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# Intellectual Trade between Economics and Sociology: Rationality and Choice in Futures Studies

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*As pointed out by Duesenberry (1960), "Economics is all about how people make choices. Sociology is all about how they don't have any choice to make." This paper treats Futures Studies as a holistic and synthesized field and follows techniques from Economics and Sociology to bridge "how people make choices" and "they don't have any choice to make." Accordingly, the issue of rationality can be investigated further since choice cannot be made without a well defined rationality concept. The substantive contents of rationality proposed in this paper allow us to further visualize the theory of rational choice, emphasizing both the scientific approach to experimentation and the ethical approach to value judgement.*

**Keywords:** interdisciplinary approach, rationality, choice

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### *Introduction*

The Futures Studies' reasoning or approach is linked to future thinking, which is a need, a choice, and a way of thinking (Masini, 1993). Choice cannot be made without first defining rationality and forecasting. Cornish with members and staff of the World Future Society (1977) presented several hypotheses about the futurist perspective.<sup>1</sup> Rationality and forecasting are Cornish's most frequently mentioned hypothesis. Most literature in this holistic and synthesized field of Futures Studies pays significant attention to the forecasting issue. However, rationality is an issue not yet thoroughly addressed by Cornish as well as other futurists. This has prompted some incentive to produce further research on this issue. Accordingly, the issue of how rationality is well defined and how it is linked to the theory of choice deserve close scrutiny.

As pointed out by Duesenberry (1960), "Economics is all about how people make choices; Sociology is all about how they don't have any choice to making." This paper borrows techniques from both Economics and Sociology to bridge "making choices" in Economics and "no choices to make" in Sociology. This methodological borrowing of techniques is used, as Bell (1997) says, to get the method commonly used in other disciplines.<sup>2</sup> This "borrowing techniques" is not distinctive to Futures Studies. What determines the relevance of this borrowing technique to the futures field is its substantive content and the purpose of the use rather than the borrowing technique methodological characteristic alone. According to Masini's approach (1993), the relevance of "borrowing techniques" to this paper is not its methodological "interdisciplinary approach" characteristic but its' "complex content."

Choice is made with individual preference, belief, opportunity, and action. However, both preference and belief are simplified and hence treated as exogenous factors in Economics. Consequently, value judgement is not thoroughly considered in economic analysis, especially in the theory of choice. On the contrary, preference and belief are deeply taken in to account in Sociology. A framework for analyzing preference and belief is inevitably complicated and diversified. The major advantage of our proposed approach is that rationality in Economics and Sociology is addressed simultaneously rather than separately. This simultaneous approach allows us to further investigate the theory of choice emphasizing both the scientific approach to experimentation and the ethical approach to value judgement.

The rest of this paper is organized as follows. Section II presents a

simplified value judgement framework. Section III is devoted to the analysis rationality in Futures Studies. The final section contains the concluding remarks.

### *A Simplified Framework of Value Judgement*

In our daily life, a way of thinking will be built when an event or phenomenon is observed or analyzed. The structure of a thinking is inevitably complicated and diversified. Much of common sense experience is gained by a process of simplification. This simplification is usually applicable to much of the knowledge gained in science. We start with the phenomena the scientist seeks to understand and a system or theory is developed that consists of a set of assertions from which consequences are derived, using the rules of logic. The model of a theory can be recognize as an outcome of the process of simplification.

Both common sense and scientific knowledge are built using the process of simplification. Consequently both have the same thought structure. Only the degree of simplification possibly makes scientific knowledge different from common sense. The following question, one of the most argumentative, is what is the rule or logic of simplification or abstraction. According to Max Weber, the criteria for simplification or abstraction heavily relies on a scientist's subjectivity, which is closely related to value judgement.

One of the most crucial issues in Futures Studies is value judgement. Because futurists are concerned about the future and this concern includes desire and fear, they believe that they are, through their actions, democratically building the future. Futurists exhibit a deep interest in values, the criteria by which one decides what to choose (Cornish, p. 186). Thus, we are allowed to say that Futures Studies is not persuasive unless the issue of value judgement is investigated. Most people who do not get involved in the area of Futures Studies generally believe that this discipline involves the technical forecasting method itself. This is not an appropriate concept since the technical forecasting method is not able to explicitly include the subjective variables of desire and fear in the future. The approach or reasoning of Futures Studies emphasizes the past, the present and the future time path in terms of value judgement.

