Summaries

Thorstein Veblen's Critique of Irving Fisher's Economics

Hiroyuki Saito

Taking changing institutional factors into consideration, Thorstein Veblen constructed his institutional economics under monopoly capitalism, while pre-Darwinian economics was built on the basis of the free competitive market. To clarify Veblen's attitude toward pre-Darwinian economics it is necessary to present the characteristics of his economic thought.

In order to approach this subject, I make a survey of Veblen's "Fisher's Capital and Income" and "Fisher's Rate of Interest". This survey will enable us to shed light on the influence of American economic change on economics and its reactions to these changes, and is expected to contribute to the joint research project on the "Evolution of Economics as Response to Economic Change".

Irving Fisher thought that institutions do not change cumulatively but are constant. He rejected elements which do not suit the free competitive market. He assumed normality in an economic society in which a competitive standard of behavior prevails, and believed economic activities to be competitive. However, American capitalism shifted from a competitive stage to a monopoly stage after the depression of 1873.

Fisher deduced his economic theory from the free competitive stage. His theory cannot explain the nature and functioning of American capitalism. Veblen made it clear that Fisher's premises were becoming more and more unrealistic in the American political and economic environment of the late nineteenth century. He criticized Fisher's capital, income, and interest in terms of institutions of a credit economy.

Veblen thought that the concept of capital must be defined by observation of the current habits of thought of businessmen. He holds that Fisher should have observed and followed the actual, evolving usage of capital. According to Veblen, capital is not a collection of physical goods but a pecuniary concept. The meaning of capital changes over time as society evolves. However, Fisher believed that wealth signifies material objects owned by human beings; capital is held to include persons. Accordingly, the inclusion of persons led him to avoid intangible goods.

In defining income, Fisher adheres to the logic of the hedonistic-taxonomic system of theory. The nature of income is not worked out from observation. To Veblen, income is a pecuniary or business concept. The logic of economic life in a modern community runs in terms of pecuniary, not of hedonistic magnitudes. Fisher postulates that physically productive goods (including persons) alone are to be included in capitalization. He explains away intangible assets with the hedonistic conception by construing them in terms of some category of tangible items.

According to Fisher, interest is paid for a service, and arises from a preference for present income over future income. Veblen considered that this was not a theory of production or of industry, but of business in terms of non-pecuniary factors.

From his evolutionary viewpoint, Veblen realized the unreality and inappropriateness of Fisher's economic theory in monopoly capitalism.

Thorstein Veblen's Theory of Instinct

Hiroyuki Takahashi

Thorstein Veblen is generally known as the founder of the American institutional school. Several economists followed his footstep, but the problem as to how his economics has devolved still remains until today. One of issues is the interpretation of Veblen's economics in relation to his concept of human nature, namely, his theory of instinct.

Veblen's economics was understood by a dual interpretation—Veblenian dichotomy, and its view was upheld by the later many students as a "Veblen – Ayers tradition." There is a view, however, that Veblen's economics is unified in terms of the "instinct of workmanship." Moreover, some researchers question the dual interpretation in redefining Veblen's economics in terms of modern psychology.

This situation suggests that the discussion about Veblen's theory of instinct remains mired in confusion. For this reason, I will take up Veblen's theory of instinct and examines his explanation about it in his own words. This paper therefore examines his book *The Instinct of Workmanship And the State of Industrial Arts* (1914), in which Veblen developed the theory of instinct. In particular, the focus will be on Chapters 1 and 2, in which Veblen elaborates on the theory of instinct. Part 1 summarizes the discussion thus far on the theory of instinct in Veblen's economics. Part 2 examines Veblen's concept of instinct. Part 3 treats in detail the characteristics of the instinct of workmanship, parental bent, and idle curiosity which Veblen emphasized the importance. Part 4 then discusses Veblen's theory of the process of institutional change based on the instinct of workmanship. And Part 5 discusses about Veblen's view on the theory of instinct, and finally shows that his economics can be understood as unified under the instinct of workmanship.

