of dealing with it.

Futures tools and methodologies spring up everywhere. A whole growth industry develops as a new, more enlightened generation of consultants, motivational speakers and men and women in all professions and fields begin to adopt, shape and apply these resources in their own lives and work. It is a part of the dynamic 'service sector' which is based on qualitative growth, facilitative processes, communication - and hence involving minimal environmental impacts. The growth of social innovations accelerates and foresight, futures thinking, is implemented just about everywhere. Governments are startled out of their complacency and short-term habits. They are not reformed overnight. But they do ensure that the very best futures thinking is available to them at source. So a new generation of research institutions and IOFs spring up, many sponsored by anxious governments themselves.

As these social, cultural, organisational and other processes flow together something quite new emerges. It is not the 'noosphere' dreamed of by Teilhard de Chardin, nor the full-blown 'wise culture' sought by visionaries and far-sighted observers.[19] It does not solve all the world's problems overnight, but it does establish a different outlook and perhaps the preconditions of humanly-compelling futures. The new quality is a collective capacity for, and commitment to, long-term thinking. A foresight culture therefore emerges at the dawn of the 21st century. It is a culture that routinely thinks long-term, takes future generations seriously, learns its way toward sustainability and brings the whole earth back from the brink of catastrophe.

The old material growth economy is steadily replaced by a 'restorative economy'. Growth itself becomes a dubious concept - unless it is preceded by the term 'qualitative'. Corporations become intelligent, value-based and systems-aware. The earlier commercial outlook disappears and re-emerges in notions of service and long-term quality. Education is transformed. The schools are vital nodes within the new culture, the springboards for society-wide foresight. Universities finally get the message and begin to break down the old inter-departmental barriers: interdisciplinarity thrives. Futures study and research are seen to be one of the emerging disciplines of the new century. A whole new generation of scholars discovers a realm of enquiry that their ancestors would have thought impossible. [20]

The world is no Utopia. Wars still break out. Viruses ravage certain areas. It is a nervous time and many species could not be saved. There is a collective sense of loss and grief. But a

different sensibility is abroad. It is one that sees each generation as links in a chain, not only as inheritors of the past but also as guardians of the future. The species looks out on a newly enchanted world and universe. It grows beyond the primitive ego states and destructive technologies that drove so much of earlier history. Finally it grows toward maturity.

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Appendix

Figure 1
Futures study - from individual to social capacity

Levels		Indicators
Level 5:	Social capacity for foresight as an emergent property	Long-term thinking becomes a social norm
Level 4:	Futures processes, projects & structures embodied in variety of applications	Foresight routinely applied in most organisations
Level 3:	Futures tools & methodologies increase analytic power	Widespread use of standard fs tools & methods
Level 2:	Futures concepts & ideas enable a futures discourse	Futures concepts & ideas become influential via discourse
Level 1:	Raw capacities & perceptions of the human brain-mind system	Unreflective use of forward thinking in daily life of individual

Figure 1 illustrates the way that futures study is progressively enabled level-by-level from a raw, under-utilised, potential to an applied social resource. At level 1, futures thinking is virtually impossible, and the future seems to be an 'empty space'. However, concepts, methods and applications augment these capacities. The future then emerges as an *active social category* brimming with social implications.