



Developing Frameworks for New Theories in Futures Studies

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How to develop frameworks for new theories is one of the most interesting questions we could attempt to answer in futures studies. The process may be summarized as follows:

1. Understanding the components of a framework (interacting variables that model a phenomenon or problem).
2. Goal setting for the framework (helping futures thinking to be practiced in a better way).
3. Going along with main kinds of futures thinking (definite, speculative, and visionary futures thinking).

In general, a framework is a real or conceptual structure intended to serve as a support or guide for the building of something that expands the structure into something useful (Theoretical Framework, <http://education.astate.edu/dcline/guide/framework.html>).

First, we need to know what a conceptual framework is. A conceptual framework is a concise description (often accompanied by a graphic or visual depiction) of the major variables operating within the arena of the problem to be pursued, together with the researcher's overarching view of how the variables interact (or could be made to interact under conditions of manipulability) to produce a more powerful or comprehensive "model" of relevant phenomena than has heretofore been available for shedding light on the problem (Bishop 2009).

Second, we should remember that the ultimate goal of building a conceptual framework for theories in futures studies is to help practice futures thinking in a better way. And third, we may remember three kinds of futures thinking, as summarized in the following table:

Table 1: Different Kinds of Futures, Forces, Thinking and Techniques

Futures	Forces	Thinking	Techniques
Expected (baseline)	Constants Trends	Definite Scientific	Historical analogy Extrapolation
Plausible (alternative)	Discontinuities Surprises	Speculative Imaginative	Scenarios Simulation
Preferable (visionary)	Choices Images	Visionary Empowered	Visioning Planning

Source: Bishop 2009

In other words, any kind of framework should consider three main kinds of futures: expected, plausible, and preferable. What is usually neglected is the distinction of thinking regarding these types of futures. Methods of thinking as well as types of futures are different.

Three phases of developing frameworks mentioned above are discussed in the next sections. Keeping Causal Layered Analysis (CLA) method in mind (Inayatullah), four main questions have been raised and answered in a layered manner:

1. How have different paradigms been shaped? (Litany)
2. What has made developing new theories a real need? (Social Causes)
3. How can new futures-studies theories be generated? (Worldviews)
4. How can futures thinking be improved by new theories? (Myths)

IT'S TIME TO GO BEYOND CONTEMPORARY PARADIGMS

Barry Hughes argues that images of the future hinge on the

worldview of the futurist, defining a worldview as “a comprehensive set of values, basic assumptions about the way the world works and derivative understandings of complex events and processes. It implies as well derivative prescriptions with respect to individual, social, and political behavior.” Hughes adds that worldview is roughly synonymous with such alternative terms as “paradigm,” “prescriptive political theory,” and “ideology” (Hughes 1985). A paradigm of the future is an explanation and description of the future. Futurists tend to develop both paradigms of the future (where we are, how we got here, and where we are going) and ideologies of the future (what we may be doing wrong and what we should do differently) (Wagar 1998). Futurists tend to develop paradigms that are descriptive and prescriptive, treating issues of both fact and value, theory and fact, and ideology and value that are connected together.

For instance, Richard Slaughter’s (1996) paradigm of human reality is that the modern world has an excessive industrial and materialistic culture and has created a “crisis” point in human history—potential disasters are imminent, due to our imbalanced mind-set and manner in which we live.

There is a strong connection between futurists’ paradigms and the predictions and prescriptions they offer. Depending on how we see and interpret reality, we will create alternative descriptions, make different predictions, and attempt to understand reality in different ways. The framework of a futurist influences both his/her predictions and actions. Some futurists interpret our present reality rather negatively, while others see the present more positively. Some emphasize technology more, and some emphasize humanistic elements.

Depending upon the paradigm, we focus our attention toward different aspects of reality and become motivated to alternative courses of actions and thus, to some degree, create differences in how the future unfolds. As science philosophers Paul Feyerabend and Thomas Kuhn have pointed out, the theoretical concepts in a scientific explanation of nature clearly influence and color the descriptions and pre-

dictions that a futurist makes about the world (Feyerabend 1965).