Evolutionary Thought and Veblen's Conception of Economics: A Survey of Recent Discussions

Noriko Ishida

This study surveys some recent debates on evolutionary thought and Veblen's conception of economics, the so-called Evolutionary Economics. My aim is more to bring out the points under discussion than to offer any new interpretation of them against the accepted explanations. In doing so, I will indicate a possible direction by which Veblen's economic thought can be understood more precisely.

First, I show that the interaction of the historical interpretations of economics and biology contributed partly to these debates. Historically considering either point has not been possible in a single discourse, because both these historical interpretations made it necessary to modify or rethink each discipline's interpretation of the other. I consider some implications of how the revisionist studies of Darwin and Darwinism, which are known as the origin of "*The Origin*," could have had an impact on the study of Veblen, by reference to Lamar Jones' work (1986) and the refutations of it by his critics, such as H. H. Liebhafsky and Rick Tilman (Section 2). Second, I note the controversies over the relationship between evolutionary thought and the problem of causality in social science. Here there are two serious points. One is associated with how Veblen's evolutionism-based analysis of economic society could involve both *nonteleological* evolutionary processes and *teleological* human action (Section 3). Reconsideration of these points was provoked by Malcolm Rutherford's conclusion (1998) that Veblen's program for creating an evolutionary economics had ultimately failed. This section covers Geoffrey M. Hodgson's laborious endeavors on the Veblenian mediation of causal dualism, and Tiziana Foresti's acute insights into the formative influence of Kant on Veblen. The other point is linked to how Veblen's evolutionism-based methodology of economics may shed light on his intellectual or ideological position (Section 4). I also deal with the huge problem raised by Warren J. Samuels (1990): whether Veblen was an ethical relativist or not. Of course, here I follow some rejoinders directed against him, for example, those by Baldwin Ranson, Tony Lawson and Malcolm Rutherford. By sorting out these complicated arguments and reviewing their interpretive results, I show that it remains an open question how Veblen would envisage the way in which science provides any practical guidance.

W. C. Mitchell's Approach to Aggregates: Some Comments on G. Hodgson's View

Takao Tsukamoto

The objective of this paper is to elucidate with reference to the views of G. Hodgson on the research methodology employed by W. C. Mitchell. That is to shed light on Mitchell's approach to "aggregates," by which he tried to build up his "quantitative economics," his own institutional economics. Mitchell tried to analyze the actual condition and the transformation process of the U.S. economy in the period from the 1920s to the 1930s.

Mitchell came to prominence through his statistics-focused main work "*Business Cycles.*" In what sense then does the term "institutionalism" apply to this school of economic thought? This paper concentrates on contemplating Mitchell's aggregation methodology.

In the years from 1920 to 1921, the U.S. economy was facing recession. For controlling the business cycle, in the opinion of Mitchell, it was necessary to capture the state of the U.S. economy by means of statistical data. Thus, Mitchell applied statistical analyses to aggregate data in an attempt at an "institutional-level" analysis of the U.S. economy. Mitchell's focus on group behavior enabled him to recognize that human behaviors were the subject of institutional standardization. From this perspective, the U.S. economy was perceivable as an institutional compound whose unit of analysis is the institution. In this way, Mitchell developed an "aggregate quantitative analysis" for the statistical capture of institutions. This concept encompasses Mitchell's quantitative economics.

This aggregate methodology was squarely criticized by T. C. Koopmans, who savaged Mitchell's aggregation as "measurement without theory." The reason was that Koopmans asserted as theory's basis the role of the individual and repudiated that of the institution.

The rebuttal of Koopmans' criticism by institutional economists at the time was not an unqualified success. This was due to the failure to formulate a theory of the methodology of institutionalism grounded in the philosophical and methodological concepts of complexity and emergent properties. Therefore, for Mitchell's economics to be re-formulated as the "institutional school of economics" it would require a new theory of methodology based on complexity and emergent properties. Such a re-formulation would produce a school of economics at the "mezzo-level," i.e., with roots in both macro- and micro-economics.