Ozbekhan (1960) suggested that it is important to distinguish "that will be" from "that which we want to be." When human beings have the capability to make use of a technology to overcome difficulties in their

daily life, they will work hard to improve the technology and aggressively use it and rely on it. Under these circumstances, Ozbekhan argues that this is a greater danger in our time because "can implies ought." As soon as we are able to do it, it becomes compulsory; hence, the value of human beings is ignored and the technology is introduced to dominate the value judgement. This is the so-called monopoly of autocracy. Under this circumstance, we are allowed to state that the future dominates the fate of human beings because the past plus the present continuously constructs the future. This statement is also the result of admitting to the mistake of equating Futures Studies the technical forecasting method. Accordingly, a simplified value judgement framework in Futures Studies must explicitly include human nature, experience and knowledge when simplification is used in the process of investigating alternative futures.

### *Rationality in Futures Studies*

Jantsch (1967) defines Futures Studies as a forecasting discipline, which is probabilistic and a relatively scientific affirmation on the choices and consequences of problems and phenomena related to the future. McHale and McHale (1976) stated that Futures Studies as a discipline includes all forms of extrapolations from the past and the present into the future. According to Godet (1979), the foundation of Futures Studies is a prospective state that goes beyond forecasting. In addition, Future Studies basically emerges from the crucial and deterministic influence of the past and the present, on the one hand, and the choice, will and action in the present, on the other. An important definition of Futures Studies proposed by Chang (1984) can be treated as a prospect on the basis of reality. Chang emphasized that the only space on which human-beings can have a significant impact is the future. Futures Studies can be treated as a science requiring systemic methods in the field. More recently, Baker (1987) defined that Futures Studies constitutes an interdisciplinary, methodological, systemic critical analysis of human nature, experience and knowledge, with the primary purpose of understanding and developing humanity's actual and potential abilities to forecast and influence the emergence of alternative futures.

According to the above descriptions of the definition of Futures Studies, the deterministic past, choice, will and action of the present, and alternative futures are apparently related to the issue of values which can not be judged without further discussing the theory of rational choice.

Thus, an incentive to further research in rational choice in the area of Futures Studies is demonstrated in this paper.

The relevance to distinguished rationality has been deeply analyzed by two distinguished papers, "The Impact of Economics on Contemporary Sociology" by Baron & Hannan (1994) and "Rationality and Social Choice" by Sen (1995). One of the crucial issues discussed by Baron & Hannan is rational choice Sociology; by Sen is values and individual choices. Both papers, dealing intensively with the issue of rationality, attempted to relax barriers to intellectual trade between Economics and Sociology.<sup>3</sup> Both Sociology and Economics are defined as a fields of social science. However, the definition of rationality in both fields is in disagreement. An interdisciplinary approach, emphasizing intellectual trade, is proposed by this paper to discuss the issue of rationality in the value judgement simplified framework. Accordingly, that disagreement is expected to be encountered.

Scarcity is emphasized in Economics. This concept is not that economic resources are limited, but that human desires are boundless. Choice is made necessary by scarcity and in turn implies opportunity cost. If an individual behaves rationally in the economic sense, the goal he pursues is his maximum utility subject to the possible constraints of scarcity. How does an individual make a rational choice? Four subsidiary elements: preference, belief, opportunity, and action are required to answer this question.

#### *Preference*

The preference relation specifies the capacities and inclinations of the consuming agent when faced with a situation of choice. The "law of demand" was built on some extremely strong assumptions. For example, "pleasure" and "pain" in terms of utility and disutility can be explicitly measured and compared between individuals. In addition, the "principle of diminishing marginal utility" is held to be universal in the consumer theory. Any theory, which depends on a willingness to accept the above assumptions, will naturally tend to have only limited applicability.<sup>4</sup>

Given the limited applicability, the notion of preference is very primitive. For instance, when economists say that an individual prefers commodity bundle A to commodity bundle B, this statement is assumed to be self-evident and requires no explanation. Economists do not investigate further why an individual prefers A to B, but are concerned with whether or not the individual is able to tell why he prefers A to B, and to be consistent in his weak-ordered preference relation.

*Belief*

Human desires, including wants and not-wants are boundless and those are the issues of possible futures or possible alternative performances. How do we decide what is preferable? This is the question of belief: making value judgements objectively. According to Elster (1986), "In order to know what to do, we first have to know what to believe with respect to the relevant factual matters. Hence a theory of rational choice must be supplemented by a theory of rational belief." The belief foundation of choice theory emphasizes an individual's not acting out of pure habit or emotion. Belief is about the casual structure of the world and can be viewed as providing hypothesized links between alternative actions and their consequences defined in terms of utility. Under these circumstances, belief is utilized to overcome the problem that economists do not investigate further why an individual prefers A to B mentioned in the previous discussion about preferences.