Different modes of future consciousness, such as the rational, scientific, mystical, and narrative, have evolved throughout human history, and different cultures and societies have created different belief systems, theories, archetypes, myths, visions, and values in conceptualizing the future. According to the Tofflers, modern civilization, building on basic human psychology and traditions of history, has developed a new set of approaches or methods (Lombardo 2006).

Meanwhile, futurists like Slaughter believe that we should broaden our approaches to the future to include the insights and methods of spiritual, mystical, introspective, and inner-directed traditions and philosophies (Slaughter 2003). Hence, he does not limit futurist methods to scientific methodologies, since he sees important roles for personal meaning, phenomenology observations, and “transcendent realities” in thinking about the future. For Slaughter, the methods of futurists presuppose paradigms regarding the nature of reality, which are often influenced by cultural beliefs and values. Therefore, we should expand our modes of thinking and values beyond this culture and limited mind-set if we are to move successfully beyond this critical point in human history. It’s time to go beyond contemporary paradigms.

HOW HAVE DIFFERENT PARADIGMS BEEN SHAPED? (LITANY)

Paradigms of the Future

Numerous paradigms of the future have been evolved during the history of this field. For example, there are a significant number of mythological and wisdom approaches to the future, and there are many paradigms connected with the idea of linear progress. The following are some of the most influential and popular contemporary ideologies having impressive roles in shaping futurists’ paradigms:

- **Globalization:** The world is evolving into a global society along economic, political, and cultural dimensions.
- **Accelerative Change:** Change in almost all facets of human life

is accelerating and will continue to do so in the future.

- **The Technological Transformation of Humanity:** Humanity and technology are integrating. Computer and communication technologies have become increasingly embedded into our lives and our society. Biotechnology is transforming humanity.
- **The Adventure into Outer Space:** Humanity will travel into and colonize outer space (Hines 1995).

Paradigms in Futures Studies

In a specified review conducted by Patokorpi and Ahvenainen (2008), paradigms in futures studies were categorized in order to see how they can respond to solve current and future needs of humanity. The following table represents a summary of this categorization.

Table 2: Paradigms in Futures Studies

Advocates of various schools of thought	Orientation
Gaston Berger, Bertrand de Jouvenel	Prospective, futurible
Roy Amara	Probable, possible, preferable
Jurgen Habermas (Richard Slaughter)	Technical, hermeneutic/(practical), emancipatory
Eleonora Barbieri Massini	Extrapolation, Utopia, Vision
Sohail Inayatullah	Predictive-empirical, cultural-interpretative, critical-post-structuralist
Wendell Bell	Positivism, critical realism, post-positivism
Mika Mannermaa	Descriptive, scenario paradigm, evolutionary
Who is next? ...	What is the orientation? ...

Source: Erkki Patokorpi and Marko Ahvenainen, 2008, with modification

Who will be the next advocate, and what will be his/her orientation? Regardless of possible answers to this question, as you see, these and many other theories shape the futurists' paradigms leading them to take personal styles in their ways of thinking and behaving. In addition, there are many kinds of styles for futurists when they enter the practical aspect of their studies: foresight.

Scharmer (2002, 2007) has been building U Theory, an alternative foresight system, based on group cognition to presence the future. Another foresight system is integral futures (Slaughter 2008), built on a wider evolution of consciousness as a collective and planetary imperative (Gidley 2007). There is temporal orientation research (Stratham and Joireman 2005), which has explored future time perspective and motivation for more than 60 years.

If futures studies aims to make any theoretical progress at the individual, organizational, or social level, Gary (2008) claims it must not reinvent the wheel, but stand on the shoulder of giants who are working from interactionist and integrated paradigms. The main challenge that futurists are now facing is generating an integrated set of theories of foresight underlying their practice. The process of making new theories in futures studies can begin with finding worthy research questions, such as: How do effective leaders construct and use futurist visions for their strategic decision making? How does contemporary futures studies relate to other intellectual capacities such as reasoning, thinking, learning, imagination, intuition, and creativity? How do futures studies correlate with learning theories? Can new futures studies concepts lead to theories that strengthen organizational performance (Slaughter 2004)? It seems that futures studies is at the edge of a regeneration, and a new school of thought may be born that will shape our paradigms with a new orientation.

