Evolutionary Economics and Social Complexity Science 5

Hiroyuki Uni *Editor*

Contemporary Meanings of John R. Commons's Institutional Economics

An Analysis Using a Newly Discovered Manuscript

Springer

Evolutionary Economics and Social Complexity Science

Volume 5

The Japanese Association for Evolutionary Economics (JAFEE) always has adhered to its original aim of taking an explicit "integrated" approach. This path has been followed steadfastly since the Association's establishment in 1997 and, as well, since the inauguration of our international journal in 2004. We have deployed an agenda encompassing a contemporary array of subjects including but not limited to: foundations of institutional and evolutionary economics, criticism of mainstream views in the social sciences, knowledge and learning in socio-economic life, development and innovation of technologies, transformation of industrial organizations and economic systems, experimental studies in economics, agent-based modeling of socio-economic systems, evolution of the governance structure of firms and other organizations, comparison of dynamically changing institutions of the world, and policy proposals in the transformational process of economic life. In short, our starting point is an "integrative science" of evolutionary and institutional views. Furthermore, we always endeavor to stay abreast of newly established methods such as agent-based modeling, socio/econo-physics, and network analysis as part of our integrative links.

More fundamentally, "evolution" in social science is interpreted as an essential key word, i.e., an integrative and /or communicative link to understand and re-domain various preceding dichotomies in the sciences: ontological or epistemological, subjective or objective, homogeneous or heterogeneous, natural or artificial, selfish or altruistic, individualistic or collective, rational or irrational, axiomatic or psychological-based, causal nexus or cyclic networked, optimal or adaptive, micro- or macroscopic, deterministic or stochastic, historical or theoretical, mathematical or computational, experimental or empirical, agent-based or socio/econo-physical, institutional or evolutionary, regional or global, and so on. The conventional meanings adhering to various traditional dichotomies may be more or less obsolete, to be replaced with more current ones vis-à-vis contemporary academic trends. Thus we are strongly encouraged to integrate some of the conventional dichotomies.

These attempts are not limited to the field of economic sciences, including management sciences, but also include social science in general. In that way, understanding the social profiles of complex science may then be within our reach. In the meantime, contemporary society appears to be evolving into a newly emerging phase, chiefly characterized by an information and communication technology (ICT) mode of production and a service network system replacing the earlier established factory system with a new one that is suited to actual observations. In the face of these changes we are urgently compelled to explore a set of new properties for a new socio/economic system by implementing new ideas. We thus are keen to look for "integrated principles" common to the above-mentioned dichotomies throughout our serial compilation of publications. We are also encouraged to create a new, broader spectrum for establishing a specific method positively integrated in our own original way.

More information about this series at http://www.springer.com/series/11930

Hiroyuki Uni
Editor

Contemporary Meanings of John R. Commons's Institutional Economics

An Analysis Using a Newly Discovered Manuscript

Springer

Editor
Hiroyuki Uni
Graduate School of Economics
Kyoto University
Kyoto, Japan

ISSN 2198-4204 ISSN 2198-4212 (electronic)
Evolutionary Economics and Social Complexity Science
ISBN 978-981-10-3201-1 ISBN 978-981-10-3202-8 (eBook)
DOI 10.1007/978-981-10-3202-8

Library of Congress Control Number: 2017930935

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #22-06/08 Gateway East, Singapore 189721, Singapore

Preface

This book is the final result of our joint research on contemporary meanings of John R. Commons's institutional economics for 3 years from 2014.[1] The trigger of this joint research was my finding Commons's mimeographed manuscript titled "Reasonable Value: A Theory of Volitional Economics" (called the 1927 manuscript hereafter), in the Kyoto Prefectural Library. Most of this manuscript turned out to be newly discovered material. Our joint research thus is the first attempt to reinterpret Commons's theoretical development using this new material.

John Rogers Commons (1862–1945), together with Thorstein B. Veblen and Wesley C. Mitchell, was a pioneer of the American institutionalist school. Commons wrote prominent works not only on the theory of institutional economics but also on the history of labor and the labor movement in the United States. His years as a professor at the University of Wisconsin in Madison (1904–1933) were his most fruitful. During this period, acting as one of the advisors of Wisconsin governor Robert M. La Follette, Commons provided recommendations on policy and legislation, especially in relation to workplace safety and unemployment compensation. Commons used the empirical knowledge he had accumulated from his experiences to develop his economic theories and produced two major theoretical works: *Legal Foundations of Capitalism* (1924) and *Institutional Economics* (1934). In both works, he set transactions as the ultimate unit of investigation and regarded institutions as collective actions that control individual actions. Commons's perspective differed greatly from classical economics and marginalist economics, in which collective actions were eliminated and the ultimate units of investigation were commodities and individuals, respectively. Moreover, Commons's theory was based on multiple causations woven together by five principles: efficiency, scarcity, futurity, custom, and sovereignty. His theory represented a striking contrast to the above two economics frameworks, which were based on a single causation that

[1]This joint research was supported by the Japan Society for the Promotion of Science (JSPS), under the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

was driven by either efficiency or scarcity. These innovative aspects of Commons's theory attracted major economists such as John Maynard Keynes, Gunnar Myrdal, and Oliver E. Williamson.

However, from a modern perspective, the reinterpretation or extension of various aspects of Commons's institutional economics remains unsatisfactory. One reason is that the process through which Commons formulated his theory became hidden as a result of him discarding his manuscripts after retiring from the University of Wisconsin. The newly discovered 1927 manuscript, which contains substantial content from the first half of Commons's main work *Institutional Economics*, therefore provides invaluable clarification of the processes through which his theory was constructed. This may lead us to derive new theoretical implications from Commons's institutional economics or find new ways in which it is significant to modern society.

The 1927 manuscript comprises 340 sheets. Since we find "John R. Commons/April 1927/To be revised" in the upper right corner of the first sheet of Chapter 1, and "John R. Commons/March 1927" in the upper right corner of the first sheet of Chapter 5, we can assume the manuscript was written in 1927. The manuscript consists of eight chapters, as shown in Table 1, which roughly correspond to Chapters 2−8 of *Institutional Economics* (a total of 377 pages). However, in many sections, the contents of the 1927 manuscript differ from those of *Institutional Economics*, as I will mention later. As each sheet of the manuscript contains only about two-thirds as many words as a page of *Institutional Economics*, in terms of length, the 1927 manuscript corresponds to only about 267 pages of *Institutional Economics*. Therefore, the final text of *Institutional Economics* contains extensive revisions (particularly, Chapter 1 "Method" and Chapter 8 "Scarcity and Efficiency"). At the beginning of *Institutional Economics*, Commons (1934, p. 1) notes that he distributed to his students "the various mimeographed copies and revisions of this book on Institutional Economics." We believe that one of those copies and revisions was the 1927 manuscript. Of the eight chapters of this manuscript, only Chapters 1 and 8 were previously known to researchers.[2]

Hatsutaro Tanahashi (1893−1979) owned the only known copy of the 1927 manuscript. In 1981, after Tanahashi's death, this copy was donated to the Kyoto Prefectural Library by the bereaved family.[3] Tanahashi was a lecturer (and later,

[2]The most comprehensive collection of Commons's documents is held by the State Historical Society of Wisconsin. This organization published *John R. Commons Papers*, which comprises 24 reels of microfilm, in 1986. Film Nos. 276–360 of the 12th reel contain similar content to Chap. 8 of the 1927 manuscript. Additionally, Chap. 1 of the 1927 manuscript is contained in Film Nos. 198–230 of the 13th reel. The remaining chapters of the 1927 manuscript have not been collected by this organization (confirmed by the author via an e-mail exchange with a reference archivist at the State Historical Society of Wisconsin on September 14, 2013.)

[3]Among a total of 1266 donated books was a 125-page booklet titled *Reasonable Value*, which was printed and distributed by Commons in April 1925. The pages of this booklet contained a piece of paper entitled "Economics 1B Registration Suggestions/Second Semester 1926–1927," and so it is presumed that this booklet was used in Commons's seminar in 1927, together with the 1927 manuscript.

Table 1 Table of contents of the 1927 manuscript and *Institutional Economics*

Table of contents of the 1927 manuscript	Table of contents of *Institutional Economics* (excludes Chapters 9, 10 and 11)
Reasonable Value: A Theory of Volitional Economics	*Institutional Economics: Its Place in Political Economy*
I. METHOD (April 1927, To be revised) (33)	I. THE POINT OF VIEW (12)
1. Metaphysics	
2. Formula of Transactions	
II. JOHN LOCKE (54)	II. METHOD (112)
1. The Mind	(I) John Locke
2. Value	1. Ideas
3. Custom	2. Value
	3. Custom
	(II) Transactions and Concerns
	1. From Corporations to Going Concerns
	2. From Exchange to Transactions
	(III) Ideas
	(IV) Conflict of Interests
	(V) Economic Backbone of History
III. QUESNAY (22)	III. QUESNAY (15)
	(I) The Natural Order
	(II) The Moral Order
IV. HUME AND PEIRCE (23)	IV. HUME AND PEIRCE (18)
1. Scarcity	(I) Scarcity
2. Custom	(II) From Habit to Custom
	(III) Pragmatism
	(IV) From Nature to Going Concerns
V. ADAM SMITH (March 1927) (81)	V. ADAM SMITH (60)
(I) Self Interest	(I) Self-Interest and Mutuality
(II) Liberty, Security, Equality	(II) Liberty, Security, Equality, Property
(III) Property	(III) Labor-Pain, Labor-Power, Labor Saved
(IV) Labor Power and Labor Pain	1. Cause of Value
1. Cause of Value	2. Regulator of Value
2. Cause of Scarcity Value	3. Measure of Value
3. Regulator of Value	(IV) Social Utility
4. Measure of Value	
(V) Opinion	
VI. BENTHAM AND BLACKSTONE (29)	VI. BENTHAM VERSUS BLACKSTONE (26)
VII. MALTHUS (8)	VII. MALTHUS (7)

(continued)

Table 1 (continued)

Table of contents of the 1927 manuscript	Table of contents of *Institutional Economics* (excludes Chapters 9, 10 and 11)
VIII. SCARCITY AND EFFICIENCY (89)	VIII. EFFICIENCY AND SCARCITY (139)
(I) Use Value, Scarcity Value and Value	(I) Materials and Ownership
(II) Value and Price	(II) Real and Nominal Value
(III) Fund and Flow	(III) Averages
	(IV) Input-Output, Outgo-Income
	(V) From Circulation to Repetition (VI) Ability and Opportunity
	1. Physical and Legal Possession
	2. Choices
	3. Opportunity
	(VII) Ricardo and Malthus
	(VIII) Marx and Proudhon
	(IX) Menger, Wieser, Fisher, Fetter
	(X) From Absolutism to Relativity

Notes: Numbers in parentheses indicate the number of pages (or sheets) in each chapter. There are missing (IV.1) and a duplication (V. (IV) 2.) of the section number in the 1927 manuscript

an assistant professor) at the Faculty of Agriculture, Kyoto University, and studied at the University of Wisconsin during 1926−1927, where he attended Commons's seminar. This manuscript seems to have been distributed in that seminar in 1927. This manuscript is hand bound and has a cover sheet on which is written "Madison 1928."[4] Moreover, there is a handwritten signature of "Kenneth H. Parsons/June 20, 1965,"[5] and an ownership mark of Tanahashi.

By exploring the 1927 manuscript and other works by John R. Commons, we have endeavored to clarify the construction of processes in his conceptualization of institutional economics and its meaning for modern society from various perspectives. The present volume features seven contributions, touching on the three theoretical fields contained in Commons's institutional economics: the theory of

[4]Madison houses the campus headquarters of the University of Wisconsin. According to the chronology in the book titled *Memories and Posthumous Writings of Tanahashi Hatsutaro* (1995, not for sale), Tanahashi Hatsutaro enrolled in the Graduate School of Agricultural Sciences, University of Wisconsin, on September 10, 1926, but dropped out in October 1927 and returned to Japan on November 25, 1927 (pp. 428–430). We can confirm from the diary excerpts in the book that he attended Commons's seminar (p. 452). Therefore, if Tanahashi Hatsutaro wrote the words "Madison 1928," it seems he made an error in the year.

[5]Kenneth H. Parsons (1903–1998) was a professor of agricultural economics at the University of Wisconsin. He was the editor of *The Economics of Collective Action* (Commons, 1950) and the author of articles on Commons's theory. It is not known why Parsons signed this manuscript in 1965.

value (Part I), social reforms (Part II), and dynamic models (Part III). Furthermore, Appendix includes two excerpts from the 1927 manuscript, Chapter 1 "Method" and Chapter 8 "Scarcity and Efficiency," in each of which the 1927 manuscript differs considerably from *Institutional Economics*.[6]

In Part I, Hiroyuki Uni and Natsuka Tokumaru examine Commons's attempt to construct a volitional theory of value with multiple causations, by critically integrating the classical and marginalist theories of value. The two contributions focus mainly on his theoretical development from *The Distribution of Wealth* (1893) to the 1927 manuscript with relation to his foregoing economics.

Hiroyuki Uni attempts to reveal how Commons overcame the limitations of the classical theory of value, namely, the elimination of scarcity, ownership, and money. Uni compared the 1927 manuscript with several other published works by Commons, namely, *The Distribution of Wealth* (1893), *Legal Foundations of Capitalism* (1924), *Reasonable Value* (1925), and *Institutional Economics* (1934), and identified three aspects in which the 1927 manuscript demonstrated Commons's theoretical progress. The first aspect was the conceptualization of proprietary scarcity; the second was the construction by Commons of his theory of value with multiple causations; the third was the formulation of three types of transactions, namely, managerial, bargaining, and judicial. Based on the 1927 manuscript, Uni infers that this theoretical progress resulted especially from Commons's critical examination of Marx's theory. On the other hand, Uni identifies two theoretical limitations of the 1927 manuscript: first, the "judicial transactions" described in the 1927 manuscript included only the correction of transaction failures at the microlevel; second, Commons's theory of value did not include the coexistence of suppliers with different efficiency levels. Regarding the implications of this study, Uni mentions that bargaining transactions and managerial transactions should be regarded not as mutually substitutable, consistent with Oliver E. Williamson, but rather as complimentary, consistent with Commons.

Natsuka Tokumaru scrutinizes theoretical inheritances in Commons's institutional economics from the early Austrian theory of value, especially Carl Menger's subjectivist method as presented in *Principles of Economics*. According to Tokumaru, Commons was inspired from the beginning of his research by Austrian ideas, especially the idea of human volitions, powers, and social organisms as interpreted by Clark and Smart. By carefully analyzing the 1927 manuscript and *Institutional Economics* (1934), Tokumaru finds a more fundamental methodological influence from Menger's functional analysis, on which basis Commons derived his central concept of "reasonable value" from human volitions. More interesting is that she finds a commonality between *Institutional Economics* and the added material from the second edition of *Principles of Economics*. Menger proposes that institutional devices such as protection of property rights emerge from "conflicts of interests" and

[6] Adam Berg (Ph.D. candidate at the Graduate School of Economics, Kyoto University), Natsuka Tokumaru, and Hiroyuki Uni checked these two excerpts and corrected some obvious mistakes in the original text.

also distinguish the "economizing" and "technological" directions of the economy. Tokumaru initially focused on the historical connections that link Menger to Commons, but these connections also have significant methodological implications for disciplines that deal with institutional issues, which tend to be classified as "collectivist" in contrast to the "individualistic" method of neoclassical economics. In this contribution, Tokumaru discusses that humans "volitionally" participate in collective actions or follow working rules, to resolve conflicts of interests and adopt external conditions according to the logic of Commons, which he in turn obtained from Menger. For Commons, "reasonable value" is explained by collective power relationships, in production, bargaining, and legal processes. Tokumaru's contribution not only provides a new perspective on the historical links from the early Austrians to the old institutionalists but also theoretical implications for institutional economics based on human volitions.

Part II moves on to Commons's theories of social reform. Commons actively promoted various economic and political reforms. Discussion of institutional reform is a core component of Commons's theory. In Part II, Shingo Takahashi, Kota Kitagawa, and Nanako Fujita examine Commons's attempt to construct theories of social reform. These three contributions focus mainly on his theoretical development from the 1927 manuscript to *Institutional Economics*.

Shingo Takahashi discusses the relation between the Great Depression and Commons's ideas. Takahashi examines Commons's understanding of the Great Depression and the effect of the Great Depression on his institutional economics. Although *Institutional Economics* (1934) was published after the start of the Great Depression, it contains little analysis of that event. In fact, Commons formed some of his main concepts, such as the institution and the rationing transaction, from 1927 to 1931. Takahashi explores the development of Commons's institutional economics using three materials. The first is the 1927 manuscript, which contains no definition of the institution and no references to the rationing transaction. The second is "World Depressions," published on May 9, 1931, which is one of the few materials in which Commons directly mentioned the Great Depression. The third is the article "Institutional Economics" (1931), in which Commons defined the concept of the institution and explained the rationing transaction. Through analyses of these three materials, Takahashi clarifies that Commons's analyses of the causes of the Great Depression resembled those in other prominent studies like Kindleberger, but Commons was unique in advocating international cooperation on interest rates. The Great Depression caused Commons to substitute the idea of the rationing transaction for that of the judicial transaction and also influenced his definition of the institution. Takahashi implies that what Commons learned from the Great Depression, namely, his concepts of the "institution," "rationing transaction," and "administrative committee," can guide us in protecting capitalism.

Kota Kitagawa examines the differences with respect to institutional reform between the content of the 1927 manuscript and the additional descriptions contained in *Institutional Economics* (1934). He finds the later description contains an additional method of institutional reform. The 1927 manuscript stresses that a

higher authority plays a role in institutional reform by settling disputes. In contrast, the additional description in *Institutional Economics* (1934) focuses on the joint bargaining system. The essence of this system is the creation and amendment of working rules through negotiations between interest groups, joint administration of those rules, and the enabling of institutions via sovereignty. Kitagawa suggests two reasons for Commons explaining the joint bargaining system in detail after writing the 1927 manuscript. First, Commons tried to show the unique characteristics of the American political economy that prevented it from moving in communistic and fascistic directions. Second, his confidence in the workability of joint bargaining increased following the passage of the Wisconsin unemployment compensation bill in 1932. Kitagawa further articulates the two methods and shows the dynamic nature of these methods of institutional reform, wherein reform is affected by economic, political, and ethical principles. Kitagawa implies that this multifaceted coordination system differs from that of Oliver E. Williamson, which is decided by a single principle, namely, transaction cost, and the empowering of institutions via sovereignty and the negotiation between interest groups in the process of institutional reform enhance the workability and acceptability of the reformed institution.

Nanako Fujita discusses John R. Commons from the perspective of Gunnar Myrdal. Her research aim is to clarify the characteristics of Commons's method of social reform by comparative analysis of the two institutional economists who worked for social reform in their respective countries, that is, America and Sweden. The two men met in Wisconsin in 1930, immediately after the Great Depression, a pivotal event in each of their academic careers. Changes made to the 1927 manuscript in the version of *Institutional Economics* published in 1934 indicate that Commons came to promote the notion of "reasonable value" as his methodology of social reform. After being influenced by political activities in America, Myrdal also came to participate in social reform in Sweden, which eventually resulted in his establishment of the methodology of "explicit value premises" in the 1940s. Both Commons and Myrdal believed that the individual should be seen as an "institutional mind," following a Veblenian view of evolutionary economics. They also believed that deliberate creation of harmony of interest was a main issue of institutional economics. However, regarding effective measures of social reform, whereas Commons emphasized the role of "law" and "reasonable value," Myrdal advocated "policies" and "enlightenment" that should be derived from his own methodology of "value premises." Compared with Myrdal, Fujita points out that Commons had (1) not a "utopian bone" in his body, (2) a peculiar background characterized by interwar American society, and (3) a relatively conservative outlook in the sense that he never insisted on seeing institutional economics as an alternative to existing mainstream economics.

Part III explores the dynamic models that Commons finally formulated at three levels: models of the long-term historical evolution of capitalism, a model of cumulative causation at the macro level, and a model of human interaction at the microlevel. Takao Tsukamoto analyzes the first models, and Hiroyuki Uni and

Takayuki Nakahara analyze the second and third models. Most existing studies appear to have emphasized the "institutional" aspects of Commons's theory, but these two contributions attempt to clarify its "evolutionary" and "dynamic" aspects.

Takao Tsukamoto aims to reconsider and elucidate Commons's evolutionary theory of capitalism so as to show that his economics is an "evolutionary economics," rather than an "economics of institutions." To show this, he explains the relationship between Commons's two models of the development of capitalism: one is the model of industrial stages, comprising "merchant capitalism," "employer capitalism," and "banker capitalism"; the other is the model of economic stages, comprising the "era of scarcity," "era of abundance," and "era of stabilization." Commons considered modern American capitalism to be a complex of "banker capitalism" and the "era of stabilization." Because the latter means "stabilization of profit," it is attractive to bankers. This type of stabilization differs from that desirable to the public, who instead value "full employment" and "stabilization of employment." Commons investigates the historical process through which "banker capitalism" has appeared in the current "era of stabilization." This historical investigation reveals the most prominent aspect of Commons's evolutionary economics. Tsukamoto shows that "industrial development" causes "institutional changes." Namely, the development of industrial technology creates new business practices. Conflicts of interest may occur between new and existing business practices. To deal with such conflicts, common-law courts create precedents based on reasonable value. Tsukamoto concludes that the evolution of institutions by the stacking of such precedents is a core mechanism in Commons's evolutionary theory. Tsukamoto's contribution illuminates the causal relationship between the development of "industry" and "economy," in Commons's evolutionary economic model.

Hiroyuki Uni and Takayuki Nakahara identify the unique characteristics of Commons's institutional economics as being (1) value theory based on multiple causation, (2) transactions as the ultimate unit of analysis, and (3) interrelation of habitual assumption and collective action. These three characteristics draw on the philosophy of Dewey, which emphasizes (1) the world's plurality and multiplicity, (2) the primary significance of multifarious interactions, and (3) the interrelation of habit and intelligence. As it is well known that Commons's concept of transaction has greatly affected various schools of institutional economics, Uni and Nakahara focus on the first and third of the unique characteristics of his institutional economics as mentioned above: "multiple causation" and "interrelation of habitual assumption and collective action." The former is the core mechanism in his macro dynamics, which explains the macro process resulting in reasonable value and its stability, while the latter is the core mechanism in his micro theory of human interaction, which explains how reasonable value is realized by interactions among individuals. In *Institutional Economics* (1934), applying the idea of "multiple causation," Commons approached macro dynamics by expanding some key concepts and studies on income distribution and demand growth. This macro dynamics is a prototype of growth analysis based on the cumulative causation model with various forms of coordination, later formulated by the regulation theory. Moreover, Commons, following and developing Dewey's theory of habit and intelligence,

created a concept of “habitual and customary assumptions” and discussed collective processes for achieving “reasonable values,” such as the common-law method and the committee system. Commons briefly mentioned psychological means and social mechanisms involved in persistence of customs and institutions. Uni and Nakahara infer that convention theory attempts to shed fresh light on the insight of Commons through a cognitive, interpretative approach.

Kyoto, Japan Hiroyuki Uni

Contents

Contributors

Nanako Fujita is a professor at the Graduate School of Economics, Nagoya City University, Japan. Her research interests encompass the history of economic thought and institutional economics. She is the author of *Gunnar Myrdal's Economic Thought: From Welfare State to Welfare World*, NTT Publisher, 2010 (in Japanese), which won the Eighth JSHET Young Scholar Award from the Japanese Society for History of Economic Thought (JSHET).

Kota Kitagawa is an assistant professor at the Faculty of Economics, Kansai University, Japan. His areas of study are industrial relations in Germany, evolutionary economics, and economic sociology. His recent publications include "Cumulative Causation in J.R. Commons's Institutional Economics from the Perspective of Instrumental Pragmatism," *Cahiers D'économie Politique*, 70:75–106, 2016.

Takayuki Nakahara is a professor at the Faculty of Economics, Hannan University, Japan. His research interest is creating the theoretical foundation for a new economics of institution based on regulation theory and convention theory. He is the author of *Political Economy of Conflict and Régulation*, Nakanishiya Publisher, 2010 (in Japanese).

Shingo Takahashi is a professor at the Tokyo College of Transport Studies, Japan. His research interests encompass the history of economic thought and the institutional economics of John R. Commons. He wrote "J.R. Commons's 'Transaction Economics': Institutional Economic Theory by Legal Concepts," *The History of Economic Thought*, 48(1):16–31, 2006, which won the Fourth JSHET Young Scholar Award (prize for the article) from the Japanese Society for History of Economic Thought (JSHET).

Natsuka Tokumaru is a senior lecturer at the Graduate School of Economics, Kyoto University. Her research interests encompass the philosophy of economics, corporate governance, and experimental economics. Her recent publications include *Social Preference, Institution, and Distribution: An Experimental and Philosophical Approach*, Springer, 2016.

Takao Tsukamoto is a professor at the College of Economics, Nihon University, Japan. His research interest is the thought of American institutional economists, especially Thorstein B. Veblen, John R. Commons, and Wesley C. Mitchell. His recent publications include "How Did Commons Understand Veblen's Concepts of Intangible Property and Good-will," *Keizai Shushi (The Nihon University Economic Review)*, 85(2,3):35–49, 2015.

Hiroyuki Uni is a professor at the Graduate School of Economics, Kyoto University. His research interests encompass political economy, institutional economics, and comparative analysis of capitalism. He is the author of *Economics of Institution and Régulation*, Nakanishiya Publisher, 2009 (in Japanese).

Part I
Volitional Theory of Value with Multiple Causations

Scope of John R. Commons's Criticism of the Classical Theory of Value: Progress and Limitations in the 1927 Manuscript

Hiroyuki Uni

Abstract Commons criticized three limitations of the classical theory of value, namely, the elimination of scarcity, ownership, and money, and attempted to construct new concepts and theories to overcome these limitations. The purpose of this chapter is to reveal Commons's theoretical progress by analyzing a recently discovered manuscript written in 1927 titled "Reasonable Value: A Theory of Volitional Economics". Specifically, I compare this manuscript with several other published works by Commons: *The Distribution of Wealth* (1893), *Legal Foundations of Capitalism* (1924), *Reasonable Value* (1925), and *Institutional Economics* (1934).

This chapter is structured as follows. Section 1 presents the conclusions Commons reached as a result of his criticisms of the classical theory of value. Section 2 applies comparative analysis to identify three aspects of Commons's theoretical progress in the 1927 manuscript: first, the conceptualization of proprietary scarcity; second, the construction of his theory of value with multiple causations; third, the formulation of three types of transactions. Section 3 identifies two theoretical limitations of the 1927 manuscript and considers how to overcome them. The first limitation is that the "judicial transactions" described in the 1927 manuscript included only the correction of transaction failures at the microlevel. The second limitation is that Commons's theory of value did not include the coexistence of suppliers with different efficiency levels, with the result that Commons did not sufficiently explain the coordination of managerial and bargaining transactions. Section 4 shows that managerial transactions controlling efficiency and bargaining transactions controlling scarcity are complimentary, both at the firm and macroeconomic levels.

Keywords John R. Commons • Institutional economics • Value theory • Transaction • Efficiency • Scarcity

H. Uni (✉)
Graduate School of Economics, Kyoto University, Kyoto, Japan
e-mail: uni@econ.kyoto-u.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_1

1 Conclusions of Commons's Criticism of the Classical Theory of Value

A recently discovered manuscript written in 1927 titled "Reasonable Value: A Theory of Volitional Economics" (called the 1927 manuscript hereafter) roughly corresponds to Chapters 2–8 of *Institutional Economics* (Commons 1934). In both texts, Commons explained the areas where his theory of value differed from the theories of the major economic theorists from John Locke to Carl Menger and the areas where his theory descended from earlier theories. In doing this, Commons referred to the historical and institutional development of capitalism. The conclusions that Commons reached based on his criticism of the classical theory of value, as summarized in *Institutional Economics*, are detailed below.

In the last section of Chapter 8 of *Institutional Economics*, Commons identified three limitations of the classical theory of value. The first limitation is the "elimination of scarcity" by assuming demand accommodates supply, which leads to value being determined only by efficiency. As Commons explained, "Smith and Ricardo eliminated the variability of wants of consumers (buyers) by assuming that they expanded or contracted equally with the supplies of materials or services offered by consumers in their function of producers (sellers). The decisive variables, therefore, in their conceptual schemes, were labor-pain with Smith, and labor-power with Ricardo and Marx" (*ibid*., p. 386). Thus, the classical theory of value was based on a single causation. Instead of "the idea of building a whole system of economics, and even a whole social philosophy, upon a single principle, such as labor or wants," Commons proposed "a complex of many principles," (*ibid*., p. 376) such as efficiency, scarcity, futurity, sovereignty, and custom. In sum, Commons proposed "theories of multiple causations" (*ibid*., p. 8).

The second limitation of the classical theory of value is the "elimination of ownership." "This was the assumption, derived from the popular concept of corporeal property, that everything valuable is owned, and ownership, therefore, was a constant factor varying exactly with the quantities of materials owned. [. . .] This elimination of ownership is seen in their [i.e. the classical economists and the Austrian economists] tacit (Austrian) or avowed (classical) assumption of the identity of production with selling and of consumption with buying" (*ibid*., pp. 386–387). Consequently, the classical theory of value excluded incorporeal property, preventing it from being applied to analyze the dimension of futurity. It also excluded intangible properties, preventing it from being applied to analyze institutional reforms resulting from collective action. Commons considered transactions the ultimate unit of investigation and saw their importance as derived from the independence of ownership from materials:

> If, therefore, transfers of ownership (legal control) are themselves highly variable, independent of yet inseparable from the exchange of materials (or services) owned, then another relativistic concept must be constructed, which we name a transaction governed by working rules of collective action that transfer the ownership, whether with or without exchanging the materials. (*ibid*., p.387)

The third limitation of the classical theory of value is the "elimination of money and credit." As Commons expressed: "[s]till another independent variable, money and credit, arising solely from the legal scheme of control, was eliminated from the classical and hedonic theories on the assumption of stability of prices, so that all changes in monetary and credit prices were equivalent to changes in labor-pain, labor-power, or pleasure or pain. Money became an absolutistic framework, itself unchangeable, while the changes occurred in the production, exchange, and consumption of products" (*ibid*., p. 387). Furthermore, the classical theory of value did not consider the dimension of futurity mediated by the credit system. Instead of "non-monetary theories" that eliminated money and credit, Commons proposed a monetary theory in which money is "the social institution of the creation, negotiability, and release of debts arising out of transactions" (*ibid*., p. 513).

Commons also developed his criticism of the classical theory of value in *The Distribution of Wealth* (Commons 1893), *Legal Foundation of Capitalism* (Commons 1924), and *Reasonable Value* (Commons 1925). This chapter attempts to reveal his theoretical progress and limitations, as represented in the newfound 1927 manuscript, by comparing this manuscript with these other published works. As I mentioned above, the 1927 manuscript roughly corresponds to Chapters 2–8 of *Institutional Economics* and excludes content dealing with money and credit theory contained in Chapter 9 of *Institutional Economics.* Therefore, the 1927 manuscript contains little on Commons's criticism of the third limitation of the classical theory of value, namely, the "elimination of money and credit." In this manuscript, Commons criticized the first and second limitations of the classical theory of value, namely, the "elimination of scarcity" and "elimination of ownership," and attempted to construct new concepts and theories to overcome these limitations.

This chapter is structured as follows. Section 2 clarifies Commons's theoretical progress in the 1927 manuscript by comparative analysis with Commons (1893), Commons (1924), and Commons (1925). The first area of progress involves the conceptualization of proprietary scarcity, the second is the construction of his theory of value with multiple causations, and the third is the formulation of three types of transactions. Section 3 identifies theoretical limitations of the 1927 manuscript and considers how to overcome them. The first limitation is the concept of "judicial transactions," which was formulated in the 1927 manuscript as the third type of transaction but included only the correction of transaction failures at the microlevel. In *Institutional Economics*, "judicial transactions" were renamed "rationing transactions," and their content was expanded greatly by including institutional economic adjustments at the macro- and meso-levels. The second limitation is that Commons did not introduce to his theory of value the coexistence of suppliers with unequal efficiency. This oversight led to insufficient explanation of the coordination of managerial and bargaining transactions. Section 4 shows, as an implication of this chapter, that managerial transactions controlling efficiency and bargaining transactions controlling scarcity are complimentary, both at the firm and macroeconomic levels.

2 Theoretical Progress in the 1927 Manuscript

2.1 Conceptualization of Proprietary Scarcity

In the 1927 manuscript and the first half of *Institutional Economics* (Chapters 2–8), Commons focused on scarcity and efficiency. Although Commons considered these two variables indispensable to economic theory, the major economic theorists from John Locke to Carl Menger had focused on just one of the two variables. In the 1927 manuscript and the first half of *Institutional Economics*, Commons tackled the following issues. How did the major economic theorists conceptualize scarcity and efficiency? Furthermore, what were the failures in their conceptualization? Commons then redefined these two concepts and tried to construct a theory of value based on "a complex of many principles," such as efficiency, scarcity, futurity, sovereignty, and custom.

Commons defined efficiency as the ratio of output to input. When input is measured by the amount of labor, efficiency is identical to physical labor productivity. In the 1927 manuscript, the term "productivity" was often substituted for "efficiency."[1]

Thus, Commons corrected some confusion regarding efficiency but did not innovate on the concept. As an institutionalist, his innovation involved the understanding of scarcity by the various schools. In the 1927 manuscript, for the first time, Commons named a concept himself, namely, "proprietary scarcity."[2] The origin of "proprietary scarcity" is "scarcity of proprietors," explained by Commons as follows:

> [F]or the business man, working man, creditor, debtor, landlord, tenant, scarcity is a scarcity of proprietors. These proprietors are buyers, sellers, lenders, borrowers, landlords, tenants, who own, or have the prospect of owning, the food, clothing, shelter and land. It is this proprietary scarcity for which prices are paid, [...] Scarcity, as an immediate fact of

[1]For example, the 1927 manuscript listed "productivity" among the five principles that formed the basis for the theory of value (Commons 1927, Chapter 1, p.14). However, in *Institutional Economics* Commons substituted "efficiency" for "productivity" to avoid confusion over physical versus value-added labor productivity. In the former case, output is measured by physical quantity of product; in the latter case, output is measured by added value (ibid., p. 378). Price is used in calculating added value, but Commons sees price as determined by bargaining transactions related to scarcity. However, efficiency is determined through managerial transactions. Although these two variables are linked, Commons treated them as distinct concepts. Furthermore, Commons (1934, p. 284) noted the potential plant productivity to be confused with plant capacity in ordinary discussion.

[2]Commons (1927, Chapter 5, s.47f) noted "Cf. Llewellyn, Carl, American Econ. Rev., March 1924," and Commons (1934, p.194f) added, "Llewellyn, like Hume, makes proprietary scarcity the basis of his correlation of law and economics. Knies and Ely had previously set forth a similar idea." As a cause of price, Ely (1889) mentioned suppliers' withholding of supply as follows: "[l]abor organizations and other organizations of productive forces try to regulate supply and demand in a manner beneficial to themselves, and this is often, though not always, in a manner beneficial to the general public. To withhold supply for a time from those demanding it tends to raise prices, while to press it upon them leads to 'slaughter-prices'" (Ely 1889, p.180).

> business and the subject-matter of economics, is scarcity of those who have legal control, not scarcity of goods. (Commons 1927, Chapter 5, s.17)[3]

The chapter titled "Adam Smith," in both the 1927 manuscript and *Institutional Economics*, includes a section titled "Cause of scarcity-value," in which Commons explained his concept of proprietary scarcity in reference to Smith's concept of psychological scarcity. According to the 1927 manuscript, proprietary scarcity differs from the concept of scarcity as defined by various previous schools of economic theory. For Adam Smith and the marginalists,[4] scarcity was psychological and subjective, based on human pleasure and pain. Ricardo explained scarcity based on the strength of nature's resistance to human beings, as shown in the unproductiveness of land. His scarcity was objective natural scarcity. However, while Commons's scarcity is also objective, it is defined by the relationship between the supply and demand in a particular society at a particular time. Although nature limits the quantity of supply in Ricardo's natural scarcity, in Commons's proprietary scarcity, the quantity of supply to the market is limited or withheld artificially, based on supplier collusion or monopoly.[5] The purpose is to prevent a decrease in scarcity (price) due to excess supply. In the words of Commons, "the relative degree of scarcity of man-power and products [is] determined, not by pain or by nature, but directly by the relative ability to withhold supply for any reason or no reason" (*ibid*., Chapter 5, s.49).

Commons emphasized that whether in the case of general commodities or labor power, the power of sellers to limit or withhold supply has been authorized and strengthened historically by the development of institutions of ownership and labor rights. Therefore, proprietary scarcity is closely related to custom and sovereignty, as follows, "The correct view, [...] is the one to be derived from Hume, namely the view based on scarcity, custom and sovereignty, and it is this which we name proprietary scarcity. [...] Custom and sovereignty determine who shall be the proprietor" (*ibid*., Chapter 5, s.48). However, Smith regarded collective actions solely as privilege or monopoly based on mercantilism and thought that collective actions should be eliminated. Commons said of Smith that "[h]e identified his avowed scarcity value with monopoly and identified monopoly with collective action, whether it be the state or private associations. This was his meaning o[f] mercantilism" (*ibid*., Chapter 5, s.46).[6]

---

[3] Similar sentences exist in Commons (1934, p. 169).

[4] According to Commons, Menger should be excluded because his concept of scarcity was social and objective and differed from the individual and subjective concept of Jevons (Commons 1927, Chapter 8, s.16). Commons explained this as follows, "Menger went further than the individual. His quantity wanted is wanted by society. His quantity available is made available by society. The relation between the two quantities is his 'social relation' of scarcity. Put in mathematical terms this is the scarcity-ratio between the quantity wanted by society and the quantity made available by society. This ratio is Price" (Commons 1934, p. 380).

[5] Regarding this point, beginning with his 1893 book, Commons consistently emphasized suppliers' control of the quantity of supply as a determinant of prices and wages.

[6] Similar sentences exist in Commons (1934, p.195).

These different understandings of collective action were also mentioned in the section titled "Regulator of value," both in the 1927 manuscript and in *Institutional Economics*. Commons and Smith had different understandings of the regulator of value, about which Commons explained that "Smith [. . .] required a natural regulator of supply and demand in place of collective regulation, and he found it in the breast of every industrious and thrifty manufacturer and merchant" (*ibid*., Chapter 5, s.50). Commons criticized Smith's idea that the regulator of value is a natural regulator of supply and demand, namely, the "invisible hand" as follows:

> If this collective action is eliminated then there will emerge divine benevolence, abundance, perfect liberty, perfect equality and security, such that exchange values will be regulated according to their real value. This "real value" is "reasonable value", but without the leading constituents of reasonable value, namely, collective action, scarcity, money, custom and collective opinion. Reasonable value, as formed in the practices of courts, juries, commissions, arbitration arrangements, and so on, is a concept of collective action in terms of money, arrived at by consensus of opinion of reasonable men, in that they are men who conform to the dominant practices of the time. Reasonable value changes with new combinations of circumstances and collective control, and is in process of evolution through changes in efficiency, scarcity, custom politics and dominant opinions. (*ibid*., Chapter 5, s.57)

Thus, the regulator of value for Commons is "collective action" such as "the practices of courts, juries, commissions, arbitration arrangements, and so on."

Although the term "proprietary scarcity" first appeared in the 1927 manuscript, the above idea of Commons regarding the cause and regulator of value was constructed over many years following the publication in 1893 of Commons's first theoretical book *The Distribution of Wealth*. In this book, Commons considered the behavior of suppliers who profit by withholding supply and criticized the profit theory of Böhm-Bawerk from this perspective. Moreover, he considered such supplier behavior a cause of wages exceeding subsistence levels and criticized the wage theory of classical economists, which could not explain wages exceeding subsistence levels. Commons (1893) showed the following figure (Fig. 1).