Marshall and the Formation of the Logic of England's Industrial Organization

Tadakazu Miyake

Although the field of study known as the logic of industrial organization emerged and developed centered on the United States, already before that time, as *industrial economics* the questions of economies of scale and differentiation of products — central concepts of the logic of industrial organization – were the subject of discourse in conjunction with monopoly formation and its ill-effects as an inevitable outcome of competition. Marshall was first to raise the question of industrial organization in England as a research topic. That is, through the question of what explains the conflicting relationship between economies of scale and industrial equilibrium, it evolved into the theories of J. Robinson and E. H. Chamberlain.

Marshall's research covered a wide range of the industrial sector but considered industrial organization as a partial equilibrium theory and raised the issue of the monopolistic tendency resulting from economies of scale, i.e., attempted to reconcile the issues of complete competitive equilibrium and the rule of increasing return. Subsequently, works that were in many regards mutually supplemental such as *The Logic of Industrial Organization* and *The Logic of British and American Industry* by P. Sargant Florence, or *The Structure of Competitive Industry* and *Monopoly* by E. A. G. Robinson developed views on market structural issues such as economies of scale, product differentiation, and economies of scope. Topics treated relate not only to the ill-effects of monopolies but include issues such as the potential efficiency of large-scale organizations, optimal business size, natural monopoly, returns from cooperation between enterprises, and the administration and operation of large enterprises and labor relations. There is also an introduction to later developments on the part of the Oxford Group. Included are important questions and suggestions for the modern logic of industrial organization.

A Way to the Sraffa System

Morio Fujii

This paper traces the evolvement of Piero Sraffa's research in the period from his two works on increasing returns published in 1925 and 1926 until the publication of *Production of Commodities by Means of Commodities* in 1960 and focuses, as a point in opposition to contemporaneous theory, on economic system viability, or sustainability, in other words, on dynamic equilibrium, which is the central proposition of Sraffa's work in 1960. Moreover, it has been pointed out that this biological concept of dynamic equilibrium is a common concept of modern Italian economics assumed by Pantaleoni, Pareto, and Barone. Thus far, the presence of this common concept has been verified with respect to Pareto and Barone but remains subject to research as regards Pantaleoni. Naturally, the assertions and analytical methods of Sraffa, Barone, Pareto, and Pantaleoni diverge respectively. However, if it were possible to verify the concept of dynamic equilibrium in modern Italian economics, it could at least be spoken of as a tradition of modern Italian economics. Naturally, given that foregoing economic theory attempted to express the conditions for economic system sustainability through formulae, as is apparent in the work of Adam Smith and David Ricardo, it is not only Sraffa but the entirety of modern Italian economics that can be spoken of as a rehabilitation of classical economics.

A Note on Worker Behavior and Wage Rigidity: A View of the Fair Wage Effort Hypotheses for the Microfoundation of Microeconomics

Tsuneyuki Ueki

From the perspective that wage rate rigidity constitutes a part of the research to show the microfoundation of macroeconomics, this paper considers wage rate variance and the determination of employment volume and wages rates. In considering these matters, this paper introduces a model according to which wage-rate variance is not necessarily subject to adjustments causing labor markets to clear, and which introduces a concept of inter-dependence of fair wage rates, labor effort, and worker behavior. The model assumes two types of workers, one with inferior skills and experience of unemployment (type-1 worker) and one with superior skills without experience of unemployment (type-2 worker). The model shows that apart from an equilibrium where wage rates received equal marginal labor productivity, an equilibrium is possible where type-1 workers may lose employment or receive wage rates below their perceived fair wage rates, or where type-2 workers may receive wage rates above market-clearing rates or wage rates equaling the effective labor supply taking into account labor effort, thus receiving relatively high wage rates. Moreover, the paper considers the assumed model worker of behavioral economics "whose behavior is not entirely but almost rational based on experience" and shows the characteristics of the labor market equilibrium.

This paper will also show the research program core at the back of the shared nature of neoclassical models. This study attempts to supplement the macro-dynamic analysis from the perspective of the endogenous cycle of complex economics and to show the micro-foundation of the worker behavior of anti-cyclical variance in employment and wage rates in labor markets.