WHAT HAS MADE DEVELOPING NEW THEORIES A REAL NEED? (SOCIAL CAUSES)

Different descriptions have been offered about futures studies,

yet perhaps the best one can be found in Wendell Bell's description of the subject matter of futures studies: "to discover or invent, examine and evaluate, and propose possible, probable and preferable futures" (Bell 1996). On the other hand, I believe that there is a need for rethinking the dynamics of science and research in the context of innovation systems. Jim Dator said once, "futures studies should be useful" (Dator 1996). Since usefulness is a pursuit of being responsive to current needs, it is necessary to reexamine the efficiency of past theories in relation to different needs we may face within the coming future. The nature of humans' needs has a changing identity and this makes theories and theories-building activities more dynamic and up to date.

Since the emergence of futures studies as an academic research field after the Second World War, it has become a trans-multidisciplinary field of research with a diversity of schools of thought, theories, qualitative and quantitative methods, approaches, and applications.

Futures studies had significant gains during the 1990s by developing its basic knowledge as an academic field. Now, after passing a decade of the third millennium, futures studies must define its role through offering a new theoretical base appropriate for an era of "post-normality." This will involve theory derivation from different fields and theory generation suitable for futuristic activities (Gary 2008). New philosophies and theories should be developed, and related methods should be introduced and applied in futures research activities. Studying alternative futures related to different societal, industrial, organizational, and developmental fields requires new theories in futures studies to accomplish foresight missions in an effective manner.

As a rule, futures studies is seen as a systemic, heuristic, and trans-disciplinary approach to all human endeavors. The core competences of futures studies are modeling future-oriented information (well-grounded beliefs and reasonable hints) and processing futures

design. The aforementioned two basic approaches reveal two functions for futures studies: (1) “explanatory-predictive” as a traditional perspective, and (2) “proactive-creative” as an emergent perspective (Slaughter 2002).

Meanwhile, futures studies aims at well-grounded descriptive forecasts considering reasonable or plausible futures. On the other hand, by promoting interaction between information carriers and by exceeding conventional thresholds between information interfaces, futures studies tries to take a proactive role, “an innovative control” (Slaughter 2002), over systemic futures. It is obvious that this introduction is not a wall-to-wall picture of futures studies but is adequate for framing some questions, worthy of clarification, considering the futures of the field. Previously, Inayatullah (2008) had introduced six pillars of futures studies that provide a theory of futures thinking and is linked to methods and tools. The pillars are: mapping, anticipation, timing, deepening, creating alternatives, and transforming (MATDCT).

Although theories like MATDCT seem useful, others may not be effective enough. It is believed that design theory based on the problem-solving paradigm is too narrow for sustainable futures and that, by focusing on interaction rather than information, the sociological, technological, environmental, economic, political, anthropological, and psychological aspects can better be taken into consideration. The emergent role of interaction can be recognized from increasing “foresight activity.” The term foresight has been used much in futures studies, especially in Europe, during the last decade. Foresight as a method combines the three components—futures, planning, and networking—with the three activities—critical thinking, debate/participation, and future shaping—under the systemic and proactive approach to futures (FORERA, <http://forera.jrc.ec.europa.eu/>).

However, I acknowledge that increasing proactivity might involve a dilemma. The more we are proactive, the more there will be

turbulence in the operational environment, and thereby the more difficult it will be to foresee the future (Slaughter 2002). The well-known question of “What is preferable?” is philosophically essential to futures studies, as it emphasizes the “openness” of futures in contrast to deterministic views. It is the same thing that constitutes the foundation of all of efforts made in the way of reaching sustainable development, especially in developing societies. Sustainable development as the significant mark of this era makes it necessary to think about new theories, rather than just relying on old paradigms and theories. This is not only a friendly suggestion, but a real growing need.