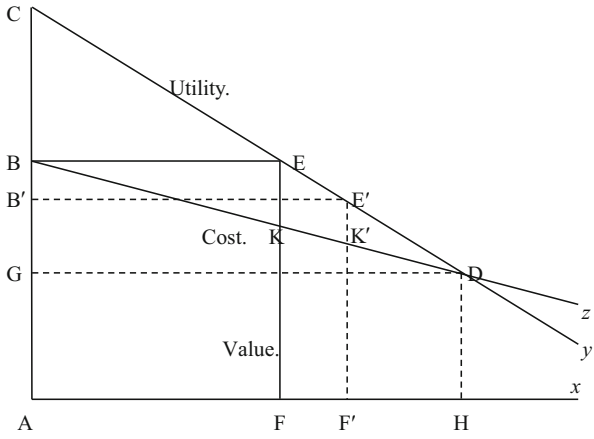


Fig. 1 Theory of value in Commons (1893) (Source: Commons 1893, p.125, Diagram 4)

The horizontal axis indicates the quantity of production, and the vertical axis represents both product cost and product utility per unit. The straight line Bz indicates the cost per unit, which is assumed to decrease with increasing production.[7] The straight line Cy indicates consumer utility per unit, which is also assumed to decrease with increasing production. Commons described, "[i]f production is carried beyond the point H, the value of the marginal product will be less than the cost of producing the same, and the value of the entire product, represented by the area AHDG, would be less than its cost, represented by AHDB. But if the production be limited at the point F, the value of the entire product being AFEB, would be greater than its cost, AFKB, and there would be a profit of BKE" (Commons 1893, p.126). Commons coined the term "monopoly privileges" to describe such ability to control production, which empowered owners to limit supply relative to demand, and thus to keep prices above the cost of production (*ibid*., p.103). He further explained that permanent profits "depend upon the nature of the business (natural monopolies, trusts), the possession of natural resources or opportunities (land), the possession of legal advantages (patents, franchises, copyrights), long-established relations to the community, inspiring confidence and popularity (good-will)" (*ibid*., p.198).

However, Commons (1893) did not clearly distinguish reasonable and unreasonable monopoly privileges. In *Legal Foundations of Capitalism*, published in 1924, based on analyses of historical changes in customs and laws regarding rent bargain, price bargain, and wage bargain, Commons distinguished between goodwill and privileges by whether any public purpose was served by suppliers' withholding supply. He saw this distinction as ultimately legitimated through expansion or changes in the definition of property rights by a judicial decision, saying, "[t]hese can be distinguished only by good judgment as to the point where goodwill ends and special privilege begins" (Commons 1924, p.316).

Thus, Commons (1893) regarded suppliers' withholding supply as a cause of scarcity value, and Commons (1924) included the idea that collective action via courts, administrative commissions, and so on was a regulator of value, judging reasonableness based on public purpose. However, in these books, Commons did not use the term "proprietary scarcity" or any other expression that combined these two words.[8] "Proprietary scarcity" was a term Commons coined in the 1927 manuscript to clarify his criticism of Smith's subjective scarcity and Ricardo's natural scarcity.

[7]Commons (1893) also examined the case of increasing costs (pp.147–148). However, according to Harter (1962), "Commons lost his way when he tried to use increasing costs and practically admitted as much." Consequently, "Not only did the interesting part of the analysis in the *Distribution of Wealth* fail to survive its bad reception from economists, but it failed to sustain Commons's interest. Never again did he attempt to approximate the type of analysis which interested his fellow economists" (Harter 1962, pp.214–215). However, as I will explain later, in the 1927 manuscript, Commons tried to articulate the theories of value of Menger and Ricardo using a framework similar to that in his earlier work of 1893.

[8]Expressions such as "proprietary and scarcity concept" (p.32) and "the scarcity factor and the proprietary factor" (p.33) appeared in Commons (1925).

This is the first contribution of the 1927 manuscript, and the concept of "proprietary scarcity" would become a key concept in *Institutional Economics*.

2.2 Construction of a Theory of Value with Multiple Causations

Based on this concept of "proprietary scarcity," Commons tried to construct a theory of value using a complex of many principles, such as efficiency, scarcity, futurity, sovereignty, and custom. Although *Institutional Economics* contains a 150-page chapter titled "Efficiency and Scarcity," unfortunately it lacks an explicit quantitative description of the relationship between efficiency, scarcity, and price. The 1927 manuscript contains an attempt at such a description, which can be found in Chapter 8, titled "Scarcity and Efficiency." This 89-sheet chapter consists of three sections, as follows: Section 1 "Use Value, Scarcity Value, and Value" (19 sheets), Section 2 "Value and Price" (30 sheets), and Section 3 "Fund and Flow" (40 sheets). Of these three sections, virtually all of Section 1 was used in Chapter 8 of *Institutional Economics*, appearing in Section 7, titled "Ricardo and Malthus." Only the first nine pages of Section 2 were used, appearing in the Section 9 of Chapter 8 in *Institutional Economics*, titled "Menger, Wieser, Fisher, Fetter." Finally, only the first six pages of Section 3 were used, appearing in Section 8 of Chapter 8, titled "Marx and Proudhon." Notably, the part of Section 2 of Chapter 8 from the 1927 manuscript that was not used in *Institutional Economics* contains Commons's quantitative explanation of the relationship between efficiency, scarcity, futurity, and price.

In this part of the 1927 manuscript, which explains Ricardo's labor theory of value and Menger's marginal utility theory,[9] Commons showed that prices are affected by multiple factors, such as "use value, property-rights, degree of scarcity, relative scarcity, and futurity" (Commons 1927, Chapter 8, s.134). This detailed analysis was excluded from *Institutional Economics*.[10] Below, I clarify the main points Commons made in his explanation of value formation in Section 2 of Chapter 8 in the 1927 manuscript. Incomplete aspects of his explanation are mentioned in Sect. 3.2 of the present chapter.

First, Commons evaluated Menger's concept of scarcity as follows. He clarified that Menger distinguished between wants (Bedürfnisse) and quantity wanted (Bedarf), the former being mere feelings that differ in intensity, while the latter is an

[9] Although Lederer (1922) attempted a similar explanation, Commons not only tried to articulate the two theories but also added his own concept of price determinants to overcome their limitations.

[10] J. Robinson's *The Economics of Imperfect Competition* and E. H. Chamberlin's *The Theory of Monopolistic Competition*, published in 1933, triggered a full-fledged examination of price theory in an oligopolistic market. Based on these new developments in imperfect competition theory, Commons might have considered it necessary to revise the price theory in the 1927 manuscript. This may explain why *Institutional Economics* excluded this material from the 1927 manuscript.

adaptation to circumstances—the quantity of a particular use-value wanted at a time and place. Hence, the quantity wanted refers to actually recognized needs (*ibid*., Chapter 8, s.107). Menger thus focuses on the total quantity wanted versus the total quantity available under specific circumstances of time and place (*ibid*., Chapter 8, s.109). The total quantity wanted and the total quantity available are inseparable and limited by different factors. Unfortunately, Menger's use of Bentham's hedonistic term "utility" obscured his own contribution (*ibid*., Chapter 8, s.110). Commons, who like Menger, defined "scarcity" in terms of the relationship between the total quantity wanted and the total quantity available, regarded Menger's real contribution as "the explanation of a strictly objective and quantitative theory of value." The influence of Menger is evident in Commons's contemplating "the transition of economic science from psychological economics to volitional and quantitative economics" (*ibid*., Chapter 8, s.111). In clarifying the meaning of the term "volitional," Commons also mentioned the "volitionalism" of Menger and Wieser (*ibid*., Chapter 8, s.122). He explained that they considered valuation in terms of a proposed action. That is, the total quantity wanted is valued in relation to the total quantity available under specific circumstances of demand, supply, and price that apply at a certain time and place. Valuation thus takes on a volitional dimension, in the sense that an actor seeks to "economiz[e] his own resources, in order to decide for himself what attitude he may take up with regard to things outside of him" (Wieser 1889, p.52).

Although Commons inherited Menger and Wieser's "volitionalism," he also described how his method differed from theirs (Commons 1927, Chapter 8, ss. 122–124). Wieser (1889) derived his theory of "natural value" based on the hypothesis of a communist state. Because no collective action exists to restrain or coerce individuals in this state, it resembles an anarchistic state such as Proudhon pictured. The essential feature of such a state is that individual actions are taken without the intervention of money. In contrast, the basis of Commons's theories is collective action, to which individuals adjust themselves according to the positions, jobs, or memberships that they hold.

Commons then discussed the factors that restrict the total quantity wanted and the total quantity available and contrasted the theories of value of Menger or Malthus with that of Ricardo. He observed that Malthus focused on "the total limited quantity wanted by the total increasing population," but Ricardo focused on "the total limited quantity available owing to the increasing scarcity of nature's resources" (*ibid*., Chapter 8, s.125). Commons used a figure to explain the difference between the value theories of Menger and Ricardo using an analysis, replicated here as Fig. 2.

The horizontal axis indicates the quantity of wheat, for example, and the vertical axis represents the value of wheat per unit. As the use-value per unit is constant, it is indicated by the horizontal line CD. Additionally, happiness and welfare as defined by Smith and Bentham are represented by the horizontal line C′D′. This figure shows

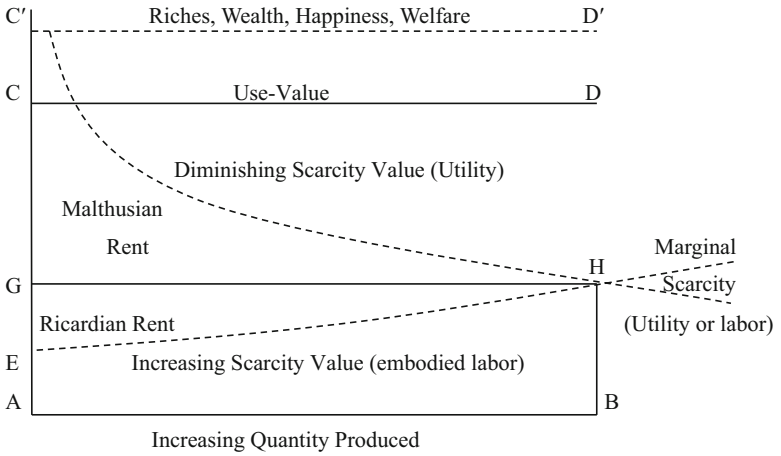


Fig. 2 The value theories of Menger and Ricardo (Source: Commons 1927, Chapter 8, s.125, Fig. 9)

the case of agriculture.[11] According to Ricardo, if cultivation progresses toward more infertile land as population increases, then labor productivity will decrease and the amount of labor embodied in a single unit of wheat will increase. This means an increase in natural resistance to humankind, that is, an increase in natural scarcity, which Ricardo measured by the increase in the amount of embodied labor. Therefore, "his [Ricardo's] embodied labor is a personification of scarcity" (*ibid.*, Chapter 8, s.126). As indicated by the curve EH, as production increases, so too does the amount of embodied labor per unit of wheat. That is, the curve EH shows increasing scarcity-value per unit. Assuming point B represents marginal land, the length of the vertical line BH shows the amount of embodied labor per unit of wheat in the marginal land. "This marginal quantity of labor per bushel is his [Ricardo's] personification of marginal scarcity." Then, according to the theory of labor value, this marginal quantity of labor determines exchange-value or price: "If, finally, there is perfectly free competition, then the exchange-value, or price, will be one price at the same time for all bushels, measured vertically from AB to GH." "Finally, Ricardo's 'Value' of the total product is the parallelogram, ABHG" (*ibid.*, Chap. 8, s.126). The total Ricardian rent is measured by the area of the triangle bounded by points E, H, and G.

According to the Malthusian view, as enunciated by Menger and Wieser, price is determined both by the length AB, which represents "the quantity available, controllable, or purchasable, for the population as a whole at that time and place," and by the curve C′H, which shows the "diminishing utility with each additional

[11]Commons noted that Ricardo did not assume diminishing returns in manufacturing as he did in agriculture and assumed an average amount of embodied labor per unit in the case of the former (Commons 1927, Chapter 8, s.125).

increment of quantity available" (*ibid*., Chapter 8, s.126). Price is measured by the height BH, similarly to the explanation of Ricardo.

Menger and Wieser described the meaning of C′H as diminishing utility, but Commons described it as follows, "[w]e have given [this] the name, diminishing scarcity, instead of the hedonistic sensational term, diminishing utility. The subjective term is a concept of pure scarcity-value personified and subjectified, and separated from all circumstances of time, place, demand, supply or price. But the term diminishing scarcity indicates what is meant objectively and quantitatively" (*ibid*., Chapter 8, s.127).

As mentioned above, regarding the cause of value, Ricardo focused on the supply-side effects of increasing resistance from nature or increasing embodied labor, while Menger focused on the demand-side effects of reduction of scarcity or diminishing utility. As Commons considered both supply-side and demand-side factors important, he criticized both of these approaches and proposed his own theory of value.

He criticized Ricardo because "[w]hat he [. . .] did was to make them [i.e. wants or demand] constant per unit of commodity, no matter how great the increase of quantity available. If wants are unlimited it is the same as saying that intensity of the want is constant for each added increment of supply" (*ibid*., Chapter 8, s.128). He criticized Menger, saying, "for Menger and Wieser the variable quantity is the limited quantity wanted while the constant quantity per unit of product was technologically the process that determines the quantity available" (*ibid*., Chapter 8, s.130).

Commons considered Ricardo's assumption of constant demand for product per unit appropriate in an analysis to measure the effects of technological factors on price. However, Commons argued that factors on the demand side, such as Menger's decreasing scarcity, should be incorporated in general analysis of price determination. He explained his idea of price formation as follows:

> Ricardo's capitalist would not increase the supply of embodied labor in the form of capital if there were no profit in it, and Menger's quantity available would not be produced if expected consumers would not pay the price plus profit. Always Ricardo's capitalist produces unlimited quantities, in order that his embodied labor may have an equivalent scarcity-value including profit on the markets; and always Menger's diminishing scarcity places a limit on this scarcity-value. (*ibid*., Chapter 8, ss.129–130)

To explain this idea of Commons using Fig. 1, the supplier limits the quantity of supply at point F, where the realized price (EF) covers the cost of production (FK) and the desired profit (KE). If the quantity of supply exceeds that at point F, the supplier cannot achieve the desired profit because the scarcity-value for consumers decreases according to change in the total quantity wanted versus the total quantity available.

As mentioned above, according to Commons's theory of value, price is affected by three factors: efficiency-value represented by the cost per unit, scarcity-value based on the total quantity wanted versus the total quantity available at a certain time and place, and suppliers' withholding supply to realize profit.

Furthermore, Commons focused on futurity as another factor that affected price. He gave an example, following Menger, of how capital goods are valued. Although

consumer goods can satisfy human wants directly, capital goods satisfy such wants indirectly through being used over time to produce consumer goods. Therefore, "capital goods get their present scarcity value from the expected scarcity values of the consumption goods, through man's knowledge of causes and effect" (*ibid*., Chapter 8, s.132). According to Commons, "Menger made it [i.e. futurity] stand out as the essential element in valuation . . . [and] revealed the mental mechanism of expectation by which it [i.e. present value of capital goods] occurs" (*ibid*., Chapter 8, s.135).[12] He concluded his analysis as follows, "[h]ence the concept of scarcity-value which we may derive from Menger may be reduced to the five characteristics: use value, property-rights, degree of scarcity, relative scarcity, and futurity" (*ibid*., Chapter 8, s.134).

2.3 Formulation of Three Types of Transactions

The most remarkable theoretical progress in the 1927 manuscript is a formulation in Chapter 1, titled "Method" of three types of transactions, namely, managerial transactions, bargaining transactions, and judicial transactions.[13] Having taken transactions, rather than commodities and individuals, to be "the ultimate unit of investigation," Commons wrote the following, "[f]inally, transactions are the modern substitute for the older physical idea of exchange of commodities, and, in their three-fold aspect of managerial transactions, bargaining transactions and judicial transactions, they are the behavioristic units of investigation modified in their dimensions by the five variable dimensions, scarcity, futurity, efficiency, sovereignty and custom" (Commons 1927, Chapter 1, s.7). Although, in Commons (1924) and Commons (1925), he had regarded transactions as the ultimate unit of investigation, in those earlier works, he did not formulate this analytical framework of three types of transactions.

[12]While Commons does not explicitly mention here the financial processes associated with external financing of the purchase of capital goods, this is substantially the same as Minsky's explanation of the "demand price" of investment goods (Minsky 1975). Commons did not explicitly describe—this is self-evident—how curve C′H in Figure 2 changed position when futurity was considered. Commons developed his analysis of financial processes in Chapter 9 of *Institutional Economics*, titled "Futurity."

[13]Chapter 1 of the 1927 manuscript consists of two sections: Section 1 "Metaphysics" (12 sheets) and Section 2 "Formula of transactions" (21 sheets). After major revisions, these contents were used in Sections 2 and 6 of Chapter 2 of *Institutional Economics*, titled "Transactions and Concerns" and "Conflict of Interests." With regard to bargaining and managerial transactions, the section names and contents were almost the same in the 1927 manuscript and *Institutional Economics*. However, the name of the third type of transaction was changed from "judicial transactions" in the 1927 manuscript to "rationing transactions" in *Institutional Economics*, and the content of this type of transaction was expanded greatly. The reason for and meaning of this change are explained in Sect. 3.1.

In the 1927 manuscript, Commons characterized the three types of transactions according to different psychological aspects, defining psychology as "behavioristic sciences of psychology with their emphasis on stimuli and response" (Commons 1927, Chapter 1, s.3). Commons stated, "Managerial and judicial transactions employ the social psychology of command and obedience, [. . .] The distinguishing mark of these managerial and judicial transactions is absence of alternatives. The employee or citizen must obey or suffer punishment. But bargaining transactions imply the social psychology of persuasion or coercion, in that the parties have each a choice of alternatives between which they can select without punishment. A coercive bargaining transaction is one in which the alternative for one of the parties is onerous, but not looked upon as punishment for disobedience. A persuasive transaction is one in which both alternatives for both parties are beneficial" (*ibid*., Chapter 1, ss. 12–13). Moreover, Commons distinguished between judicial transactions enforced by sanctions from public authorities and the other two types of transactions, which were supported by inducements working between concerned individuals. For example, Commons noted that compliance with a decision by a judge or arbitrator is "enforced by that alternative collective action which we name punishment" (*ibid*., Chapter 1, s.25).[14]

Furthermore, managerial transactions are technological connections controlled by engineers, while bargaining transactions are economic connections controlled by business people, as follows:

> [I]n order to obtain future goods a combination of several present instruments is needed, such as materials, labor, land, and this combination has both a technological and economic connection. The technological connections are the physical apportionment of complementary goods for the production of use values, the province of the engineer and managerial transactions. The economic connections are the proportioning of the quantities of these complementary goods according to the present and expected degrees of scarcity of each, the province of the business man and bargaining transactions. (*ibid*., Chapter 8, s.133)

In the remainder of this section, I examine the possible reason Commons first formulated the concepts of managerial transactions and bargaining transactions in the 1927 manuscript, referring especially to Section 3 of Chapter 8. First, it is important to understand how Commons formulated the concepts of transactions in his books prior to the 1927 manuscript. Transactions first appeared as a core analytical concept in Commons (1924). In this work, Commons described them as "the ultimate unit of investigation" and explained that "[t]he transaction is two or more wills giving, taking, persuading, coercing, defrauding, commanding, obeying, competing, governing, in a world of scarcity, mechanism and rules of conduct" (Commons 1924, p.7). Next, he classified the flow of transactions into two processes, namely, a going plant and going business. He explained a going concern as "none other than a technological process of production and consumption

[14] According to Commons, "[i]nducements are the stimuli applied to individuals by other individuals, but sanctions are the stimuli applied to individuals by a collection of individuals acting in concert" (*ibid*., Chapter 1, s.24).

of physical things and a business process of buying and selling, borrowing and lending, commanding and obeying, according to shop rules or working rules or laws of the land. The physical process may be named a 'going plant,' the business process a 'going business,' and the two together constitute a 'going concern' made up of action and reaction with nature's forces and transactions between human beings according to accepted rules" (*ibid*., p. 8). Thus, although Commons (1924) distinguished two process types, namely, the going plant and going business, he did not yet distinguish two transaction types, such as managerial transactions and bargaining transactions.[15] On this point, Commons (1925) is the same as Commons (1924).[16] Therefore, Commons first formulated managerial transactions and bargaining transactions in the 1927 manuscript, and these two concepts of transactions then appeared in *Institutional Economics*.

I think the reason Commons formulated the two concepts of managerial transactions and bargaining transactions can be found in his criticism of the analysis of Marx, who defined both these transaction types as a function of capitalists in the production process. Commons developed his criticism of Marx's analysis in Section 3 of Chapter 8 of the 1927 manuscript, titled "Fund and Flow." However, *Institutional Economics* devotes just a few lines to summarizing this criticism, with the result that readers exposed only to this work may not get a clear understanding of Commons's argument.

To solve the problem of how to formulate and analyze the processes controlling efficiency and proprietary scarcity, Commons critically examined the ideas of Marx. He approved of Marx taking into account both efficiency and proprietary scarcity but criticized his merging both these processes into the production process. First, Commons pointed out that Marx, unlike Proudhon, attached importance to demand-side factors, quoting from *The Poverty of Philosophy* (Marx 1847), as follows:

[15]Commons (1924) classified transactions into "authorized transactions" and "authoritative transactions." According to Commons (1924), in an authoritative transaction, "[t]here is no bargaining between citizen and official, no power to withhold service or property, the psychological aspect of the transaction being that of command and obedience" (p.107). Therefore, an authoritative transaction was defined in the 1927 manuscript as corresponding to a "judicial transaction" as defined in the 1927 manuscript. However, the psychological aspect of an authorized transaction is "partly command and obedience, partly persuasion or coercion" (p.107). Although an authorized transaction seems to include both managerial transactions and bargaining transactions, Commons (1924) did not formulate these two terms. Moreover, although Commons (1924) identified managerial ability as follows, he did not conceptualize managerial transactions. "[I]f managerial ability is distinguished from these, it is the ability to induce other persons to move things, usually by that emotional influence of promises, warnings or threats which may be summarized in social psychology as persuasion or coercion, command and obedience"(p.155).

[16]Commons (1925) did not use the antonyms "going plant" and "going business" but rather the similar pair of terms "engineering economy" and "business economy" (p.38). Regarding psychology, Commons (1925) mentioned that "external psychology by which individuals adapt themselves to this custom of private property and personal liberty [...] [is] summarized in the psychological concepts of persuasion and coercion between equals, command and obedience between superiors and subordinates" (p.66). Moreover, similar to Commons (1924), Commons (1925) identified managerial ability (p.11).

> This is seen in his assertion that demand was essential to Ricardo's meaning of value. A thing had to be in demand, else embodied labor could not give value to it. "The difficulty of Proudhon", he said "is simply that he has forgotten demand, and that a thing can only be scarce or abundant according as it is in demand. [. . .] He all at once forgets that there are people who produce and that it is to their interest never to lose sight of the demand."[17] In other words, Marx's "producer" not only produces use-value but also limits its quantity in the process so that expected demand will give exchange-value to it. His use-value is already a scarcity-value. (Commons 1927, Chapter 8, s.145)

Marx said that producers controlled the quantity of production, anticipating future demand, to prevent a decrease in profit from oversupply and a resultant price decline. In regard to this, Commons said that Marx "changed Ricardo's meaning of use-value from physical abundance to volitional scarcity" (*ibid*., Chapter 8, s.149).[18] As I mentioned in Sect. 2.1, Commons believed that the center of power in bargaining transactions lay in the ability of suppliers to withhold supply based on property rights. Commons positively evaluated Marx's theory of value for recognizing the withholding of supply. However, he criticized Marx's ideas with regard to proprietary scarcity for containing contradictions (*ibid*., Chapter 8, s.149). One contradiction was "confusion of income and outgo with output and input."[19] Commons insisted that these two relations should be distinguished because "[t]hey involve two entirely different types of transactions" and further explained as follows:

> Evidently the output-input relation is wholly different from the income-outgo relation. They involve two entirely different types of transactions, the managerial transaction of producing and output and the bargaining transaction of determining how much and at what prices visible and invisible stocks shall be increased or diminished by buying or selling. The output-input rate per man-hour is the measure of efficiency, the income-outgo rate is the measure of the rate at which supply, visible or invisible, is increasing or decreasing. (*ibid*., Chapter 8, ss.163–164)

However, Commons explained that Marx merged "the two in the physical process of production. [...] They merged the efficiency process of output of use-values relative to input of labor with the scarcity process of limited quantities of income

[17] Although Commons cited Marx simply as "Poverty, 41, 42," a more precise citation of the source text would be as follows: Marx, K. 1847. Poverty of Philosophy. Translator H. Quelch. 1913. Chicago: C.H. Kerr & Company. pp.40–41.

[18] However, Commons continued that "sometimes his meaning is ambiguous [. . .] In some cases Marx seems to mean that use-value is only physical quality." To demonstrate Commons cited several passages from *The Capital*, as follows: "[the exchange-value of commodities] manifests itself as something totally independent of their use-value;" "[u]se-value is independent of the amount of labor required to appropriate its useful qualities;" "[u]se-values furnish the material for a special study, that of the commercial knowledge of commodities;" and "[u]se-value as such lies outside the sphere of investigation of political economy" (ibid., Chapter 8, s.146).

[19] The term "confusion" may be incorrect, because Marx distinguished efficiency (relation of output and input) and scarcity (relation of income and outgo). Commons criticized Marx not for his distinguishing these two relations but for his idea that these two processes were controlled in the production process by capitalists. In fact, Commons (1934) correctly noted that "Social Man-Power [...] is intended to distinguish [the] engineering economy from [the] proprietary economy, which Marx was the first clearly to distinguish" (Commons 1934, p. 267).

and outgo relative to the existing quantities of supply and demand. [. . .] One is the principle of efficiency with its managerial transactions, the other the principle of scarcity with its bargaining and credit transactions" (*ibid*., Chapter 8, ss. 164–165). According to Commons, this merging of the "two entirely different types of transactions" in the physical process of production was caused by "the confusion of a physical with a proprietary process." Commons explained that "Marx and Ricardo used the term 'exchange' in the same physical sense as the term production. Production and exchange were the labor-process of producing limited quantities of commodities and delivering them physically in exchange one with another. Thus the business process of regulating or controlling supply, demand and price was read into the physical process of producing an output" (*ibid*., Chapter 8, s.165).[20] Commons's main criticism of Marx was in the following passage:

> This business process is a proprietary process of holding, withholding and transferring the legal control of goods. [. . .]
>
> Marx, like Ricardo, extended this proprietary process into the factories. With him it was the employer who was the proprietor and the marketing process was, in fact, the labor-market at the doors of the factory, where legal control of input and output was decided. Hence the employer controlled the relative scarcities, not only of commodities already produced as did the merchant, but the relative scarcities of labor and commodities in the process of production itself. The employer controlled the supply, demand and prices both of the input of labor and the output of labor. (*ibid*., Chapter 8, ss. 165–166)

Thus, Commons strongly criticized Marx's idea that both physical processes controlling efficiency and proprietary processes controlling scarcity merged into the production process controlled by capitalists. This criticism of Marx's method of analysis led Commons to conceptualize the managerial transaction and the bargaining transaction as "two entirely different types of transactions."[21]

[20] Although in Commons (1927) the explanation of Marx's confusion continued over nine sheets (Chapter 8, ss.161–169), in Commons (1934) it was summarized in a few short sentences. Readers may not easily understand the brief explanation in Commons (1934), which ran as follows: "This production in limited quantities, we take it, is what Marx meant by socially 'necessary' labor-power. The word 'necessary' means necessary to supply the demands of consumers. Herein Marx read into his concept of labor-power, whose principle is efficiency, the antithetic meaning of bargaining power, whose principle is scarcity." (Commons 1934, p. 374)

[21] In Commons (1934), after the criticism on Marx quoted in the above footnote, Commons explained his own method of analysis, writing: "[o]ur method is different. We separate each by a 'virtual' elimination of the other, and then combine them on the principle of limiting and complementary factors. Hence, for us, the engineer as such increases production indefinitely, regardless of its price, but the business man restricts or regulates production in order to maintain its price. The two are limiting and complementary factors" (Commons 1934, p. 374). This explanation indicates that the reason Commons formulated two types of transactions can be found in his criticism on Marx.

3 Theoretical Limitations in the 1927 Manuscript

3.1 Limitations in the Concept of Judicial Transactions

In the 1927 manuscript, Commons divided the concept of transaction into bargaining, managerial, and judicial transactions. In *Institutional Economics*, he divided it into bargaining, managerial, and rationing transactions. Commons's explanation of bargaining and managerial transactions was almost identical in both texts. The purpose of bargaining transactions is the transfer of ownership of property in the market. The purpose of managerial transactions is wealth production, and a major example of such transactions is the relationship between a foreman and a worker. However, judicial transactions in the 1927 manuscript differ considerably from rationing transactions in *Institutional Economics*, not only in name but also in content. To summarize the difference, rationing transactions were much broader in content than judicial transactions.

Commons explained judicial transactions in Chapter 1 of the 1927 manuscript as follows. First, he explained the difference between bargaining and other two transactions. He identified a characteristic of bargaining transactions as being the presence of multiple buyers and sellers, meaning it is possible to select a suboptimal trading partner. However, because management and judicial transactions are relationships between a superior and an inferior, there exists no possibility of alternative trading partners.

> Managerial and judicial transactions employ the social psychology of command and obedience, whether it be in the industrial transactions between employees and their foreman, superintendents, boards of directors or arbitrators, or in the political transactions between citizens and policemen, executives, judges, legislatures or supreme courts. The industrial transactions pertain to the working rules and customs of industry; the political transactions are known as process of law. The distinguishing mark of these managerial and judicial transactions is absence of alternatives. The employee or citizen must obey, or suffer punishment. (Commons, 1927, Chapter 1, s.12)

Important to understanding the above is that Commons uses "the political transactions between citizens and policemen, executives, judges, legislatures or supreme courts" as examples of judicial transactions and that "the political transactions are known as process of law."

This characteristic of judicial transactions, that is, the relationship between a superior and an inferior, reappeared in Commons's explanation of rationing transactions in *Institutional Economics* (Commons 1934, p.59). However, another characteristic of judicial transactions, namely, that they employed the social psychology of "command and obedience," was changed to that of "arguments and pleadings" in *Institutional Economics*. The later work explained that the psychology of transactions "resolves into the persuasions or coercions, the advertising and propaganda, of bargaining transactions; the commands and obedience of managerial transactions; or the arguments and pleadings of rationing transactions. All of these are negotiational psychology" (*ibid*., p.91).

The meaning of this change is easily understood by comparing instances of rationing transactions with those of judicial transactions. A typical instance of a judicial transaction in the 1927 manuscript is the "decision by a judge or arbitrator" (Commons 1927, Chapter 1, s.25). This decision legitimizes sanctions imposed by a superior on an inferior in the case of the latter's disobedience in managerial transactions. Stated more generally, judicial transactions mean activities that apply general social rules to individual cases to correct failures of transactions at the microlevel, such as contract defaults in workplaces and markets. In this sense, judicial transactions "supplement" bargaining and managerial transactions at the microlevel.[22] The effect of such supplementing is to provide another mechanism by which incomplete results of an economic adjustment mechanism can be modified and made more complete.

However, rationing transactions in *Institutional Economics* include not only such judicial decisions, which must be supplemented at the microlevel, but also the other four activities: "log-rolling," "dictatorship," "cooperation," and "collective bargaining" (Commons 1934, p.753). In Chapter 2 of *Institutional Economics*, Commons described instances of rationing transactions as follows:

> Quite similar, and more distinctive, is the activity of members of a legislative body in apportioning taxes or agreeing on a protective tariff—known as "log-rolling" in America. The so-called "collective bargaining," or "trade agreement," is a rationing transaction between an association of employers and an association of employees, or between any association of buyers and an association of sellers. Dictatorship and all associations for control of output, like cartels, are a series of rationing transactions. A judicial decision of an economic dispute is a rationing of a certain quantity of the national wealth, or equivalent purchasing power, to one person by taking it forcibly from another person. In these cases there is no bargaining, for that would be bribery, and no managing which is left to subordinate executives. Here is simply that which is sometimes named "policy-shaping," sometimes named "justice," but which, when reduced to economic quantities, is the rationing of wealth or purchasing power, not by parties deemed equal, but by an authority superior to them in law. (*ibid*., p.68)

This explanation contains the following two important points. First, rationing transactions include the formation of tax policy that affects income distribution and redistribution. This policy-making activity is not that of applying general social rules to individual cases at the microlevel but of making general social rules at the macro-level for the entire country. Furthermore, the purpose of such activity is not to correct failures in bargaining and management transactions at the microlevel but to remedy the so-called fallacy of composition, such as a decrease in aggregate demand resulting from the paradox of thrift, by government activity. In this regard, this

[22] In this sense, the concept of the judicial transaction in the 1927 manuscript is the same as the authoritative transaction in Commons (1924). Commons explained the authoritative transaction as follows: "[w]e have seen that unauthorized transactions are likely to fail in the two respects of lack of correlation and insecurity of expectations. For this reason a government or judiciary, with its rules regarding transactions, is needed to intervene with the double purpose of correlating rights, exposures, liberties, duties, and of maintaining the correlation even if the parties prove false or change their minds." (Commons 1924, p.100)

policy-making activity differs considerably from both the judicial transactions in the 1927 manuscript and the judicial decisions that are a part of rationing transactions in *Institutional Economics*. The second important point is that rationing transactions include "collective bargaining" between an employers' association and a labor union and "trade agreements" between associations of buyers and sellers. These activities are intended to determine wages or prices across industries by negotiations at the industry level (meso-level). Such institutional economic adjustments at the meso-level significantly impact income distribution. Furthermore, a purpose of these activities is to determine wages and prices by creating a rule that generally work in a particular industry. This differs greatly from judicial decisions and judicial transactions that apply existing general rules to individual cases.

By including institutional economic adjustments at the macro- and meso-levels, the concept of the rationing transaction as described in *Institutional Economics* is expanded significantly compared with the concept of judicial transaction in the 1927 manuscript.[23] The analysis in the 1927 manuscript focused on the complementary relationship between managerial and bargaining transactions, a relationship that works in a firm. As shown in Uni and Nakahara (2017), this conceptual expansion in *Institutional Economics* was associated with Commons's study of demand control at the macro- and meso-levels. This study of income distribution and demand growth in *Institutional Economics* signifies Commons's approach to cumulative causation, which works between efficiency growth and demand growth at the macro-level. This cumulative causation is mediated by managerial, bargaining, and rationing transactions and may result in stable reasonable value.

3.2 Coordination of Managerial and Bargaining Transactions

In Section 3 of Chapter 8 of the 1927 manuscript, titled "Fund and Flow," Commons described the coordination of managerial and bargaining transactions as follows: "The two, while entirely different, are not allowed to fly off separately, for they are coordinated, more or less successfully, by the business policy of a going concern" (Commons 1927, Chapter 8, s.164). However, he did not explain how to successfully coordinate the two transaction types. His explanation in *Institutional Economics* was similarly rough and general, as follows: "Efficiency and scarcity are separable in analysis but not in reality, since they operate functionally upon each other in making up the going concern. The quantity of gasoline needed to operate a car, or number of mechanics or foremen needed to operate a plant, or number of judges to

[23] Because Commons included varied activities in a single category of rationing transaction, his characterization of rationing transactions exhibited some weaknesses. For example, according to Commons (1934) the psychology of rationing transactions is "arguments and pleadings," but the psychology of judicial decisions is "commands and obedience," as general social rules are applied to individual cases. In fact though, in Commons (1950), the psychology of a rationing transaction is explained as "commands and obedience" (p.57).

operate a bench, is separable in thought but not in fact from the price, or wage, or salary." (Commons 1934, p.644)

I think that one reason for this insufficient explanation of the coordination of managerial and bargaining transactions was a theoretical defect in Commons theory of value, namely, that it did not explicitly introduce the coexistence of suppliers with unequal efficiency. I explain this problem below.

As a general fact, Commons believed that different companies producing the same product would have different efficiency (productivity) levels. Furthermore, Commons strongly criticized Marx for ignoring efficiency differences and equating the social value of a product with the weighted average of labor embodied in that product (Commons 1927, Chapter 8, ss. 152–154; Commons 1934, p.269).[24]

The reason for assuming an efficiency gap among companies when analyzing the relationship between managerial and bargaining transactions is easily understood if we use the particular expenses curve. For example, let us assume that four companies supplying the same product have efficiency gaps because of differences in technology, equipment, and increasing returns to scale and therefore have different production costs per unit. We label the companies A, B, C, and D, and they are ranked in descending order of efficiency. We assume that the marginal company D can obtain a minimum profit sufficient to remain in business, and therefore, suppliers that are less efficient than company D cannot enter this market. The horizontal axis of Fig. 3 indicates the quantity of supply, and the vertical axis indicates the production cost per unit of each company and the market price. The companies are arranged from left to right in descending order of efficiency. The particular expenses curve is the stepped line, which shows the four companies' production costs.

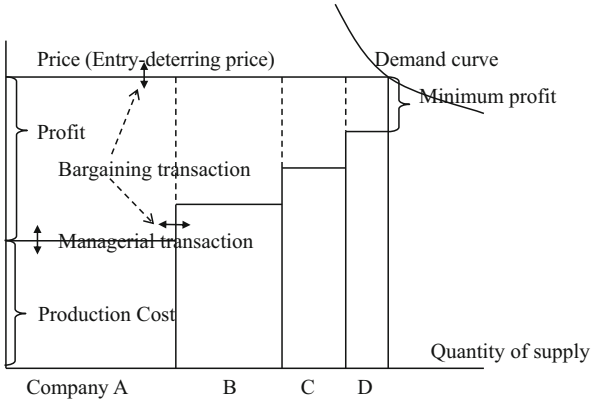


Fig. 3 Relationship between bargaining and managerial transactions (Source: Prepared by the author)

[24]In explaining "extra surplus value," Marx obviously assumed a productivity gap between producers. Marx's theory of value therefore did not consider only the social average of productivity. Kühne (1979, Chapter 18) recognized this characteristic of Marx's theory of value and called Marx's theory of value based on the social average of productivity "the static theory" and that based on the productivity gap among producers "the dynamic theory."

If we apply Commons's theory of value shown in Figs. 1 and 2, the price of the product produced by the four companies is determined by consumers' evaluations of the product's scarcity-value based on the total quantity of supply that would result from each of the four companies withholding supply. In the case of marginal company D, it limits the quantity of supply at such a level that it can obtain a minimum profit and remain in business. Based only on this fact, the marginal company D appears to be a pricemaker. However, this analysis is incorrect because the decision of company D presupposes the quantity of supply determined by the other three companies. Therefore, it is more appropriate to consider the leader company A to ultimately control the price by setting it at a level that excludes new entrants, as described in the entry-deterring price theory of Sylos-Labini (1956). Such a price level allows marginal company D to obtain sufficient profit to remain in business but is not sufficiently high to new entrants. Therefore, the leader company A sets the price, taking into account the possibility of new entrants. Expectations of the production capacity of the four companies also influence price setting because competitors' behaviors affect the total quantity of supply. Following the lead of company A, companies B, C, and D set their own prices.