Structural Interrelations among the Digital Appliance Industry, the Digital Contents Industry, and Consumers: An Inquiry into the Choice between Private and Shared Ownership of Information held by Consumers

Moriyasu Arima

This paper has as its object of analysis the three entities of (1) the digital appliance industry, which engages in the handling of appliance for the playback and processing, etc., of digitized information and programs; (2) the digital contents industry, which engages in the production and selling of software contents comprised of digitized information for which these appliance are used, such as motion pictures and images, music, games; and (3) consumers, who consume and use this hardware and software, and store and preserve with the aid of appliances and software the knowledge, experience, and encounters that occur in their daily lives. With respect to these three entities, this paper proposes a structural segregation into the three categories of internalized specialist technical expertise, output from which added value can be derived, and output of diminishing competitive strength, and proposes to identify common laws of operation as well as interrelations. Furthermore, this paper touches upon the feasibility and future potential of a conversion of the digitized private information accumulated by consumers into shared property through a market process, and researches the individual decision making of consumers in such a case.

The research concerning the individual three entities considers the loss of competitive strength of Japanese firms due to the commodification and encapsulation that have resulted from the advance of module-based production in the digital appliance industry, revisits prior research related to the current situation and the issues affecting the digital contents industry as it is faced with spreading gratuitous copying of digital data, and, adding in the consumer, perceives the diminishing value from increased copying of technology, knowledge, and creative content as a wider-cast common phenomenon affecting the three entities. Also considered is the question of what kind of individual decision making on the part of consumers would result – taking into account the "nature of digital data as public property," the "smallness of the marginal cost of digital data copying," and the "conceivable externality of data publication" – if a market process and shared ownership were applied in the future to the large quantities of data on knowledge, encounters, and creative work that is held and accumulated as digital data (such as image, video, and document files and databases) by individual consumers that is currently not marketed.

Relationship between the Three East Asian Countries and Central Asia: In Search of the Eurasian Land Bridge

Mitsuo Honda

The objective of our research team was to consider measures to promote the economic development of the countries located along the rail and road overland route from East Asia (Japan, China, and Korea) to Europe, the so-called new Silk Road, by way of utilizing that route. While our research activities consisted mainly of fieldwork, this fieldwork forms the foundation for theory-based model building. Predicated on the fieldwork output, we aim to analyze and report on the effectiveness and policy implications of an already-established model of ours, i.e., the "beads-type" development model, and to formulate policy propositions. Given the broad scope of this topic, continuous long-term research is required, of which process this research result forms a part.

As to the starting point of our research, given that China's "old" Silk Road is an important source of China's current economic activity, we selected Lianyungang as the easternmost starting point especially for the Eurasian continent, and Xuzhou as the starting point for China's east-west and north-south expanses. Within China, we conducted our fieldwork along the route from Lianyungang, Xuzhou, Zhengzhou, Xi'an, Lanzhou, to Ürümchi. Part of the results of this research has already been published. We researched mainly with regard to Lianyungang, Xuzhou, and Souzhou. For this recent team research program, the plan was for a continuation of previous research, with on-site surveys and research in Zhengzhou, Xi'an, Lanzhou, and Ürümchi, further to the countries in the west. Part of this work has been carried out already. For considering the economic background of those countries where our fieldwork has yet to be completed, we will use panel data for analysis. From the results, which are discussed in the main text of this paper, we derive the following conclusion. Unlike the pattern of trade activities observed between Japan and China, or between Japan and the Southeast Asian countries, the pattern between Japan, China, and Korea and the Central Asian countries reflects a traditional vertical foreign trade pattern, which provides a useful indication in our pursuit of the "beads-type" development formation.

“Beads-Type” City Formation and its Process along the New Silk Road

Wu Yiliang

This paper analyzes from the perspective of spatial economics the effects on the countries along the new Silk Road that result from improvements to the new Silk Road transportation network, identifies relevant existing obstacles, and proposes measures for resolving them. As a result of improvements to its transportation network, the competitive strength of the new Silk Road as an Eurasian east-west transportation route has increased. Conceivably there is sufficient potential for autonomous economic growth if the countries and regions along the new Silk Road utilize the agglomeration forces of the areas situated in border proximity. However, the absence at present of close cooperative relationships among the countries and regions along the new Silk Road presents numerous issues. Resolving them requires formulating development strategies for mutually gainful patterns of co-existence among the countries and regions situated along the new Silk Road.