It is abundantly clear in this second decade of the twenty-first century that we face a series of unprecedented environmental and social challenges that, in combination, threaten the sustainability of human civilization. These challenges include the threat of dangerous climate change, unsustainable growth in resource use, loss of supporting ecosystems, extreme inequity between and within nations, severe poverty across much of the planet, and management of technological risks associated with nuclear weapons, artificial intelligence, and nanotechnology. Slaughter (Riedy 2009) calls the combination of these and other bleak trends our “civilization challenge.”

Futures thinking should be one of our key defenses against this civilization challenge, allowing us to anticipate dangerous trends, identify desirable futures, and respond appropriately. Foresight is needed to steer a path towards a sustainable civilization. Futures work can fulfill this role by influencing decision makers in positions of power to deliver policy and action consistent with a sustainable future or by contributing to the establishment of social movements that bypass existing decision makers and power structures.

We should not forget that there is always a wave of criticism regarding futures work. If we study these critiques carefully, we may find proper theoretical responses for them. At least, the strategies that are offered as solutions to cope with these critiques give us necessary clues to find out more in this regard. There is nothing wrong with current

or old theories, but new theories should be developed and established in order to make contemporary futures more effective than before. In a pragmatic study, Chris Riedy (2009) counted different reasons for lack of influence of futures work and simultaneously suggested strategies to increase the influence. Table 3 shows a brief summary of his study.

Table 3: Strategies for Increasing the Influence of Futures Work

Reason for lack of influence	Strategies to increase influence
Much futures work is shallow and of poor quality	Wider application of advanced futures methods, including critical, layered, and integral approaches
Links to specific actions are difficult to make	Use futures methods with an action focus, such as backcasting
The dominant Western worldview reinforces short-term thinking	Align futures work with worldview. Transform worldview to be more receptive to futures work
Futurists do not engage sufficiently with the political context	Build or contribute to political movements that seek desirable change. Provide a voice for marginalized perspectives
Decision makers are unable to understand the implications of futures work	Build individual capacity for understanding and application of foresight. Translate futures concepts into readily understandable terms
Decision makers are unwilling or unable to act on futures work for moral reasons	Seek to initiate moral development of decision makers. Translate futures work into terms that resonate with the moral capacity of the decision maker
Futurists often have a poor understanding of their audience	Assess audience capacity. Translate futures work into terms that resonate with the capacity of the decision maker

Source: Mermert 2008

In addition to strengthening futures work, developing new theories can make new capacities in futures thinking, broadening futurists' paradigms to new territories, and developing their forward views regarding the future of life on this planet or even in outer space.

HOW CAN NEW FUTURES STUDIES THEORIES BE GENERATED? (WORLDVIEWS)

A theory can be defined as an abstract description and explanation of some set of related facts or dimension of reality. There is a vital need to make a clear differentiation between theories *of* futures studies and theories *in* futures studies, as they are not the same and need a careful distinction. The former is needed to justify the activity to the world beyond futures studies, and the latter to underpin the activities it undertakes. The two are interrelated but need to be framed in distinct ways.

Theories of Futures Studies

A theory of futures studies both describes and explains present contemporary facts and trends and presents a variety of hypotheses regarding the future; it identifies the direction that reality is taking into the future (Anderson 1995). Theories of futures studies often provide an interpretation of both the past and the present, suggesting trends and directions in our history that may continue into the future. A theory of the future may make specific predictions or describe some set of plausible possibilities for the future.

Theories of futures studies are prescriptive as well as descriptive. They do not simply explain the present and predict the future, but they also prescribe what we should and should not do in effecting the future course of events. A theory often proposes a general plan of action for tomorrow. Theories of futures studies are prescriptive because they are usually connected with values and ideologies; contemporary conditions and trends are evaluated as to their negative or positive qualities, and desirable or preferable future directions and goals are identified and argued for, all relative to a set of values. Fur-

ther, a theory of futures studies provides a sense of inspiration also based on a set of values. Finally, the facts and predictions highlighted within a theory strongly influence the values prescribed and vice versa. Vision and value are connected.