To understand the complementary relationship between managerial and bargaining transactions, we consider a case where company A, to grow its market share, reduces the price to a level at which company D cannot continue in business. Consequently, company D is eliminated and company A increases its supply. This supply increase occurs through either increased use of existing equipment or investment in equipment that embodies a new technology. Therefore, the result of bargaining transactions to control price and quantity of supply depends on the progress of managerial transactions that deal with technology and equipment constraints. Conversely, a change in the quantity of supply resulting from bargaining transactions leads to a change in the scale of production, which usually follows an increase in efficiency as a result of economies of scale and the introduction of new equipment or technology. Therefore, the result of managerial transactions depends on the progress of bargaining transactions. Managerial and bargaining transactions thus have a complementary relationship. In this case, scarcity as income-outgo ratio is measured by a ratio between the price and the production cost per unit or profit markup rate. Even if company A decreases the selling price of a product, it may still increase its markup on that product by increasing efficiency and so decreasing the production cost per unit. Commons explained that to ensure the increase in profit markup, bargaining transactions controlling the price and the quantity of supply and managerial transactions controlling efficiency "are not allowed to fly off separately, for they are coordinated, more or less successfully, by the business policy of a going concern" (Commons 1927, Chapter 8, s.164).

Let us consider how the above analysis would change if the four companies had the same efficiency level, that is, if the particular expenses curve is horizontal. If, to deter new entrants, the price is set at a level that minimizes profits for such companies, no company can change the price setting. If any of the four companies reduces the price, that company will be unable to remain in business. Conversely, raising the price would attract new market entrants, and the increase in total supply

would cause the price to return to its original level. Likewise, no company can change the quantity of supply. Should any company increase supply, the price will fall and the businesses of all the companies will become unsustainable. Should any company reduce supply, the price will increase, attracting new entrants. As the new entrants increase total supply, the price will then return to its original level. Thus, in the case where there is no efficiency gap, both the price and quantity of supply are determined only by demand-side conditions and supply-side technological conditions. Consequently, the leader company cannot adopt strategic behavior such as expelling competitors by controlling of the price in bargaining transactions.

In the figure from the 1927 manuscript (Fig. 2), Commons drew changes in production cost (embodied labor per unit) from the most fertile land to marginal land as a continuously growing curve. This suggests that his understanding approached that represented in the model of oligopolistic competition between companies with unequal efficiency, shown in Fig. 3. Unfortunately, Commons did not explicitly assume an efficiency gap among companies in either the 1927 manuscript or *Institutional Economics*. This oversight led him to insufficiently explain the coordination of managerial and bargaining transactions.[25]

4 Concluding Remarks

Although Commons's explanation of the coordination of managerial and bargaining transactions was insufficient, he first formulated managerial transactions and bargaining transactions as "two entirely different types of transactions" in the 1927 manuscript. Moreover, Commons tried to construct a theory of value based on "a complex of many principles" such as efficiency controlled by managerial transactions, scarcity controlled by bargaining transactions, futurity, sovereignty, and custom. His theory of value attached importance to the action of suppliers in withholding supply based on property rights and also to collective action that expands or changes the definition of property rights as expressed in judicial decisions. He first conceptualized these aspects of his theory in the 1927 manuscript

[25]In Commons (1924), Commons (1927), and Commons (1934), Commons explained bargaining transactions using a formula that consisted of two sellers (S offered a lower price than S^1) and two buyers (B offered a higher price than B^1). Although Commons did not show this explicitly, the difference in offer price between two sellers is mainly based on an efficiency gap between them. Commons (1934) used this formula to explain the "limits of coercion" and "bargaining power." For example, the gap between the offer prices of S and S^1 affects the bargaining power of S relative to buyers, and the offer price of S^1 becomes the "limits of coercion by S to buyers." Commons explained as follows: "In our formula it is evident that seller S cannot force buyer B to pay more than $120, since above that margin his competitor S^1 would take his place as the seller" (Commons 1934, p.331). This explanation seems to mention the effect of supplier efficiency gap on price determination. However, in this formula, if S can sell, S^1 cannot. That is, Commons did not assume the coexistence of transactions involving both S and S^1. The efficiency gap assumed in this formula was that between a supplier that monopolizing the market and a supplier that was expelled from the market.

by describing the concept of "proprietary scarcity." Although the concept of "judicial transaction" as formulated in the 1927 manuscript included only the correction of transaction failures at the microlevel, in *Institutional Economics* the concept was renamed "rationing transactions," and its content was expanded greatly by including institutional economic adjustments at the macro- and meso-levels. Although the analysis in the 1927 manuscript focused on the firm level complementary relationship between managerial and bargaining transactions, the conceptual expansion in *Institutional Economics* allowed Commons to indicate that bargaining and managerial transactions had complimentary and mutually promotive relationships at the macroeconomic level.

The relationship between bargaining transactions and managerial transactions can also be considered a relationship between market and hierarchy, because the former occur in a market, whereas the latter occur in a hierarchical organization. Williamson (1975) developed a theory on the relationship between markets and hierarchies. Because Williamson's theory also employs transaction as its basic concept, it is commonly considered an inheritance from Commons. However, in fact, Williamson took inspiration not from Commons but from the transaction cost approach proposed by Coase (1937). Coase focuses on cost requirements in market transactions as a reason for the existence of enterprises. Specifically, costs are necessarily incurred in finding transaction partners, conveying transaction conditions to them, negotiating with them, concluding contracts, or auditing compliance with contracts. Coase explains that firms emerge if costs can be saved by substituting market transactions for intra-firm (hierarchical) transactions.

Commons also recognizes that bargaining transactions, that is, adjustments in the market, also cause problems under circumstances of "unequal opportunity," "unfair competition," and "unequal bargaining power." Commons finds that collective actions can resolve the problems in bargaining transactions. Restated, Commons thinks that these three premises of "equal opportunity," "fair competition," and "equal bargaining power" are formulated gradually by consolidating working rules that regulate each transaction via multi-step coordination processes that involve state agencies, the federal legislature, and the supreme court. Unlike Commons, Williamson claims problems can be resolved by "internalization," which transforms market transactions into intra-firm transactions that occur within a hierarchy. For Commons, problems can be resolved through negotiation and consensus, accompanied by exchanges of qualitative and quantitative information. For Williamson, organization-specific codes also contribute to problem resolution, but the main mechanism is hierarchical coordination by power, order, auditing, and assessment.

Thus, in Williamson's view, although coordination mechanisms fundamentally differ between markets and hierarchies, both can obtain the same result, each can be substituted for the other, and both share a common quantitative attribute in the form of transaction cost. Transaction cost is the main criterion for determining which transaction has taken place. However, the concept of transaction in Commons's theory differs from that of Williamson. For Commons, the two transaction types control completely different parameters: bargaining transactions control scarcity,

whereas managerial transactions control efficiency. Additionally, the main actors of transactions are quite different: businessmen are the main leaders of bargaining transactions, whereas engineers are the main actors in managerial transactions. According to this chapter and Uni and Nakahara (2017), bargaining transactions and managerial transactions should be regarded not as mutually substitutable but rather as complimentary.

Indisputably, Williamson's theory explaining diversity of economic coordination is partly based on the theory of Commons. However, in developing his theory, Williamson did not sufficiently consider the theoretical implications and significance of Commons's theoretical system of institutional economics.[26]

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS) and the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

References

Coase, R.H. 1937. The Nature of the Firm. *Economica* 4(16): 386–405. Reprinted in Coase, R.H. 1988. *The Firm, the Market, and the Law*. Chicago: University of Chicago Press.

Commons, J.R. 1893. *The Distribution of Wealth*. New York: Macmillan.

———. 1924. *The Legal Foundations of Capitalism*. New York: Macmillan.

———. 1925. *Reasonable Value*. Madison: Edwards Brothers.

———. 1927. *Reasonable Value: A Theory of Volitional Economics*. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

———. 1934. *Institutional Economics: Its Place in Political Economy*. New York: Macmillan.

Ely, R.T. 1889. *An Introduction to Political Economy*. New York: Hunt & Eaton.

Harter, L.G. Jr. 1962. *John R. Commons: His Assault on Laissez-faire*. Corvallis: Oregon State University Press.

Kühne, K. 1979. *Economics and Marxism*. Vol. 1. New York: St. Martin's Press.

Lederer, E. 1922. *Grundzüge der ökonomischen Theorie: eine Einführung*. Tübingen: J. C. B. Mohr.

Minsky, H.P. 1975. *John Maynard Keynes*. New York: Columbia University Press.

Rutherford, M. 1994. *Institutions in Economics: the Old and the New Institutionalism*. Cambridge/New York: Cambridge University Press.

Sylos-Labini P. 1956. *Oligopolio e Progresso Tecnico*. Torino: G. Einaudi (Henderson, E. (tr.) 1962. *Oligopoly and Technical Progress*. Cambridge: Harvard University Press).

Uni, H., and Nakahara, T. 2017. Economics of Collective Action and Custom: A Comparison of John R. Commons with the Theories of Regulation and Convention. In *Contemporary Meanings of John R. Commons's Institutional Economics: An Analysis Using a Newly Discovered Manuscript*, ed. H. Uni. Singapore: Springer.

Wieser, F. 1889. *Der Natürliche Werth*. Wien: Hölder (Smart, W. (ed.) and Malloch, C.A. (tr.) 1893. *Natural Value*. New York: Macmillan).

Williamson, O.E. 1975. *Markets and Hierarchies, Analysis and Antitrust Implications: A Study in the Economics of Internal Organization*. New York: Free Press.

[26] Rutherford (1994) has contributed excellent comparative studies on old and new institutionalist theories, which illustrate differences from various viewpoints and propose ways in which they are complementary.

From Carl Menger to John R. Commons: Human Volition and Value Theory in Institutional Economics

Natsuka Tokumaru

Abstract In the 1927 manuscript of Institutional Economics, John R. Commons explicitly referenced Menger's functional analysis of the human–goods relationship developed in *Grundsätze der Volkswirtschaftslehre*. By chronologically scrutinizing the Menger–Commons link in the writing of Institutional Economics, this chapter aims to show the methodological inheritance that influenced the value theory of Commons. Commons had been inspired by Austrian value theory during his youth via interpretations of Clark and Smart, especially with regard to the ideas of human volition and social power. After obtaining rich working experiences in the legal and political fields, but encountering setbacks in his attempts to theorize those experiences, Commons began to scrutinize Menger's functional analysis in *Grundsätze*, and this scrutiny informed the construction of his volitional theory of "reasonable value." Menger's functional analysis was important for Commons because it proposed the conditional logic that drives the value determination process in a power relationship between human subjective evaluation and the objective conditions of goods. Additionally, Commons was inspired by the revised portions of the second edition of *Grundsätze*, especially the distinction between the "economizing" and "technological" directions within the economy, and the explanation of the process through which institutions emerge from the resolution of "conflicts of interest." Criticizing the value theory of Menger for being restricted to the field of scarcity, Commons attempted to develop it by introducing other social powers in production, bargaining and legislation. Commons' theory of reasonable value can be understood as an extension of Menger's subjectivist value theory based on conditional logic, because it describes human volitional actions under social situations that involve collective action.

Keywords Subjectivism • Power • Volition • Functional analysis • Conditional logic • Reasonable value

N. Tokumaru (✉)
Graduate School of Economics, Kyoto University, Yoshida-Honmachi, Sakyo-ku, Kyoto, 606-8501, Japan
e-mail: tokumaru@econ.kyoto-u.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_2

1 Introduction

John R. Commons was theoretically inspired by the subjective value theory of the early Austrian school of economics from the very beginning of his research. In the first chapter of *The Distribution of Wealth*, his earliest theoretical work, Commons claims his value theory "is based primarily on the work of the Austrian economists . . . [and] gives a *scientific basis* for explaining the fundamental question of Value" (Commons 1893, p.1, emphasis mine). From a historical perspective, it is unsurprising that the young Commons was attracted by the Austrian school. Many of Commons' contemporaries were strongly influenced by economists from the German-speaking world. For example, Richard T. Ely, Commons' professor at Johns Hopkins University, earned his PhD under Karl Knies at the University of Heidelberg.[1] For 40 years, Commons maintained an interest in Austrian theory, especially value theory. In the recently discovered "Reasonable Value: A Theory of Volitional Economies" (hereafter called simply the 1927 draft), which was effectively a draft of *Institutional Economics*, as well as the final version of *Institutional Economics* published in 1934, Commons frequently refers to Menger, Wieser, and Böhm-Bawek, especially when he discusses subjective human evaluations as the origins of value.[2] Commons, who declares institutional economics a theory of human "volitions" and its final goal the achievement of "reasonable value," seems to have been deeply affected by Austrian subjectivism.

However, Commons was dissatisfied with the Austrian direction in value theory on marginality (Marangos 2007). Hence, he attempted to reformulate and extend the theory, which was limited to the field of scarcity, to describe a broader range of real-world processes, including legal, political transactions and collective actions. On the one hand, Commons (1934a) evaluated Menger's idea of marginal utility as having revolutionized classical economic theory. He criticizes Austrian economics as "hedonistic economics," in the sense that the theory of value was confined within psychological processes to maximize utility under scarcity. Commons claimed that institutional economics should concern five principles, these being not only scarcity but also the going concern, efficiency, custom, and futurity. He believed that Austrian value theory should be extended beyond scarcity to explain other principles, such as actual social economy. Here, one may ask about the degree to which Commons inherited the Austrian theory of value in his *Institutional Economics* and how he extended it.

[1] More interesting is that Wieser and Böhm-Bawerk, the second generation of Austrians, and Clark, the introducer of Austrian theory to the USA, also participated in the seminars of Knies at Heidelberg. In that sense, one can say that Commons, Elly, and early Austrians shared the "habitus" of the economics of the German-speaking world.

[2] Commons refers to Menger 65 times in the draft manuscript of 1927 and 57 times in the final book published in 1934; he refers to Wieser 36 times in the 1927 draft and 24 times in the 1934 book; he refers to Böhm-Bawerk six times in the 1927 draft and 64 times in the 1934 book.

In this chapter, I attempt to investigate the historical links between the value theories of Commons and Menger and chronologically analyze the formation of the central concept of reasonable value in *Institutional Economics*. To clarify the theoretical origins of reasonable value, I focus especially on Menger's functional analysis between humans and things as a basis of the value theory developed in his masterpiece *Grundsätze der Volkswirtschaftslehre (Principles of Economics*, hereafter simply *Grundsätze)* (1871, 1923), a founding masterpiece of the school that presents the revolutionary idea of diminishing marginal utility. Although Commons (1924, 1934a) declares that his reasonable value is a theory of human volitions and devotes many pages of *Institutional Economics* to Menger's subjectivist value, few studies have investigated the historical links between the value theories of Menger and Commons. Vanberg (1989) discusses that the theories of Menger and Commons were not conflicting but shared many aspects and might be complementary. Writing contemporaneously with Commons, Hamilton (1919) claimed Austrian value theory and institutional economics shared much in common and suggested the former should be extended beyond market transactions. Investigating the historical link from Menger to Commons thus is important to understanding the theoretical consistency or inconsistency between these two theorists. Furthermore, Palermo (1999) discusses the convergence of New Institutional theory and Austrian economics. The Menger–Commons link, being an influence of early Austrian economics on "old" institutionalism, should constitute a prehistory of the convergence.

Investigating the Menger–Commons link in value theory may lead us to reexamine what qualifies as appropriate behavioral or microfoundations for institutional economics (Bowles 2004; Sen 1977; Simon 1996) and to contribute to the formalization of such behavior for further empirical studies. Although Commons emphasizes the importance of "collective action" and "going concerns" (social organizations), understood as "collectivist" theory in contrast with "individualistic" Austrian economics (Lowenberg 1990), in *Institutional Economics* he declares that institutional economics is a theory of human volitions and requires "...a reconciliation with the individualistic and collectivistic theories of the past two hundred years" (Commons 1934a, p.1). If Commons constructed his value theory based on certain behavioral assumptions, his derivation of reasonable value from assumptions regarding human volitions and collective actions should be clarified. However, his ambitions to constitute institutional economics based on human volitions as a systematic theory appear unsuccessful. Some of the blame for this may lie with Commons' writing style, containing many implicative ideas or detailed descriptions of actual judicial or political cases, but so lacking in "careful definitions or logical chains of reasoning" (Hodgson 2004, p.286) that it was criticized as "anti-theoretical" or even as "tangled thoughts" (Boulding 1957; Vanberg 1989; Ramstad 1995). Reformulating Commons' value theory of human volitions as an offshoot of Menger's functional analysis with logical strictness would clarify his tangled thoughts and help formalize his intended microfoundations of institutional economics. This chapter shows that Commons was greatly inspired by Menger's functional analysis in *Grundsätze* and extended Menger's conditional logic of power relationships between human subjective evaluations and given social conditions of

collective action to explain the value determination process. Commons' theory of reasonable value was thus formalized as an extension of Menger's framework.

To clarify Menger's influence on the value theory of *Institutional Economics*, I have organized this chapter into sections that correspond to the three periods of Commons' creation of his book. Next, in Sect. 2, I review Commons' inquiries from the 1880s to his first attempt to establish a "volitional theory of value" in 1924, an attempt that was informed by his working experiences in industrial and labor relationships. Here Commons accepted the Austrian value theory mainly via the interpretation of Smart and Clark, especially in relation to the ideas of power, volitions, and organisms. In Sect. 3, I scrutinize the 1927 draft of *Institutional Economics*, which shows Commons was deeply affected by Menger's functional analysis in *Grundsätze* as an application of conditional logic to power relationships. Additionally, I will discuss how Commons was especially influenced by the revised part in the second edition of *Grundsätze*, especially the distinction between the "economizing" and "technological" directions within the economy and the explanation of the process through which institutions emerge from the resolution of "conflicts of interest." In Sect. 4, I discuss how Commons extended Menger's functional analysis to construct his theory of reasonable value in the publication of *Institutional Economics* in 1934. Commons explains reasonable value as a process constituting power relationships in production, bargaining, and legal processes. After critically examining Commons' theory of reasonable value, I discuss the conclusions in Sect. 5.

2 Austrian Prelude to *Institutional Economics*: Value and Powers in Commons Before 1927

Despite the declaration of Commons (1893) that his value theory was based on the Austrian "scientific" method, he started his investigation on value theory not via Menger,[3] the founder of the school, but via Smart (1891) and Clark (1886), who introduced the ideas of the Austrian school to the USA, as well as Böhm-Bawerk (1891) and Wieser (1889), who represented the second generation of the Austrian

[3]In *The Distribution of Wealth* (1893), Commons made no reference to Menger. Meanwhile, in *Legal Foundations of Capitalism* (1924), Commons referred to Menger only twice, when describing the marginal revolution that followed from the work of other economists such as Jevons, Walras, and Gossen (Commons 1924, pp.4, 40). By developing the idea of marginal utility, Menger, Jevons, and Walras were considered to have overcome the classical value theory that explains value as deriving from certain sources such as labor or usefulness. Marginal explanations explain a paradox of Smith—why diamonds are highly valued despite having no use value, while water is not valued despite being essential to human survival. Marginal theory was introduced to the USA quite early, and marginal utility is explained in the chapter titled "Consumption" in Elly's textbook from 1893. Undoubtedly, the young Commons had evaluated Menger as one of the greatest economists in history, but he showed no special interest in the *Grundsätze* until the 1924 draft of *Institutional Economics*.

school. The young Commons first attempted to develop Austrian value theory by introducing legal and political factors that these theorists had excluded from their analyses. He discussed how governmental intervention became a decisive factor in value determination because it creates artificial scarcity by restricting property rights. These attempts to incorporate legal or political processes into economic value theory were common among institutionalism in the USA at that time, and Commons continued such attempts throughout his life.

Interestingly, Smart (1891) interpreted Austrian value theory in terms of mutual power relationships in *An Introduction to the Theory of Value on the Lines of Menger, Wieser, and Böhm-Bawerk*, and Commons' value theory seems to depend heavily on this work. As the subtitle shows, in this book Smart attempted to introduce Austrian value theory, but did so in terms of his original interpretations of subjectivist theory as involving *power relationships* between two factors. Smart (1891) claimed, "Value in all its forms implies a relation... It is a power that lies in the connection or relation of two things, and not in either of the things" (pp.5–6). He simply summarized Menger's definition of goods as things that possess the ability to satisfy human wants, and in doing so he introduced the term "power." As will be discussed in the next section, the term power as used here designates a certain capability or motivating force that enables the combination of two factors. Smart's interpretation of Austrian value theory in this direction seems novel, but was well summarized and more convincing than the methodological individualism that was then prevalent.[4] Menger (1871, 1883) had claimed that his method analyzes a process through which relationships between elements emerge and that these elements possess a certain capability or motivating force. Menger regarded individuals as one of the important constituents of social organisms, because their wants act as a motivating force or power that constitutes value, with goods having a capacity or power to satisfy these wants. Thus, rather than individuals, Menger instead stressed the wants of individuals as forming the basis of subjective value. Wieser (1889, 1914, 1926) developed Menger's theory in a similar direction by using the conceptual power of individuals, nations, and even leaders, as a motivating force for all economic phenomena, something Tokumaru (2015) named "methodological motivationalism."[5] The notion of power combined with

[4]The preoccupation of the Austrian school with an individualistic approach methodology was first expanded by Schumpeter (1908) and then confirmed by Mises, from the third generation of the Austrian school, whose epistemological book declares social science should start from "human behaviors to achieve their ends" (Mises 1933/1960, 1962). The neo-Austrians who followed Mises can be called methodological individualists, but this label should not be applied to the first and second generations of the Austrian school. Some evidence exists that these neo-Austrians did not regard individuals as absolute final factors; when Menger (1871) discusses public or national wealth (Volksvermögen) and wants, he regards states, provinces, and associations as having needs as collective independent economic agents (p.112): in Book 6 of *Natural Value*, Wieser regards states from the perspective of independent evaluation (pp.217–243).

[5]Commons (1934a) evaluated Wieser and proposed a bidirectional theory of power. Referring to two books by Wieser—*Natural Value* (1889) and *Law of Power* (1926)—Commons states, "[it] turns out that first book was individualistic, the second collectivistic. The first was a relation of

social relationships occupies a central position in Commons and he seems to have inherited this notion from Menger via Smart. "Commons emphasized the centrality of power in economics" (Marangos 2007, p.65).

In addition to Smart, Commons seems to have inherited central ideas of the Austrian school via Clark, especially in relation to the notion that human volitions constitute the social organism. In *Philosophy of Wealth*, Clark (1886) discusses that human volitional actions are the ultimate forces of value determination and are as fundamental to society as organisms. "A man is not independent. ... Though a self-directing being of the highest organization, he is made, by his relations to others, to be an atomic portion of a higher organism, –society" (p.37). The idea of regarding social institutions such as nations as organisms was broadly shared among German historicists and contemporary Austrian economists. Menger (1871, 1883) intended to reconstruct the collectivistic understandings on social organisms of German historicists as more scientific theories that involve strict causal analysis of the organisms that initially emerge from the subjective evaluations and actions of humans. This motif of human volitions and social organisms was inherited in Commons' value theory throughout his works, being especially apparent in some of the terminology Commons developed, especially collective action and going concerns. Although Clark conveyed these notions of social organisms and human volitions of Menger in an easily comprehensible way, it remained merely a description of these basic concepts without a theoretical formalization.

After writing *The Distribution of Wealth*, Commons, who had failed to attain a stable position in academia, spent the next 30 years involved in practical legislative processes related to industrial and labor relations. These experiences strongly influenced his value theory. As Commons describes in *Institutional Economics*, from the start of the twentieth century until the publication in 1924 of *Legal Foundations of Capitalism* (henceforth, *Legal Foundations*), he enjoyed numerous opportunities to observe the influence on economic values of legal and other powers of collective action. Specifically, Commons participated in labor arbitration with the National Civic Federation during 1901–1906, drafted civil service law in 1905 and public utility law in 1907 for the state of Wisconsin, was delegated to investigate labor conditions in the steel industry at Pittsburg in 1906–1907, organized a Bureau of Economy and Efficiency for socialists at Milwaukee in 1910–1911, was a member of the Industrial Relations Commission during 1913–1915, investigated the Federal Reserve system in New York and Washington in 1923–1924, and administered a voluntary unemployment insurance plan in the clothing industry during 1924–1926 (Commons 1934a, p.2). As Marangos put it, "He attended to the American people in their numerous struggles as citizens to achieve a tolerable

man to nature, the second a relation of man to man. The unit of the first was a commodity that satisfies wants, the unit of the second was a moral, monopolistic, or violent force that collectively subdues the individual ... In the law of value Wieser sought what is permanent and enduring under all historical and institutional changes ... he finds that history is the history of collective suppression of individuals" (p. 677–678).

degree of power, stability, and security" (Marangos 2007, p.50). Through those experiences, Commons observed not only market transactions but also the effect on value determination of powers arising from legislation, governmental intervention, business customs, or business organizations such as cartels or labor unions.

After more than two decades spent gaining rich experience in industrial and political relationships, in *Legal Foundations* Commons attempted to develop his original value theory, which would reflect his social observations.[6] In developing his theory, he followed the Austrian interpretations of Smart and Clark and particularly their ideas about human volitions and power relationships in social transactions. To reflect his experiences in his value theory, Commons discussed four powers involved in transactions: collective power, remedial power, substantive power, and determining power (Commons 1924, pp.100–133).[7] For Commons, those powers not only originate from individuals but also restrict individuals' volitional actions, through being expressed in working rules of social organizations that constrain transactions. According to Commons, "the aim of this volume is to work out an evolutionary and behavioristic, or rather volitional, theory of value" (Commons 1924, p.vii). Naturally, the emphasis of Commons on powers and human volition stems not only from the ideas of Smart and Clark but also from his experiences as an individual struggling to resolve conflicts in industrial relationships, legislation processes, or governmental committees. Restated, his extension of the concepts of powers can be understood as part of his efforts to reformulate Austrian value theory to follow a more "realistic" direction, by introducing powers that lie not only in the material process of economic transaction but also in legal processes and collective actions.

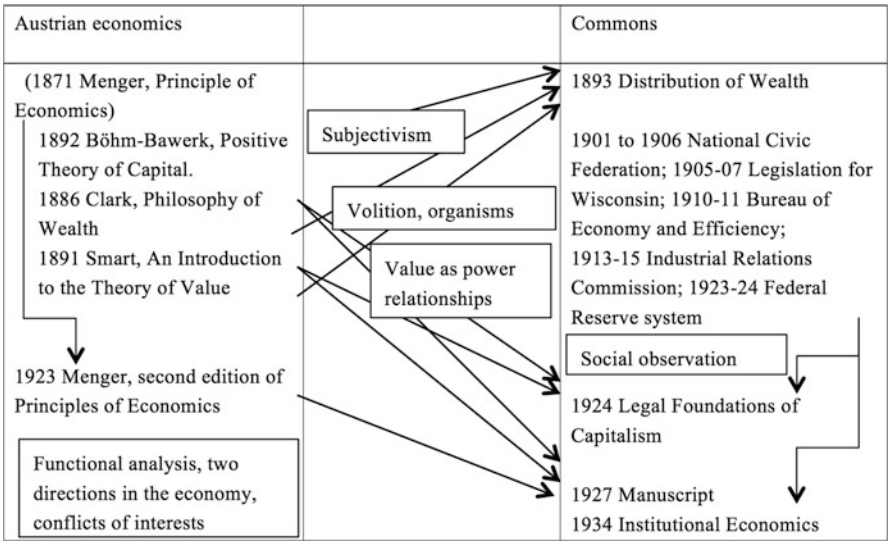
However, the success of these attempts by Commons in *Legal Foundations* is an open question. Most of the core terminology used in *Institutional Economics*, such as transactions, working rules, or collective action, is also found in *Legal Foundations*. However, the earlier work does not systematically describe these terms, nor does it propose general laws or principles on human volition and power relationships. Despite Commons' volitional theory of value, *Legal Foundations* seems to lack theoretical analysis of how value emerges from human volitions. The inspiring ideas that Commons presents on various powers are not very scientific, and there is a lack of logical explanation of how those power processes determine value. Thus Commons' ambitions to introduce his practical experience of the political economy to scientific theory encountered harsh but sound criticism.[8] In a review

[6]Commons described his motivations in writing the volume as stemming from his working experiences, particularly in relation to "labor problems and problems connected with regulation and valuation of public utility," after his first attempts in *The Distribution of Wealth* to combine Böhm-Bawek's hedonic psychology with legal rights (Commons 1924, p.vii).

[7]Commons (1924) repeatedly uses the term "power" (this term appears in the work 1045 times) to explain the importance of political and legal process in economic value.

[8]One exception was Commons' teacher Mitchell (1924), who wrote an admiring review that presented Commons as a reformer of conventional economics, developing original ideas based

Table 1 Austrian influence on Commons' value theory



of *Legal Foundations*, Sharfman (1925) admired the way that Commons sought to incorporate his experiences in political economy into the book. However, Sharman concluded, "while the study, as we have seen, is realistic both in aim and in origin, its method of execution is markedly unreal" (Sharfman 1925, p.302). Although Commons intended his theory of volitional economies as a social science theory, the analysis far exceeded the limits set by contemporary social scientists. Sharfman further stated, "the analytical portion of this work, while broadly suggestive, does not appear to marshal the essential materials for the volitional theory of value which it seeks to formulate" (Sharfman 1925, p.305). Despite his 30 years of practical experience observing the emergence of process value in transactions, Commons thus faced criticism and cynical disregard for his ambitious theoretical work.

Table 1 summarizes the Austrian influence on the formulation of Commons' value theory. In *The Distribution of Wealth* (1893), Commons followed Austrian subjectivism, which explained scarcity value mainly via Böhm-Bawerk rather than Menger, and also displayed an understanding of the ideas of the Austrian school expressed by Clark and Smart. After his working experiences in industrial and political relationships, Commons attempted to construct a theory of reasonable value that was compatible with his social observations in *Legal Foundations* (1924). *Legal Foundations* was filled with ideas on value as power relationships that Commons had obtained from Smart, and also the ideas on human volitions and

on his experiences of taxation, labor reforms, and legislation. Mitchell's review even observed that innovative ideas are sometimes difficult to understand.

social organisms he had obtained via Clark. After his failure in *Legal Foundations* to convey the volitional theory of value in a manner sufficiently "scientific" to win acceptance, Commons started to scrutinize the second edition of Menger's *Principles of Economics*. There, he found enormous inspiration, especially with regard to functional analysis. Particularly, Commons found in the distinction between the "economizing" and "technological" directions of the economy an explanation for the emergence of institutions from conflicts of interests, as will be discussed in the following sections.

3 Menger's *Grundsätze* for the Scientific Volitional Theory of Value in the 1927 Draft

Considering the challenges Commons was confronting at the time, we can understand the "baffling ten years" that separated the publications of *Legal Foundations* (1924) and *Institutional Economics* (1934a). Commons had attempted to establish institutional economics as a coherent theory of reasonable value based on human volitions that had a status in the history of economic thought. Commons had initially intended to publish these two books as one, but changed his mind and published them separately based on the advice of his teacher Ely. The 10-year gap between the publications of the two works seems excessive: one could assume this gap occurred because Commons was struggling to constitute theoretical explanations of institutional economy, which he failed to achieve in *Legal Foundations*. Thus after 1924 Commons confronted the challenge of formulating a value theory based on human volition that was not only compatible with his actual observations but also academically rigorous.

To establish theoretical institutional economics that could support a volitional theory of value, it was perhaps natural and necessary that Commons returned to *Grundsätze* (1871, 1923), in which Menger developed a new value theory based on human subjective evaluation using strict analytical methods. Menger termed this approach an "exact orientation of research" that attempts "to reduce the complex phenomena of human economic activity to the simplest elements that can still be subjected to accurate observation... to investigate the manner in which the more complex economic phenomena evolve from their elements according to definite principles" (Menger 1923, p. XX). Menger introduced this method as "scientific" and said that it had been used in the natural sciences to reconstruct the descriptive method of the German historicists. Accordingly, in his 1927 draft of *Institutional Economics*, Commons carefully scrutinized *Grundsätze*. This was the first time Commons discussed Menger's work, and he devoted considerable space to the endeavor—88 of the 315 pages that comprise the 1927 draft.

Clearly, Commons intended to reconstruct institutional economics as a volitional theory of value, with a firm logical foundation such as that proposed by Menger. It seems that Commons reexamined *Grundsätze* after long ignoring the work because

this masterpiece responded to problems he had tried to overcome in three ways: (1) Menger was a pioneer of the volitional theory of value and *Grundsätze* proposed a logic regarding the emergence of value from subjective human motivation or evaluation; (2) *Grundsätze* introduced a seemingly strict scientific method that Menger called the "exact orientation of research"; (3) Menger's thoughts in *Grundsätze*, especially the second edition, inspired Commons just as they had many other contemporary economists. I separately discuss each of Menger's ideas below.

3.1 Menger as a Pioneer of the Volitional Theory of Value

The first reason Commons (1927, 1934a) had to refer to *Grundsätze* was that Menger was a pioneer of the construction of value theory based on human subjective motivations—volitions. Although Commons was somewhat familiar with the ideas of Austrian subjectivism via Clark as already discussed, in *Institutional Economics*, he attempted to present the titular theory as a new but systematic discipline in the history of economic thought. In his own words, "[T]he problem now is not to create a different kind of economics—'institutional' economics—divorced from preceding schools, but how to give to collective action . . . its due place throughout economic history" (Commons 1934a, p.5). Before Commons (1927, 1934b) discussed Menger in Chap. 8 of *Institutional Economics*, he critically reexamined representative economic thought, including that of Locke, Smith, Quesnay, Hume, Bentham, and Malthus. His aim was to determine the theoretical importance and limitations of the preceding theory to better construct his original discipline of collective action in the context of theoretical history.

According to Commons, Menger is important in the history of economic thought because he combined humans' internal motivations with the external world—these two being separated in the theory of classical economists. Commons states that until Menger, "physical economists" such as Locke or Marx separated the internal minds of humans from the external world, ignoring their subjective evaluations that were based on that external world—he terms these evaluations "meanings." Because individuals' subjective evaluations of the external world do not matter for value theory as described by physical economists, the main factor in value determination becomes simplified to be solely a problem of use value, or how much labor is inputted into a product. The theory of physical economists describes human minds as mirrors that merely passively copy the external world while having no effect on that external world or on the value determination process. In both the 1927 draft and the final published version of *Institutional Economics*, Commons evaluates Menger's subjectivism as a reformulation of classical value theory by introducing human internal motivations that can be connected to the external world using the concept of marginal utility. As Commons expressed, "[t]his separation of an internal mechanism, the mind from an external mechanism, the world, is characteristic of the physical economists, from Locke to Marx. The concepts necessary to get away

from this dualism and to substitute a functional relation between the mind within and the world without were not devised until Menger" (Commons 1927, p.38).[9] Although Commons ironically calls Menger a "psychological" or "hedonistic" economist because his value theory is based on the concept of utility (psychological sensation) and excludes other social aspects of human motivations in normative or collectivistic relationships, he considered Menger an innovator in the history of economic thought. In fact, Commons considered Menger to have introduced human volition to value theory.

Additionally, Commons was impressed that Menger's functional analysis implicitly designates the dependent-control relationships between human and other factors in an external world. As Yagi (2004) discusses, the analysis incorporates the social philosophy that human wants depend on things in an external world—that is, whether human wants are satisfied depends on goods and the ability of humans to control goods.[10] In his functional analysis, Menger also claimed that humans require "control over the thing" (die Verfügung über dieses Ding)[11] to satisfy their wants. Here, the band that combines humans with things in value relationships is described as a dependent-control relationship. This motif appears frequently in *Institutional Economics*, such as when Commons explained that humans depend heavily on going concerns (social organizations) to which they belong, and thus their volitional actions are regulated or controlled by the working rules of those going concerns. Smart summarized the band in the Austrian theoretical framework with the simple term "power" and wrote "[it] is a power that lies in the connection or relation of two things" (Smart 1891, p.6). If the band or power is identified more specifically as "independent-control relationships," what Commons termed "collective action" can be understood as derived from the volitions of individuals, whose welfares are independent and controlled by going concerns. Thus, the analysis concerns fundamental philosophy on how humans with certain volitions come to be involved in causal relationships in the external world. Having failed to establish a volitional theory of value according to strict theoretical standards in 1924, Commons naturally returned to the functional analysis of *Grundsätze*. This functional analysis seems to strictly explain a value determination process stemming from humans' volitional evaluation of objects, which describes the involvement of internal motivations in the external world.

[9]Most of these paragraphs appear in the 1934 manuscript with some revisions. In the 1934 manuscript, "physical economists, from Locke to Marx" is revised to read "from Locke to the end of the nineteenth Century" (Commons 1934a, p.16).

[10]Yagi (2004) also discusses that in the process of writing *Grundsätze*, Menger found in relational analysis focused on humans and goods the "teleological relationship of human action and existential causality of humans and the external world at the same time" (p. 62).

[11]Interestingly, the German term "Verfügung," which Commons translates as "control," comes from verb "verfügen"—a combination of the emphatic marker "ver" and the verb "combine." Dingwall and Hoselitz (1871) translate the same sentence as "command of the thing" in the English translation of *Principles of Economics*. Commons interpreted the derivative word "Verfügbar qualitäten" as meaning "quantity available."

3.2 *Functional Analysis in* Grundsätze *as "Exact Orientation of Research"*

In Chap. 8 of *Institutional Economics*, titled "Scarcity and Efficiency,"[12] Commons seeks to give his theory scientific status by scrutinizing Menger's functional analysis of goods and humans in *Grundsätze*.[13] Menger himself termed analysis intended to establish a universal theory the "exact orientation of research" (Menger 1871). Although this was the first time Commons referred to Menger, he devoted considerable space to Menger's functional analysis, which attempts to clarify the relationship between humans and goods.[14] Because Menger had attempted in *Grundsätze* to derive strict universal laws to resolve the demarcation problem in the social sciences (Milford 1990), the book must have appealed to Commons, who sought a method to theoretically derive a valid inference for value theory. Commons cites Menger's functional analysis of the prerequisites for things to become "goods," as follows:

1. The knowledge or expectation of a human want (Bedürfniss)
2. Such physical qualities of the object (Guterqualitäten) as make it fit to satisfy the want
3. Knowledge, correct or erroneous, of this fitness
4. Such control over the thing, or over other things as instruments, that the thing can be obtained and used to satisfy the want (die Verfügung über dieses Ding) (Menger 1923 p.11; in Commons 1927, p.106)

After referring to Menger's analysis of the prerequisites of goods, Commons details Menger's relational analysis of "quantity wanted" (Bedarf) and "quantity available" (Verfügbar qualitäten), from which scarcity value can be derived. Quantity wanted is an aggregation of individual wants related to certain goods, whereas quantity available is an aggregation of the natural supply of goods. If the quality wanted exceeds the quantity available, then goods become "economic." This simple analysis was the starting point of *Grundsätze*, based on which all the other analyses on value are developed. This method, which infers economic principles through a step-by-step progression from relational analysis between the simplest factors to higher relational analysis, is consistent with what Menger called the "exact orientation of

[12]The title "Scarcity and Efficiency" was proposed in the 1927 draft. The title was changed to "Efficiency and Scarcity" in the 1934 published version.

[13]*Grundsätze* was structured to reformulate the methods of the German historicists, especially Roscher, who attempted to establish "Volkswirtschaftlehre" (the theory of the national economy) through integrative social science, including the national legal system and transaction customs, to be more "scientific" by separating economic aspects from others.

[14]As Yagi (2004) discusses, Menger introduced relational analysis of humans and goods based on the economic traditions of the contemporary German-speaking world. For instance, Roscher and Knies wrote landmark works on economics in the German-speaking world of the day, starting with the theory of goods, which analyzes the relationships between humans and goods, and involved philosophical thoughts on humans and their relationships with the external world (p.62).

research" and includes classifications of another two approaches "empirical-realistic orientation of research" and "practical orientation of research" (Menger 1883).