*Opportunity*

Opportunity means opportunity cost concerning limited resources or constraints. Elster believes that it is not necessary to explicitly distinguish opportunity from preference. This does not mean that opportunity cost is ignored, but it is taken into account implicitly under preference. Caporaso & Levine have a different opinion about opportunity and preference. They believe that it is absolutely required to determine the differences between resources and preferences. Resources tell us the actions of "able to" and preference tell us the actions of "willing to." "Willing to" is not always equal to "able to." In fact, both "willing to" and "able to" are not necessary to be consistent.

To overcome the above problem, Elster defined the concept of feasibility set as a set of actions that are possible, given logical, physical and economic constraints. In this case, resources and constraints are included in the feasibility set to frame preferences. The separability between opportunity and preference can then be ignored. Under this manipulation, opportunity is no longer exogenous but endogenous to the preference structure. In other words, opportunity is implicitly assumed to equal preference; that is, "willing to" equals "able to."

*Action*

Actions are the results of rational choices. The aim of rational choice theory is to explain those choices. This primary framework is based on the exogenous factors of preferences and beliefs. Choices respond to



change incentives (costs) at the margin within the framework. In traditional consumer theory, a consumer tries to pursue his maximum utility subject to his income constraint. His choice is rational if the maximum-utility behavior is performed. This means that the result of maximum utility is existent and stable.<sup>5</sup> Furthermore, his choice behavior obeys the way of making "willing to" equate "able to"; that is, the marginal utility ratio is equal to the market price ratio.

The fundamental framework of rational choice embodies a concept of how preference, belief, opportunity and action stand in relation to one another. This relationship consists of two parts: consistent criterion that applies to the structure of preference and belief, and the consistence of a series of corresponding requirements. An action is rational when it stands in relation to preference, belief and resources. The action is rational when it can be shown *ex ante* rather than *ex post* to the best status possible to satisfy the individual preferences in the feasibility-set setting. Since a rational choice is supplemented by a rational belief, individual's preference must be consistent with his belief, which ensures that he not to act out of pure habit or emotion. In addition, the principle of "willing to"- "able to" ratios is prevalent.

There are three possible sources of confusion in explaining rational choice. First, rationality and self-interest are often treated as synonymous; in fact, they are wide apart in meaning. According to Sen (1989), rationality is purely procedural in that it specifies nothing about the content of the pursued goals. In contrast, the concept of self-interest at least reflects want, desire and need but does not imply rationality. A person can display self-interest and at the same time be totally irrational.

Second, should preference be viewed from psychological data, which indicates mental or emotional states, or from behavioral data which conforms to specified consistency requirements? Economists have largely opted for the latter viewpoint and mental or emotional states are neglected by them. This seems to erode some of the contents of our previous work on how preferences, beliefs, opportunities and actions stand in relation to one another.

Third, the confusion concerns the unit to which the terms of rational discourse are applied. If the unit is a collectivity, there maybe a serious problem with aggregation of preferences. Under this limitation, it may be impossible to have social preferences. The famous Arrow's impossibility theorem (Arrow, 1951) states that a social welfare function will not be existent if the function expresses the preferences of the collectivity as a whole and conforms to the (consistency requirements es-

established for individual preference orderings. Thus, a rational choice explanation may be invalid because the collective agents are not rational or because the idea of what is rational for the collectivity can not be operative.

The theory of individual rational choice is very often used to explain the operations of an economy or society. However, Economics and Sociology view the theory of individual rational choice differently because both sciences do not have a consistent interpretation of individualism, rationality and voluntarism.

According to Baron & Hannan, a sociological argument claims that it cannot be reduced analytically to arguments about individual action. Modern Sociology intensively discusses and investigates "social facts." In its methodology, individual behavior and action are treated as an externality or a constraint. Following the traditional limitation, sociological reasoning barely deals with the issue of individual rational choice. In addition, Sociology pays little attention to Economics, especially microeconomics, because economic reasoning emphasizes choices.