Theories in Futures Studies

Theories in futures studies attempt to provide supportive explanations and synoptic descriptions of our present conditions and fundamental trends, but there are many different theories—each with its own slant on things—emphasizing one or more of the fundamental dimensions of change. Theories in futures studies themselves are in a state of mutual amplification and development, both in competition and collaboration. There are many answers to the question of the meaning of our times—for we live in an era of multiple and complex theories and stories—and this kaleidoscopic array of views is in fact an essential feature of the answer to the question of the meaning of our times.

By identifying the structure of a phenomenon, the analysts create a theory of how things really work. Theories in futures studies help us understand the dynamics of futures studies and how can we create our preferable futures.

The following suggestions may generate new theories in futures studies. Remember that they are not unique approaches, and many other ways can be conceived and suggested based on the creativity of futurists' minds and their personal experience.

One way to develop a theory in futures studies is to determine which parameters do (or do not) show substantial differences among alternative futures of a phenomenon. Impressive factors relating to these individual futures can be studied and their probable relation to the ultimate shape of different futures can be explored. Then, related theories may be offered as far as these relations are meaningful.

Another way is to increase your knowledge on the topic you have brought under your study. This can be done through gathering and reviewing futures studies literature. Sometimes new relations between dif-

ferent factors are explored through a careful futures studies literature review. Remember that your proposed theory should be worthy enough to advance contemporary futures studies. Review your theory and see if it is contributing something new to the futures-studies knowledge base.

One of the most effective ways of developing new theories is finding probable connections between your studied phenomenon and futures studies knowledge. This will show you the real worth of your theory. Perhaps your theory is genuine, but seek for other similar or even a parent theory as a source of the derivation. Focus on your theory or parts of it and find out which parts can better explain or predict the future of phenomenon you are studying.

A useful way to propose new branded theories in futures studies is choosing relevant concepts and structures in a selective manner. By doing this, you will have a new conceptual structure. The remaining job is refining your theory. Eliminate those aspects of the theory that are not very useful, so that the remaining parts may be enough to maintain your desired meaning and concept. Sometimes more development or refining may be necessary to offer a comprehensive theory more meaningful to futures work. A summary of suggested ways can be found in Table 4.

Table 4: Six Ways to Generate New Theories in Futures Studies

1. Identifying parameters that show differences among alternative futures.
2. Studying impressive factors related to individual futures and their probable relationships.
3. Gathering and reviewing futures studies literature.
4. Finding probable connections between the studied phenomenon and futures studies knowledge.
5. Seeking for similar or parent theories as sources of the derivation.
6. Choosing relevant concepts and structures in a selective manner.

HOW CAN FUTURES THINKING BE IMPROVED BY NEW THEORIES? (MYTHS)

Futures research questions should lead us to research hypotheses. New concepts should be represented as variables, and their relationships should be examined. A hypothesis can be accepted or rejected after conducting related statistical tests. The findings of research should be shaped into a coherent form of knowledge that is called theory. A theory along with related methods constitutes what is called a framework (Gary 2008).

To have a realistic understanding of contemporary theories, let's just sketch a rough picture of the situation, by reviewing important aspects of the development of the futures field (Mermet 2008). As expressed by Bertrand de Jouvenel (1964): "One always foresees, without richness of data, without awareness of method, without critique nor cooperation. It is now urgent and important to give this individual and natural activity a cooperative, organized character, and submit it to growing demands of intellectual rigor." This has proved a decisive basis for the development of the field, from the 1960s to the present day. It has led to a situation where most works on futures are legitimized through their connection to business management, to public decision making, or both. The success of foresight in recent years is an illustration of the strength of this covenant between futures methodology and the needs of long-term, strategic management and policy. Although many such avenues have been opened, they have not been explored very far, because the evaluation of new theories has been based on their adequacy in serving studies designed for the preparation of decision making or of collective action.

Another strong impact of basing most developments of futures on the idea of contributing to decision making has been the deep hybridization between practitioners and academics within the futures community, including the various intermediary consulting arrangements. The existence and work experience of networks of practitio-

ners, academics, and consultants is a major asset of the field, but it may also become a source of rigidity and vulnerability.