Commons identified the main characteristic of the functional analysis in *Grundsätze* as the ability of Menger's conditional logic to describe the emergence of scarcity value in subjective–objective power relationships. Menger considered human wants as subjective power, theorized that objective conditions of goods could satisfy human wants,[15] and performed quantitative relationships of those two factors when value emerges. Following Smart's value interpretation as described above, this analysis can be understood as a process by which value is determined in relationships between two elements exerting powers. First, as shown in the left-middle area of Fig. 1, things become goods if humans have related "wants," if those things can be controlled via subjective power, and if those things have qualities that can satisfy human wants via objective power. Second, goods become economic goods, meaning they attain scarcity value, if humans' *Bedarf* (quantity wanted) for the goods as subjective power exceeds the *Verfügbar qualitäten* (quantity available) for the goods as objective power, as can be seen in the upper left area of the table. The structure would be nearly identical even if we did not follow Smart's

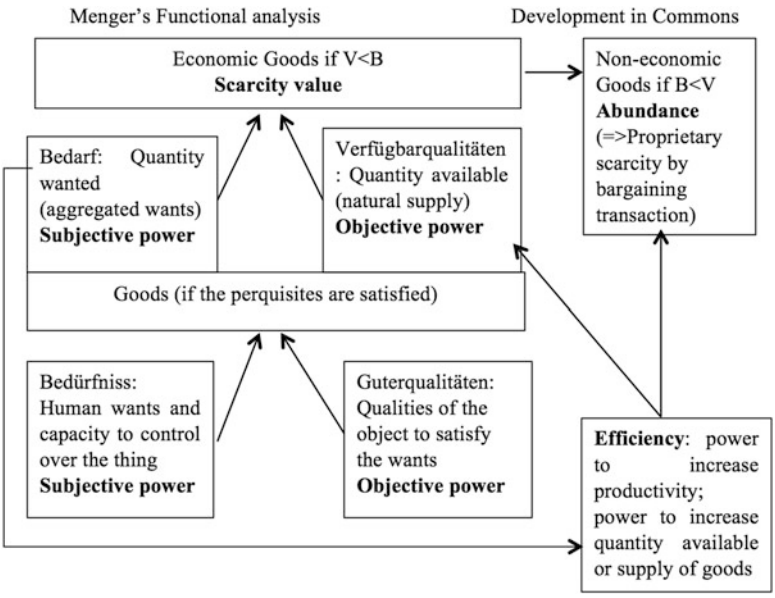


Fig. 1 Menger's functional analysis in *Grundsätze* as power relationships and development in commons

[15] Although neither the terms "internal power" nor "external power" are used by Menger, I have introduced them for clarity. Menger uses the terms "subjective" and "objective" to mean almost the same thing.

interpretation of the power relationship, but the structure exemplifies the results of applying Menger's "exact orientation of research" based on subjectivism and relational analysis between factors.

Furthermore, Commons seems to have been impressed that Menger formulated functional analysis through conditional logic and identified certain conditions of two factors that incorporate those factors into certain relationships. As we have already seen, things attain an economic value only if the quantity wanted by humans exceeds the quantity available. Things that are plentiful do not become economic goods—at least provided the quantity available exceeds the demand, as shown in Fig. 1. As will be discussed later, whereas Menger limited his analysis to the conditions of scarcity, Commons extends Menger's conditional logic by extending the value analysis to the conditions of abundance resulting from increased efficiency (see the right side of Fig. 1). Commons sought to understand the early twentieth-century USA, when advances in mass production resulting from improved technology and innovation enabled enterprises to more efficiently provide an abundant supply of goods. Commons thought that under such conditions of abundance, producers would arbitrarily withhold or restrict production, to artificially create scarcity value, which he calls "proprietary value." Commons seems to have obtained the idea of abundance from Menger's conditional logic on scarcity: the term "abundance" appeared 192 times in the 1927 draft of *Institutional Economics*, mostly in the context of discussing scarcity and value, but appeared just twice, and in different contexts, in *Legal Foundations* (1924), which had been written before Commons became inspired by Menger's conditional logic. As we can see on the right side of Fig. 1, whereas Menger excluded goods whose supply is sufficient to meet human wants from his investigations as "noneconomic goods," Commons analyzed the situation of abundance caused by increased efficiency. Here Commons exhibits extended versions of Menger's conditional logic.

3.3 Commons and Menger as Contemporaries: Two Directions Within the Economy and Conflicts of Interests in the Second Edition of Grundsätze

Institutional Economics refers extensively to the second edition of *Grundsätze*, published in 1923 after Menger's death. Commons seems to have been especially inspired by the revised parts, which extended the value theory presented in the first edition. The second edition was written to answer criticism of the first edition directed at Menger by German historicists. Although Menger had attempted in the first edition of *Grundsätze* to establish a realistic theory compatible with his experiences, German historicists did not accept the book in this way, instead seeing it as lacking understanding of the real national economy, which functions like an organic whole in which interaction occurs among market transactions, laws, customs, and cultures. These critics rejected the method of the book for being too

abstract to reflect the reality of the national economy. After a methodological debate (*Methodenstreit*) in the 1880s with these German historicists, Menger spent a long period revising the first edition. Thus, in a sense, the second edition was the outcome of Menger's "reflect[ing] on the economic theory and its characteristics for a long time" (Yagi 1981). Maintaining his strictness and carefulness as a theoretician, Menger extended the field of analysis in the second edition to incorporate a broader swathe of the real economy.

Reviewing the second edition of *Grundsätze*,[16] especially the revised parts, it becomes evident that Menger shared many of Commons' concerns, which is natural given that both were contemporary economists living in the early twentieth century. This was a time when collective powers gained influence over capitalism, something Commons identifies as "an age of collective action" (Commons 1950, p.23). Surprisingly, the second edition of *Grundsätze* contains many discussions related to institutional economics, including discussions on property rights, conflicts of interest, technological–economic direction, futurity, opportunity, and monopoly. This overlap in discussion topics arises partly because Commons and Menger shared a similar perspective on both the evolution of economic problems and on individual actions. Despite this commonality in perspective, regional differences nevertheless existed between the USA and Austria, such as oligopolization by capital, and even liberal economists who were contemporaries of Commons and Menger could not avoid reconsidering individual economic activities and governmental interventions. Interestingly, in the third section of the new chapter added to the second edition of *Grundsätze*, Menger (1923) introduced the new concepts of "collective wants (Kollektivbedürfniss)" and "wants of organizations (Verbandsbedürfniss)" (pp.7–8). Through these concepts, he implied that collective action is necessary to satisfy collective wants, such as education or water supply. These concepts resemble Commons' concept of the going concern, which had already been proposed in *Legal Foundations*. Additionally, Menger, like Commons, discusses the protection of intangible rights, such as patent and property rights. Here one can see why Commons was attracted by Menger's *Grundsätze*, and not simply the early 1871 version, but specifically the 1923 version that reflected Menger's efforts to make the theory more realistic.

Commons not only faced similar economic problems to Menger, but the theoretical framework of Menger also seems to have influenced the framework Commons developed in *Institutional Economics*. One of aspect of this framework is the distinction between the "economizing (ökonomisierende)" and "technological (technische)" directions in the economy. In the new chapter added in the second edition of *Grundsätze*, Menger (1923) distinguished two directions of the human economy, involving allocation to either saving (economizing) or technology. According to Menger, the former concerns the allocation and consumption of goods under scarcity to maximize utility, while the latter concerns technological

[16]For comparison of the revisions and additions in the second edition of *Grundsätze* relative to the first edition, see the editor's preface in Menger (1923), written by his son Karl Menger Jr.

reorganization of the means of production. Allocation gives direction to means of production. Restated, individuals have two motivational directions in their economic activities—to allocate given goods under budgetary constraints and to raise productivity under given means of production (pp.77–79). Following this distinction proposed by Menger, Commons (1934a) discusses a distinction between the "engineering economy" and the "economy of [the] businessman."[17] He continues, "... we distinguish [between] either physical control which Menger notifies with technology, or property rights which he identifies with economy" (Commons 1927, p.106).[18] As discussed in the next section, the former relates to a process of increasing use value by improving production efficiency, such as through innovation or mass production, while the latter relates to a bargaining process whereby businessmen artificially create scarcity value by withdrawing or restricting supply. This distinction, which Commons inherited from Menger, explains different volitional motivations of individuals and constitutes the fundamental basis of Commons' theory of reasonable value in *Institutional Economics*.

In the new material added to the second edition of *Grundsätze*, Menger (1923) discussed the economic origin of property rights as emerging from "conflicts of interest (Konflikt der Interessen)" caused by scarcity, and Commons seems to have followed this line of thought in *Institutional Economics*. According to Menger (1923), property rights matter when supply lags demand—that is, when people's wants are not satisfied because of scarcity of things, because under such circumstances conflicts of interest arise among people over things. In the opposite situation, when the quantity available is sufficient to satisfy everybody's wants (such as in the case of water or air), property rights do not matter. In the case of scarcity, Menger discusses the need to protect individual appropriation as a means to resolve conflicts of interests, a need that constitutes the economic origin of property rights (pp.79–82).[19] This logic of Menger clearly contains the idea that a process and

[17]Menger (1923) criticizes Smith and Ricardo for not distinguishing the technological and economic aspects of goods, and for concentrating on the technological aspect in their economic inquiry, which should have been directed mainly at the allocation of scarce goods. Both the 1927 draft and the final published version of *Institutional Economics* contain similar lines of criticism: Commons (1927, 1934a) criticizes "physical" economists such as Ricardo, Marx, and Malthus for focusing only on the "economy of engineering" and confusing economic aspects with technological ones.

[18]Commons had already referred to both topics in *Legal Foundations of Capitalism* (1924), but he conveyed clear distinctions in *Institutional Economics*.

[19]The direction of this discussion resembles arguments put forward by Commons. However, Menger went no further than the legal origins of property rights, whereas Commons made the concept of institutions being created by the resolution of conflicts of interest central to his analysis. This may partly reflect a difference between the continental system of statute law and the Anglo-American common law system: Menger had in mind the legal system of central Europe, where laws were relatively static once enacted, whereas Commons was exposed to the American common law system, wherein dynamic processes emerge from custom. Thus Menger observed a process by which legal order emerges from custom or a historical situation, but he regarded the legal order as rather fixed.

institution—legal protection of property rights—emerges from the resolution of a conflict of interests, which is the central idea of Commons' institutional economics. In *Legal Foundations*, Commons had already expressed the similar idea that institutions pursue a process of conflict resolution through various transactions (Commons 1924). However, Commons first introduced the term "conflict of interests" in the 1927 draft, in explaining the process through which rules or regulations emerge in transactions (Commons 1927, p.28). The term "conflict of interests" became a central theme in the final text of *Institutional Economics*, appearing 45 times and describing a process by which institutions emerge to resolve conflicts. Looking at this similarity in the discussion of conflicts of interests, namely, presenting such conflicts as a means through which institutions originated, we can say that Menger's thinking in *Grundsätze* contributed enormously to the clarification of Commons' arguments in *Institutional Economics*.

From the discussion above, we can summarize the links between Menger and Commons from *Grundsätze* to the 1927 draft of *Institutional Economics*. First, Commons considered Menger a pioneer of the volitional theory of value, who had overcome the limitations of classical theory by combining humans' internal motivations with the external world. Second, Commons was influenced by Menger's functional analysis, which described human and external world relationships in terms of subjective–objective powers described according to strict theoretical standards using conditional logic. Third, Commons confronted many of the same issues as contemporary economists such as Menger and thus seems to have been inspired by Menger's differentiation of "economizing" and "technological" directions, as outlined in the second edition of *Grundsätze*, as well as Menger's logical explanations regarding institutions or working rules that emerge from conflicts of interests. Commons developed his theory of reasonable value after the publication of the 1927 draft, which included eight out of the 11 chapters in the final published version of *Institutional Economics*, including Chap. 8 in which *Grundsätze* was scrutinized in detail. Commons developed his theory of reasonable value partly in the additional chapters that appeared in the final manuscript of *Institutional Economics* but not in the 1927 draft. Although most of Commons' discussion of Menger was included in the 1927 draft, the final manuscript of *Institutional Economics* contains extended and applied versions of Menger's formalization of value determination that deal with subjective–objective power relationships in conditional logic. The next section discusses the influence of Menger on the final manuscript of *Institutional Economics* in more detail.

4 Reasonable Value as a Development of *Grundsätze* in *Institutional Economics* in 1934

Inspired by the ideas Menger proposed in *Grundsätze*, in the final version of *Institutional Economics*, Commons developed his original theory of reasonable value, which is not limited to the field of scarcity, but also includes legal, political,

and bargaining processes. Commons was dissatisfied with Menger not because of his method of "exact orientation of research," but rather his definition of "economy" that restricted economics to mere scarcity. Actually, Menger (1871, 1923) defines an economy as being concerned with the allocation of goods that are in scarcity, meaning that all behaviors not directed toward the satisfaction of wants should be excluded from the field of economics. Thus, legal problems should be excluded from economic research (even though Menger often referred to them himself), as should political processes. For Commons, who had observed numerous examples in the actual economic process of the importance to value of collective actions, customs, legal or political restrictions, as well as other social powers, it was clear that Menger's theory of value should be extended beyond scarcity value. Thus, Commons determined the theory of reasonable value in various transaction processes. In the published version of *Institutional Economics*, Commons declares that the theory of reasonable value concerns five principles—scarcity, going concerns, efficiency, customs, and futurity. Whereas Menger (1871, 1883, 1923) carefully limited his analysis of decisive factors for value to the economic field, which he defined as human efforts to allocate things in scarcity, Commons attempted to extend the analysis to factors having power that constitute value-making processes. Chapter 10, entitled "Reasonable Value," which was added to the final manuscript published in 1934, contains an extended version of what Menger called the "exact orientation of research": Commons resolved the value phenomenon into elements with different controlling powers, identified certain conditions where these elements are in functional relationships, and reconstructed the whole process of value determination. Although he referenced Menger only rarely in the chapter, and extended the work of Menger through illustrations of real cases and by applying his own explanation, his way of inferring reasonable value can be understood and reconstructed as an applied version of Menger's functional analysis. As previously explained, Commons (1924) had already proposed the idea of reasonable value and most of the central concepts in *Legal Foundations*. However, the explanation of reasonable value became more systematic with the reconstruction of each legal, economic, or political element, and identifying conditions of individual elements are combined by a certain controlling power.

Inspired by Menger's distinction between "economizing" and "technological" directions in the economy, Commons (1934a) distinguishes the "engineering economy" and the "economy of [the] businessman" based on their working according to different principles of scarcity and efficiency as well as different transaction processes. They constitute prerequisites to derive reasonable value with "meaning," which Commons used to describe a dimension where certain subjective human powers and objective external powers are interconnected. He explains that meaning, "... implies both of the subjective and objective sides of a volitional process of acting and reacting upon the changing world without and within" (Commons 1934a, pp.17–18). Here, Commons clearly shows his intention to describe subjective–objective power analysis using the term meaning and following Menger and Smarts, as already discussed. For Commons, Menger's subjective evaluations based on human wants only had a meaning of scarcity value in the "economy of [the]

businessman," and the other aspect of meaning could also strongly influence value creation. Thus, Commons believed that the subjective–objective power process in the meaning of the "engineering economy" should also be analyzed.

According to Commons, the "engineering economy" concerns production process and the creation of use value by imputing manpower. The dominant principle of the engineering economy is efficiency, which increases efficiency power and maximizes output while minimizing input. The engineering economy is a natural outcome of Menger's scarcity value—if the quantity wanted exceeds that available, not only does the thing have a scarcity value, but ingenuity will be invested in increasing production. Thus efficiency also constitutes an important subjective–objective relationship like that of Menger's functional analysis, where motivations exist on the one hand to increase efficiency as internal power and on the other hand to increase production elements such as land or capital in the external world. Commons realized that the engineering economy, which tries to increase input–output value through technology development, would work to create more use value, but also would become a power to decrease scarcity value to increase efficiency. Commons criticizes both classical economists and Marx for focusing only on use value of goods that are produced by labor power and capital. Since classical economists recognize use value only, increasing efficiency or productivity in production processes matters for them in value determination processes. As we can see on the right of Fig. 2, those principles are from the field of scarcity and thus are excluded by Menger, but considered by Commons.

Commons also scrutinizes the meaning of the "economy of [the] businessman," which is concerned with the process of producing scarcity value by withholding supply and controlling prices. Whereas the engineering economy relates to transactions of corporal property with use value, the "economy of [the] businessman" relates to intangible property such as goodwill, patents, or legal property rights. In these cases, value comes not from something material, but rather from ideals that restrict transactions according to bargaining customs, credit, or the legal system. In the "economy of [the] businessman," value can be created via bargaining transactions or business strategies such as branding or oligopolistic coordination. According to Commons, the dominant principle of the "economy of [the] businessman" is scarcity, but the scope of scarcity is expanded beyond how Menger used it, to include commercial bargaining processes intended to control exchange value, for example, industrial collusion. For instance, suppose a case where an enterprise can produce 1 kilogram of cotton at a cost of $100 and that cotton will have a market exchange value of $120. In this case, the profit to the enterprise is $20 per kilogram. Now, suppose that radical innovation and increased efficiency halves the production cost of the same amount of cotton, which now becomes $50. According to the orthodox theory of supply–demand mechanisms under perfect competition, the exchange value should also decrease as market supply increases. However, Commons discusses that even in such a case, the exchange value will remain unchanged at $120 if enterprises exert their strong bargaining powers by means of cartels, holding companies, or lobbying, thus restricting market supply and excluding new entrants with lower prices from the market. If enterprises

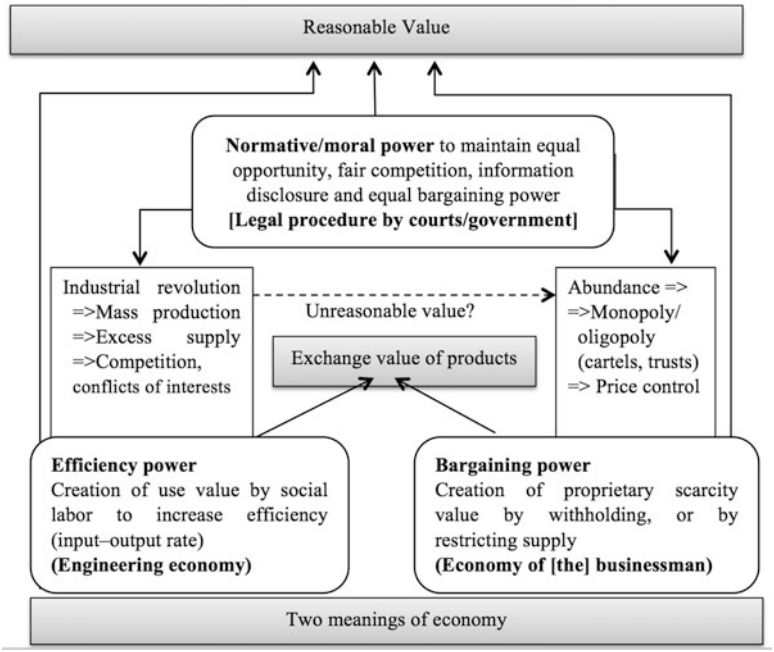


Fig. 2 Commons' explanation of reasonable value by different powers

successfully use their bargaining powers to create proprietary scarcity value, they will enjoy increased marginal profit of $70 per kilogram.

The historical background to Commons' discussion of the engineering and business economies was his having observed megacorporations develop special bargaining strategies to create scarcity value and so increase their profitability in the USA during the early twentieth century—an era of mass production and excess supply. At that time, US enterprises were accumulating enormous capital through repeated mergers and acquisitions and enjoying monopolistic or oligopolistic status that let them exert their bargaining powers to control prices. For instance, even where innovation decreased production costs, something that normally could have been assumed to decrease prices, giant industrial enterprises could maintain prices and hence industry profitability through industrial collusion (see the middle of Fig. 2). Interestingly, as Menger (1923) had already discussed, conflicts of interests caused by scarcity result in the creation of property rights as the conflicts are resolved by legal institutions. Commons regards conflicts of interests as also being caused by "abundance" such as excessive supply and as being resolved by institutional devices. According to Commons, the economy has evolved through three eras of scarcity, abundance, and stability: scarcity is overcome by increasing efficiency; abundant production creates conflicts of interests among enterprises over decreasing profitability; conflicts of interests in turn lead to institutional settings

such as cartels or trusts. Menger provided the inspiration for Commons' use of the term "conflict of interests," his idea that institutions originate from efforts at conflict resolution and his conditional logic based on identifying certain situations—scarcity or abundance—and outcomes (see the middle of Fig. 2). Whereas for Menger scarcity value arises simply from a relationship between human wants and natural supply, Commons found that businesspeople artificially create scarcity value by their oligopolistic power and political strategies for supply and price control. Commons uses the term "proprietary scarcity" to distinguish politically created from naturally created scarcity, with the former being controlled by dominant bargaining powers (see the bottom right of Fig. 2).

From the distinction between the "engineering economy" and the "economy of [the] businessman," Commons derives a process for the determination of exchange values, as we can see in Fig. 2. Commons explained exchange values as being decided by relationships between efficiency power in the "engineering economy" and bargaining power in the "economy of [the] businessman," explanations that resembled Menger's functional analysis, which applied conditional logic to explain the subjective power of human wants and the objective power of the conditions of scarcity of things. Whereas Menger excluded the situation of abundance from his inquiry, Commons extended the conditional logic to this situation, where businesses use their bargaining powers to artificially create value. In this framework, Commons could have explained actual cases where prices do not decline despite innovation increasing productivity—owing to megacorporations exerting their huge bargaining powers to create proprietary scarcity. Although Commons introduced factors excluded from Menger's theoretical system, such as efficiency improvements that increase productivity and bargaining processes that create value, his explanation of value creation mechanisms resembles Menger, as shown in Fig. 1 in the previous section.

However, Commons goes further than Menger in his relational analysis on production and bargaining powers, by introducing the idea of applying normative (or moral) power by legal and governmental process to achieve reasonable value by regulating transactions. Commons had observed giant oligopolistic enterprises manipulate prices through collusion, pressuring smaller enterprises, or political lobbying. He regarded values that were inappropriately inflated by businesses exploiting their bargaining power in this manner as "unreasonable" and hence requiring correction via the normative or moral power wielded by public institutions such as courts or government (see the upper part of Fig. 2). According to Commons, the normative powers wielded by courts or government work to achieve certain normative goals among transactions—maintaining equality of opportunity, fair competition, information disclosure, and equal bargaining power. For instance, the charging of higher prices for electricity by a public utility organization or industrial cartel would be considered "unreasonable" because it would give the organization an inappropriately high profit that should have been distributed to consumers via lower prices. In such a case, Commons believed that transactions should be regulated by legal or judicial process to achieve more "reasonable" value. These

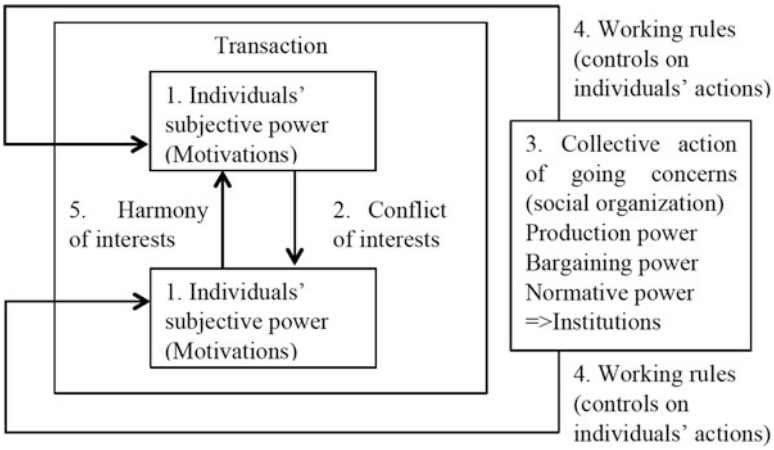


Fig. 3 Individuals' volitions and collective action in resolving conflicts of interests

concepts of reasonable value and moral power via legal processes were central to *Legal Foundations*, published in 1924. However, after introducing Menger's method of functional analysis, Commons systemized these concepts in *Institutional Economics*.

Although the powers described here appear to belong to collectivistic going concerns (social organizations) such as enterprises, governments, or courts, Commons could have called his concept of reasonable value a theory of volitions because he identifies those collective powers as emerging from relationships between individuals' subjective motivations and collective action via the resolution of conflicts of interests. We can see Commons' view of the process of emergence of collective action or institution from human volitional activities in Fig. 3: (1) the initial motivations of individuals are subjective power (wants); (2) however, individuals encounter conflicts of interest with others in transaction processes; (3) to resolve these conflicts of interests, individuals act collectively via going concerns (social organizations), and such collective action creates institutions; (4) these going concerns control or regulate individuals' actions via working rules; (5) collective action and working rules harmonize the interests of individuals. As one commentator summarized, "Commons tried to develop an economic theory that would enable us to understand the influence of power, conflict of interest, and collective action on economic outcomes" (Marangos 2007, p.65). Efficiency power in the "engineering economy" stems from individuals' subjective motivations to increase output of goods to satisfy more wants; bargaining power in the "economy of [the] businessman" stems from individuals' subjective motivations to earn more profit by artificially controlling exchange value; the principle of reasonableness (normative power) comes from individuals' motivations to achieve fair distributions under fair competition. Individuals thus "voluntarily" participate in collective actions or follow working rules that restrict their actions, in the expectation of so resolving

conflicts with others and increasing their own welfare. Commons' reasonable value can be regarded as an extended version of Austrian subjectivism applied to the USA in the early twentieth century, a time when enormous power could be wielded through collective actions such as industrial collusion, governmental intervention, and legislation.

We have seen that Commons' concept of reasonable value simply extended Menger's subjectivism to power relationships. However, we should still examine his logical formation critically, especially his problematic definitions of reasonableness. Because of his doctrine of pragmatism, Commons attached the two conditions of "ought" and "be" to his concept of the "reasonable," thus creating confusion with regard to whether he uses the concept to analyze actual processes or simply to show a certain social policy goal. Furthermore, Commons discusses many actual cases in which US courts applied juridical due process to regulate market transaction processes and achieve reasonable value. He also uses the term "reasonable" to refer to normative goals that "ought to be achieved" by political or legal regulations within given social situations or that such regulations "aimed to achieve." In the last chapter of *Institutional Economics*, Commons critically analyzes different cases under communism, fascism, and capitalism where value was inappropriately controlled by legal or political powers of sovereignty. He contends that based on the meaning of "ought," these cases would be classified as involving "unreasonable value" and could also be understood as special cases of "reasonable value" controlled by compulsory normative power in specific historical situations. Commons should have clearly distinguished reasonable value into "normative value," meaning a specific value that could become a public policy goal, and "collective value," meaning value affected by political powers and observed in actual social process. Such a distinction between the theoretical and normative aspects of "reasonable value" makes the concept more applicable to modern institutional analysis, where empirical testing is necessary. The distinction also makes the concept more applicable to normative discussions on what values economic policy should be designed to achieve. In the early twentieth-century USA, the political ideals Commons proposed in his term "reasonable value," namely, equality of opportunity, fair competition, information disclosure, and equal bargaining power, could have provided the basis for a public consensus to regulate the excessive capitalism of giant oligopolistic enterprises. However, the present era, or other regions during the early twentieth century, would present a very different situation, and thus one should discuss political goals from the perspective of actual institutional analysis. However, "reasonable value," an analytical framework that Commons inherited from Menger, continues to have important theoretical implications for modern institutional analysis.

5 Concluding Remarks

By chronologically investigating the development of Commons' theory of value, I have attempted to highlight the influence of Menger on *Institutional Economics*. As we have seen, the young Commons was influenced by the Austrian school when

first starting his inquiry into value theory. After his practical experiences of the legislative and political process over more than 20 years, Commons attempted to theorize his experiences of collective action by creating his original value theory in the draft of 1927, being inspired by the Austrian ideas of power relationships, volitions, and social organisms. However, his attempts were unsuccessful because they lacked a logical explanation of the process by which value emerges from human volitions and collective actions. Thus Commons returned to Menger's *Grundsätze* and reconsidered his theory. The functional analysis Commons presented in the draft manuscript of 1927 shows a strong influence from Menger, namely, in the strict identification of a process through which value emerges from interactive relationships between the internal power of humans and external conditions of goods. Additionally, Commons seems to have been impressed by several sections of additional material included in the second edition of *Grundsätze*—material that specifically dealt with a distinction between the "economizing" and "technological" aspects of the economy and that explained property rights as originating from the resolution of "conflicts of interests." Commons introduced a similar distinction in *Institutional Economics* and also adopted the term "conflict of interests."

In the final version of *Institutional Economics*, published in 1934, Commons extended Menger's functional analysis, which applied conditional logic to power relationships, to explain his original concept of reasonable value. This concept is described as efficiency power by the production side, bargaining power by the business side and normative powers by the public side, and regulates transactions to achieve appropriate distributions. In Commons' theory of reasonable value, individuals' volitions or subjectivist motivations were not deleted by collectivistic analysis, but rather constitute the central factors from which collective action emerges to resolve conflict of interest in transactions. In this sense, Commons inherited Menger's subjectivism in his institutional economics and the work can be called the theory of human willingness. The Menger–Commons link in value theory scrutinized here showed that a collectivist understanding of institutional economics is misleading. Commons attempted to describe the emergence of processes of value from interactive relationships between human volitional actions and going concerns. This process of constructing institutional economics constituted the prehistory of the convergence of neo-institutionalism and the Austrian school and led to reevaluation of the Austrian school as a theory for describing the emergence of institutions. To Commons, the traditional institutionalists were not mere collectivists, but individuals and their volitional actions constituted the methodological core of his institutional economics, which also contained influences from Menger. Although this chapter has focused only on value theory in the construction of Commons' *Institutional Economics*, the subsequent development of the theory by Commons and other authors would also be an interesting object for investigation.

Though Commons' concept of reasonable value confuses the two connotations of social fact and social norm, it nevertheless has important implications for institutional analysis and social policies. This concept encourages us to reconsider the reasonableness of valuations of derivatives in financial markets, or wage gaps in labor markets, and the power processes of collective actions that create unreasonable

valuations. Also, we are inspired to reconsider the kinds of reasonableness public policies should aim to achieve. Consideration should include not only equality of opportunity, fair competition, information disclosure, and equal bargaining power as set out by Commons but also other social values that are more compatible with our era. By formalizing the ideas of Commons as theoretical models, it might be possible to develop an analytical framework for institutional analysis. Such a project falls outside the scope of the present chapter, but would be an interesting focus for further investigation.

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS) and the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048). I sincerely thank Dr. Ryuichiro Terakawa, Dr. Taizo Yamamoto, and Professor Hiroshi Osaka for providing fruitful comments and criticisms, according to which I have considerably revised this chapter. Naturally, all mistakes are mine.

References

Böhm-Bawerk, E.v. 1891/1930. *Positive Theory of Capital*. Trans. W. Smart. New York: G.E. Stechert & Co.

Boulding, K.E. 1957. A New Look at Institutionalism. *American Economic Review* 47: 1–12.

Bowles, S. 2004. *Microeconomics: Behavior, Institutions, and Evolution*. Princeton: Princeton University Press.

Clark, J.B. 1886. *Philosophy of Wealth: Economic Principles Newly Formulated*. Boston: Ginn & Co..

Commons, J.R. 1893. *The Distribution of Wealth*. New York/London: Macmillan Company.

———. 1924/1959. *Legal Foundations of Capitalism*. Wisconsin: University of Wisconsin Press.

———. 1927. *Reasonable Value: A Theory of Volitional Economics*. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

———. 1934a. *Institutional Economics: Its Place in Political Economy*. New Brunswick: Transaction Publishers.

———. 1934b. *Myself*. Wisconsin: The University of Wisconsin Press.

———. 1950. *The Economics of Collective Action*. New York: Macmillan.

Elly, T.R., T.S. Adams, and M. Lorenz. 1893/1919. *Outlines of Economics*. New York: Macmillan.

Hamilton, W.H. 1919. The Institutional Approach to Economic Theory. *The American Economic Review* 9(1): 309–318.

Hodgson, G.M. 2004. *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism*. London: Routledge.

Lowenberg, A.D. 1990. Neoclassical Economics as a Theory of Politics and Institutions. *Cato Journal* 9(3): 619–639.

Marangos, J. 2007. John Rogers Commons on Power. *Journal of Political Economy* 35(4): 50–66.

Menger, C. 1871/1976. *Principles of Economics* (Grundsätze der Volkswirtschaftslehre). Trans. J. Dingwall and B.F. Hoselitz. Institute for Humane Studies.

———. 1883. *Untersuchungen über die Methode der Socialwissenschaften, und der Politischen Oekonomie insbesondere* (Investigations into the Method of the Social Sciences with special reference to economics). Leibzig: Verlag von Duncker & Humblot.

———. 1923. *Grundsätze der Volkswirtschaftslehre 2. Aufl (Principles of Economics, second edition), mit einem Geleitwort von Richard Schüller, aus dem Nachlass herausgegeben von Karl Menger. Wien*. Leipzig: Hölder-Pichler-Tempsky.

Milford, K. 1990. Menger's Methodology. In Carl Menger and His Legacy in Economics. Annual supplement to *History of Political Economy* 22: 215–240. Ed. Bruce J. Caldwell. Durham/London: Duke University Press.

Mises, L.V. 1933/1960. *Grundprobleme der Nationalökonomie: Untersuchungen über Verfahren, Aufgaben und Inhalt der Wirtschafts und Gesellschaftslehre*. Epistemological Problems of Economics (trans: Reisman, G.). Princeton: D. Van Nostrand.

———. 1962. *The Ultimate Foundation of Economic Science: An Essay on Method*. Princeton: D. Van Nostrand.

Mitchell, W.C. 1924. Commons on the Legal Foundations of Capitalism. *The American Economic Review* 14(2): 240–253.

Palermo, G. 1999. The Convergence of Austrian Economics and New Institutional Economics: Methodological Inconsistencies and Political Motivations. *Journal of Economic Issues* 33(2): 277–286.

Ramstad, Y. 1995. John R. Commons's Puzzling Inconsequentiality as an Economic Theorist. *Journal of Economic Issues* 29(4).

Schumpeter, J.A. 1908. *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie* (The Nature and Essence of Economic Theory). Leipzig: Duncker & Humblot.

Sen, A. 1977. Rational Fools: A Critique of the Behavioral Foundations of Economic Theory. *Philosophy & Public Affairs* 6(4): 317–344.

Sharfman, I.L. 1925. Commons's Legal Foundations of Capitalism. *The Quarterly Journal of Economics* 39(2): 300–312.

Simon, H. 1996. *The Sciences of the Artificial,* 3rd ed. Cambridge, MA: Massachusetts Institute of Technology.

Smart, W. 1891/1931. *An Introduction to the Theory of Value: on the Lines of Menger, Wieser, and Böhm-Bawek*. London: Macmillan Company.

Tokumaru, N. 2015. Wieser's Unity of Thought. *Journal of the History of Economic Thought* 37(4): 583–596.

Vanberg, V. 1989. Carl Menger's Evolutionary and John R. Commons' Collective Action Approach to Institutions: a Comparison. *Review of Political Economy* 1(3): 334–360.

Wieser F. v. 1889. *Natural Value* (Der natürliche Werth, Wien: Alfred Hölder). Trans. Christian A. Malloch. 1956. New York: A.M. Kelley

———. 1914/2003. *Social Economics*. Trans. A.F. Hinrichs. London: Routledge.

———. 1926/1983. *The Law of Power* . Trans. W.E. Kuhn. Lincoln: University of Nebraska Press.

Yagi, K. 1981. Commentary: Menger's Investigation and the Revision of *Principles of Economics*, in Carl Menger, *General Theory of Economics (second edition of Principle of Economics)* (Japanese translation). Tokyo: Misuzu Shobo (in Japanese).

———. 2004. *Economic Thought in Vienna: From the Menger Brothers to the Twentieth Century*. Kyoto: Minerva Shobo (in Japanese).

Part II
Theories for Social Reform

The Effect of the Great Depression on the Institutional Economics of John R. Commons

Shingo Takahashi

Abstract Although *Institutional Economics* (1934), John R. Commons's most important work, was published after the start of the Great Depression, it contains little analysis of that extraordinary event. In fact, Commons formed some of his main concepts, such as his notions of the institution and the rationing transaction, over a 4-year period, from 1927 to 1931, overlapping with the start of the Great Depression in 1929. The evolution of his ideas can be traced from April 1927, when he completed the manuscript "Reasonable Value: A Theory of Volitional Economics" to his later article "Institutional Economics" in 1931. Commons analyzed the causes of the Great Depression in a report published in May 1931. The ideas he presented were similar to those in other prominent studies. However, Commons was unique in advocating a policy of international cooperation on interest rates. The Great Depression caused Commons to substitute the notion of the rationing transaction for that of the judicial transaction and also influenced his definition of the institution, his support for policy making by administrative committees working under due process of law, and his idea of reasonable capitalism. Commons worried that inherent in capitalism was a risk of evolution toward fascism and communism where rationing transactions would be controlled by a dictator. Therefore, in his later years, he emphasized the role of the administrative committee working under due process of law in policy making, a means through which he sought to achieve a reasonable capitalism.

Keywords Great depression • Institution • Rationing transaction • Administrative committee • Reasonable capitalism

S. Takahashi (✉)
Tokyo College of Transport Studies, Tokyo, Japan
e-mail: s.takahashi@toko.hosho.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_3

1 Introduction

This chapter analyzes how John R. Commons, one of the founders of institutional economics, understood the Great Depression and how this event influenced his theory of institutional economics.

Commons's institutional economics is a systematic theory expressed using terms Commons developed himself, such as "working rule," "going concern," and "reasonable value." Fundamental to the theory is the concept of the transaction, which Commons classifies into the "bargaining transaction," "managerial transaction," and "rationing transaction." Commons's theory remained neglected immediately after his death but later influenced the development of a new theory of institutional economics. Particularly important was the work of O. E. Williamson in developing transaction cost economics, which he said was inspired by Commons's concept of the transaction.[1] Since the development of transaction cost economics, Commons's institutional economics has gradually attracted more attention. Recently, researchers like Whalen have focused on the relationship between the monetary approach of Commons and the post-Keynesian approach,[2] and researchers like Théret, who studies régulation theory, have focused on Commons's theory and methodology.[3]

This study focuses on the main concepts in the work of Commons, such as the institution and the rationing transaction, through analysis of the Great Depression. This approach is adopted because the concepts of the institution and the rationing transaction were clarified after the Great Depression. *Institutional Economics* (1934), Commons's most important work, was completed in November 1933 and published the next year, long after the start of the Great Depression. However, *Institutional Economics* contains little analysis of the Great Depression. Furthermore, Commons never dealt with the Great Depression in detail in subsequent works. I compare *Institutional Economics* with "Reasonable Value" (1927) (called the 1927 manuscript hereafter),[4] the latter essentially being a manuscript of the former. I study the influence of the Great Depression on Commons's institutional economics based on analysis of the small number of reports he published that dealt with the Great Depression.

I choose the 1927 manuscript written in April 1927, because it is the only full draft of *Institutional Economics* that Commons completed just before the onset of the Great Depression.[5] Comparing the 1927 manuscript with the article

[1] Williamson (1975, p.254).

[2] Atkinson and Whalen (2011).

[3] Dutraive and Théret (2013).

[4] "The 1927 manuscript" refers to Commons (1927a), written in April 1927.