Regional Economic Development along the New Silk Road and the Beads-Type Development Strategy

Yugun Riku

The designation beads-type development strategy originates from the joint research of the five members of the “new Silk Road” research team (Mitsuo Honda, Yiliang Wu, Yugun Riku, Naohiko Ijiri, and Tadahiro Tsuji), and was first conceptualized and presented to the public at the July 2007 International Symposium on Regional Economic Cooperation along New Silk Road, UNDP 2nd Silk Road Mayors Forum. Based on the joint research results to date, this paper formulates a more specific strategy concept from the perspective of development economics. Moreover, as a case study, this paper analyzes a strategy for the West China Development formulated since 2000 by the Chinese government, and examines the potential for new industrial development in China’s inner western region and the development strategy choices for achieving successful regional development in inner China.

This paper considers not individual countries and regions but focuses on the economic development of the overall “new Silk Road” region, including Japan and Korea on the eastern and Europe on the western rim of the Eurasian continent. The beads-type development strategy is concerned with the strategy issues of how to activate the capacity to facilitate industrial agglomeration on the part of the core cities located along the “new Silk Road,” engage the industrialized countries on the eastern and western rims of the Eurasian continent, and cause the formation of beads-type clusters of industrial cities. As regards the policy level, this paper considers it necessary to promote an integrated policy approach of industry, government, and academia, in order to enable the cities along the “new Silk Road” to facilitate industrial agglomeration and to maintain environments that enable these cities to operate as one section of the international division of labor. At the same time, this paper separates the policy packages required for achieving these results into the two categories of industrial agglomeration measures and route maintenance measures, and further states policy action derived from the four elements of policy measures, social infrastructure, industry base maintenance, and knowledge support.

Finally, this paper considers development strategies for China’s western region extending along the “new Silk Road.” If inter-regional economic disparities are to be resolved, a conceptual shift will be necessary away from the flying geese strategies of old. This paper argues that for the West China Development a development strategy is beneficial that strengthens inter-regional cooperation and aims at beads-type growth geared at joint development.

The beads-type development strategy is capable of enabling economic growth in China's inner regions, where autonomous growth has been considered not feasible. At the same time, through the formation of a beads-type industrial belt, this strategy aims at the regional integration of economic growth through cooperation with the economic superpowers on either rim of the Eurasian continent. This paper elaborates on the significance of this strategy.

The Potential for Economic Development in the New Silk Road Region through a "Bead-Type" Development Strategy

Tadahiro Tsuji

This paper attempts an overview of the potential for economic development in the new Silk Road region in the inner part of the Eurasian continent using a "bead-type" development strategy proposed by us. Since the subject of our previous research last fiscal year was the coastal region and inland China, the core cities we researched were located within the same country. By contrast, the new Silk Road region comprises the four Central Asian countries of Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan, and Turkmenistan and, surrounding them, Russia, Iran, and the Caucasus countries. This paper examines whether the conditions for realizing a "bead type" development strategy, which includes infrastructure maintenance and cooperative relationships among the adjoining regions, are already in place in the nation-straddling new Silk Road region and whether a bead-type development strategy itself is feasible in this region at all.

Our research established the inadequacy of infrastructure essential for logistics such as railway and road networks and an unsatisfactory degree of cooperation among neighboring countries. It became also clear that despite efforts at the creation of customs tariff unions among these countries, practical effectiveness was barely accomplished.

This paper therefore emphasizes the importance also of "soft" measures in addition to conventional infrastructure hardware upgrades. In particular, this paper stresses the significance of creating "soft" networks among the countries involved, i.e., social capital that will aid regional economic cooperation. To achieve economic development in the new Silk Road region under a "bead-type" development strategy, it will be necessary to foster and encourage mutual trust among the countries involved by implementing "soft" networks alongside hardware infrastructure and to create environments that enable regional economic cooperation on a voluntary basis.