In the development of Sociology, rationality is an argumentative issue. Vilferdo Pareto believes that Economics is a study of rational behavior. The critical argument of the sociological approach to rational choice theory is voluntarism. Generally speaking, sociologists accept the viewpoint of exchange as embedded within the systems of power, domination, or norms. They believe that it is unrealistic to regard many actions as choices, especially the coercive and/or normative institutional arrangements. It is impossible and unrealistic to have a consistent agreement of public affairs. Duesenberry (1960) states that "Economics is all about how people make choices. Sociology is all about how they don't have any choice to make."

Most sociologists do not directly define preferences by means of rationality judgements and instead view preferences as the result of enduring exchanges and social contracts. Preferences in Sociology are treated as an endogenous factor. This is the reason why human beings always seek consistency between their conduct and beliefs. People try to conform to the values and expectation of others as well. This concept results from Charles Horton Cooley's "looking glass itself." Individual behavior is deeply influenced by social reaction.

Much sociological work regards that preference cannot be viewed separately from the roles which are social (not technical) definitions of durable clusters of tasks, rights, and responsibilities. The so-called individual role is the consistent state in terms of compatibility between tastes

and role demands. If social roles are discussed for some purposes, individual roles are naturally as fluid as the pattern of movements among roles. Under these circumstances, individual roles or preferences can be ignored in the discussion or analysis of social roles.

The economic reasoning to rationality conceptually includes preference, belief, opportunity and action and emphasizes the relations between those four components. In order to intensively investigate choice activities, Economics treats those four components in the individual rational choice in a simplified way. Market mechanisms, at the same time, are simply viewed as a summation of individual activities. Preferences in Economics are traded off by choices. This conclusion results from a common assumption that preferences remain constant. In other words, value judgement in terms of preference is neglected in analyzing economic problems. In this case, this economic reasoning easily falls into Ozbekhen's "can implies ought" which is a potential disaster for human beings.

On the contrary, sociologists use a very complicated method to analyze individual behavior, including the effects of values, prior experience, commitment, location in the social network, and context. In addition, a very complicated mechanism is used to aggregate individual interests and actions. Coleman argues that sociologists make a serious strategy mistake by building a much too complicated basis for individual rational choice. To overcome this problem, Coleman suggests that sociologists adopt the definition or methodology about individual activities used in the area Economics to investigate social problems. This is the so-called theory of individual rational choice in Sociology. This theory claims social order as a consequence of voluntary action by self-interested individuals. This viewpoint from individual rational choice in Sociology supports Sen (1995): the prospects of rationality in social decisions must be fundamentally conditional on the nature individual rationality.

According to Jantsch, McHale & McHale, Godet, Chang, and Baker, the definition of Futures Studies can be classified in to two parts: time path and forecasting. Both parts deal much with choices. The existence of history is the result of current protection, while the future of human fate depends on current decision. Both protection and decision are heavily related to the issue of choice. During taking actions of choice, value judgements play an important role. Thus, the rationality of individual choice can be summarized in Figure 1. The methodology about the issue of rationality in Futures Studies does not accept either economic reasoning with the simplified method or sociological reasoning with the

complicate method, but makes use of both Economics and Sociology with the intermediate method to visualize individual behavior. Therefore, not only choices but also preferences are dealt with in the area of Futures Studies. Both qualitative and quantitative strategies must be methodized to investigate time path and forecasting. Following this way of thinking, Futures Studies will not fall into the trap of "can implies ought" or "ought implies can." This methodology reflects the interdisciplinary approach feature associated with a simplified framework of value judgement and supports Coleman's rational choice Sociology.

For example, gross national product (GNP) is one of the crucial indicators to measure economic progress.<sup>6</sup> As pointed out by Henderson (1991), GNP is losing its meaning as a measuring system for real-world production and monetary value. A new indicator, Country Futures Indicator (CFI) proposed by Henderson, takes into account the many other non-monetary issues that contribute to the quality of life. The quality of life measured in CFI includes quantitative GNP measures as well as such qualitative factors as population, education, health, nutrition, basic services, and shelter. Henderson's broad thinking or intellectual trade is beginning the redefinition of Economics into something that is friendlier to both humans and the planet. The GNP calculation is an economic reasoning with the simplified method which overcomes "all about how they don't have any choice to make" in Duesenberry's sense. However, we will fall into the trap of "all about how people make choices" if GNP is utilized to analyze the issue of economic growth. Henderson's CFI shows the intellectual trade framework of rational choice in Economics and Sociology.