[5] Besides the 1927 manuscript, Commons produced several other drafts of *Institutional Economics*. Three drafts were completed between April 1927 and the start of the Great Depression: the draft of December 1927 (Commons 1927b), the draft of February 1929 (Commons 1929a), and the draft of March 1929 (Commons 1929b). These are simply tables of contents.

"Institutional Economics" (1931), in which Commons clarified the concept of institutions, clarifies the background against which he constructed the concept of institutions, the central feature of his institutional economics.

Commons restructured the latter half of *Institutional Economics* many times while working on its various draft manuscripts. By the time he wrote the 1927 manuscript, he had already decided to devote one chapter to the concept of "futurity," an important term in his institutional economics. This demonstrates that Commons developed the concept of futurity *before* the Great Depression. Although Commons is remembered for his brilliant research on labor history in the United States, he also always had an interest in monetary policy.[6] While at the University of Wisconsin, Commons became a policy consultant working with Wisconsin's governor, La Follette, and in addition to labor and monetary policy, he was interested in numerous other fields in law and economics. Commons analyzed property using Supreme Court rulings, as a result of which he published *Legal Foundations of Capitalism* (Commons 1924). The analyses of incorporeal property and intangible property contained in this work were demonstrated in Chapter 9 of *Institutional Economics*, titled "Futurity." In this study, I investigate how Commons's analysis of futurity, including incorporeal property and intangible property, relates to the Great Depression.

First, in Sect. 2, I compare *Institutional Economics* with the 1927 manuscript and pick up a point not mentioned in previous studies. Then in Sect. 3, I focus on two reports by Commons from 1931. One is "World Depressions," published on May 9, and in which Commons referenced the Great Depression (Commons 1931a). The other is "Institutional Economics" (Commons 1931b), which established the concept of institutions. By analyzing these two publications I clarify Commons's understanding of the Great Depression and demonstrate that the foundational concepts of his economic theory were formed by 1931. In Sect. 4, I analyze the influence of the Great Depression on the formation of Commons's institutional economics. In Sect. 5, I discuss the features of Commons's analysis of the Great Depression and his view of capitalism. Finally, in Sect. 6, I summarize and seek contemporary insights into institutional economics and capitalism.

[6]Commons wrote "Economic Reform" (Commons 1893a) and "Sound Currency" (Commons 1893b) in 1893, also the year of publication of his first major work, *The Distribution of Wealth*. In these two studies he insisted that money should have elasticity.

2 Comparison Between *Institutional Economics* (1934) and the 1927 Manuscript

2.1 Previous Studies on the 1927 Manuscript

The 1927 manuscript covers the same ground as the first half of *Institutional Economics* (1934); from Chapter 2 "Method" to Chapter 8 "Efficiency and Scarcity."[7] Previous studies have also examined the 1927 manuscript. Particularly valuable is the work of Uni (2014), which compares the 1927 manuscript with *Institutional Economics*.

Uni (2014) highlighted two issues. The first issue is that between 1927 and 1934 Commons changed the concept of "proprietary scarcity." Proprietary scarcity was assumed to result from the seller controlling the supply. However, in 1934 the definition of proprietary scarcity was changed such that it resulted from control by both the supply and demand sides for the sake of public interest, welfare, or need. Uni explained that the Great Depression decreased demand and so caused deflation (Uni 2014, p.82).

The second issue is that the concept of the "judicial transaction," one of Commons's notions of transaction, was replaced with that of the "rationing transaction." In the 1927 manuscript, Commons's notion of the transaction comprised the bargaining transaction, managerial transaction, and judicial transaction; in *Institutional Economics* (1934), it comprised the bargaining transaction, managerial transaction, and rationing transaction. The bargaining transaction refers to the transfer of ownership among legal equals, occurring mainly via the market. The managerial transaction is intended to produce wealth and occurs between a legal superior and inferior within a firm. Uni (2014) insisted that the judicial transaction became the rationing transaction, while the bargaining transaction and the managerial transaction remained unchanged between 1927 and 1934. The rationing transaction differs considerably from the judicial transaction. The judicial transaction describes the application of a social rule at the micro level, such as a decision by a judge or arbitrator about nonfulfillment of contract. Conversely, the rationing transaction describes the creation of a social rule at the macro level, such as a taxation policy to apportion a burden. Furthermore, at the industrial level (mezzo level), the rationing transaction occurs as a result of arguments about industry-wide wages and prices, while the judicial transaction simply applies existing rules to individual cases (*ibid.,* pp.82–83).[8]

[7] See Table 1.

[8] Additionally, Uni explained that Commons enhanced the price theory between 1927 and 1934, and in the 1927 manuscript Commons thought reasonable value was formed in the mutual constraint relationship between bargaining transactions in the market and managerial transactions in the organization (Uni 2013).

Summarizing the above, the 1927 manuscript focuses on the micro level, specifically supply-side factors that affect individual firms. In contrast, *Institutional Economics* (1934) expands the focus to the macro level and thus includes the actions of government and industry that affect supply and demand.

2.2 The Concept of the Institution

Comparing the 1927 manuscript with *Institutional Economics*, I find an important difference in the concept of the institution, a fundamental concept in Commons's institutional economics. While Veblen defined the institution as the dominant habits of thought of a society, Commons defined it differently. In *Institutional Economics*, Commons stated:

> . . . the short definition of an institution is collective action in control of individual action, the derived definition is: collective action in restraint, liberation, and expansion of individual action. (Commons 1934a, p.73)

Following this explanation, Commons introduced the special terms, "transaction" and "working rule," used in his theory of institutional economics and emphasized that these terms were the main characteristic that distinguished his theory from traditional economic thought:

> These individual actions are really *trans*-actions—that is, actions between individuals—as well as individual behavior. It is this shift from commodities, individuals, and exchanges to transactions and working rules of collective action that marks the transition from the classical and hedonic schools to the institutional schools of economic thinking. (*ibid.*, p.73)

In contrast, the concept of the institution was not defined in the 1927 manuscript. The term "institution" appeared only seven times in 340 pages and referred simply to general rules and customs, as in the following passage:

> Thus money is the outstanding characteristic of modern economic life. Moreover, it is legal tender money, or the equivalent on demand of legal tender, because it is founded on a credit system whose standard is the expectation of what courts will do in the enforcement of contracts to pay money and to deliver commodities at specified dates in the future or unspecified dates on demand. For this reason, money is the all-important social institution for all producers and consumers. (Commons 1927a, s.18)

The above explanation indicates the importance of legal tender and of expectations surrounding how courts will enforce contracts in the future. These concepts were related to that of futurity, but Commons simply used the term institution to describe general rules and customs and gave no further special definition.

Comparison of the 1927 manuscript and *Institutional Economics* thus shows that Commons established his concept of the institution from 1927 to 1934. The institution and other key concepts all appear in the article "Institutional Economics," published by Commons in 1931, and in the next section I look at this article. The period during which Commons developed his concept of the institution coincided with the start of the Great Depression. Examination of the report "World

Depressions" in the next section can reveal Commons's analysis of the Great Depression and the influence of this event on the formation of his concept of the institution.

3 Two Publications in 1931: "World Depressions" and "Institutional Economics"

3.1 "World Depressions" (1931)

3.1.1 Causes of World Depressions

"World Depressions," dated May 9, 1931, is one of the few reports in which Commons directly mentioned the Great Depression.[9] Commons explained that a decrease in a company's profit margin as a result of deflation decreased the capacity of that company to employ workers and so caused layoffs. He thought that this in turn decreased the consumption capacity of the workers. After thus describing the impact of prices on the economy, Commons described the causes of the global depression as follows:

> For this reason the world-wide fall of prices, or the world-wide rise of prices, depending on the instability of the gold standard and the lack of cooperation of Central Banks of the world, is the most important of the world-wide problems of prosperity and depression, of employment and unemployment. (Commons 1931a, s.620)

Commons thought the fundamental problem lay in European countries' payment of war debts to the United States. European countries tried to use low-priced exports to repay these debts, but in doing so they decreased world prices, including in the United States, and created worldwide deflationary pressure. Additionally, countries set high interest rates to prevent the outflow of gold under the gold standard, but this created a burden for businesses.

The continuance of this situation would create a risk of decreased corporate profit margins in both the European countries and the United States due to decreased prices and increased layoffs. As such, Commons thought the United States and France, which together owned about 60 % of the world's monetary gold supply, should have supplied gold more actively to other debtor countries to stabilize the purchasing power of money. In fact, the United States and France had instead adopted a passive central bank policy in relation to monetary gold supply. In "World Depressions" Commons thus identified the instability of the gold standard and a lack of international cooperation among central banks as the causes of the Great Depression.

[9] According to *John R. Commons Papers* (microfilm edition, State Historical Society of Wisconsin, 1982), this report is contained in a set of unbound items that includes articles, speeches, and miscellaneous writings (*ibid.,* p.27). Being dated May 9, it seems likely the report took the form of a speech or newspaper account.

3.1.2 Measures Against World Depressions

A. Gruchy, a scholar of the history of economic thought, stated, "Concerning measures and devices by which a managed recovery could be made to work successfully, Commons had little to say" (Gruchy 1947, p.151).[10] In fact, Commons did present some such measures in "World Depressions." I look at these measures below.

Commons insisted that "the most important of the present problems is the world wide stabilization of the purchasing power of money" (Commons 1931a, s.620). Accordingly, he made the following suggestions. First, the international cooperation policy by the Bank for International Settlements. This suggestion related to international financial administration, and Commons explained it by saying, "The most important remedy now before the world is the Bank for International Settlements, known as the Young Plan, with headquarters at Basel" (*ibid.*, s.617). The intention was that this institution would lower the interest rates that were restricting European economies by facilitating cooperation between the United States and France to supply gold (*ibid.*, s.620). Second, Commons suggested that if the United States were to cancel Europe's war debts, this might be the most effective means to help the European countries recover from their downward plunge (*ibid.*, s.622).

Evidently, Commons thought it important to suppress global low-price competition and ensure the profit margin of firms. He sought to maintain a firm or a nation as a "going concern," although this term did not appear in the report. Commons believed that, under capitalism, the disappearance of profit margin for individual firms threatened national survival. The report contains other interesting statements, such as the following:

> On the other side is the argument that the margin for profit is too small, and this leads to the world-wide unemployment, reductions of wages and the long hours of work, which foment strikes, revolutions and dictatorships. The dictatorships are of two kinds, the dictatorship of the proletariat in Russia and the dictatorship of landlords and capitalists in Hungary, Italy and other countries. (*ibid.*, s.617)

Although this report was written before the birth of Hitler's regime in Germany, Commons was concerned by the risk of dictatorship. This same content reappears in *Institutional Economics*, the final chapter of which is "Communism, Fascism, Capitalism."

[10]Gruchy described *Institutional Economics* as follows: "In the depths of depression he published his *Institutional Economics, Its Place in Political Economy* (1934), a statement of his overall economic ideas, and not a book designed to provide answers to the immediate problems of the day" (Gruchy 1947, p.151).

3.2 "Institutional Economics" (1931)

3.2.1 Concept of the Institution

Commons established the concept of the institution not in *Institutional Economics* (1934), but in the article "Institutional Economics" (Commons 1931b). At the beginning of this article, Commons defined an institution as follows:

> An institution is defined as collective action in control, liberation and expansion of individual action. Its forms are unorganized custom and organized going concerns. The individual action is participation in bargaining, managing and rationing transaction, which are the ultimate units of economic activity. (Commons 1931b, p.648)

This definition differs little from that used in *Institutional Economics*, namely, "collective action in restraint, liberation, and expansion of individual action" (Commons 1934a, p.73); the only notable difference is the substitution of "control" for "restraint." In the article, Commons explained after his definition of the institution that an unorganized institution was a custom and an organized institution was a going concern. Furthermore, he said that the importance of the transaction lay in it being the ultimate unit of economic activity, and he showed three kinds of transactions: the bargaining transaction, the managing transaction, and the rationing transaction. Additionally, he explained that the control of individual activities by either customs or going concerns was the "working rule" that governed what individuals "can," "must," "may," or "may not do."

In this way, by 1931 Commons had developed the terminology used to describe his theory of institutional economics, including such terms as institution, transaction, going concern, custom,[11] and working rule. By 1931 Commons had also coined the term rationing transaction to substitute for judicial transaction in his 1927 manuscript.

3.2.2 Rationing Transaction

The article "Institutional Economics" stated that "negotiational psychology" or "behavioristic psychology" provided the framework for the three types of transactions. That is, the bargaining transaction is founded on persuasion or coercion, the managerial transaction is founded on commands and obedience, and the rationing transaction is founded on argument and pleading (Commons 1931b, p.655). Uni noted that *Institutional Economics* described the rationing transaction as founded on the psychology of argument and pleading, a change from the 1927 manuscript, in which the judicial transaction was described as based on the social psychology of commands and obedience (Uni 2013, p.82). However, Commons had already made this change in the article "Institutional Economics" of 1931. Commons explained

[11] "Custom" means specifically "common law method" (Commons 1931b, p.651).

his new definition of the rationing transaction, and particularly how it differed from the managerial transaction, as follows:

> [T]he rationing transactions differ from managerial transactions in that the superior is a collective superior while the inferiors are individuals. Familiar instances are the log-rolling activities of a legislature in matters of taxation and tariff; the decrees of communist or fascist dictatorships; the budget-making of a corporate board of directors; even the decisions of a court or arbitrator; all of which consist in rationing either wealth or purchasing power to subordinates without bargaining, although the negotiations are sometimes mistaken for bargaining, and without managing, which is left to executives. (Commons 1931b, pp.653–654)

Institutional Economics reflected the above content. Here, I should pay attention to the statement that rationing transactions included "the decrees of communist or fascist dictatorships." As mentioned above, although this article was produced in 1931, before the rise of Hitler's regime in Germany, Commons already recognized the potential for such dictatorship.

At the end of the article, Commons wrote that if managerial and rationing transactions were the starting point of the philosophy, then the end point was the command and obedience of communism or fascism (*ibid.*, p.657). Contradicting this, he also said that if bargaining transactions were the unit of investigation, then the trend was toward "the equality of opportunity, the fair competition, the equality of bargaining power, and the due process of law of the philosophy of liberalism and regulated capitalism" (*ibid.*, p.657).

As described above, by 1931, Commons had developed the special terminology that was later used in *Institutional Economics*. Also, in describing the rationing transaction, he showed both the possibilities and the dangers of capitalism. The final chapter of *Institutional Economics* further discusses these dangers and possibilities (cf. Table 1).

4 The Influence of the Great Depression on Commons

4.1 Administration of Incorporeal Property and Intangible Property

From the studies examined so far, I have identified two lessons that Commons learned from the Great Depression. First, Commons learned the importance of cooperation among central banks to stabilize the purchasing power of money globally. As described above, Commons specifically advocated the lowering of interest rates through cooperation between the United States and France, which together owned more than half of the world's monetary gold supply and so could cooperate to supply gold to other European countries. In Chapter 9 of *Institutional Economics*, titled "Futurity," Commons also stated, "we thus can see the significance of Wicksell's theory of the regulation of the general price level by concerted action of banks in changing the bank rate" (Commons 1934a, p.627). Commons thus understood the importance of the "management of incorporeal property," including war debt.

Table 1 *Institutional Economics* (1934), the manuscript (April 1927), and outlines (1927, 1929)

Chapter	1927, 4 (Manuscript)	1927, 12 (Outline)	1929, 3 (Outline)		1934
1	Method	Method	John Locke		The point of view
2	John Locke	Locke	Francois Quesnay		Method
3	Quesnay	Quesnay	Hume and Peirce		Quesnay
4	Hume and Peirce	Hume and Peirce	Adam Smith		Hume and Peirce
5	Adam Smith	Smith	Bentham and Blackstone	Beginning of the great depression	Adam Smith
6	Bentham and Blackstone	Bentham and Blackstone	Malthus		Bentham and Blackstone
7	Malthus	Malthus	Scarcity and efficiency		Malthus
8	Scarcity and efficiency	Scarcity and efficiency	*Futurity*		Efficiency and scarcity
9		*Futurity*	Capital and capital goods		*Futurity*
10		Capital, credit, prices	*Futurity and property*		*Reasonable value*
11			*A world pay community*		*Communism, fascism, capitalism*
12			Willingness		
13			*Reasonableness*		

Source: Created by the author with reference to the relevant texts

In relation to this point, as stated in Koh (2013), after the Great Depression, Commons emphasized the public character of currency management.[12]

Second, Commons learned to protect the continuity of the firm or the nation by securing profit margins. In "World Depressions," Commons insisted it was necessary to suppress the low-price competition that occurred in response to global economic weakness and to ensure the profit margins of individual firms. He thus promoted the idea that the firm is a going concern and profit margin is essential to its continuation. Additionally, although Commons insisted that the organized institution was a going concern in "Institutional Economics" (1931), he also said, "The typical case of liberty and exposure is the goodwill of business. This is coming to be distinguished as 'intangible' property" (Commons 1931b, p.649). In a firm, employers are exposed to the freedom of employees to work or not work. However, employees are exposed to the freedom of the employer to fire them or not fire them. These relations between employers and employees form "goodwill," which is an intangible good relationship. In other words, these relations are important to the "management of intangible property" in a going concern.

[12]Koh (2013, pp.58–59). This article pointed out that before the Great Depression Commons consistently maintained that a "public" organization should manage the currency. The article also insisted that Commons was optimistic in that the FRB would be recognized as suited for this role.

As described above, Commons learned from the Great Depression the importance of the "management of incorporeal property" and the "management of intangible property." These ideas about the management of different types of property were very important to Commons. Hence, Chapter 9 of *Institutional Economics*, which discusses these two types of management, is the longest chapter in the book, comprising 259 pages out of a total of about 900 pages.

4.2 How to Control Two Kinds of Property

The idea of futurity was included in the draft of *Institutional Economics* before the Great Depression. As shown in Table 1, "Futurity" was the planned title of Chapter 9 by December 1927. Moreover, by March 1929, just before the Great Depression, Commons had decided to add another chapter, titled "Futurity and Property," to appear after the chapter titled "Futurity." Clearly, futurity was not a term Commons developed only after the Great Depression. However, it seems that after the Great Depression Commons determined that the problem of "how to manage" incorporeal and intangible property became critical,[13] and hence Chapter 9 of *Institutional Economics* discussed this problem in considerable detail. Rules for management, including the making of such rules, also became a central issue for Commons. The former are evident in his concepts of institution and working rule, while the latter appear in his notion of the rationing transaction.

Commons paid particular attention to the rationing transaction. This is because the rationing transaction creates the rules of going concerns, and these rules can include orders under communism and fascism. In Chapter 9 of *Institutional Economics*, titled "Futurity," he said, "the capitalistic elements turn toward the Fascism that would preserve their margin for profit. Others turn towards communism or voluntary collective bargaining and codes that would re-distribute the shares against an increasing, or even abolished, margin for profit" (Commons 1934a, p.612). Commons thought the going concerns that constitute capitalist society contained an element that predisposed them toward fascism and communism.

In addition, Commons said the following about "A World Pay Community" in Chapter 9, "The criticism of Wicksell should turn, not on the assumption of a permanently low bank rate, but on the present infancy of the profession of forecasting and the political dangers of entrusting so great a power as control of the Bank rate to the concerted action of central banks" (*ibid.*, p.610). This suggests Commons would have thought the same about the political risk inherent in international financial cooperation policy.

In fact though, Commons said about international financial cooperation policy that, "At this writing, November 1933, the nations have definitely failed to get

[13]Incorporeal property and intangible property are discussed in more detail in *Legal Foundations of Capitalism* (Commons 1924).

together on all questions of national and international conflicts of interest, whether economic, monetary, or military and the future is unpredictable. The risk-discount is 100 per cent" (*ibid.*, p.611). Therefore, although he appealed for international cooperation policy as a necessity, he was also aware that such concentration of power was dangerous.

Ultimately, in compiling *Institutional Economics* Commons added further material after the final chapter of the 1927 manuscript. What had been the final chapter of that draft manuscript became "Efficiency and Scarcity" (Chapter 8) in *Institutional Economics* (1934). This chapter was followed by "Futurity" (Chapter 9), and then "Reasonable Value" (Chapter 10), which discussed reasonable value in relation to corporeal, incorporeal, and intangible property. Finally, Commons added "Communism, Fascism, Capitalism" (Chapter 11). Therefore, although Commons had the idea of futurity (and of a "World Pay Community") before the Great Depression, the Great Depression led him to explain the controlled "reasonable capitalism" via a logical flow from "Futurity" to "Reasonable Value" and "Communism, Fascism, Capitalism."

4.3 Teachings of Benjamin Strong

Why did Commons conceive of a policy of worldwide cooperation in financial administration? As mentioned above, though Commons had long been interested in monetary policy, his specialized knowledge of finance and central banks was deeply influenced by Benjamin Strong, Governor of the Federal Reserve Bank in New York. Commons had previously proposed policies based on his personal experience, for example in the area of labor–management relations and, therefore, I cannot ignore the importance of such personal experience on the evolution of his thought. In *Myself*, Commons said the following about the impact of Strong.

> I spent much time with the Federal Reserve bank in New York and the Federal Reserve Board at Washington. I learned from Governor Benjamin Strong of the New York bank how he operated with the bank rate and the open market operations to "mop up" credit or to expand credit on the money market, and how they had to regulate credit in order to enable England to return to the gold standard. (Commons 1934b, p.192)

The Federal Reserve Bank, at first, bought securities using its gold reserves to increase its assets and revenue. Few people could understand the exact results of these securities purchases. However, Strong was the first to recognize the impact of the open market operations in early 1920s. The open market investment committee was founded in 1923 and Strong played a key role there. Commons learned about both the bank system of the United States and open market operations from Strong. Consequently, he produced ideas such as the following.

> Curiously enough, though I was a late comer in the field of banking, I was, in December, 1924, the first to expound to economists at the American Economic Association the principles of control of the money market by a central bank through buying and selling securities on the open market at current prices. (*ibid.*, pp.192–193)

Strong took a positive approach to cooperation with the major European countries. In response to the pound crisis of 1927, he supported the exchange of gold held by the United States for pounds, reducing the official bank rate of the United States, and conducting a monetary easing through a securities buying operation. In this way, the United States engaged in large-scale capital export that helped increase the gold and dollar reserves of other countries.[14]

However, when Strong died in October 1928, the real bills doctrine, which emphasized the proof of material backing for a currency and securities, became dominant in the Federal Reserve System.[15] Consequently, the monetary policy of the Federal Reserve Bank changed from easing to tightening, or from cooperation to noncooperation. The result was that money supply decreased, a bank run occurred, and banks went bankrupt in a chain reaction.

Because Commons appreciated the price stabilization policy implemented by Strong in the 1920s, it makes sense that he would have responded to the situation that followed Strong's death by reconfirming the importance of Strong's credit management policy. In the final part of *The Economics of Collective Action* (1950), published after Common's death, he said of events in 1928, "they (the congressional committee) rejected the bill introduced by Congressman (James G.) Strong of Kansas instructing the Federal Reserve Board (FRB) to use its instruments of control for the public purpose of stabilizing the general price level" (Commons 1950, p.260). Commons thus criticized the congressional committee for rejecting the bill on price stabilization. This shows that Benjamin Strong's price stabilization policy clearly influenced Commons.

4.4 The Administrative Committee After the Great Depression

Commons proposed a theory of policy in the last part of *The Economics of Collective Action*. This theory took the form of a proposal about who should create institutions and how. He focused on administrative committees for investigation as the fourth branch of government, after the legislature (parliament), the executive (executive: president and governors), and the judiciary (courts). As he grew older, he increasingly emphasized the administrative committee, although such an institution had existed in the United States from the early twentieth century.

Administrative committees have two roles. For example, the role of the industry committee is to quasi-legislatively reflect the interests of stakeholders in legislation, quasi-judicially adjust the interests of labor and management, and also arrange statistical surveys. There occur situations where it is important to implement a policy quickly, but the courts may be too slow to reach a judicial decision, and political maneuvering in the legislature may delay the progress of legislation. In such situa-

[14] Akimoto (2009, p.67).

[15] Timberlake (2005, p.212).

tions, administrative policy making, based on hearing directly from stakeholders and considering statistical surveys conducted by experts, offers excellent advantages in terms of its ability to take immediate effect. In *The Economics of Collective Action*, Commons argued that such administrative policy making was effective in the three areas of labor, agriculture, and credit.

The substitution by Commons of the term rationing transaction for judicial transaction after the Great Depression was connected to his support for administrative policy making. He was concerned about the risk of extreme outcomes if the notion of rationing transaction were used incorrectly. But he thought such extreme outcomes could be prevented by objectivity of the statistical investigation and due process of law. Importantly, this approach provided a place for negotiation to secure the political and economic opportunities of workers, who were also consumers or members of the general public. For Commons, the individual was not a passive man characterized by economic rationality but an active man characterized by "willingness." Securing the place of negotiations in administrative policy making is indispensable in exerting active personal freedom. Commons thus considered such negotiations essential to protect capitalism and democracy.

Commons's ideas are a theory of policy that considers the Great Depression, fascism and communism, and the New Deal; namely, if a person in a dominant legal position made policy in defiance of due process around the performance of rationing transactions, this would be unconstitutional, not to mention dictatorship by fascism and communism. Though Commons never commented directly, he probably opposed the institutionalism that accompanied the rapid and radical reforms of Tugwell.

Commons sought to realize reasonable capitalism via institutions and due process. As seen in his concept of institutions, he believed that institutions could support the spread of personal freedom. He also believed due process could prevent capitalism from driving recklessly to extremes. The ideas of Commons were influenced by his experiences of the Great Depression. For example, he stressed the relationship between policies of the FRB and the international financial situation, viewed firms as going concerns that require a profit margin, and believed government economic interventions should carefully consider the processes involved, to avoid outcomes such as those under communism, fascism, and the early New Deal.

5 Discussion

My review of Commons's writings shows that he identified three causes of the Great Depression. First, low-priced exports by European nations to repay war debts created deflationary pressure. Second, high interest rates intended to prevent gold outflows under the gold standard suppressed corporate activity. Third, prices became unstable owing to a lack of cooperation among central banks on interest rate policy. I now turn to how the analysis of Commons compares to existing studies on the Great Depression.

Friedman and Schwartz (1963), both monetarists, regarded a decrease in the money supply and a policy mistake by the FRB in pursuing a tight monetary policy as the causes of the Great Depression. Comparing this analysis with that of Commons, there is agreement that the FRB made a policy error.[16] However, Commons did not only consider money supply. Commons thus differed from monetarists in his political and microeconomic viewpoints, such as in advocating for cancelation of war debt and protection of profit margins.

Next, Kindleberger (1973) thought the Great Depression occurred because the international economic system was destabilized by a combination of British inability and American unwillingness to assume responsibility for economic stabilization after World War I (Kindleberger 1973, p.289). Comparing this analysis with Commons, there is agreement on the importance of international cooperation in areas other than monetary policy, such as through international politics and the Bank for International Settlements. The thought of Eichengreen (1992) that the gold standard became a fetter also accords with that of Commons.[17]

Thus, the causes of the Great Depression as identified by Commons share many commonalities with the conclusions of major studies on the Great Depression. However, Commons made an original contribution by pointing out the need for international cooperation on interest rate policy. Such cooperation is effectively what Commons was calling for in his suggestion that the United States and France supply money to other European countries and thus reduce the interest rates that were impeding economic recovery in Europe (Commons 1931a, s.620).

A further question is the influence of the Great Depression on the economic thought of Commons, as uncovered by my analysis of the 1927 manuscript, "World Depressions," "Institutional Economics," and *Institutional Economics*. I identify four areas of influence, as follows. The first was Commons's formation of the concept of the institution. After the Great Depression, Commons defined the institution as "collective action in control, liberation and expansion of individual action" (Commons 1931b, p.648). Commons believed that the institution should not only control individual action, but also liberate and expand individual action.

The second area of influence was in Commons's replacement of his notion of the judicial transaction with that of the rationing transaction. Among the three types of transactions identified by Commons, the rationing transaction best reflects his thinking. Transaction cost economics, developed by Williamson, centered on the selection problem, namely, whether the transaction occurred in the market or within a company. I can say that this problem involves selecting whether a transaction is a bargaining transaction occurring in the market or a managerial transaction occurring in the company. Therefore, as noted in previous studies, the idea of the rationing transaction has become a major difference between the transaction cost

[16] Galbraith (1955) also criticized the passive attitude of the FRB.

[17] This is common with Bernanke (2000).

economics of Williamson and the institutional economics (transaction economics) of Commons.[18]

The third area of influence was in Commons's growing awareness of the importance of the administrative committee based on "due process of law" in rule creation. Part of the background to this evolution in his thinking was the policies of Tugwell in the initial New Deal, which included actions judged unconstitutional, as well as the despotic policy making method of the fascist and communist nations. However, *The Economics of Collective Action*, published posthumously, was the work that reflected Commons's thoughts on the direct influence of the initial New Deal. This is because Commons completed *Institutional Economics* in 1933, before the effects of the Great Depression and the New Deal became clear.

The fourth area of influence was Commons's outlook on capitalism. Commons viewed capitalism very differently to how Veblen viewed it. While the ideas of Veblen were based on natural selection, Commons advocated a "reasonable capitalism" based on artificial selection. Commons envisaged neither market fundamentalism guided by an "invisible hand" nor a planned economy guided by state controls. By contrast, his reasonable capitalism involved an economy in which institutions evolve by artificial selection of working rules via "the visible hand of the court" (Commons 1924, p.204). In this economy, the court would act to balance the three types of transactions (bargaining, managerial, and rationing).

This reasonable capitalism includes all the points discussed above, the concept of the institution, the rationing transaction, and due process of law. Put simply, it requires that public purposes are prioritized over private purposes. Commons gave the following examples in *The Economics of Collective Action*:

> The Federal Reserve Board was originally created by legislation during the administration of President Wilson to regulate the twelve reserve banks and the thousands of private commercial banks. But after the discovery by Governor Benjamin Strong, of the New York Reserve bank, of the powerful regulative influence of open market operations, the Congress was induced by the bankers to amend the law by placing the controlling power over these instruments in the hands of an "open market committee" appointed by the private reserve banks instead of by the President and Senate of the United States ——— a substitution of private purpose for public purpose ... (Commons 1950, p.260)

That is, Commons considered that a private purpose had replaced a public purpose after Strong discovered open market operations, where originally a public purpose had been prioritized over a private purpose. The power wielded by commercial banks to so replace a public purpose with a private purpose was inconsistent with reasonable capitalism.

Dutraive and Théret (2013) address the issue of public versus private purposes in their discussion of the balance of political versus monetary sovereignty. They note the possibility of shifting from the state of "political sovereignty > monetary sovereignty" and "public purposiveness > private purposiveness" to that of "political sovereignty < monetary sovereignty" and "public purposiveness < private purpo-

[18] See Ramstad (1996) and Takahashi (2006).

siveness." They hold that the political is subordinate to the economic, consistent with the model of banker capitalism and inconsistent with the reasonable capitalism of Commons (Dutraive and Théret 2013, p.108). These problems are relevant to current issues such as our inability to decide global financial rules.

6 Conclusion

After the start of the Great Depression, Commons reorganized the concepts of institution and transaction that formed the core of his institutional economics by bringing together his original ideas, various experiences, and lessons from experts. The Great Depression caused Commons to apply new experiences and lessons to his original institutional economics, and led him to develop his own original outlook on capitalism, called "reasonable capitalism."

What Commons learned from the Great Depression remains valuable when we consider the problems of modern capitalism. One lesson is the need for an international financial cooperation policy. The other lesson, which is more important, is the need for international financial rules to avoid financial crises like the Lehman Brothers bankruptcy in 2008. To build an international system able to respond to such a situation, Commons's concept of institutions as, "collective action in restraint, liberation, and expansion of individual action," and his idea of making rules based on the due process of law, can contribute to the creation of effective rules, which are neither laissez-faire nor excessively strict. Ultimately, what Commons learned from the Great Depression, not to mention the development of the theory of institutional economics, gives us valuable suggestions about how to protect capitalism and democracy.

Acknowledgements This work was supported by the Japan Society for the Promotion of Science (JSPS), the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

References

Akimoto, E. 2009. *The Great Depression (in Japanese)*. Tokyo: Kodansha.

Atkinson, G. and C. J. Whalen, 2011. Futurity: Cornerstone of Post-Keynesian Institutionalism. In *Financial Instability and Economic Security after the Great Recession*, ed. Whalen, C. J., 39–61. Cheltenham: Edward Elgar, 2011.

Bernanke, B.S. 2000. *Essays on the Great Depression*. Princeton: Princeton University Press.

Commons, J. R. 1893a. Economic Reform. *The Voice*. Reproduced in *John R. Commons Papers* (microfilm edition: reel 15, 58–63). State Historical Society of Wisconsin. 1982.

———. 1893b. Sound Currency. *The Voice*. Reproduced in *John R. Commons Papers* (microfilm edition: reel 15, 64–66). State Historical Society of Wisconsin, 1982.

———. 1924/1995. *Legal Foundations of Capitalism.* New Brunswick/London: Transaction Publishers.

———. 1927a. Reasonable Value: A Theory of Volitional Economics. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

———. 1927b. Reasonable Value: A Theory of Collective Action. Manuscript. Reproduced in *John R. Commons Papers* (microfilm edition: reel 13, 197). State Historical Society of Wisconsin. 1982.
———. 1929a. Reasonable Value: A Theory of Collective Action. Manuscript. Reproduced in *John R. Commons Papers* (microfilm edition: reel 13, 196). State Historical Society of Wisconsin. 1982.
———. 1929b. Reasonable Value: A Theory of Concerted Action. Manuscript. Reproduced in *John R. Commons Papers* (microfilm edition: reel 12, 1–3). State Historical Society of Wisconsin. 1982.
———. 1931a. World Depressions (May 9). Reproduced in *John R. Commons Papers* (microfilm edition: reel 18, 613–624). State Historical Society of Wisconsin. 1982.
———. 1931b. Institutional Economics. *American Economic Review* 21: 648–657.
———. 1934a. *Institutional Economics: Its Place in Political Economy*. New Brunswick/London: Transaction Publishers.
———. 1934b. *Myself*. New York: Macmillan.
———. 1950. *The Economics of Collective Action*. New York: Macmillan.
Dutraive, V., and B. Théret. 2013. Political Sovereignty and Monetary Sovereignty: An Interpretation from J. R. Commons (in Japanese). *Keizai-Ronso (The Economic Review)* 187(1): 83–110.
Eichengreen, B. 1992/1995. *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*. New York: Oxford University Press.
Friedman, M., and A.J. Schwartz. 1963. *A Monetary History of the United States 1867–1960*. Princeton: Princeton University Press.
Galbraith, J.K. 1955/1997. *The Great Crash 1929*. Boston: Houghton Mifflin.
Gruchy, A.G. 1947. *Modern Economic Thought: The American Contribution*. New York: Prentice-Hall.
Kindleberger, C.P. 1973/1986. *The World in Depression, 1929–1939: History of the World Economy in the Twentieth Century*. Berkeley: University of California Press.
Koh, Y. 2013. J. R. Commons on Managed Currency: Class Conflict and Justice (in Japanese). *Boekihu (Chubu International Review)* 8: 50–64.
Ramstad, Y. 1996. Is a Transaction a Transaction? *Journal of Economic Issues* 30(2): 413–425.
Takahashi, S. 2006. J. R. Commons's "Transaction Economics": Institutional Economic Theory by Legal Concepts (in Japanese). *The History of Economic Thought* 48(1): 16–31.
Timberlake, R.H. 2005. Gold Standards and the Real Bills Doctrine in U.S. Monetary Policy. *Econ Journal Watch* 2(2): 196–233.
Uni, H. 2013. J. R. Commons' Concept of Transactions and Value Theory: Mutual Relationship between Bargaining and Managerial Transaction (in Japanese). *Keizai-Ronso (The Economic Review)* 187(1): 1–16.
———. 2014. J. R. Commons' Theory of Cumulative Causation: A Comparative Analysis of *Institutional Economics* and Its Manuscript in 1927 (in Japanese). *Kikan-Keizai-Riron (Political Economy Quarterly)* 51(2): 77–88.
Williamson, O.E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.

Two Methods of Institutional Reform in the *Institutional Economics* of John R. Commons

Kota Kitagawa

Abstract This chapter presents an additional method of institutional reform that John R. Commons described in *Institutional Economics* (1934a) by comparing this published version with its 1927 manuscript "Reasonable Value: A Theory of Volitional Economics" (1927). *The Legal Foundations of Capitalism* (1924) and the 1927 manuscript stress that a higher authority plays a role in institutional reform by settling disputes. In contrast, the discussion in Commons 1934a, written after the 1927 manuscript, focuses on the joint bargaining system. The essence of this system is the creation and amendment of working rules through negotiations between interest groups, joint administration of those rules, and the enabling of institutions via sovereignty. On the one hand, interest groups receive sovereign power (rule enforcement power) from government, provided they create rules that society considers reasonable. On the other hand, sovereignty enhances progressive private practices by making them part of the broader semipublic system. Sovereignty thus makes private going concerns responsible for social governance. After clarifying these two methods, this chapter further articulates them. The dynamic nature of these methods of institutional reform becomes apparent where economic, political, and ethical principles affect institutional reform. Not only do higher-level and lower-level (in terms of political, economic, cultural, and legal power) going concerns influence each other, but influence also runs in many directions and follows multiple paths. This dynamic composition artificially enhances the reasonableness of political economy.

Keywords John R. Commons • Institutional reform • Reasonable value • Judicial sovereignty • Joint bargaining • Social governance

K. Kitagawa (✉)
Kansai University, Osaka, Japan
e-mail: kota.k@kansai-u.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_4

1 Introduction

Discussions of institutional reform are a core component of the value theory in the major work of John R. Commons, *Institutional Economics* (Commons 1934a).[1] Institutional reform is the method that realizes the three requirements of reasonable value,[2] namely, "equality of opportunity," "fair competition," and "equality of bargaining power." When we compare two sets of descriptions of institutional reform, namely, (1) the additional descriptions not included in "Reasonable Value" (Commons 1927, called the 1927 manuscript hereafter) and that appear only in *Institutional Economics* (the refined and published version of the 1927 manuscript) and (2) Commons' earlier two theoretical works, *The Legal Foundations of Capitalism* (Commons 1924) and the 1927 manuscript, we find that two different methods of institutional reform are being described. This chapter clarifies these two methods of institutional reform, the first presented in Commons (1924) and the 1927 manuscript, and the second presented in the additional description contained only in Commons (1934a).

Discussion of institutional reform in Commons (1924) and the 1927 manuscript treats judicial sovereignty as supreme. The Supreme Court of the United States is the pinnacle of the US judicial system. Economic conflicts "come before the Supreme Court of the United States" (Commons 1924, p.288) and the Supreme Court selects the best from among plural conflicting customs. Commons (1924) and the 1927 manuscript present the Supreme Court as an agent of "artificial selection" (Commons 1924, p.376). Previous studies about Commons' works have explained the method whereby institutions are reformed through a higher authority that resolves conflicts among lower-level going concerns (Medema 1998; Ramstad 1990; Ramstad 1994; Biddle 1990).

After the 1927 manuscript, Commons focused his discussion of institutional reform on the joint bargaining system (Commons 1934a, p.858),[3] whereby

[1] The term "institution" means "collective action." When it is unorganized, such a rule is described as a "custom"; when it regulates the collective action of an organized "going concern," such a rule is described as a "working rule." Commons uses the term working rules to describe rules of private going concerns, laws, judicial precedents, and even the constitution. "Working" here implies that the rules continuously change or evolve in response to changes in economic, political, and ethical conditions outside and inside the going concern. Commons sees "political economy" as the ensemble of evolving "working rules," namely, the ensemble of evolving institutions (Commons 1924, p.377).