Location Factor-Analysis for Foreign Direct Investment into Central Asia

Naohiko Ijiri

Although compared with East Asia and Southeast Asia, there has been less research on foreign direct investment into Central Asia, a number of earlier research papers report a rising trend in energy resource related foreign direct investment into Kazakhstan and Turkmenistan. Moreover, according to other research, foreign direct investment has been increasing in Kyrgyz Republic, a country that is not rich in energy resources, indicating that direct investment into Central Asia has been on a gradual rise although the region is not attractively located geographically. This paper attempts an economic analysis of the trends in and determinants of foreign direct investment into Central Asia, using quantitative analysis that is based on the theoretical analysis model for horizontal direct investment of Navaretti & Venables (2004).

According to estimated results, among the factors that increase direct investment into Central Asian countries, individual countries' geographical and factor endowment aspects are more important than economies of scale. As has been noted in foregoing research, natural resources and energy resources in particular are important factors promoting the inflow of direct investment. Additionally, although it is frequently reported with respect to other regions that market size is a factor increasing the inflow of direct investment, this paper arrives at a different conclusion. Market size in Central Asia is regarded as too small for attracting horizontal direct investment.

A Comparative Analysis of Japanese and U. S. Call Option Price Difference using Monthly Panel Data

Asuka Takeuchi

This paper attempts a comparative analysis of option price difference using Japanese and U. S. call option data. *Option price difference* is here defined as the difference between the option market price and the theoretical price. This paper examines whether the option price difference is dependent on the three variables of moneyness, survival period and trading period, and the variance of option price difference is heterogeneity, using the estimation method of Kanoh and Takeuchi (2006). As a result, in the case of U.S. data using the EGARCH model, we find that option price difference show no dependency with respect to either of moneyness, survival period and trading period, but the variance is heterogeneity. In the case of Japanese data, we find that option price difference indicate dependency with respect to all of moneyness, survival period and trading period, with a significant heterogeneity. Therefore, while the result that option price difference depends on moneyness, survival period and trading period is idiosyncratic only to Japan, heteroscedasticity in the option price difference is a characteristic common to Japan and the U. S. Furthermore, comparative analyses using three volatility models, i.e., BS, GARCH, and EGARCH, are also performed. Japanese data show no variation in the results of estimated coefficients about the sign and magnitude correlations caused by difference in volatility models. However, in the case of the U. S. results, the heteroscedasticity of the variance is estimated significantly regardless of volatility models, but coefficient estimate results differ. We conclude that at least the variance of option price difference is heteroscedasticity with regard to both Japan and the U.S., regardless of volatility models.

Empirical Study of Option Valuation using Volatility Variation Models

Hidetoshi Mitsui

Since variation over time in the yield volatility of the underlying has been known as an empirical fact, the analysis of option markets therefore necessitates the use of models that take a formalized approach to volatility variation. The issue of how to formalize volatility variation for option price valuation is therefore quite important.

Option pricing analysis using volatility variation models has been largely researched in two ways. One method uses stochastic volatility (SV) models. Continuous-time SV models are effective for option pricing. However, since SV models treat volatility as an unobservable variable, likelihood is not easily obtainable and therein lies this method's weakness. Empirical study of option price valuation is therefore scarce.

The other method uses the Autoregressive Conditional Heteroskedasticity (ARCH) model of Engle [1982] and the model that made it widespread, the Generalized-ARCH model (GARCH) of Bollerslev [1986]. These ARCH models excel at capturing the nonlinearity of financial time series and are useful for the empirical study of options. This is because ARCH models formalize volatility at t as a deterministic function of only the known variable at $t-1$, and estimating is simple also when the model is extended. Even so, as in the case of SV models, empirical research of option price evaluation is scarce.

This research consists of empirical research of the Nikkei 225 option market using the two representative volatility variation models and examines whether the SV model or the ARCH model display the better option pricing performance.