### *Conclusions*

Rationality is a crucial foundation of the theory of choice. An interdisciplinary approach to redefining rationality by utilizing different descriptions of Futures Studies has been presented. The distinguishing characteristic of this interdisciplinary framework is that rationality in Economics and Sociology is addressed simultaneously rather than separately. Based on an interdisciplinary view of value judgements, it seems unlikely that the omission of any of the above aspects of rationality, as shown in Figure 1, can be justified. Emphasizing both the scientific approach to experimentation and the ethical approach to value judgements, several crucial conclusions are shown as follows.

The approach of Futures Studies is one kind of forecasting method, but cannot be treated as a completely technical forecasting. The qualitative judgement of human nature, experience and knowledge in the past and present must be explicitly well defined to process a forecast in the field of Futures Studies. Both the past, present or future time path and the normative, strategic or operative forecast cannot be value-judged without discussing the rational choice issue. Vilfredo Pareto believes that Economics is the study of rational behavior and Sociology is the study of nonrational behavior. Duesenberry points out that "Economics is all about how people make choices; Sociology is all about how they don't have any choice to make." Futures Studies is about how people make nonrational choices. "Nonrational", a term taken from Sociology, deals with qualitative judgements (ought implies can), while "choice", a term derived from Economics, deals with quantitative or technical strategy (can implies ought). Rationality as it is applied to Futures Studies, in this study, is well-defined through the proper use of inter disciplinarity. Therefore, the approach presented in this paper further supports the arguments proposed in Coleman's rational choice Sociology.

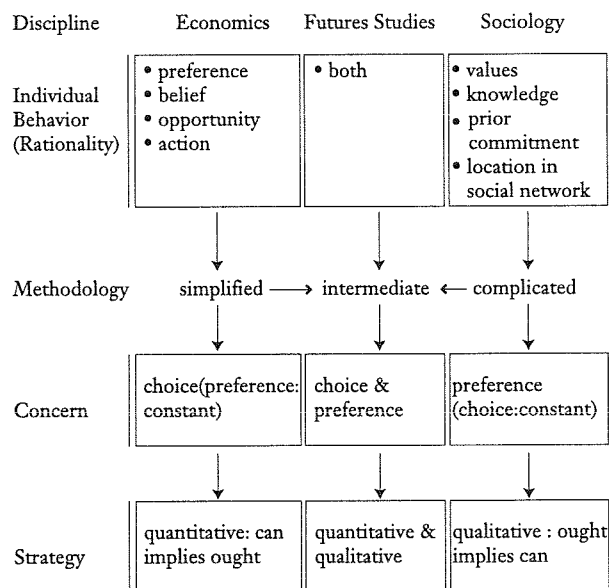


Figure 1: Intellectual Trade: Issue of Rationality

## Notes

1. According to Cornish (1977, p.184-186), futurist perspective can be treated as "a basis for speculation on what it is that gives a person a future-oriented outlook and what other characteristics seem to go with that outlook." The hypothesis by Cornish are openness to experience, global outlook, long-term time-perspective (treated as forecasting in this paper ),...,rationality,...reality of choice.
2. For example, Gordon (1992) distinguishes between quantitative and qualitative methods as well as exploratory (forecast of futures that seem plausible) and normative (forecasts of futures that seem desirable) methods. Bell (1997, p.243) states that "The quantitative-qualitative distinction is better conceived as a continuum than a dichotomy, most methods allowing for some degree of quantification, however limited."
3. Caporaso & Levine (1992) viewed rationality as an important reasoning or approach and discussed the role of rationality in the area of political Economics.
4. As pointed out by Baron & Hannan (1994, p.1116), "Economists who seek to incorporate sociologically informed specifications of performance into their models are thereafter frustrated to find that sociological studies do not provide the necessary information."
5. As pointed out by Baron & Hannan (1994, p.1116), "For this [microeconomic] model to have predictive power, preference must be stable; in practice, actors' preference are usually assumed to be fixed."
6. GNP is a combined annual monetary (current) value of all goods, services, and products sold on markets of national economy.

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# Transforming Workplaces of the Future: Unpacking EEO Policy in Australia

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Brenda Hall-Taylor\*

*This paper positions the 'problem' of inequality of women within a remedial strategy known in Australia as Equal Employment Opportunity (EEO) policy. It argues that normative frameworks of power and gender are limited in their contribution to the analysis of the problems of inequality or thinking about alternative futures. It proposes that we need to engage in different ways of thinking about the exercise of power and offers an example of a poststructural analysis of EEO illustrating how alternative frames of reference produce alternative realities.*

**Keywords:** EEO, workplace change, workplace futures

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