[2] In this chapter, the term "value" expresses the broader meaning of value relating to economic, political, and ethical "principles," which include efficiency value, political power, justice, security of expectation, and freedom (Commons 1934a, pp.207, 213, 683–684). To express a narrower meaning, I use alternative terms such as "price" or "proprietary scarcity value."

[3] I chose to focus on the joint bargaining system rather than the government institution of a commission because the former term expresses the essentials of Commons' idea. Operative examples include the "advisory committee" of the Wisconsin Industrial Commission and the "interim committee" in the Wisconsin legislature. These examples are not perfectly expressed

conflicting interest groups jointly create and administer rules. The system, which became his second method of institutional reform, has the following three characteristics. First, the working rules of the system are created and amended based on negotiation among interest groups. Individual interest groups, established voluntarily, select representative(s) to participate in negotiations. Second, the rules are administered voluntarily by interest groups. Third, the workability of the system is supported by "sovereign power" given by the government. In the joint bargaining system, on the one hand, interest groups assume some of the powers of sovereign government. A transfer of sovereignty confers the interest groups with great authority on the condition they create rules that society deems reasonable. On the other hand, sovereignty can enhance "progressive" private practices, meaning those practices that are reasonable, in a wide-ranging and semipublic system. Sovereignty thus guides the groups to participate in social governance. While Chasse (1986) and Bazzoli (1999) stress that Commons considered the joint bargaining system an effective method of reforming institutions, they do not comment on why the system is effective and on what grounds Commons created a fairly detailed explanation of the system after the 1927 manuscript.[4]

An important question is why Commons detailed this second method of institutional reform in the additional descriptions that appeared only in Commons (1934a). This chapter asserts that it happened for two reasons. First, Commons tried to show the unique position and direction of the American political economy. In particular, he sought to contrast it with both totalitarian and laissez-faire directions. Second, his confidence in the workability of joint bargaining increased following the passage of the Wisconsin unemployment compensation bill in 1932.

While the two methods of institutional reform differ in whether their essence is conflict resolution by a higher-level institution or negotiation among equals, a common perspective nevertheless underlies them both. Specifically, both methods assume that multiple principles are at stake in resolving a conflict, including economic, political, and ethical principles. The economic principle involves economic laws and doctrines related to scarcity and efficiency. The political principle involves the struggle for power. The ethical principle involves common sense, freedom, equality, and fairness. The two methods of institutional reform share a common focus on these plural principles, because both methods use different ways to ensure the three requirements of reasonable value. The requirements are

by the term commission. The terms expressing the same idea are "*voluntary* representations of organized interests" (Commons 1934a, p.859) and "leading representatives of conflicting interests" (Commons 1934b, p.159).

[4]Of course, I am aware that Commons wrote rough outlines of his experiences of the formation and administration of joint bargaining systems before 1927 (e.g., Commons 1911, 1913a, 1913b). However, important questions remain, such as why he embedded fairly detailed explanation of such systems in his later comprehensive theoretical work, Commons (1934a), and why he described such systems in detail only after 1927.

ensured when the ethical principle regulates the economic and political principles. Therefore, discussion of the realization of reasonable value necessarily focuses on the composition of these three principles.

The remainder of this chapter is organized as follows. The next section (Sect. 2) confirms that the method of institutional reform described in Commons' earlier works, namely, Commons (1924) and the 1927 manuscript, involves decision-making by a superior to resolve a conflict between inferiors. Section 3 confirms that the method of institutional reform described in the additional descriptions that appeared in Commons (1934a), but not the 1927 manuscript, focuses on the joint bargaining system. Section 4 discusses the reasons that led Commons to describe a new method of institutional reform in Commons (1934a). Section 5 unites Commons' two methods of institutional reform. This integration is necessary for three reasons. First, while the two methods are undoubtedly related, Commons himself did not clarify the relationship between them. Second, the integration clarifies that economic, political, and ethical principles affect institutional reform, in multiple directions and through multiple paths. Third, the integration shows the joint bargaining system to be a place where private going concerns and government interact. Section 6 discusses the contemporary meanings of Commons' discussion of institutional reform.

2 The Method of Institutional Reform Seen in *The Legal Foundations of Capitalism* (1924) and the 1927 Manuscript

This section will discuss the method of institutional reform described in *The Legal Foundations of Capitalism* (Commons 1924) and the 1927 manuscript. This method is that whereby a superior selects one out of a group of competing institutions (customs) to decide a dispute among inferiors.

The governing system of the USA is called "judicial sovereignty." This type of sovereignty contrasts with both "executive sovereignty," where the king holds supreme power, and "legislative sovereignty," where the legislature holds supreme power (Commons 1934a, pp.684–685). The Supreme Court of the United States is authorized to determine the constitutionality of legislation, that is, the Supreme Court holds supreme power. Judicial sovereignty indicates a system where the judicial branch, especially the Supreme Court by virtue of its authority to determine the constitutionality of legislation, occupies the top of the governing system and so plays the role of selecting institutions.

Both Commons (1924) and the 1927 manuscript focus on institutional selection by the judicial branch. Because Commons (1924) describes this method of institutional reform in more depth, I will focus firstly on discussion of institutional reform in that work.

Commons (1924) describes a process of institutional reform that involves the evolution of customs and laws. Citizens and going concerns are affected both

by their own individual habits and by dominant community customs, the two of which naturally are not identical.[5] In economic disputes, each party justifies its own practice based on its own habits and customs. Therefore, the challenge is to determine which customs the community should adopt as authorized customs. The conflict between customs, passing through the lower courts, finally "come[s] before the Supreme Court of the United States" (Commons 1924, p.288). Commons (1924) stresses that "property rights" have evolved through the selection of customs by the Supreme Court. The various decisions of the Supreme Court have expanded the coverage of legal protection from the property of individuals only to also include the property of corporations and from corporeal property to intangible property. Given these legal foundations, the concept of economic value has broadened from the solely material to also include the intangible.

When discussing the evolution of customs related to value, Commons (1924) describes how higher-level going concerns decide disputes involving the customs of lower-level going concerns. The hierarchy that Commons identifies among going concerns is one of economic, political, ethical, or authorized power. Commons expresses this method of institutional reform as "artificial selection" (Commons 1924, p.376) because it involves going concerns purposefully sorting and controlling natural objects and institutions. He contrasts artificial selection with non-purposeful natural selection (*ibid.*). In some easy-to-understand examples from Commons (1934a), Commons notes that "artificial selection converts wolves into dogs, nature's poisons into medicines, eliminates the wicked microbes, and multiplies the good microbes" (Commons 1934a, p.636).

The Supreme Court occupies the pinnacle of this process of artificial selection. The objectives of the Supreme Court in selecting a custom and the logic it applies in doing so thus are important. The Supreme Court is intended to serve the "public purpose" by providing justice, which increases the commonwealth and realizes ethical principles such as providing security of expectations, freedom, and equal treatment (Commons 1924, pp.327, 345, 351, 352). The public purpose is not an a priori purpose (Commons 1924, p.321). The meaning of the public purpose has changed historically and has even been changed by the Supreme Court itself. For example, the Supreme Court has expanded the meaning of freedom from applying only to the human body, to personal property, and finally to corporate property (Commons 1924, p.325).

The Supreme Court makes decisions based on the positive and negative consequences to the public purpose (Commons 1924, p.356). Specifically, the Supreme Court, while considering the public purpose and being strongly affected by its internalized customs, classifies facts, weights them appropriately, and finally makes decisions that sort conflicting customs (Commons 1924, pp.349–351).

[5]Examples include a novel business practice, unconventional decision of a lower court, or minority opinion of the Supreme Court.

While the Supreme Court occupies the supreme position and even has the power to decide the meaning of the public purpose, it is not isolated from society because judges "seek to explain and justify their opinions in the public interest" (Commons 1924, p.352). Additionally, judges should also check their reasoning based on their internalized habits and experience. This is what we call the belief or conviction of a judge. Commons (1934a) also states that a judge's "institutionalized mind" consists of "intellect" and "habitual assumptions" (Commons 1934a, pp.697–699). Currently dominant social customs strongly affect habitual assumptions, and consequently the evolution of social customs affects the Supreme Court.

The 1927 manuscript continues to adopt the same perspective on the reform of institutions (customs) as Commons (1924), being focused on a higher-level authority deciding disputes between lower-level actors.

In the 1927 manuscript, the following four types of disputes are assumed to emerge from economic transactions:

> [. . .] all economic disputes arising from bargaining transactions may be classified under the three heads, bargaining power, value of service [that is, opportunity], and cost of service [that is, competition],[6] while all disputes arising from managerial and judicial transactions may be brought under the head of the extent of authority which the superior as executive or judge has over the inferior. (Commons 1927, ch.1, p.26)[7]

The "judicial transaction" (Commons 1927, ch.1, p.12) occurs after a superior decides a dispute arising from bargaining or managerial transactions. Commons explains this type of transaction as follows:

> When a decision is made by a judge or arbitrator it takes the form of a command requiring obedience, enforced by that alternative collective action which we name punishment, but which, from the standpoint of the stimulus to obey, is named the sanction. (Commons 1927, ch.1, p.25)

Judges or arbitrators are involved in bargaining transaction as a "fifth party"[8] and in managerial transaction as a third party[9] that makes transaction participants conform to working rules, which comprise the accumulations of past judicial transactions (Commons 1927, ch.1, p.28). If a participant deviates from the rules or if a conflict emerges among participants, the fifth party emerges as an arbitrator. The 1927 manuscript thus focuses only on ruling by legal superiors as a method of dispute resolution. In this same work, Commons also describes the ethical issues that courts focus on in economic disputes:

> [The reason a conflict of interests exists owes] both to the competition for access to limited opportunities and the inequalities of individuals in their exercise of power. It is an ethical regulation of the conflict through the collective operation of rules and decisions of disputes.

[6] See Kitagawa and Izawa (2016), which explains how Commons (1934a) presents "opportunity" and "competition" in the bargaining transaction.

[7] The contents of squared brackets have been added by the author to enhance readability. This also applies elsewhere throughout this paper.

[8] The other four parties consist of two sellers and two buyers.

[9] The other two parties consist of a superior and an inferior in a firm.

> And out of this regulation arises the current but changing ideals of equal opportunity, fair competition, equality of bargaining power, which constitute the combined ethical and economic problem of reasonable practices and reasonable prices. (Commons 1927, ch.6, pp.28–29)

Based on the above, this section emphasizes the following two points. First, as repeatedly noted, Commons (1924) and the 1927 manuscript discuss reform of institutions (customs) solely in terms of superiors resolving disputes among inferiors, and in the process sanctioning certain customs over others. Second, Commons (1924) and the 1927 manuscript detail the effect on institutional reform of ethical values, which are neither scarcity value nor efficiency value (Commons 1924, ch.9 "Public Purpose").[10] The Supreme Court reforms institutions according to certain ethical values, such as stronger security of expectations of economic agents, expansion of freedom, and more equal treatment. On the one hand, the description of institutional reform in the 1927 manuscript, which focuses on a superior who decides disputes, differs from the description of the joint bargaining system in the additional descriptions contained in Commons (1934a), but not the 1927 manuscript. On the other hand, both the 1927 manuscript and Commons (1934a) emphasize that values other than economic ones affect the process of institutional reforms.

3 The Method of Institutional Reform Described in *Institutional Economics* (1934a)

In this section, we look at the additional descriptions contained in Commons (1934a), but not in the 1927 manuscript, and clarify the different methods contained in these additional descriptions but not in the two earlier works (Commons 1924 and the 1927 manuscript).

In Commons (1934a, pp.840–873) "Accidents and Unemployment—Insurance and Prevention," Commons retraces the deliberation processes associated with the Wisconsin Workmen's Compensation and Accident Prevention Law of 1911 and the Wisconsin Unemployment Prevention Law[11] of 1932, as well as their administration after passage. He also describes the joint bargaining system in detail. This system is a different method of institutional reform from that described in Commons (1924) and the 1927 manuscript and involves three parties, the Wisconsin State Industrial Commission, employers' association, and trade union, quickly and jointly amending the working rules of the system[12] that relate to highly technical and conflicting

[10] How political value, or power, relates to institutional reform is described in Commons (1934a, pp.749–761, "Politics").

[11] It is also known as the unemployment insurance or unemployment compensation law.

[12] Commons sees the working rules of a going concern as an "institution" (Commons 1934a, p.69). In this case, the going concern is the joint bargaining system.

issues. Additionally, parties negotiate and compromise in the process of amending the rules to enhance the acceptability and workability of the amended rules. That is, the system aims not only to amend rules quickly but also to ensure that the parties accept the contents of the amendments and agree to jointly and actively administer the amended rules. Next, I touch on the deliberation process of the Wisconsin Workmen's Compensation and Accident Prevention Law of 1911, its administration, and the workings of the joint bargaining system.

Starting in the 1900s, large corporations began to employ safety engineers. The practice came about because it helped corporations win the support of employees in the face of trade union hostility and enhanced management-labor cooperation without increasing production and insurance costs and sometimes even with cost reductions (Commons 1934a, p.888; Commons 1950, pp.278–279; Ueno 1997). Through managing the investigation of workplace accidents in the steel industry in 1907, Commons had the opportunity to listen in detail to the practices of the safety engineers of US Steel. In 1910, Commons was asked to draft a worker compensation law by Wisconsin Governor Francis E. McGovern. In writing this draft he cooperated with the American Association for Labor Legislation and involved the trade union and Wisconsin employers in the discussion of the draft as it was compiled. The draft contained an institutional innovation by Commons in that it tied together workplace safety and worker compensation. The worker compensation system included mutual insurance with voluntary enrollment. Moreover, the draft established a system whereby workplace accidents would affect employer insurance premiums, incentivizing affiliated employers to enhance workplace safety by stimulating their profit motives. To accelerate employer efforts to enhance workplace safety, "safety experts" belonging to the industrial commission sought preventive measures that employers could implement at no additional cost and without disadvantageously affecting production. Additionally, these safety experts acted not as workplace inspectors but as continuous advisors to management, engineers, and laborers. Owing to the advice and education of these safety experts, as well as a massive campaign to improve workplace safety throughout the state, workplace fatalities decreased by 61 % over 5 years, and in some cases plant efficiency and labor-management relations also improved (Harter 1962). The challenge of accident prevention prompted Commons to create an innovative institutional design based on inducement rather than coercion.

The system Commons proposed came under the jurisdiction of the industrial commission rather than the traditional arrangement where the state legislature would create laws for execution by the administrative branch. This innovation was a response to the rapid pace of technological development and the associated specialization and sophistication of expertise (Harter 1962, p.100). Previous laws designed to control workplace dangers had clearly referenced specific safety devices, rules, and preventive measures, with the result that technological development quickly made the laws obsolete. However, quickly and effectively amending the law in response to technological development was challenging for two reasons. First, employers would oppose amendment because they feared increased production costs. Second, lawyers and lawmakers lack the varied and sophisticated expertise

required to improve safety in response to rapid technological development. The industrial commission could overcome these legislative and executive limitations because it could quickly amend the working rules of the system, possessed greater expertise, and could better coordinate conflicting interests in the amendment process.

The industrial commission comprised not only commissioners and professional researchers but also an advisory committee appointed by the commission itself. Commons described this committee as consisting of "employers, employees, physicians, engineers, architects, economists, numbering some two hundred persons in all." They investigate, find, and conclude on "health, safety, accident compensation, child labor, hours of labor" (Commons 1934a, p.717). The advisory committee drafted "all the rules and regulations," interpreted "to employers and employees the long and detailed provisions of the law, and even" encouraged "the employers of the state to come voluntarily under the law. The [Industrial] Commission itself would be, in effect, only the sanctioning authority, giving legality to the 'recommendations' of the advisory committee" (Commons 1934a, p.848). Drafts of orders of the industrial commission that had been informed by the recommendations of the committee were presented at public hearings to seek dissenting opinions. During these public hearings, stakeholders such as employers could request that the industrial commission amend these draft orders.

Commons said that the orders issued by the industrial commission as a result of this process offered the following advantages. "They were drafted by joint action of employers and employees and not by lawyers and legislatures ignorant of the technology of the industries. They could be changed, with further experience, by the same committees that had formulated them originally. Above all, they were workable and acceptable to both the employers and employees" (Commons 1934a, p.857).[13]

[13]Here Commons emphasizes the importance of the participation of *every* representative, as well as the importance of seeking a rule that is workable for *each* interest group. He does this for two reasons. First, in the history of labor movements in America, attempts by labor to unilaterally impose their policies on employers often failed. Such unilateral attempts by a single interest were a type of collective action classified as "coöperation," and clearly differed from "collective bargaining," which involved participation of representatives of interest groups (Commons 1934a, pp.756–757). A historical case of coöperation involved the radical and aggressive association of the Knights of Labor.

Second, he wanted to avoid extreme systems that imposed the policies of one interest group on others, as occurred under Communism and Fascism (Commons 1934a, p.756). In World War I and the interwar era (especially 1918–1921), the American people were skeptical of Communist and Fascist influences. Their skepticism was encapsulated in the phrase "Red Scare." In this atmosphere, radicals, socialists, and unionists were stigmatized as "communist" and hence were oppressed. Additionally, in response to the Great Depression, as part of the New Deal the USA eagerly imported elements of European totalitarianism and applied them to the social and economic order (Schivelbusch 2005). In this environment, Commons, as an institutional liberalist, must have strongly felt the need to draw a defensive line to protect the American political economy against fascism and communism.

The members of the advisory committee represented capital and labor, and "would not be chosen by the state [Industrial] Commission in bureaucratic or civil service examination fashion, but would be chosen by the organized interests themselves" (Commons 1934a, p.848).

> [Because the state officials involved in this system are appointed jointly by the conflicting interests of capital and labor, they have] the confidence of both sides. As such, the state officials act, not as compulsory 'arbitrators' coming from a superior authority, the state, but as voluntary 'conciliators,' whose business it is to bring opposing interests together on a basis of 'facts' known to be such on both sides, and thereby aiding them in drafting the 'working rules' under which, as individuals, they must severally operate. Since these rules can be changed at any time, on the basis of further investigation and experience, it is a system of continuous conciliation, without dictatorship, of continually conflicting interests. (Commons 1934a, p.849)

Given the means used to select system participants, "the system cannot be understood as a mere statute administered by a bureaucratic commission with appeals to the courts" but instead should be understood as a "voluntary system of collective bargaining" (Commons 1934a, p.852). The joint bargaining system has the character of a governing system and simultaneously of "the concerted action of voluntary private associations" (*ibid.*). In this case, the safety law designates an area of discretion for the system and serves as an enabler that makes the system workable.

By the time Commons finished writing Commons (1934a), in November 1933, shared experiences of administering this joint bargaining system over about 20 years had improved understanding among the conflicting interest groups and created shared beliefs. Mutual understanding meant that each participant recognized the motivations of others and used this knowledge to further their own aims or those of the system (Commons 1934a, pp.859–860). The motivations of the labor union were wage increases, reduction of working hours, safety, guarantee of employment, etc. Meanwhile, the motivation of firms was pursuit of profit. On the one hand, the trade union tried to attract firms to participate by offering incentives, making an effort to connect the profit motive of firms with welfare improvement. On the other hand, the employers' association tried to increase efficiency and build management-labor cooperation by offering a progressive job environment that was desirable to employees. Based on such mutual understanding and exploitation of mutual motivations, a shared belief was built. This was the belief that to enact or amend the working rules of the system, if the concerned parties would negotiate, compromise,

---

Contemporary American society saw both communism and fascism as undesirable political movements. However, Milwaukee was a rare city in the USA with an active socialist movement. This was a movement not of revolutionists, but of gradualists, and they sought civic reforms like infrastructure improvement. In 1910, Emil Seidel of the Socialist Party was elected as the mayor of Milwaukee. He set up the Bureau of Economy and Efficiency in the administrative branch of the Milwaukee government. Commons became involved in the Bureau (Commons 1913b, ch.13).

and reach agreement, then they would jointly administer this working rule. This belief prevents the new rule from becoming a dead letter and ensures its continual workability and penetration.

3.1 Sovereignty in the Joint Bargaining System

By reconstructing the explanation of the joint bargaining system from the perspective of sovereignty, we clarify the role of sovereignty in the new method of institutional reform that Commons described subsequent to writing the 1927 manuscript. By focusing on the building and administration of the joint bargaining system, we identify sovereignty as having two roles.

The first role is investigation. Through investigation, sovereignty determines factual progressive business and labor customs. Progressive practices are more suited to the public purpose than prevailing practices. Examples are practices that contribute to increased efficiency, stable employment, safety improvements, and price stabilization and practices that ensure "reasonableness," such as ensuring equality of bargaining power between negotiators, fair competition, and equal opportunity. In other words, sovereignty identifies novel behaviors through investigation.

The second role is the giving of sovereign power. Through involving interest groups, sovereignty institutionalizes ideas in the joint bargaining system. Thus, sovereignty involves private groups in social governance to sustain order and realize public goals. While the core of the joint bargaining system is, as noted above, "voluntary" negotiation between interest groups, the partial transfer of sovereign power enables discretionary power and hence the workability of the system. The following quotes show two points. First, within the system a "law" or "working rule" is an agreement between interest groups reached through voluntary negotiations. Next, the purpose of sovereignty in giving part of its power to support such an agreement is to connect private collective actions to the increase of commonwealth, in other words, to increase efficiency.

> [...] the Wisconsin accident and unemployment laws are the incorporation, into the theory of sovereignty, of the *voluntary* representation of organized interests. This is in vivid contrast to the older individualistic theories that represented a sovereign as a kind of overlord speaking for the consumers, and separated from, yet laying down laws, for the unorganized producers. This older theory, whether the "rule of the majority" or the rule of an organized minority, turns out to be dictatorship.
>
> But *voluntary* representation of organized interests in collective bargaining, each electing its own leaders, requires recognition, on both sides, of the motives which animate the opposite side. In the present case it means recognition of the profit motives, in the now dominant collective action of corporations; and *use* of that motive in such a way as to promote the welfare of the whole community. [...] The theory embodied in the Wisconsin law **gives to approved voluntary agreements a sovereign power** to promote the commonwealth by collective action in control of individual action. This joint collective action *is* the law; and its administration is the individual action of the employer in conformity with the working rules which have been developed by employer and employee with the coöperation of the state [Industrial] Commission.

> From this collective standpoint, reasonableness is the upper practicable limit of idealism. (Commons 1934a, pp.859–860)[14]

Thus, sovereignty as described by Commons (1934a) written after the 1927 manuscript supports negotiation between private going concerns to resolve economic conflicts, which became complex and frequent, and supports the institutionalization of agreements, in that an agreement and its administration are expected to match public purposes. By using the advisory committee to promote the organization of the workable joint bargaining system, sovereignty tries to guide private going concerns to play a social governance role.

3.2 Reasons Private Going Concerns Participate in the System

Private going concerns were willing to participate in the joint bargaining system for three reasons. First, they could obtain greater power. The legislature gives private going concerns part of its sovereign power to enable them to effectively administer the working rules that result from their negotiations. This is paraphrased using the definition of "institution" in Commons (1934a) that private going concerns expand their power by participating in higher institutions that possess sovereignty.

Second, with regard to participation in this system, sovereignty permits large-scale collective actions. For example, the National Industrial Recovery Act regime allowed industries that established codes of fair competition which could avoid the application of antitrust laws. Conformance to the codes encourages firms to plan carefully and stabilizes production, helping create certainty about the future.

Third, participation in the system can help private going concerns realize objectives such as reduction of production costs, stabilization of employment, and improvement of safety. Considering the reduction of production costs, Commons stresses the efficiency of the joint bargaining system:

> This safety campaign of two years showed to the employers that they could make *more profit* by coming under the new law than by remaining under the old individual liability laws, provided that, at the same time, they entered into the safety spirit by preventing accidents. And furthermore, it was shown that, by preventing accidents, nobody, not even the consumers by higher prices, would bear any burden in paying the benefits to workmen stipulated in the accident compensation laws. In other words, appeal was made to a new kind of "efficiency," efficiency in preventing accidents, by which costs of production could be reduced, with the result that prices need not be increased. (Commons 1934a, p.857)

For the above three reasons, private going concerns "voluntarily" committed to establish the system, then got involved in negotiations and compromises regarding the system, and finally in the administration of the system.

[14]In passages quoted from other works, text in *italics* is simply reproduced from the original, whereas text in **bold** indicates emphasis by the author of this chapter. This applies throughout this chapter.

3.3 Two Meanings of Reasonableness

As seen above, on the one hand, the method of institutional reform that is the focus of Commons (1924) and the 1927 manuscript occurs when the judicial branch artificially selects one from a set of competing institutions. On the other hand, in parallel with this method, Commons (1934a) also stresses the method whereby private going concerns start up and administer the joint bargaining system with sovereignty. According to the additional descriptions in Commons (1934a), the "reasonableness" realized by the latter method differs from the "reasonableness" realized by the former method.

> This practice, it must be conceded, does not always conform to the *customary* meaning of "reasonable" in the decisions of the courts. The courts generally go on the assumption that whatever is "ordinary" is "reasonable." With them, "customary" is *not* the *best practicable*, it is something of a *mean* between the palpably inefficient or stupid and the exceptionally capable and efficient. After repeated observations I make the guess that only 10 to 25 per cent of employers or unionists are above this meaning of custom as "ordinary," while 75 to 90 per cent are below that level. By this is meant that about 10 to 25 per cent of employers or unionists can be expected voluntarily to do more for the welfare of others than the best that can be expected from any kind of compulsion, whether by the state or by private collective action. (Commons 1934a, p.860)

Thus, while artificial selection by the judicial branch introduces ordinary reasonableness to a community, the establishment and administration of the joint bargaining system introduces to a community the reasonableness meant by "the best practicable," seen as local practice.

Before the enactment of the safety law of 1911, a "reasonable" standard of safety meant ordinary reasonableness, namely, the practice of an "ordinary" person. This standard prevented government from effectively regulating the work environment to reduce injuries because workplace safety is sufficiently specialized that an "ordinary" person cannot be expected to identify and remove workplace dangers. However, should the industrial commission order companies to comply with safety standards that are not "reasonable," the safety law of 1911 would be judged unconstitutional, because it infringes on the property of corporations without due process of law. During the drafting of the safety law of 1911, Francis H. Bird, a student of Commons, introduced an interpretive innovation that overcame this difficulty. Bird conceived that the meaning of reasonableness could be changed to make the imposition of high safety standards for corporations constitutional. That is, the meaning of reasonableness could become the highest safety standard reasonably permitted based on the nature of the industry or the employer.

> Here the statutory and common law of the state was changed by merely changing the meaning of reasonableness. Instead of "ordinary" safety, interpreted as a *mean* between the highest and lowest, "reasonable" safety now became the highest degree of accident prevention, which is actually in practice by the best firms. And, instead of many impractical statutes accruing over a period of thirty years, the meaning of safety was expanded so that investigation had to be made in the factories themselves to find what was the highest practicable limit already successfully in operation in the most "socially minded" class of establishments, for the protection of life, health, safety, comfort, decency, and moral

> well-being. Thereupon no question of unconstitutionality was raised against the orders of the Commission in these respects, because they were demonstrably "reasonable" as having been drafted by the advisory committees of employers, employees, and experts, having acquaintance with the best practicable methods and devices. (Commons 1934a, p.861)

The above quote shows how to evade an unconstitutional judgment by reinterpreting language while conforming with due process of law. Also, it shows that the joint bargaining system is the arena for competition and compromise not only among economic and political motivations, such as profit, efficiency, increased wages, and the exertion of political power, but also for ethical principles (e.g., protecting "decency" and "moral well-being"). Thus, the working rules created and amended by the joint bargaining system express the compromises of different principles, that is, the working rules reflect coordination among economic, political, and ethical principles.[15] Therefore, a reasonable action conforming to these working rules is also a mixed expression of these various principles.

4 The Importance of the Joint Bargaining System

4.1 Avoidance of Totalitarianism

To escape the Great Depression, sparked by the plunge of the New York stock market in 1929, the advanced countries separately embarked on managed recoveries (Commons 1934a, p.611). Commons added detailed explanation of the joint bargaining system to Commons (1934a) because he was concerned not only with the rise of fascism in Germany and Italy and communism in Russia but also with the managed recovery of the American political economy. In May 1933, the American political economy rushed toward totalitarianism in the name of the New Deal. Given this rapid development, Commons wanted to show how a managed recovery could hold the line against fascism and communism. According to Commons (1934a), the defense against fascism was to keep legislatures alive, which could be done by using commissions to resolve their functional failures.

[15] As already stated in this chapter, Commons did not clearly show the coordination of different principles. However, clearly he was strongly interested in principles other than economic ones, as demonstrated by his following comments about the working rule.

> [The term "working rules" indicates] their temporary and changing character conforming to the evolution of economic, political, and ethical conditions. (Commons 1934a, p.705)

> Reasonable Value is the evolutionary collective determination of what is reasonable in view of all the changing political, moral, and economic circumstances and the personalities that arise from there to the Supreme bench. (Commons 1934a, pp.683–684)

> The legislature has a dozen or more conflicting and overlapping interests. [...] But American legislatures and Congress are learning to relieve themselves of the details of administration required by the modern complexity of conflicting interests. The railroad and public utility commissions, the tax commissions, the industrial commissions, the market commissions, are created to deal with the conflicts between railroads and shippers, between employers and employees, between classes of taxpayers, between big and little competitors for business. These commissions are semi-legislative bodies, and where they are most effective it is being found that they set up representation of the conflicting economic interests as advisory committees, curiously analogous to Mussolini's Fascist Corporations but with the difference that interests are voluntary, electing their own representatives, while his are compulsory and the representatives are selected by himself.
>
> Relieved of these overwhelming details, the modern legislature is learning to restrict itself to the field where it may be effective, notwithstanding and even because it represents conflicting interests. Its effective field is general laws and general standards of administration. These general rules are matters of compromise between conflicting economic interests, and a deadlock merely postpones the compromise, while the semi-legislative administration goes on with details and execution of politics as before. (Commons 1934a, pp.900–901)

Thus, the role of the legislatures is to approve and protect the voluntary associations, and in some cases, give authority to them, while the role of the voluntary associations is to send their representatives to the advisory committee and work to resolve the complicated conflicts. It is important that the legislatures and voluntary associations remain in their separate domains, where they function effectively and coordinate with each other through commissions.

Although in Commons (1924) and the 1927 manuscript Commons stressed that the judicial branch is supreme in institutional reform, during the Great Depression he clearly developed reservations about the role of the judicial branch in economic regulation. This was revealed in his writings after 1928 and before November 1933. Comparison of passages from the subsection of Section 8 in Chapter 10 of Commons (1934a), titled "Scarcity, Abundance, Stabilization—the Economic Stages" (pp.773–788), and the corresponding passage in "Reasonable Value: A Theory of Concerted Action" (Commons 1928, r.13, pp.193–195) reveals additional passages in Commons (1934a). In these additional passages, indicated below by underlined text, Commons evaluates the courts' recognition that injustice leads to "unequal opportunity," which stems not only from sellers demanding high prices but also from buyers paying low prices.

> Thus, the Supreme Court lagged about fifteen years behind the popular and legislative change in the meaning of discrimination, and this may be figured on generally as its customary lag.
>
> The foregoing account of the lag of the common law respecting the meaning of discrimination does not apply solely to what were known as common carriers. [...]
>
> Thus, the process of making law by deciding disputes fits laggingly the changing economic conditions and the changing ethical opinions of justice and injustice. [...] The concept of goodwill, as constructed by the courts, is grounded on the principle of scarcity, for its assumption is that opportunities are limited and margins are close, and therefore, each competitor should endeavor to retain his present customers and his present proportion of the trade. This has become a part of modern "business ethics," which holds that cut prices are not good for customers, and it is converted more or less into "unwritten" law by the common-law method of making law by deciding disputes. (Commons 1928, r. 3, pp.193–195; Commons 1934a, pp.787–788)

These additional descriptions imply the following two points. First, Commons stresses that the courts lag far behind business customs. Second, he attempts to understand how private going concerns configure working rules that help stabilize socioeconomic systems (Commons 1934a, pp.902–903). While Commons (1925) and the 1927 manuscript contain concepts that support the prevention of price cuts, such as business ethics and a live-and-let-live policy, we cannot find anything on the lag of sovereignty behind business customs. With regard to the turbulent political economy, Commons is interested in whether institutional reform is efficient and fast, the timeliness of the administration of an institution, and the best means to ensure this is achieved. This is why Commons' interests depart slightly from the judicial branch and instead are directed to the joint bargaining system comprising commissions and voluntary associations.

Starting in the 1900s, the joint bargaining system diffused from Wisconsin to other states (Kitagawa and Izawa 2016) and finally reached the national level in the form of the Recovery Act regime in the first half of the New Deal policy. The Recovery Act regime established a federal institution responsible for labor conditions and other matters that had previously been dealt with via joint bargaining at the individual state level. During the "First 100 Days" of Franklin D. Roosevelt's presidency, the Agricultural Adjustment Act was passed in May, 1933, and was followed by the National Industrial Recovery Act (NIRA) in June. Especially, the Recovery Act regime based on NIRA was the core system of the New Deal in the first period. This policy supported prices and purchasing power. First, interest groups in each industry would make a "code of fair competition" consisting of, for instance, quantity rations, price rations, minimum conditions of labor, and the right to collective bargaining. The government then would authorize these groups to voluntarily enforce the code.

Commons (1934a) evaluates the final phase of the spread of the "doctrine of reasonable bargaining power" to the whole political economy.

> Labor organizations were the first to move towards this later doctrine of reasonable bargaining power by collective action, because they were the first to feel the pinch of the limited number of jobs and of the resulting discriminations and destructive competition. [... This doctrine of reasonable bargaining power expanded historically from labor organizations to public utilities, manufacturing industries, and then the banking industry.] Last of all, the Federal government, through its National Industrial Recovery Act, and its Agricultural acts, with their codes and regulations under the direction of the President, extends wholesale the doctrine of reasonableness by collective action to practically all manufacturers and agriculturists. (Commons 1928, r.13, p.82; Commons 1934a, pp.345–346, the underlined passages indicate text added in Commons 1934a)

This quote suggests that Commons hoped the Recovery Act regime would result in a managed recovery. He thought this way because he believed the Recovery Act regime would be backed by a national version of the joint bargaining system in Wisconsin. In fact, both industrial associations and trade unions were strongly

involved in the policy-making process of NIRA.[16] Moreover, November 1933, when Commons finished writing Commons (1934a), was shortly after Roosevelt launched the "blue eagle"[17] movement.[18]

However, Chapter 11 of Commons (1934a), rather than presenting effusive praise, hints at a large and dangerous social experiment:

> It may be that American capitalism is moving towards Fascism under the guise of an Economic Planning Council. (Commons 1934a, p.902)

As stated before, Commons thought the USA should adopt a joint bargaining system with the participation of "voluntarily" organized associations (Commons 1934a, p.900). He stressed that such a system could protect against associations being forced to participate in the corporatism of fascism[19] and that spontaneity must be maintained because it would defend the USA against totalitarianism.

4.2 The Passage of the Unemployment Prevention Law

Another reason that Commons detailed the joint bargaining system in the additional descriptions contained in Commons (1934a) but not in the 1927 manuscript was

[16]For example, Sect. 7 (a) of NIRA clearly states the right of employees to organize and engage in collective bargaining. However, because this section is subject to various interpretations, it has not been enforced effectively (Kihira 1993).

[17]The blue eagle movement (formally called the campaign to enact the "President's Re-employment Agreement") was a government-organized movement that required employers to install maximum working hours (40 h per week) and minimum wages (e.g., 15, 13, or 12 dollars per week, and 40 cents per hour, albeit with various conditions and exceptions). Business establishments that met these conditions could signal their compliance by using the blue eagle mark. Noncompliant businesses became targets of economic and ethical sanctions that included public boycotts (Kihira 1993, pp.228–239, 260; Shinkawa 1973, p.102).

[18]However, in the stage of the planning and administration of the codes of fair competition, the capital exercises its power in a unilateral way, in part because the National Recovery Administration insufficiently supports trade unions and consumer groups (Shinkawa 1973, pp.120–121).

[19]The corporatism of fascism can be restated as "syndicalism":

> The word "syndicalism" comes from the French, meaning simply "unionism." A union of employers or bankers is an employers' syndicate or bankers' syndicate. A trade union is a labor syndicate. But history has changed the meaning of the word syndicate. [...] In Italy it has come to mean patriotic syndicalism, organized by government to support private property and the supremacy of the dictator. (Commons 1934a, p.883)

In Italy at the time, syndicates of employers, bankers, and workers had emerged. As noted above, these syndicates differed from the associations that were participants in Commons' joint bargaining system in being "organized by government" and therefore not voluntary associations. Commons was trying to show a way to keep such syndicalism out of the USA. Other reasons Commons respectfully describes the joint bargaining system are given in Sect. 4 of this chapter.

his deep confidence in the workability of the system after having witnessed the passage[20] of the Wisconsin Unemployment Prevention Law[21] of 1932.

Commons drafted an unemployment insurance law that was submitted to the Wisconsin legislature by State Senator Henry A. Huber in 1921. This "Huber bill" applied the injuries compensation law to unemployment prevention. The bill established mutual insurance systems for individual industries, with an unemployment compensation fund being funded by monthly fees levied on employers. An "experience rating" incentivized unemployment prevention, with employers' monthly fees being tied to the number of employees laid off. While this bill was submitted to the state legislature during every term from 1920 onward, the favorable economic situation in Wisconsin at the time meant it was rejected.

The start of the Great Depression in 1929 caused a deterioration in Wisconsin's economic situation and ended the complacency of the state senate regarding unemployment. A mechanism for providing unemployment compensation such as that contained in the Huber bill thus came to be considered a pathway to business recovery.

> Taking advantage of the wide-spread horror of unemployment, never before so seriously considered either by the public or by economists, the Wisconsin law attempts to bring home this distress positively to the employers who can, in the first instance, be made responsible for it. (Commons 1934a, p.858)

Commons saw an opportunity to pass the unemployment compensation law. He entrusted the writing of the draft to Paul Raushenbush, his previous student who was a professor at the University of Wisconsin. The draft prepared by Raushenbush (with help from others) was submitted to the Wisconsin legislature in 1931 by Assemblyman Harold M. Groves, and this "Groves bill" proved more acceptable than the Huber bill. The first step was the establishment of unemployment compensation funds at the company level rather than the industry level, meaning individual employers were responsible only for the layoff of their own employees. Next, employer contribution rates were capped according to employee wages or salaries. This meant the financial burden on employers was restricted to a narrowed but fluctuating range. The Groves bill differed from the Huber bill, with the latter containing stronger mechanisms to prevent unemployment. However, the Wisconsin State Federation of Labor (WSFL) had doubts about the Groves bill because it limited employer liability and so created a different draft that included an industry level fund and that grouped together contributions of employers in the same industry. This WSFL bill was submitted in the same legislative term by State Congressman Robert A. Nixon.

The representatives of WSFL and the Wisconsin Manufacturers' Association (WMA) participated in the interim committee that the legislature entrusted to

[20]Detailed description of the passage of the unemployment compensation law can be found in Commons (1934a, pp.840–873) and Sato (2013, pp.57–88).

[21]The substance of this law is shown as an unemployment insurance or unemployment compensation law.

prepare the unemployment compensation bill. Following discussions in the interim committee, WSFL compromised with Raushenbush to realize the unemployment compensation law, and WSFL shifted its support from the Nixon bill to the Groves bill. WMA, representing employers, continued to strongly oppose all versions of an unemployment compensation bill, and this opposition was noted as part of the minority opinion in the report of the interim committee.