In the same context, academic disciplines in general have declined to study futures, and left to futurists a field that most disciplines felt was too unscientific for academic comfort. As a result, those interested in the eccentric effort of studying futures could function as a rather autonomous community, occupying a niche in which they could exercise a very high degree of freedom. They came to the Futures Island from various disciplines, each one bringing his or her background as a contribution to the melting pot of theory in the futures field. As a result, the field operated in comparative isolation, enjoying a sort of exclusivity on a subject of practical importance that provided funding, exciting challenges, and the incentive for people of very different backgrounds to function as a community of research, consulting, and practice.

There are also downsides to this focus on theoretical and process codification, such as a tendency towards the proliferation of approaches and to a relative devaluation both of substantive productions (i.e., a critique) and of examination of more theoretical work (i.e., a theoretical analysis of procedural activity). These major traits of the futures field are both the result of and an adaptation to a situation where academic disciplines carry epistemological beliefs that lead them to eschew both the study of futures and specific collaboration between researcher and practitioner.

In the last 20 years, however, this context has been undergoing an important gradual transformation, the consequences of which are now starting to affect the futures field in a major way. The field of environment and sustainable development provides good examples. On issues such as climate change or the evolution of land use, the production and discussion of simulations has become a large-scale industry with heavy involvement of academic communities (Lombardo 2006). Of course, by no means have all academic disciplines or fields of interest followed this direction yet, but the movement is starting;

it must, and probably will, continue.

Coming back to the question I raised in the beginning of this section, I should say that generating new futures studies theories basically involves two kinds of endeavor. The first is to develop theoretical underpinning through a critical consideration and mobilization of theories from other fields, aiming either at strengthening theory, methodology, and practice of studies on futures, or at analysis and critique of futures work. The second endeavor is the continuation and renewal of work developed mostly from within the futures studies field, with efforts bearing on the theorization of futures studies practice, methods, and results.

My personal review of futures studies literature illustrates these endeavors. Within the scope of growing internal reflexivity in the field, there are two elements that remain underexposed in current analysis, but which are part of a general reflection on theoretical underpinning: (1) a historical perspective, and (2) a linguistic perspective.

The first offers the potential of learning from what the major futurists have offered to the field. Rereading and critically reexamining groundbreaking works by de Jouvenel, Berger, Polak, Boulding, Jungk, Kahn, etc., may be a valuable source for grounding futures research. Attempts in this direction have been made, but most of them are limited in scope or are only instrumental in defending an idea. The second, the linguistic (semantic) perspective, underscores the importance of language as the major, if not only, tool of futures research. This linguistic perspective demands a reflexive approach to the way we use language to explore the future and the vocabulary that is needed to do so.

CONCLUSION

We are in the midst of a fundamental world transformation, with a set of different theories and values systems of the future attempting to define and guide the direction for tomorrow. The future,

in fact, will be greatly influenced by these theories and paradigms. Theoretical challenges can play a constructive role through promoting dialogue and an ongoing evolution of our understanding of where we are and where we are going. Theories of futures studies often focus on some particular theme or themes considered of central importance in the nature and organization of future events.

Three phases of a process are considered for frameworks that are required to develop new theories in futures studies. In addition, four questions are raised and answered based on the Causal Layered Analysis perspective in this article. The first phase is concentrated on understanding the components of frameworks that may be developed for new theories in futures studies. A range of elements, such as world-view, paradigm, and ideology, were considered in this regard. Meanwhile, paradigms of the future and paradigms in futures studies were addressed distinctively. The second phase of process that is “goal setting” is accompanied with studying theories *of* and *in* futures studies separately. Finally, the third phase of the process is accomplished through recognizing the ways by which we may generate new theories in futures studies.

As the issue of developing frameworks for new theories in futures studies may have other aspects besides those discussed in this article, more research can be done in the future, especially with keeping epistemological and ontological considerations in mind. The major objective of this analysis was emboldening the growing need for developing new theories and also offering a conceptual approach in order to confront current and future challenges of futures field in a wiser manner.

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