The special legislative term started in November 1931, and the Groves bill was resubmitted and public hearings held. Some employers now saw the bill's passage as inevitable and so tried to insert as much employer discretion into it as possible. These employers offered to compromise with Raushenbush and support the bill in exchange for the insertion into the bill of exceptions and collateral conditions. One exception was that the law should not apply to firms that had already voluntarily introduced unemployment compensation. A collateral condition was that, if 200,000[22] employees were included in voluntary plans by June 1, 1933, the law would not come into effect because voluntary measures would already have largely achieved its purpose.

> As thus amended the Manufacturers' Association, while opposed to it [the bill], finally accepted it as preferable to other proposed bills, as did also the Wisconsin State Federation of Labor, and it [the bill] was enacted into law. (Commons 1934a, p.841)

This amended Groves bill was further modified in the assembly and then enacted in January 1932. This bill departed in the following two points from the 1921 Huber bill written by Commons. First, the law did not establish industrial level funds, but rather funds at the company level. Second, the experience ratings used to determine employer payments fluctuated within a much smaller range than in the Huber bill. These departures meant the enacted law created a weaker incentive for employers to avoid layoffs than would have been the case had the Huber bill been ratified. Despite this watering down of his original bill, it is remarkable that in Commons (1934a), Commons does not criticize the law that was eventually passed. Possibly Commons evaluated the legislation not on whether his plan was finally passed, but on the effectiveness of the system of making laws based on joint bargaining among interest groups.

Commons understood the effectiveness of the joint bargaining system, deliberation in law making, and more specifically the interim committee consisting of representatives of interest groups and public hearings. Of course, from the perspective of conflict, interest groups compromise for different reasons, whether they are trade union groups uniting to ensure the passage of Raushenbush's bill or employers who see the bill's passage as inevitable but still work to weaken it as much as possible. However, according to Commons, compromise among interest groups is supported by beliefs about the joint bargaining system that were shared by state officials, employees, and employers in Wisconsin.

[22]This number was further reduced to 175,000 by the representative George Blanchard.

The first such belief is that the joint bargaining system offers a "workable" method to enact and administer rules. The second such belief is that after reaching a compromise regarding a rule, all concerned parties will commit to its administration. Different interest groups naturally acted according to their own motivations, but a compromise was ultimately reached based on shared beliefs. In other words, owing to such beliefs, both WMA and WSFL remained involved in the deliberation process and finally came to support the Groves bill, eventually agreeing to jointly administer the law.

> These three individuals [the State Industrial Commission, WMA, and WSFL] had been working together for some ten or fifteen years in administering the accident prevention law. It was practically assumed that they would work together in administering the employment-reserve and unemployment-prevention law. This assumption turned out to be correct, though not stipulated in the act. [. . . This assumption] was the realistic reasoning of practical men in the midst of conflict and doubt. These assurances could not, in the nature of the case, be written into the words of the statute. But if they [such assurances] had not been the "unwritten law" of labor administration for twenty years in Wisconsin, the law could not have been enacted. At almost every point in drafting the new law, not merely a scientist's doubtful analogy, but a practical man's personal acquaintance, directed the provisions of the new law.
>
> Thus the unemployment statute itself, [. . .] was partly an *enabling act*, with minimum standards, and it was to the expected *joint administration* of the act by the state Commission, the state Manufacturers' Association, and the State Federation of Labor that all parties looked forward. (Commons 1934a, p.848)

As stressed above, in Commons (1934a) he did not detail the differences between the enacted law of 1932 and his original draft law from the early 1920s, the reasons the original draft was changed, or his criticisms of the enacted law. Rather, Commons expressed pride in the negotiation process itself. First, a shared belief in the effectiveness of joint bargaining had taken root among interest groups in Wisconsin based on 20 years of experience in administering the injury prevention law. Second, in the case of the unemployment compensation law, which represented the first attempt to implement such a law in the USA, this joint bargaining system worked well as a method of negotiation and compromise. Given these facts, Commons placed great confidence in the system. To promote the workability of the system to readers, he wrote about it in detail, and much of the new material in Commons (1934a) dealt with this topic.

5 The Articulation of the Two Methods of Institutional Reform

As we have seen, Commons (1934a) shows the two methods of institutional reform that directly or indirectly relate to sovereignty. However, it does not show how these two methods relate to each other. This section tries to show the whole picture of institutional reform described by Commons (1934a), and so to understand the composition of social progress, and potential stresses that can change its path.

The two methods of institutional reform may be integrated by the following two approaches. The first approach emphasizes the participation of actors who are mainly from lower-level institutions and their influence on higher-level institutions. The second approach involves the implementation of a collective sanction of lower-level institutions by certain higher-level institutions.

In the first approach, Commons assumes that citizens try to do two things: capture collective power by participating in various going concerns[23] (Commons 1924, pp.105–106) and change the working rules governing the exercise of collective power. In Commons (1934a), he argues that citizens establish higher institutions through concerted actions. Examples of such institutions are agreements between corporations, employer associations, or trade unions (Commons 1934a, pp.54, 70). Conflicting interest groups construct institutions through a process called "collective bargaining" (Commons 1934a, p.759). These interest groups build such institutions voluntarily, or they are constituted with guidance from state and federal commissions. The latter set of institutions represents the joint bargaining system with both private and public characteristics. In the process of instituting such working rules, economic, political, and ethical principles are coordinated. The mixture (compromised body) of the various principles is finally expressed by the working rule.

Direct participation is not the only way to affect higher institutions, and citizens and going concerns can use two other methods. First, they can launch legal action and turn to a supreme institution with appropriate jurisdiction to justify their claim based on ethical principles. Second, citizens' collective opinion (public opinion) affects judges' "habitual assumptions," because these assumptions and the associated code of conduct are based not only on judicial precedents but also on public opinion and social customs. Based on the clarifications established in Commons (1934a), judges' habitual assumptions are driven by different principles, for example, "economic assumptions" refer to scarcity and efficiency, while "ethical assumptions" reflect universalistic ethical principles (i.e., security, freedom, equality, and fairness; Commons 1934a, p.698).

In the second approach to exercising collective sanction and inducement from certain upper institutions to lower institutions, the judicial branch weighs and evaluates various aspects of a case in accordance with its habitual assumptions. The judicial branch then rules on the case, such as on its legality, and whether it violates the constitution. As a result, one institution (custom) is selected from among competing institutions. This decision should conform to various ethical principles that differ from standard economic principles. In shifting our attention from the judicial branch to the legislature, we see that legislatures concede part

[23]Commons (1924; 1934a) implied that each citizen has "constituent power." The powers inside every citizen reflect and affect social structure. From the perspective of constituent power, Kitagawa (2013) compares Commons with Antonio Negri, noting that while Negri (1981) focuses on the constitution in the productive sphere, he cannot show concrete momentum, and nor does he show processes. On the contrary, Commons shows these as economic conflicts, negotiation, and the two methods of institutional reform.

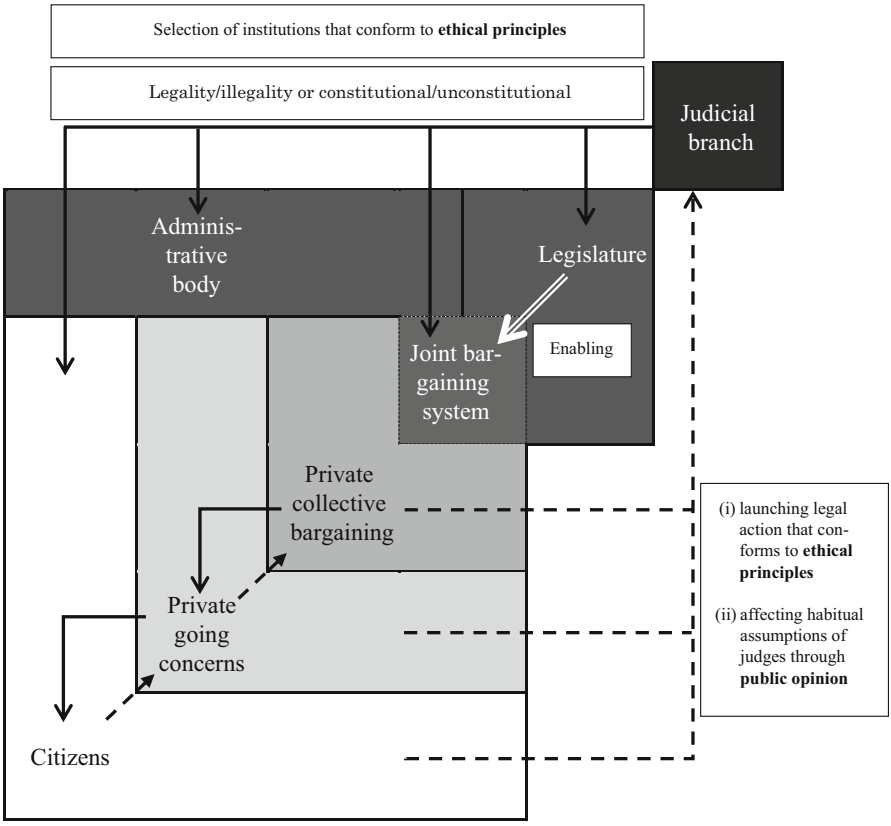


Fig. 1 Articulation of the two methods of institutional reform. *Solid arrows* indicate that a going concern self-servingly and artificially selects an institution within its jurisdiction. If the organization is a judicial branch (especially the Supreme Court), it selects the institution artificially and in conformance with certain public purposes (ethical principles). *Dashed arrows* reflect that a citizen or a going concern affects the rule-making process of an upper going concern to seize collective power for their own benefit. Economic, political, and ethical principles are coordinated and translated into working rules through participation in an upper going concern and by affecting the rule-making process (Source: Compiled by the author)

of their sovereign power to private going concerns through the arrangement of commissions (Kitagawa 2016). In doing this, legislatures allow private going concerns to contribute to social governance.

The above descriptions can be illustrated as Fig. 1. From this figure, we visually observe the following two points.

First, we observe that economic, political, and ethical principles are coordinated and translated into working rules, through a cyclical structure of participation, projections, coercions, and inducements. In this cyclical structure, the reasonableness of the political economy is gradually enhanced; in other words, the three conditions of a reasonable transaction—equal opportunity, fair competition, and equality of

bargaining power—have been and will be developed. As noted in Sect. 3.3, on the one hand, the standard of reasonableness created by the judicial branch's artificial selection means simply "ordinary," namely, conforming with customs. On the other hand, the standard of reasonableness created by the joint bargaining system means "the best practicable." This cycle of institutional reforms that develop reasonable conditions for myriad transactions is not a closed one, because the economic, political, and ethical situations evolve via complex and multiple causations, and thus institutions and agencies should continuously adapt to the changing situation (Commons 1934a, p.705).

Second, the joint bargaining system is the area of overlap between public and private activities. Institutions are constituted socially through which citizens participate in going concerns, and these going concerns become involved in collective bargaining, and participate in negotiations. In the dynamics of pluralistic and hierarchic institutions, the joint bargaining system is the area in which socially constituted private institutions assume a public character. The additional descriptions contained in Commons (1934a) but not found in the 1927 manuscript detailed the method by which the coordinated governing systems are both socially and governmentally constituted.

6 Concluding Remarks

This chapter showed that *Institutional Economics* (Commons 1934a) describes an additional method of institutional reform not discussed in "Reasonable Value" (the 1927 manuscript). In *The Legal Foundations of Capitalism* (Commons 1924) and the 1927 manuscript, it is stressed that an upper authority plays a role in institutional reforms through settling disputes among parties. In contrast, the discussion in Commons (1934a), written after the 1927 manuscript, focuses on the joint bargaining system. The essence of this system is the creation and amendment of working rules through negotiations between interest groups, administration of the rules by these groups, and empowering these groups via sovereignty. Interest groups can receive sovereign power through transfers of sovereignty. Such groups are given this power as long as they build rules that society recognizes as reasonable. However, sovereignty improves progressive private practices, which means more reasonable practices, in the broader semipublic system. Sovereignty thus makes private going concerns responsible for social governance.

After clarifying these two methods, this chapter further articulated them. Dynamic composition becomes visible where economic, political, and ethical principles affect institutional reform, not only from upper going concerns to lower ones, nor from lower going concerns to upper ones, but in both directions and via multiple paths. In this dynamic composition, the reasonableness of the political economy is artificially facilitated.

Before concluding, I remark on two implications of this discussion. First, through reviewing Commons (1924), the 1927 manuscript, and Commons (1934a),

this chapter illustrates the dynamic composition where capitalism is coordinated not only by economic principles (scarcity and efficiency) but also by political and ethical principles and shows the possibility that coordination based on these multiple principles directs capitalism to follow a more reasonable course. Commons is used as a source by Ronald H. Coase and Oliver E. Williamson, who focus solely on efficiency.[24] The later authors explain the existence of what they call "institutions," namely, firms (Williamson 1975; Coase 1988). However, if we are to make capitalism steady and sustainable (cf., Polanyi 1944; Boltanski and Chiapello 1999), multifaceted research is needed that focuses on areas where capitalism is coordinated by "multiple" principles and implies the importance in capitalism of non-economic principles, that is, political and ethical principles.

Second, government should (re)recognize that negotiation and compromise between interest groups, while reforming an institution enhances the workability of the reformed institution, and empowering institutions via sovereignty makes the bargaining system workable and acceptable. Fiscal and financial policies currently attract a lot of public interest, and both manipulate the macroeconomy, which is constructed using statistics. Although these are important methods, in modern times, when the direction of society is under pressure, government should also consider the policy challenges of supporting the construction and management of joint bargaining systems (cf., Kitagawa and Uemura 2015). This is because the joint bargaining system uses institutions that have been privately and socially built for purposes of governance. Moreover, this method involves members of a community to redefine acceptable and workable goals.

Of course, research has identified the harmful effects of the joint bargaining system, which has spread historically in the American governance system. For example, Bernstein (1955) points out that in the mature phase of a regulatory commission, when the relationship between the commission and control subjects becomes stable, the commission tends to take a stance of maintaining the status quo, which means it does not try to facilitate the competitive environment of the regulated industries. To prevent harmful effects and preserve the validity of the joint bargaining system, certain issues should be continuously reconsidered by system insiders and outsiders, and the working rules of the system should be continuously amended based on this reconsideration. Issues that require constant reconsideration, all of which Commons considered important, include whether representatives of interest groups are adequately elected, whether equality of bargaining power among interest groups is ensured, whether information is properly shared, and whether sufficient opportunity of deliberations is provided for citizens.

[24]This "efficiency" is not "efficiency" in the sense used by Commons, that is productivity per "man-hour" (quantity of products produced per man-hour), but rather refers to the minimization of transaction costs (costs of collecting information and bargaining with transactional partners). Thus, efficiency means the minimization of whole cost by choosing from between horizontal exchanges in market (entailing transaction costs) or hierarchal relationship inside a firm (entailing management costs).

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS), the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048), and the Grant-in-Aid for Research Activity Start-up (grant number 15H06303).

References

Bazzoli, L. 1999. *L'économie politique de John R. Commons: Essai sur l'institutionnalisme en sciences sociales*. Paris: L'Harmattan.

Bernstein, M.H. 1955. *Regulating Business by Independent Commission*. Princeton: Princeton University Press.

Biddle, J.E. 1990. Purpose and Evolution in Commons's Institutionalism. *History of Political Economy* 22(1): 19–47.

Boltanski, L., and E. Chiapello. 1999. *Le nouvel esprit du capitalisme*. Paris: Gallimard. (*The New Spirit of Capitalism*, translated by G. Elliott. 2007. London: Verso).

Chasse, J.D. 1986. John R. Commons and the Democratic State. *Journal of Economic Issues* 20(3): 759–784.

Coase, R.H. 1988. *The Firm, the Market, and the Law*. Chicago: University of Chicago Press.

Commons, J.R. 1911. The Industrial Commission of Wisconsin. *American Labor Legislation Review* 1:61–67, reprinted in M. Rutherford and W.J. Samuels (eds.). 1996. *John R. Commons: Selected Essays* Vol.1:241–250. London/New York: Routledge.

———. 1913a. Constructive Investigation and the Industrial Commission of Wisconsin. *The Survey* 29:251–267, reprinted in M. Rutherford and W.J. Samuels (eds.). 1996. *John R. Commons: Selected Essays* Vol.1:241–250. London/New York: Routledge.

———. 1913b. *Labor and Administration*. New York: Macmillan.

———. 1924. *The Legal Foundations of Capitalism*. New York: Macmillan.

———. 1927. Reasonable Value: A Theory of Volitional Economics. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

———. 1928. Reasonable Value: A Theory of Concerted Action. Manuscript. In H.L. Miller (ed.). 1986. *Wisconsin Progressives, The John R. Commons Papers*. Microfilm Edition. The State Historical Society of Wisconsin.

———. 1934a, 1990. *Institutional Economics: Its Place in Political Economy*. New Brunswick/London: Transaction Publishers.

———. 1934b. *Myself*. New York: Macmillan.

———. 1950. *Economics of Collective Action*. New York: Macmillan.

Harter, L.G. Jr. 1962. *John R. Commons: His Assault on Laissez-faire*. Corvallis: Oregon State University Press.

Kihira, E. 1993. *The Making of the New Deal Political Order: A Study in the Political and Social History of the United States in the Twentieth Century*. Kyoto: Kyoto University Press (in Japanese).

Kitagawa, K. 2013. The Theory of Sovereignty in the Institutional Economics of John R. Commons from the Perspective of Constituent Power. *Evolutionary and Institutional Economics Review* 10(2): 245–267.

———. 2016. An Analysis of J.R. Commons' Changing Views on the Role of Sovereignty in the Political Economy. *Kyoto Economic Review* 84(1–2): 2–28.

Kitagawa, K., and R. Izawa. 2016. Development of American Society and the Formative Process of J. R. Commons's Theory of Reasonable Value. *Keizai-ronso: The Economic Review* 190(1): 71–108 (in Japanese).

Kitagawa, K., and A. Uemura. 2015. General Statutory Minimum Wage Debate in Germany: Degrees of Political Intervention in Collective Bargaining Autonomy. *Kyoto Economic Review* 82(1): 59–91.

Medema, S.G. 1998. Commons, Sovereignty, and the Legal Basis of the Economic System. In *The Founding of Institutional Economics: The Leisure Class and Sovereignty*, ed. W.J. Samuels, 97–112. New York: Routledge.

Negri, A. 1981. *L'anomalia Salvaggia: Saggio su Potere e Potenza in Baruch Spinoza*. Milan: Feltrinelli. (*The Savage Anomaly: The Power of Spinoza's Metaphysics and Politics*, Trans. M. Hardt. 1991. Minneapolis: University of Minnesota Press).

Polanyi, K. 1944. *The Great Transformation*. New York: Rinehart and Company.

Ramstad, Y. 1990. The Institutionalism of John R. Commons: Theoretical Foundations of a Volitional Economics. In *Research in the History of Economic Thought and Methodology*, vol. 8, ed. W.J. Samuels, 53–104. Greenwich, Connecticut/London: JAI Press.

———. 1994. On the Nature of Economic Evolution: John R. Commons and the Metaphor of Artificial Selection. In *Evolutionary and Neo-Schumpeterian Approaches to Economics*, ed. L. Magnusson, 65–121. Boston: Kluwer Academic Publishers.

Sato, C. 2013. *Creating the Welfare State in the United States: Social Security Act of 1935 and the New Deal*. Tsukuba: University of Tsukuba Press (in Japanese).

Schivelbusch, W. 2005. Entfernte Verwandtschaft: Faschismus, Nationalsozialismus, New Deal 1933–1939. Munich: Hanser. (*Three New Deals: Reflections on Roosevelt's America, Mussolini's Italy, and Hitler's Germany, 1933–1939*, Trans. J. Chase. 2006. New York: Metropolitan Books, Henry Holt and Company).

Shinkawa, K. 1973. *New Deal*. Tokyo: Kondoh (in Japanese).

Ueno, T. 1997. The Spreading of the Gospel of Safety: The Safety Movement and Immigrants in the Progressive Period. *Amerika-kenkyu: American Review* 31: 19–40 (in Japanese).

Williamson, O.E. 1975. *Markets and Hierarchies, Analysis and Antitrust Implications: A Study in the Economics of Internal Organization*. New York: Free Press.

John R. Commons and Gunnar Myrdal on Institutional Economics: Their Methods of Social Reform

Nanako Fujita

Abstract This chapter aims to present a comparative analysis of institutional economics by John R. Commons and Gunnar Myrdal. Although they met in 1930 and have been widely known for their positive practical works toward social reform from an institutional standpoint, a comparative analysis has rarely been conducted. The year 1930 was of immense significance not only in the economic history but also in their academic careers. For Commons, it signified the midpoint of his work toward the completion of *Institutional Economics*. The change from the 1927 manuscript to *Institutional Economics* shows that Commons enlarged his discussion of "reasonable value." For Myrdal, it was a turning point at which he went from being a "theoretical economist" to becoming a "political economist." The two men regarded the individual as an "institutional mind" by following a Veblenian view of evolutionary economics and believed that harmony of interests was not an underlying premise of economics, but needed to be created by collective actions. However, regarding the method of social reform, Commons paid attention to "law" and "reasonable value," while Myrdal emphasized "policy" and "enlightenment" on the basis of "value premises." Three key points are addressed to provide a more detailed explanation of this difference: utopia, harmony creation, and the meaning of institutional economics.

Keywords John R. Commons • Gunnar Myrdal • Institutional economics • Social reform • Reasonable value • Value premises

N. Fujita (✉)
Nagoya City University, Nagoya, Japan
e-mail: fujita@econ.nagoya-cu.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_5

1 Introduction

It was Gruchy (1972) who characterized "neo-institutional economists" as those including Galbraith, Myrdal, Ayers, Colm, Lowe, and Perroux. "Neo-institutional economists" meant institutional economists under a new economic environment after 1939. Although these six economists were assumed to differ from American institutionalists on theoretical aspect, the difference was considered to be "in large part the difference between the 1920s and the 1960s" (*ibid.*, p.18).

Following Gruchy (1972), Tsuru (1993) also argued about "modern institutionalists." While he pointed out each member's originality, Tsuru (1993, p.73) insisted that there were common characteristics among the economists who had been called "institutionalists": "(1) the emphasis on the open-system character of production and consumption, thus a broader view of the scope of economics; (2) an interest in the evolutionary course along which the industrial economies are moving, with emphasis on the dynamic process of technological change and circular cumulative causation; (3) awareness of a growing need for guidance that can be supplied only through some form of overall social management of planning; and, finally, (4) recognition that economics must become a normative science, positively formulating social goals and objectives." Myrdal, Galbraith, and Kapp were included among those he called "modern institutionalists."

Although there is a difference in historical periods, American institutionalists and Myrdal have been regarded as having some similarities. Nevertheless, in reality, Myrdal criticized American institutionalism during its high years in the 1920s and 1930s and never recognized its intellectual influence even after he had identified himself as an "institutional economist" in the 1940s. He received the Veblen-Commons Award from the Association for Evolutionary Economics in 1975 (Myrdal 1976a). However, he confessed his feelings in an interview the later year: "I've always had the feeling that in a way I am lonely. I am alone. ... I am recognized as an institutionalist in America. But I always feel that I have broader roots for my theory when I sort them out as I had to do when I had these research experiences" (Angresano 1997, p.154).[1]

This chapter aims to present a comparative analysis of institutional economics by John R. Commons and Gunnar Myrdal. Although they met in 1930 and have been widely known for their positive practical works toward social reform from an institutional standpoint, a comparative analysis has rarely been conducted. The author has studied Myrdal's economics for years. This comparative analysis aims to provide an in-depth understanding of the characteristics of not only Commons's but also Myrdal's institutional economics.

[1]Therefore, the following explanation is not easily accepted. "Myrdal's early concern for the effect of the social environment on human behavior, his stretching of the scope of the economic viewpoint to cover all relevant factors, his concern with dynamics, and his postulate of circular causation within a social system are all so compatible with the positions of American institutionalist economics that it is hardly any wonder that Myrdal, after overcoming an early animosity, embraces and is embraced by this school" (Dykema 1986, p.157).

This chapter has been organized as follows. Section 2 presents Myrdal's clarification regarding the first meeting between Commons and Myrdal in 1930 at Wisconsin in the United States. Section 3 considers Commons's views in 1930 from the viewpoint of the formative process of his book *Institutional Economics*. Section 4 presents a comparative analysis of Commons's and Myrdal's views on methods of social reform, that is, Commons's argument for "reasonable value" and Myrdal's methodology of "explicit value premises." Section 5 summarizes the above discussion and concludes the study.

2 Commons's and Myrdal's Meeting in 1930

In 1927, Myrdal, the graduate student of Gustav Cassel at Stockholm University, finished writing his dissertation "Prisbildningsproblemet och föränderlingen [Price Formation and the Change Factor]," which brought him immense popularity as a theoretical economist in Sweden. Two years later, Myrdal, who had since married Alva Reimer, obtained an academic subsidy from the Rockefeller Foundation in the United States, as did his wife. The couple arrived in New York in October 1929, immediately before the outbreak of the Great Depression. During the economic crisis, the Myrdals traveled around the country and met several famous economists at the request of the Foundation.[2]

First, Myrdal became acquainted with Wesley C. Mitchell at Columbia University in the fall of 1929.[3] However, it seemed that the two men did not agree on methodological issues. By that time, Myrdal had almost completed *The Political Element in the Development of Economic Theory*, which was published in Swedish in 1930. His signature in the book's postscript was dated 31 December, 1929. Myrdal later described his feeling at that time as one of near desperation when he failed to get Mitchell to even see the point of the book after a conversation that continued for more than an hour (Myrdal 1973, p.7). He felt that "under Wesley C. Mitchell's leadership the young American economists criticized everything—except the basic value and welfare notions" (Myrdal 1958, p.254).

The Political Element in the Development of Economic Theory was based on Myrdal's lectures at Stockholm University during the spring of 1928. In the book, he criticized the established mainstream economic theories, such as classical and neoclassical ones, suggesting that they had implicit political biases. Myrdal was trying to develop his neoclassical economic model by adding expectative factors under the theoretical influence of Knut Wicksell. However, at the same time, he

[2]For more details read the following sentences, see Jackson (1990, pp.59–64).

[3]As a Swedish economist, J. H. Åkerman met American institutionalists at Harvard University in 1919–1920. Åkerman was influenced by Mitchell's business cycle analysis and imported his analytical skills to Sweden. For more details, see Carlson (1999). Although Hodgson (2004, p.153) believes that Åkerman further influenced Myrdal, there is no evidence of this according to the author.

came to think that in mainstream economics, basic concepts such as "utility" and "equilibrium" had come to be permeated with political bias toward the principle of laissez-faire. In his opinion, every social scientist today agrees that fact recognition and value judgment should be divided, but the reality differs. Although mainstream economics has been established based on the philosophy of natural law and utilitarianism in which a priori assumption of harmony of interests has been set, there are usually conflicts of interest in the real world, which is where economics has a practical role to play. Myrdal believed that economics should embrace practicality as well as objectivity.

However, during his stay in the United States in 1929–1930, Myrdal maintained his position as a "theoretical economist" and criticized "institutional economists," including Mitchell as a representative author, because he believed that a priori theory was indispensable for recognizing facts. Such a basic methodological view was consistent throughout his academic life. "Myrdal felt that the institutionalists' naïve empiricism was totally inconsistent" (Adair 1992, p.167).

After meeting Mitchell, Myrdal visited Washington, D.C., where he began his acquaintance with economists in the government and the Brookings Institution. Then, he conversed with Frank Knight and Jacob Viner on the train to Chicago. He went on to Minneapolis and finally visited Commons at Wisconsin University.[4]

Myrdal recalled this memorable event in 1977 when he revisited Wisconsin University and delivered a lecture. "In Madison I was received most generously by Commons and his friends in the faculty, and I remember he taught me bowling" (Myrdal 1978, p.771). As we will see in the next section, Commons had already achieved success by taking part in various legislative reforms in the state of Wisconsin. According to Jackson (1990, p.62), "the young visitor [Myrdal] was impressed by the Wisconsin idea of directing academic research toward social reform." However, Myrdal did not convert himself into an "institutional economist" at that time. In an interview he gave in July 1980, he mentioned "Commons, whom I never understood" (Angresano 1997, p.154). In 1930, Myrdal rushed into the ceremonial establishment of the Econometric Society with Irving Fisher and Ragnar Frisch. He firmly recognized that the Society played the role of a defensive wall against the advancing institutionalists. A letter from Myrdal to Commons also reveals that the two economists did not enjoy a close relationship.[5]

Nevertheless, there is no doubt that his period of research in the United States in 1929–1930 presented Myrdal with a significant opportunity to refine his attitude and

[4] Alva Myrdal was acquainted with psychologists in various places. In Minneapolis, she met the Russian sociologist P. T. Sorokin and spent time with relatives. The Myrdals bought a car after Myrdal was awarded an unexpected science prize in Sweden, and they drove it back to Washington.

[5] As for the 1930s, there is only one item of correspondence between Commons and Myrdal, a letter from Myrdal to Commons dated 16 January, 1934. (This letter was located in "Alva och Gunnar Myrdals arkiv [Alva and Gunnar Myrdal's Archive]," Arbetarrörelsens arkiv och bibliotek [Labour Movement Archives and Library], Stockholm, Sweden, when the author was undertaking research in 2008.) Myrdal wrote to Commons to make his acquaintance prior to going to America as a Rockefeller scholar. In the opening sentences, Myrdal asked Commons if he remembered him.

move toward becoming a "political economist." The Myrdals experienced the Great Depression and witnessed the emergence of a large unemployed workforce. They criticized American intellectuals, including President Hoover, for not introducing effective political devices in response to this economic crisis. However, at the same time, they acquired a positive impression of Americans' frank attitudes, their advanced educational system, and their system of democracy. All of these factors inspired their interest in political activism.

After teaching at Institut Universitaire de Hautes Etudes Internationales in Geneva, Switzerland, for about a year, Myrdal and his wife returned to Sweden in June 1931, and the couple soon joined the Swedish Social Democratic Party. In 1932, a historical change of government occurred, which resulted in the Party remaining in power until 1976. Under the Social Democratic Party's government, the 1930s became an epoch-making period in Sweden. Myrdal developed the new ideas of counter-cyclical financial policy and universal welfare policy. These policy ideas had a strong impact on Sweden, and he used them to build a theoretical foundation for the Swedish model. It is possible that Commons had provided a concrete example of "political economist" that was developed by Myrdal.[6]

In the next section, we will look the events of 1930 again, but this time from Commons's viewpoint.

3 Commons and the Formative Process of *Institutional Economics*

3.1 Wisconsin in 1930

Commons's career in Wisconsin is presented in detail in Commons (1990 [1934], pp.2–3) and Rutherford (2006). According to Rutherford (2006, pp.162–164), economics was introduced at the University of Wisconsin after Richard T. Ely joined as the first full-time professor of economics in 1892. Commons joined the university in 1904 and undertook major research into the history of labor. Before long, progressive politicians, including Robert M. Lafollette, sought advice from the university and its faculty, and Commons came to build a closer relationship between the university and the Wisconsin legislature than did Ely. Commons helped to draft the Civil Servant Law of 1906 and the Public Utility Act of 1907. He also helped to establish and participated in the Wisconsin Industrial Commission, where he drafted legislation for unemployment compensation. Furthermore, Commons played a pivotal role in the United States Industrial Commission between 1913 and 1915.

[6]Jackson (1990, p.64) strongly believed that Myrdal was determined to introduce the Wisconsin way of thought to Sweden. Moreover, Cherry (1995) pointed out that Commons and Myrdal discussed the problem of discrimination against Negro people, in which Myrdal was involved in later years.

Chasse (1986, p.766) pointed out that Commons's experience on the Wisconsin Industrial Commission had led him to reverse his earlier position on the mistrust of the judiciary. To draft unemployment compensation legislation, he had to study the law and the concept of reasonable value. As a result of this study, he developed a respect for the common-law process that shaped decisions based on the customary principles of fairness. Rather than sweeping legislative reforms, he turned to ingenious applications of the device of collective bargaining.

In 1917, Commons became the president of the American Economic Association. By then, he had become popular among American economists, and the situation at the University of Wisconsin was similar. "By 1918, Ely had stopped teaching the core theory courses while Commons had begun a teaching core course on value and valuation: a full-year course covering Commons's work on law and economics and on reasonable value" (Rutherford 2006, p.165). Commons worked on at least two manuscripts entitled "Reasonable Value" (Commons 1925a, 1927), which became part of *Institutional Economics*.[7]

Commons's lectures during the 1927–1928 and 1928–1929 academic years included "Public Value," based mainly on a study of reported legal cases, "Value and Valuation" for a graduate-level course, and "Capitalism and Socialism" (*ibid.*, pp.166–167). Therefore, we can presume that from 1918 to 1929, Commons maintained his interest in the problem of value and reasonable value. In addition, this record of his lectures and Commons (1925b) show that he had numerous concerns regarding comparative analysis of economic systems as early as the late 1920s, which seems natural because the Soviet Union had been established in 1918 and fascism had existed in Italy since 1922.

The year 1930 had important implications not only for the world history but also for Commons personally. It came immediately after the Great Depression and in the middle of Commons's struggle to complete *Institutional Economics*, which would eventually be published in 1934, following *The Legal Foundations of Capitalism*, which was published in 1924. Commons retired from the University of Wisconsin in 1933, and *Institutional Economics* was his final book. In the following section, we further examine Commons's theoretical development around 1930 by comparing his draft manuscripts with the published version of *Institutional Economics*.

3.2 From the 1927 Manuscript to Institutional Economics

As for the development of *Institutional Economics*, it is the manuscript written in 1925 that has often been examined in previous studies, because it was referred to by many economists worldwide and quoted by John Maynard Keynes. At a lecture

[7]There is also a reel of microfilm containing Commons's drafts from about 1928–1929 (H. L. Miller (ed.) 1986. Wisconsin Progressives, The John R. Commons Papers, Microfilm Edition, Madison, The State Historical Society of Wisconsin). However, these are not arranged into a booklet.

entitled "Am I a Liberal?" at the Liberal Party's Summer School in August 1925 and a lecture the following month in Moscow on "The Economic Transition in England," Keynes referred to Commons. Recently, Whalen (2008, p.229) identified that Keynes's words at these lectures were the same as those on page 95 of Commons's 1925 manuscript.

What Keynes quoted was Commons's long-term historical view. Commons had divided economic history into three stages in his 1925 manuscript: (1) scarcity, (2) abundance, and (3) stabilization. On the basis of this historical view by Commons, Keynes criticized the individualist philosophy, which had been developed by John Locke and David Hume. Keynes believed that we were rushing into a new age of stabilization, which he welcomed. Both Keynes and Commons had deep concerns about unemployment and believed that competition, flexible prices, and the laissez-faire principle would never solve this problem (Kaufman 2012, p.504). Just as Keynes regarded various organizations located between individuals and the state as ideal economic units, Commons explained the socioeconomic functions of "going concerns." "New liberalism" in Keynes's sense largely corresponded to a new social philosophy of an "age of stabilization" for which Commons had searched.

"Reasonable Value" (Commons 1927) (called the 1927 manuscript hereafter) was discovered in 2013 at Kyoto Prefectural Library, Japan, by Professor Hiroyuki Uni, of Kyoto University. In a comparative study of this manuscript and *Institutional Economics*, Uni (2014) points out that Commons enlarged the notions of "proprietary scarcity" and "rationing transaction" during this period, which resulted in his theory of cumulative causation from both the demand and supply sides. Because Commons was only emphasizing his analysis from the supply side in the 1927 manuscript, Uni (2014) presumed that the Great Depression and Commons's subsequent recognition of short aggregate demand provided the background for this change. However, in the current study, the author seeks to analyze greater differences that Uni (2014) did not mention, with a view to comparing Commons's and Myrdal's institutional economics.

First, although both the 1925 and 1927 manuscripts shared a common title, "Reasonable Value: A Theory of Volitional Economics," the book that was eventually published in 1934 had a new title *Institutional Economics: Its Place in Political Economy*. It can be seen that both the title and the subtitle had been changed.

On this point, it is interesting to note that the term "institutional economics," which would become the most important concept for Commons in 1934, was nowhere to be found in the 1927 manuscript. One obvious interpretation of this difference is that Commons only developed the concept of "institutional economics" between 1927 and 1934. Moreover, Commons might have come to prefer "institutional economics" to "volitional economics" and to believe that the concept of "institutional economics" should be promoted more than that of "reasonable value."

As for Commons's idea of "institutional economics," we need to pay more attention to Commons (1931), because this article is the first in which he formally discussed "institutional economics" in detail. In this article, Commons defined an institution as "collective action in control, liberation and expansion of individual

action" (Commons 1931, p.649) and further noted that "it is this shift from commodities and individuals to transactions and working rules of collective action that marks the transition from the classical and hedonic schools to the institutional schools of economic thinking" (*ibid.*, pp.651–652). Keywords such as "collective action," "volitional," and "transaction" were used continuously from 1927 to 1931 in Commons's writings. However, the notions of "institutional economics," which integrated all of the abovementioned keywords, and "reasonable value" were used for the first time in this article. Furthermore, to describe a new psychology that would support "institutional economics," Commons used the term "negotiational psychology," which "revolves into the *persuasions* or *coercions* of bargaining transactions, the *commands* and *obedience* of managerial transactions, or the *arguments* and *pleading* of rational transactions" (*ibid.*, p.655).

This is closely related to the second difference. Although the first chapters of the 1927 manuscript (especially the first section) and *Institutional Economics* are indispensable, as they contain Commons's basic analytical viewpoint and method, the contents differ considerably. Whereas Commons emphasized the notion of "transaction" in the 1927 manuscript, he explained "institutional economics" inclusively in *Institutional Economics*. Commons probably wrote *Institutional Economics* as an immediate and direct extension of Commons (1931), because they contain numerous common descriptions. In *Institutional Economics*, Commons discussed the meaning of "institutional economics" by emphasizing that it is inseparable from classical and neoclassical economics: "The problem now is not to create a different kind of economics —'institutional' economics— that is divorced from preceding schools, but how to give collective action, in all varieties, its due place throughout economic theory" (Commons 1990 [1934], p.5).

One important notion that was not found in Chapter 1 of the 1927 manuscript but appeared in Commons (1931) and Chapter 1 of *Institutional Economics* is that of "harmony." In *Institutional Economics*, Commons clearly denied the traditional assumption of economics regarding people's cooperation based on a harmony of interests.

> Cooperation does not arise from a presupposed harmony of interests as the older economists believed. It arises from the necessity of creating a new harmony of interests—or at least order, if harmony is impossible—out of the conflict of interests among the hoped-for cooperations .... Harmony is not a presupposition of economics—it is a consequence of collective action designed to maintain rules that shall govern the conflicts (Commons 1990 [1934], pp.6–7).

For Commons, the main issue of "institutional economics" was how to create harmony instead of conflict.

Third, the overall composition of the two documents is quite different. While the 1927 manuscript begins with Chapter 1 entitled "Method" and ends with Chapter 8 entitled "Scarcity and Efficiency," *Institutional Economics* begins with Chapter 1 entitled "The Point of View" followed by Chapter 2 entitled "Method," with Chapter 8 entitled "Efficiency and Scarcity," and ends with Chapter 11 entitled "Communism, Fascism, Capitalism." Therefore, the 1927 manuscript appears to take the form of a discussion that corresponds to Chapters 2 to 8 of *Institutional*

Economics. However, it might be incorrect to say that all the ideas in Chapters 9 entitled "Futurity" to 11 of *Institutional Economics* were created after Commons had completed the 1927 manuscript.

As Commons himself wrote in the chapter's note, the basic idea underlying Chapter 11 of *Institutional Economics* went back to Commons (1925b). Although Commons had to add new information and a current description to that chapter prior to its publication, his basic idea had been established previously. Moreover, as for Chapter 10 entitled "Reasonable Value" in *Institutional Economics*, the concept of "reasonable value" had already appeared in the 1927 manuscript. However, whereas Commons included a section entitled "Reasonable Value" in Chapter 5 entitled "Adam Smith" in the 1927 manuscript, he deleted that section and wrote a new Chapter 10 entitled "Reasonable Value" in *Institutional Economics*.

Therefore, it is interesting to ponder why Commons decided to move and extend the "reasonable value" section in the 1927 manuscript to a full chapter in *Institutional Economics*. The author believes that Commons came to evaluate his own argument of "reasonable value" as his theoretical and practical achievement, and its analysis was increasing in importance in society at the time, especially under the influence of the Great Depression. Commons was able to delete "reasonable value" from within Chapter 5 in the 1927 manuscript only after discussing the same notion in more depth in Chapter 10 in *Institutional Economics*. In other words, although the term had been deleted from the book's title, the notion of "reasonable value" remained its importance in the book.

In the next section, we will examine Commons's view toward and method of achieving social reform in his argument regarding "reasonable value," and investigate it further in the light of Myrdal's methodology of "explicit value premises."

4 Methods of Social Reform

4.1 Commons's Method of Reasonable Value

In *Institutional Economics*, Commons evaluated and totally agreed with Thomas Malthus's views on humanity, that is, "man is not a rational being, as the Eighteenth Century thought; he is a being of stupidity, passion, and ignorance" (Commons 1990 [1934], p.682). Contrary to the "Age of Reason," Malthus insisted on the "Age of Passion and Stupidity." Commons believed that such a heterodox view of Malthus on humanity in his age should be reevaluated in light of contemporary discussion of "reasonable value." However, at the same time, Commons pointed out an example of historical progress toward judicial sovereignty, even in Malthus's days (*ibid.*, p.682).

> During all these years of the Age of Reason, the common-law courts were developing an institutional idea of reasonableness and reasonable value, in the process of deciding conflicts of interest and bringing order out of incipient anarchy. . . . The institutional idea

> undoubtedly reaches its clearest evolutionary change in the common-law method of making new law by taking over the changing customs of the dominant portion of the people at the time, and formulating them, by a rationalizing process of justification, into working rules for future collective action in control of individual action. Since this process has reached its pinnacle in the sovereignty of the Supreme Court of the United States, the evolution of the idea of reasonable value requires, as its institutional background, an understanding of the historic evolution from executive to legislative, and then judicial sovereignty.

Commons emphasized that reason differs from reasonableness, since the latter is based on Malthus's view of humanity. According to Commons, reasonableness is to be confirmed and ultimately decided by the Supreme Court, which is dominated by habitual assumptions arising from the prevailing customs of the time and place. He regarded an individual as not a rational being but an "institutional mind" (*ibid.*, p.697) and emphasized a social role of "custom" even more than that of the individual or the State (*ibid.*, p.702). Malthus's emphasis on "passion and stupidity" corresponds to Commons's "custom." Commons's view of and method regarding social reform was to change this sense of "custom," and the ultimate main battlefield was the Supreme Court, where the common-law method was adopted.

Commons recognized the originality of his own attitude compared with that of Thorstein Veblen, pointing out both the differences and the similarities: "He [Veblen] did not investigate the decision of the Supreme Court" (*ibid.*, p.651), but "it is in the change of ... collective rules, including custom and going concerns, and all kinds of social philosophies, that we find, as does Veblen, the evolutionary theory of economics" (*ibid.*, p.656). In an article entitled "Why is Economics Not an Evolutionary Science?" published in 1898, Veblen demanded that economics embrace a new theoretical recognition of human nature, institutions, and society on the basis of a dynamic theory of cumulative causation, by which economics could become an evolutionary science. Although Commons was more interested in solving social problems brought about by conflicts of interest, he agreed with Veblen's basic idea.

Moreover, regarding the possibility and limits of social reform, Commons referred to Max Weber's famous discussion of ideal types. Commons insisted that Weber did not consider the ethical ideal type to be a permissible meaning of his ideal type, but that there was a double meaning that needed to be distinguished: the attainable and the unattainable. Commons suggested that an attainable ideal equated to his sense of "reasonable value," whereas an unattainable ideal was a "utopia" that could not be a goal of social reform. He argued that "reasonable value and reasonable practices are the highest attainable idealism of regard for the welfare of others that is found in going concerns under existing circumstances of all kinds, at a given historical stage of development," and named it "Pragmatic Idealism" (*ibid.*, p.741).[8]

Commons's concept of "reasonable value" was based not on individualism but on collective action. His basic idea regarding social reform or social progress is well described by his statement that "the problem of social idealism through collective

[8]Commons considered ideals such as heaven, communism, anarchism, universal brotherly love, universal virtue, and universal happiness to be unattainable (Commons 1990 [1934], p.742).

action consists in bringing the 'average' and those below the 'average' up to the level of those above the average" (*ibid.*, p.742). He further explained this point as follows. "Unregulated profit-seeking drags the conscientious down towards the level of the least conscientious; yet a considerable minority is always above that [average] level, no matter how high it may have been raised by collective action. These indicate the possibility of progress. The problem, then, is the limited one of investigating the working rules of collective action which bring reluctant individuals up to, not an impractical ideal, but a reasonable idealism, because it is already demonstrated to be practicable by the progressive minority under existing conditions" (*ibid.*, p.874).

In arguing the theory of reasonable value, Commons saw social progress by collective action and human nature as changing with "custom." At a new stage of "stability" in Commons's historical view, his method to have a society achieve reasonableness was a measure designed to maintain and manage the capitalist system in the United States.

4.2 Myrdal's Method of Explicit Value Premises

Myrdal recognized two opportunities that were to have a great impact on his move toward becoming an "institutional economist." One was that he came to be involved in the social security problem in Sweden in the 1930s, and the other was that he accepted responsibility for a study of race relations in the United States (Myrdal 1978, p.772). In 1938, he returned to the United States to direct a large social research project financed by the Carnegie Foundation on the Negro discrimination problem. Myrdal established himself as an institutional economist in *An American Dilemma* in 1944: "I became institutional in that sense because I was brought into a problem which I could not master as an economist and gradually of course I came into all these things, cumulative causation, which made *An American Dilemma* an institutional book" (Angresano 1997, p.152).

In an Appendix in *An American Dilemma*, Myrdal established his own methodology of "explicit value premises" and the theory of cumulative causation ("the principle of cumulation" in this book), which consisted of his analytical framework of institutional economics.[9] Myrdal came to believe that fact recognition and value judgment were inseparable. His methodology of "explicit value premises" demands that a researcher reveal his or her value premises at the first stage of their analysis to clarify not only the logical premise of policy advocacy but also the analytical viewpoint and its range of investigation. Myrdal believed that economics would be able to move further toward both objectivity and practicality using this methodology.

Myrdal admitted that his methodology was based on the philosophy of the Enlightenment and that of Axel Hägerström in Uppsala, Sweden. The word

[9]Kapp (1976) explained and evaluated Myrdal's theory of cumulative causation. He regarded it as "the core of institutional economics" (Kapp 1976, p.83). On Myrdal's theory of cumulative causation in the history of economic thought, see Fujita (2007).

"enlightenment" was often used at important juncture in Myrdal's writing. For example, he had decided beforehand to use the word at the end of *An American Dilemma* to provide readers with a strong message. Regarding the influence from Hägerström, Myrdal noted that his thought that "there are no values in the objective sense, only subjective valuations" and that "these [subjective valuations] should be distinguished from perception of reality" became a central viewpoint of *The Political Element in the Development of Economic Theory* (Myrdal 1990 [1930], p.13).[10]

However, in this study, the author would like to point out another possible source of philosophical influence, namely, John Dewey, although Myrdal rarely mentioned him. The following two clues support this point. First, when Myrdal made his own value premises explicit in *An American Dilemma* as "American creeds," he referred to Dewey's *Freedom and Culture*, published in 1939 (Myrdal 1996 [1944], pp. 23, 1183). Myrdal referred to Dewey again in an Appendix in the book when he distinguished between "belief" and "valuation" (*ibid.*, p.1031). Moreover, he quoted Dewey in subsequent years when he argued that not only in economics but also more generally in social sciences the question of moral valuation had too often been forgotten (Myrdal 1973, p.134). Second, Alva Myrdal, who had been impressed by Dewey's progressive educational method in 1929–1930, became a teacher of his school of thought in Sweden. According to Jackson (1990, pp.105–106), "Dewey had greatly influenced Alva Myrdal's ideas, and both of the Myrdals continued to read his work. ... The social scientist, in Dewey's view, must choose the values that inform his study, and the value choices of the majority of the citizens must guide the uses of social engineering by the state." Adair (1992, pp.169–170) insists that there is a clear resemblance between Dewey's method of "instrumental value" and Myrdal's "explicit value premises."[11]

Myrdal argued that we should consider four conditions when choosing value premises. They must have (1) relevance, (2) importance, (3) feasibility in society, and (4) logical consistency. Myrdal's theory of cumulative causation could be built on such a set of value premises. As we have already seen, the notion of cumulative causation had been emphasized by Veblen (1898) in asking for a new economics as an evolutionary science. Myrdal's view on individuals, institutions, and society through his theory was almost the same as that of Veblen. However, Myrdal's theory was specially built on his own methodology, which meant that there were some differences between them. Myrdal's theory of cumulative causation was open to not only time sequences like a Veblenian theory but also to spatial varieties like Kapp's discussion of an "open system." Based on his methodology, Myrdal examined not only "economic factors" but also "noneconomic factors." "We cannot be satisfied

[10]Myrdal only partly admitted the influence of Weber's methodology as "the remote and rather indirect influence" (Myrdal 1958, p.251). In his last years, he regretted that he had not criticized Weber's discussion on *wertfrei* (Andersson 1998).

[11]On the other hand, Ramstad (1989) emphasizes a paradigmatic conflict between Dewey's "instrumental value" and Commons's "reasonable value."

by what William Kapp has called the 'closed models' of conventional economics" (Myrdal 1976a, p.215).

Myrdal's institutional economics aimed to achieve both objectivity and practicality. His opinions differed from those of Veblen but were similar to those of Commons in terms of expecting economics to play a practical role in society. However, it was not "law" but "policy" that Myrdal evaluated as its ultimate formal means. Myrdal believed that a policy that was drawn from institutional economics could be partly independent from social reality. He explained this as follows.

> The most fundamental thought that holds institutional economists together is our recognition that even if we focus attention on specific problems, our study must take into account the entire social system, including everything else of importance for what comes to happen in the economic field. Foremost, among other things, is the distribution of power in society and, more generally, economic, social and political stratification; indeed, all institutions and attitudes. To this must be added, as an exogenous set of factors, induced policy measures, applied with the purpose of changing one or several of these endogenous factors (Myrdal 1978, pp.773–774).

More fundamentally, Myrdal anticipated the effective role of "enlightenment" through the spread of scientific knowledge, which was also drawn from institutional economics.[12] Myrdal argued that "attitudes and institutions are all related to, and depend for their unaltered existence upon, beliefs about reality" (Myrdal 1966, p.67). Beliefs about reality usually remain irrational, which tends to make an institution old-fashioned. He considered correcting this by spreading scientific knowledge to fill the social role of economics and economists.

Therefore, the dynamic relationship between the methodology of explicit value premises and the theory of cumulative causation should be explained. Myrdal believed that scientific knowledge is acquired by the theory of cumulative causation, which depends on the value premises reflecting people's value judgments regarding the direction and range of the analysis. However, this relationship is not one-sided. Following the acquisition of scientific knowledge, new policies and "enlightenment" would be introduced, through which people's value judgments would change. During the next intellectual cycle, the theory of cumulative causation based on newly chosen explicit value premises would develop, through which we would acquire new scientific knowledge. Thus, Myrdal never viewed scientific knowledge as something that could to be complete. He considered that a change in scientific knowledge not only followed a change in real economy but could also induce a change in social reality in the future (Myrdal 1957, ch.12).

Myrdal defined "institutional economics" as not only "political economy" but also "evolutionary economics" (Myrdal 1976a, p.215; Myrdal 1978, p.771). On the subject of institutional economics as evolutionary economics, Myrdal's thoughts were the same as those of Veblen, in accordance with their respective theories of cumulative causation. However, Myrdal also regarded institutional economics

[12]Myrdal (1966, p.65) demonstrated the change in reality brought about by the spread of scientific knowledge using the Wicksell-Keynes theory as historical proof. He refused to entertain a fatalistic view of history such as that of Marx.

as political economy. In this regard, he argued that it was the responsibility of economists to draw out a policy conclusion and influence the formation of public opinion by "enlightenment."

4.3 A Comparative Analysis

It can be said that Commons and Myrdal shared a common view of individuals, institutions, and society by following Veblen's evolutionary theory of cumulative causation. Moreover, Commons's basic idea that conflict of interests was a normal state in society was a viewpoint that Myrdal had emphasized ever since *The Political Element in the Development of Economic Theory* had been published. The two men believed that "we have not been able to stick to the basis which the classical and neoclassical school sought in the moral philosophy of utilitarianism and hedonistic associational psychology" (Myrdal 1976b, p.85).

Dugger (1979) pointed out that Commons had developed his discussion by following Myrdal's methodology of explicit value premises even before it was established: Myrdal's three necessary conditions of relevance, importance, and feasibility were all met in Commons's analysis. As for Commons's main target of "economic security," Dugger insisted that (1) it had social relevance because he had found economic security, not self-management, to be important for workers; (2) it had importance because persons in power who would formulate policies considered economic security to be valuable; and (3) it had feasibility because they were based on existing practices. Concerning feasibility, Dugger further pointed out the similarities between Commons and Myrdal in relation to their concept of utopia. "The mature Commons was a thoroughly practical man, without a utopian bone in his body" (*ibid.*, p.371).

However, on this last point, the author both agrees and disagrees with Dugger's argument because she thinks that while Myrdal was a practical man, he also had "some utopian bones" in his body. Commons's and Myrdal's methods of social reform are not the same. We can compare them by illustrating the following three intertwined points.

First, the difference between the two men regarding their notion of "utopia" should be made clear. As we have already seen, and as Dugger (1979) pointed out, Commons identified the attainable ideal as meaning "reasonable value," whereas the unattainable one was "utopia." The line between attainable and unattainable should be determined by whether or not the ideal exists. Commons "consider[s] it *not* to be utopian in so far as we can find it actually *existent* in the best practices of those concerns that actually maintain survival" (Commons 1990 [1934], p.742). For Commons, "utopia" is to be excluded from his analysis of institutional economics. Spreading the existing best practice was his goal for social reform.

Myrdal, however, was fundamentally a Swedish social democrat who aimed at transforming a capitalist society into a classless society through nonrevolutionary means. Such an attitude was shared not only by Myrdal but also by other Swedish

social democrats. In particular, Ernst Wigforss, who was the Finance Minister in the 1930s and gradually became a leading ideologue for the Swedish Social Democratic Party, argued the need for "provisional utopia" for social reform against a background of tension between previous dogmatic socialist ideals and changing political interests. "Provisional utopia" is explained as a tentative sketch of a desirable future society that serves as a critique of existing social conditions and a guide to present action. It can be revised in accordance with future experiences. Wigforss, mirroring John Dewey, called it a socialist "working hypothesis" (Tilton 1990, pp.43–44). Myrdal undoubtedly shared this idea. Myrdal often criticized Marx's view of history as being determined by material conditions, instead emphasizing political creativity.

Second, it concerns "creating a new harmony" (Commons 1990 [1934], p.6). How to create a new harmony from conflict was the main focus of his argument on "reasonable value" and social reform. Commons emphasized the ultimate power of legal methods. On this issue, Chasse (1991, p.447) has already shown in a comparative study that Commons often played the role of participant or facilitator, although Keynes played the role of a Socratic teacher—a persuader and educator. This difference between Commons and Keynes might correspond in large part to the one between Commons and Myrdal. In later years, Myrdal discussed the concept of a "created harmony" in the welfare state (Myrdal 1960, p.77).

Commons's concept of "harmony" was combined with that of "liberty." For Commons, a conflict turns into harmony through an institution that is defined as collective action in the control, liberation, and expansion of individual action. In his era, its national consequence was either communism, fascism, or capitalism. Commons, as an American, argued that "It is indeed a notable contrast that the Constitution of the United States is based on Rights, but the Constitutions of Russia and Italy are based on Duties. ... The rights of man are his liberties; the duties of man are the denial of his liberties. But the rights of man are his rights of free association" (Commons 1990 [1934], p.902). This view of Commons might be the "new liberalism" that reflected a historical background immediately prior to the formation of welfare states.

Needless to say, Commons was relatively old, whereas Myrdal was a newcomer. Nevertheless, the author believes that Commons viewed the future of capitalism relatively positively. He presumed a continuance of capitalism: "Partly by what may be named self-recovery and partly by forced recovery, capitalism is reaching a period of integration which apparently is strengthening the system more than ever before" (*ibid.*, p.887). In response to the emerging unemployment problem, Commons pointed out that the idea of social responsibility, instead of individual responsibility, was progressing even in the United States.[13] At the same time, he was anxious about the future of legislatures and voluntary private associations of

[13]By this "social responsibility," Commons meant "a willingness and ability to *pay taxes* and to insist on a competent *civil service* system adequate to maintain and administer the 'social services,'" examples of which are "free education, health protection, child labor prevention, freedom of collective action of organization, a new kind of unemployment relief without the sting of charity, and a new idea of unemployment prevention" (Commons 1990 [1934], p.844).

laborers, farmers, small business men, and political parties, because they appeared to be weakening in terms of their influence in the United States (*ibid.*, p.898). In this regard, we should pay close attention to the differences between Commons's and Myrdal's native countries, that is, America and Sweden, respectively, as well as the differences between the historical periods in which they lived.

Third, their views differed on the practical role of institutional economics. On this point, the conclusion of Hodgson (2003) should receive serious attention: "Commons neither developed a Veblenian approach nor developed an adequate alternative to it. ... He did not appreciate that 'artificial selection' was no more than a special case of 'natural selection' and not an alternative to it" (Hodgson 2003, pp.569–570).

Myrdal's method of social reform went beyond Commons's when he discussed the practical effectiveness of "policy" and "enlightenment" on the basis of "explicit value premises" or "provisional utopia." Although Commons emphasized changes in "customs" by legal methods, it was not an artificial construct, but rather a result of natural process. After all, Commons was likely more conservative than Myrdal in the sense that Commons did not have any utopian bone in his body. This difference was also reflected in their attitudes toward the meaning of institutional economics in terms of its relationship with mainstream economics. Whereas Commons emphasized inseparability, Myrdal insisted on its alternative nature. Such a mild attitude on the part of Commons was in large part inevitable in the anti-communist political atmosphere that prevailed in America at that time. However, that attitude might be extremely beneficial in any reevaluation of Commons by the "new institutional school" in the present period.

5 Conclusion

The year 1930, when Myrdal met Commons in Wisconsin, was of immense significance in economic history. Above all, it came immediately after the Great Depression. Capitalist countries, represented by the United States, were facing an economic crisis as well as a deepening political crisis with the emergence of communist and fascist countries. Moreover, the year was also important for both men. For Commons, it signified the midpoint of his work toward the completion of *Institutional Economics*. For Myrdal, it was a turning point at which he went from being a "theoretical economist" to becoming a "political economist." Myrdal's experiences in 1929–1930 in the United States influenced his political activities in Sweden during the 1930s. Myrdal was moved to become an "institutional economist" following his investigation of the Negro discrimination problem in the 1940s. He continually referred to the United States as his "second country" and praised and criticized it.

This chapter presented a comparative analysis of Commons's and Myrdal's views and their respective methods of social reform. Both Commons and Myrdal were economists who enlarged their respective academic fields and developed their

theoretical frameworks by participating in practical actions. The change from the 1927 manuscript to the published version of *Institutional Economics* shows that Commons enlarged his discussion of "reasonable value," which should be compared with Myrdal's methodology of "explicit value premises."

Commons and Myrdal both regarded an individual as an "institutionalized mind" by following a Veblenian view of evolutionary economics. Moreover, the two men believed that conflicts of interests were normal in society; therefore, harmony of interests was not an underlying premise of economics, but needed to be created. They thought that collective actions, rather than individualistic laissez-faire, were working to create harmony or order from the conflicts of interest that existed in society.

While Commons paid attention to the process of the formation of laws and emphasized that the function of social reform by "reasonable value" was ultimately decided in the Supreme Court, Myrdal emphasized the functions of "policy" and "enlightenment" drawn from institutional economics, based on his own methodological and theoretical framework. To provide a more detailed explanation of this difference, the author addressed three key points: utopia, harmony creation, and the meaning of institutional economics. First, as for their views on the notion of utopia, Commons was a more practical man in the sense that he had never flown beyond reality. Commons attempted to spread best practices that had already been adopted by society, while Myrdal believed in the concept of "provisional utopia." Second, in relation to creating harmony, their methods seemed to differ largely as a result of their different historical backgrounds. Commons belonged to the period just prior to the formation of welfare states, whereas Myrdal was able to observe them in their maturity. In addition, Commons was based in the United States, whereas Myrdal was working in Sweden. Third, regarding the meaning of institutional economics, both men agreed that institutional economics should develop a new philosophical and psychological basis rather than relying on the existing philosophies of natural law, utilitarianism, and hedonistic psychology. However, Commons never insisted that institutional economics should be seen as an alternative to existing mainstream economics. In this sense, Commons was relatively conservative, whereas Myrdal was clearly opposed to the mainstream.

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS), the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

References

Adair, P. 1992. Myrdal and Institutionalism: From Rejection to Acceptance. In Dostaler, G. et al. (eds.) *Gunnar Myrdal and His Works*. Montreal: Harvest House.

Andersson, S. 1998. *On the Value of Personal Archives: Some Examples from the Archives of Alva and Gunnar Myrdal – With a Main Focus on Gunnar*. A Paper for Gunnar Myrdal Cerennial Seminar, Stockholm, 2–4 December 1998. (Privately circulated. Partly recollected under the same title in Nordeuropa Forum, 1, 15–32, 1999).

Angresano, J. 1997. *The Political Economy of Gunnar Myrdal: An Institutional Basis for the Transformation Problem*. Cheltenham: Edward Elgar.

Carlson, B. 1999. The Institutional Ideas Virus: The Case of Johan Åkerman. *The European Journal of History of Economic Thought* 6(1): 71–86.

Chasse, J.D. 1986. John R. Commons and the Democratic State. *Journal of Economic Issues* 20(3): 759–784.

———. 1991. John R. Commons and John Maynard Keynes: Two Philosophies of Action. *Journal of Economic Issues* 25(2): 441–448.

Cherry, R. 1995. The Culture-of-Poverty Thesis and African Americans: The Work of Gunnar Myrdal and Other Institutionalists. *Journal of Economic Issues* 24(4): 1119–1132.

Commons, J.R. 1925a. Reasonable Value. In *Documents from F. Taylor Ostrander at Oxford, John R. Commons' Reasonable Value and Clarence E. Ayers' Last Course*, Research in the History of Economic Thought and Methodology, vol. 26 B, ed. W. Samuels. Bingley: Emerald JAI.

———. 1925b. Marx To-day: Capitalism and Socialism. *Atlantic Monthly* 136: 682–693.

———. 1927. Reasonable Value: A Theory of Volitional Economics. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

———. 1931. Institutional Economics. *American Economic Review* 21: 648–657.

———. 1990 [1934]. *Institutional Economics: Its Place in Political Economy*. New Brunswick/London: Transaction.

Dugger, W.M. 1979. The Reform Method of John R Commons. *Journal of Economic Issues* 13(2): 369–381.

Dykema, E.R. 1986. No View without Viewpoint: Gunnar Myrdal. *World Development* 14(2): 147–163.

Fujita, N. 2007. Myrdal's Theory of Cumulative Causation. *Evolutionary and Institutional Economics Review* 3(2): 275–283.

Gruchy, A. 1972. *Contemporary Economic Thought: The Contribution of Neo-Institutional Economics*. New York: Augustus M. Kelly.

Hodgson, G.M. 2003. John R. Commons and the Foundation of Institutional Economics. *Journal of Economic Issues* 37(3): 547–576.

———. 2004. *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism*. London: Routledge.

Jackson, W.A. 1990. *Gunnar Myrdal and America's Conscience*. Chapel Hill: The University of North Carolina Press.

Kapp, K.W. 1976. In Defense of Institutionalism. In *Economics and Sociology: Towards an Integration*, ed. T. Huppes. Leiden: Martinus Nijhoff Social Sciences Division.

Kaufman, B.E. 2012. Wage Theory, New Deal Labor Policy, and the Great Depression: Were Government and Unions to Blame? *ILR Review* 65(3): 501–532.

Myrdal, G. 1934. A letter from Myrdal to Commons. Dated 16 January 1934. Alva och Gunnar Myrdals arkiv, Arbetarrörelsens arkiv och bibliotek. Stockholm, Sweden.

———. 1957. *Economic Theory and Underdeveloped Regions*. London: Gerald Duckworth.

———. 1958. *Value in Social Theory*. London: Routledge/Kegan Paul.

———. 1960. *Beyond the Welfare State: Economic Planning and its International Implications*. New Haven/London: Yale University Press.

———. 1966. The Social Sciences and Their Impact on Society. In Okada, M. (ed.) 1973. *Essays and Lectures*. Kyoto: Keibunsha.

———. 1973. *Against the Stream: Critical Essays on Economics*. New York: Pantheon.

———. 1976a. Remarks upon Receipt of the Veblen-Commons Award. *Journal of Economic Issues* 10(2): 215–216.

———. 1976b. The Meaning and Validity of Institutional Economics. In *Economics in the Future: Towards a New Paradigm*, ed. K. Dopfer. London: Macmillan.

———. 1978. Institutional Economics. *Journal of Economic Issues* 12 (4): 771–783.

———. 1990 [1930]. *The Political Element in the Development of Economic Theory*. New Brunswick: Transaction.

———. 1996 [1944]. *An American Dilemma: The Negro Problem and Modern Democracy*. New York: Transaction.

Ramstad, Y. 1989. "Reasonable Value" Versus "Instrumental Value": Competing Paradigms in Institutional Economics. *Journal of Economic Issues* 23: 761–777.

Rutherford, M. 2006. Wisconsin Institutionalism: John R. Commons and His Students. *Labor History* 47(2): 161–188.

Tilton, T. 1990. *The Political Theory of Swedish Social Democracy*. Oxford: Clarendon Press.

Tsuru, S. 1993. *Institutional Economics Revisited*. Cambridge/New York: Cambridge University Press.

Uni, H. 2014. J. R. Commons's Theory of Cumulative Causation: A Comparative Analysis of Institutional Economics and the 1927 Manuscript. *Political Economy Quarterly* 51(2): 77–88 (in Japanese).

Veblen, T. 1898. Why is Economics Not an Evolutionary Science? *Quarterly Journal of Economics* 12: 373–397.

Whalen, C.J. 2008. John R. Commons and John Maynard Keynes on Economic History and Policy: The 1920s and Today. *Journal of Economic Issues* 42(1): 225–242.

Part III
Accomplished Dynamic Models

John R. Commons's Two Evolutionary Models of Capitalism: Industrial Stages and Economic Stages

Takao Tsukamoto

Abstract This chapter aims to reconsider and elucidate John R. Commons's evolutionary theory of capitalism so as to show that his economics is an "evolutionary economics," rather than "economics of institutions." In order to show this, the author explains the relationship of Commons's two models of the development capitalism. One of them is the industrial stages which include three stages: "merchant capitalism," "employer capitalism," and "banker capitalism." The other one is the economic stages which also include three stages: "era of scarcity," "era of abundance," and "era of stabilization." Commons thinks that modern American capitalism is complexed with the "banker capitalism" and the "era of stabilization." However, the latter means "stabilization of profit" which bankers seek. This type of stabilization for bankers is different from that for the public who desire a "full employment" and "stabilization of employment." Commons investigates through what historical process "banker capitalism" has come to appear in the current "ear of stabilization." On this historical analysis process, we can find the prominent aspect of Commons's evolutionary economics. The author shows that "industrial development" causes "institutional changes." Namely, the development of industrial technology creates new business practices. Between the new business practices and the existing practices, conflicts of interest may occur. In order to deal with this kind of conflicts, common law courts make a precedent on the basis of reasonable value. Thus this chapter sheds light on causal relationship between the developments of "industry" and "economy," in Commons's evolutionary economic model.

Keywords John Commons • Industrial stages • Economic stages • Banker capitalism • Era of stabilization • Evolutionary economics

T. Tsukamoto (✉)
College of Economics, Nihon University, Tokyo, Japan
e-mail: tsukamoto.takao@nihon-u.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_6

1 Introduction

This chapter aims to reconsider and elucidate John R. Commons's evolutionary theory of capitalism so as to show that the type of his economics is evolutionary economics, rather than institutional economics approach.[1] In *Legal Foundations of Capitalism* (1924) and *Institutional Economics* (1934), Commons developed his own evolutionary theory of capitalism. *Institutional Economics* sets out a three-stage "industrial" development model for the development of capitalism, from "merchant capitalism" to "employer capitalism," and, finally, the current concept of "banker capitalism." A three-stage "economic" development model is also presented, starting with the "era of scarcity," running through the "era of abundance," and ending with the modern "era of stabilization."

Commons presented two models of capitalistic history that were based on stage theory. One model involves industrial stages. This model is based on economic development stage theory and focused on changes in technology and ownership. The other model involves economic stages and is based on "changes in institutions" (Commons 1934, p.766).

Commons's theory of the stages of economic development involved both these models. Through reexamining how these two models are interrelated, this paper plans to show the nature of Commons's evolutionary economics.

In addition to Commons, various other classifications of stages of economic development have been presented. For example, the stage theories of the German Historical School are well known. Allan G. Gruchy pointed out that Commons showed similarities to Gustav Schmoller, Karl Bücher, and other members of the German Historical School.[2]

Regarding economic development stage theory, Friedrich List (1789–1846), the pioneer of the German Historical School, presented a five-stage theory that has become the best known theory of its type. His theory runs sequentially through the following periods: (1) nomadic life, (2) pastoralism, (3) agriculture, (4) combined agriculture and manufacturing, and finally (5) combined agriculture, manufacturing, and commerce. Schmoller devised a six-stage model with the progression: (1) family economy, (2) rural economy, (3) urban economy, (4) territorial economy, (5) national economy, and finally (6) world economy. Additionally, Bücher developed a three-stage model as follows: (1) independent domestic economy, (2) town

[1] According to Wesley C. Mitchell (1874–1948), the economic theory of Commons is "evolutionary economics" (Mitchell 1969, pp.701–736; *cf*., Tsukamoto 2016a, in Japanese).

[2] Gruchy 1976, pp.156–157. Here Gruchy compared Commons and the German Historical School, but his aim was to emphasize the pragmatism of Commons rather than to compare particular theories about stages of economic development. Gruchy also pointed out that "in developing his analysis of the evolution of modern capitalism, Commons has drawn considerable inspiration from such works as Karl Bücher's *Industrial Evolution* (1901) and Werner Sombart's *Der moderne Kapitalismus* (1928)" (Gruchy 1976, p.190).

economy, and (3) national economy.[3] Karl Marx also presented his own stage theory based on dialectical materialism, with a sequential progression of five stages – namely, primitive communism, ancient slavery, feudal society, capitalist society, and, finally, communism.

However, Thorstein B. Veblen (1852–1929), who is normally referred to as America's first advocate of institutional economics, presented a four-stage theory of economic development in his *The Theory of the Leisure Class* (1899) and described his theory as "the life history of western civilization." Akira Sasaki summarized the four stages in Veblen's model as "(1) the stage of peaceable primitive savage culture (the era of the primitive community), (2) the predatory stage of early savage culture (the era of slavery), (3) the quasi-peaceable stage of developed savage culture (the era of feudalism), (4) the stage of peaceable modern pecuniary culture (the era of capitalism)" (Sasaki 1967, p.136).[4] Wesley C. Mitchell, a contemporary of Commons and a representative institutional economist, also presented capitalism as the result of the development of the "money economy," from the tenth-century England to modern America. Although they differed from Veblen in that they do not start their analyses from the time of primitive societies, both Commons and Mitchell analyzed the development of capitalism.[5]

In the second part of *Legal Foundations of Capitalism*, Commons systematically delineated the historical evolution of capitalism. Commons begun from the establishment of feudalism under William the Conqueror (1027–1087) in the tenth-century England. He took special interest in how concepts of property rights and intangible property had developed within medieval feudalism.[6]

---

[3]K. Bücher explained his model in *Die Entstehung der Volkswirtschaft* (1922) as follows: "(1) The *stage of independent domestic economy* (production solely for one's own needs, absence of exchange), at which the goods are consumed where they are produced. (2) The *stage of town economy* (customer production, the stage of direct exchange), at which the goods pass directly from the producer to the consumer. (3) The *stage of national economy* (wholesale production, the stage of the circulation of goods), at which the goods must ordinarily pass through many hands before they reach the consumer" (Bücher 1922, s.91; translation from Wickett 1968, p.89).

[4]Kenji Sasano made a more detailed list of Veblen's development stages, which he described in terms of Veblen's "instinct of workmanship" and "predatory instinct" having allowed the creation of such a self-contained form (Sasano 1982, p.157).

[5]Mitchell 1996; Tsukamoto 2002. Mitchell tracked the historic change that occurred in the manor economy of medieval England and particularly the transition from a barter system to a money economy. Although the manor economy initially was not organized on the basis of money, it gradually came to be reorganized on the basis of the money economy (Mitchell *op.cit*., p. 333). The exchange of labor as property rent was changed to a system of money rent. Lords thus altered the manor economy so that it ran on a profit system. For the king, military service obligations were replaced by scutage and monetary tax. The Price Revolution in the sixteenth century changed the price system from one of fair prices to one of market prices. Money thus entered daily life, and ways of thinking changed accordingly, with behavioral and thought habits based on "economic rationality" being forced on society.

[6]According to Selig Perlman, "Commons applied this same pattern of fruitful interplay between the undogmatic intellectual and struggling movements to past history. He thus came to formulate a gripping theory of the rise of new social classes, and of their struggle for recognition. In his

Commons and Veblen both recognized that intangible capital formed the core of modern capitalism (Tsukamoto 2015). Both believed that conventional economists failed to gasp this and so could not represent the reality of modern capitalism.[7] Commons also believed intangible property to be the source of intangible capital; therefore, he investigated the historical evolution of the concept of intangible property, from medieval feudalism to modern capitalism. In tracking the evolution of this concept, from rent negotiations to price negotiations, he used a series of judgments by common law courts to chart the establishment of physical property rights to land and products. He also charted the legal recognition of intangible assets, which would be recognized as equity in the era of banker capitalism. According to Commons, based on the principle of reasonable value, common law courts made rules through the slow accumulation of judgments on specific cases and so created the basis of business practices surrounding conflict of interest over commerce. Commons explained that reasonable value changed in response to changing business practices.

Thus, in *Legal Foundations of Capitalism*, Commons described the evolution of capitalism.[8] Moreover, in *Institutional Economics*, he presented two three-stage models relevant to the development of capitalism, one dealing with industrial development, while the other dealt with economic development. In this paper, we

Legal Foundations of Capitalism he showed how in the struggle around the 'rent bargain' the barons had reduced the King of England from an over-all owner to a recipient of a tax fixed by collective bargaining between their representatives and his. In a similar way, the merchants of England began through their participation in the piepowder courts at the fairs to impose the customs of their group upon the presiding judge, who was only too glad thus to fill the void of his ignorance. Out of this unimpressive beginning, through a process of osmosis over several centuries between judges increasingly appreciative of the growing importance of the merchants to the Commonwealth of England and a continuous custom-making by that merchant class to suit changing conditions, came the law merchant, and finally the latter's incorporation in the common law. What produced this significant result was the unremitting pushing by the merchant class; the willingness of undogmatic intellectuals, the judges, to absorb pressures from below and thus prevent frustration; and ultimately a judicial sifting of these merchant customs, the rejection of some and the acceptance of those that looked acceptable from the standpoint of the moving pattern of the law. The intellectual mechanism employed was the expansion of the meaning of *property* from the mere 'physical' to embrace the 'incorporeal' and 'intangible'" (Perlman 1945, pp.3–4).

[7]In the words of Gruchy, "As was the case with Veblen, Commons came to doubt the validity of the analysis provided by the conventional economic theory of the time" (Gruchy 1967, p.135).

[8]Mitchell summarized this work as follows: "In his *Legal Foundations of Capitalism*, Professor John R. Commons has shown how the English judges gradually reshaped the old feudal conceptions of suzerainty to fit the nascent conception of private property in land; how side by side with the law of prerogative they built up the common law to regulate the relations among individuals; how they legitimized property in promises to pay, in good will, in going concerns. The great development of mercantile law by Chief Justice Mansfield came in the middle of the 18th century" (Mitchell 1927, p.71).

focus on these two sequential stage models[9] and how Commons applied them to describe the development of capitalism. In doing this, we reference the writings of Commons himself.

2 Three Stages of Industrial Development: Merchant Capitalism, Employer Capitalism, and Banker Capitalism

2.1 Industrial Stages and Economic Stages

In *Institutional Economics*, Commons presented two three-stage models of historical development, one dealing with industrial development and the other with economic development. The different stages of industrial and economic development are not separate and may overlap over time.

According to Commons, technological advance occurred simultaneously with a process of development through three industrial stages: merchant capitalism, employer capitalism, and banker capitalism (Commons 1934, p.766). Merchant capitalism resulted from market expansion, employer capitalism resulted from technological progress, and banker capitalism resulted from widespread credit systems. Commons is primarily concerned with the current industrial development stage of banker capitalism.[10]

Commons saw institutional changes as evidence of development through economic stages. He identified three such stages, sequentially the era of scarcity, the era of abundance, and the current era of stabilization.[11]

Commons investigated how capitalism evolved from the feudal system. He understood the history of capitalism as comprising three sequential stages: merchant capitalism, employer capitalism, and finally banker capitalism. Taking the example of shoemaking, which he considered a typical American industry, Commons illustrated "the evolution of these stages, as well as the associated changes in technology and ownership" (Takahashi 2015, pp.1–16; Commons 1934, p.766).[12] We take a detailed look at the ideas of Commons below.

[9]Commons describes these two stages in the sections "Marchant Capitalism, Employer Capitalism, Banker Capitalism — the Industrial Stage" and "Scarcity, Abundance, Stabilization — the Economic Stage" (Commons 1934, pp.763–788).

[10]Gruchy, A. G., "The Theory of Banker Capitalism," in Gruchy 1967, pp.189–199.

According Gruchy, "For him (Commons) the problem was one of converting 'bunker capitalism' into 'reasonable capitalism'" (*Ibid*., p.151).

[11]J. M. Keynes mentions the stage theory of Commons in Keynes 1972, pp.304–305.

[12]Commons prepared a detailed table to represent industrial stages (Commons *op.cit*., pp.764–765).

2.2 The Stage of Merchant Capitalism

The stage of merchant capitalism overlapped with the period of mercantilism. Using the example of shoemaking, Commons described this stage in the development of capitalism as a progression through a series of phases.

In the early agricultural period, the shoemaker was a skilled worker who would visit customers at home with his own tools. His customers were farmers and capital owners. These customers would provide the shoemaker wages in the form of meals, accommodation, and money.

When towns appeared, customers began to visit the shoemaker rather than vice versa. The shoemaker owned his own tools, and had his own workplace, as well as raw materials. When customers ordered shoes, they would negotiate the quality and price with the shoemaker before he began making the order. This was the "customer-order" phase of early merchant capitalism, when the shoemaker combined the functions of owner, merchant, and employer, as well as those of craftsman and artisan. This was also the phase of the "craft guild." Such guilds were composed of masters and apprentices, organized under charters that granted specific privileges and obligations, and were petitioned for by the members themselves.[13]

In the next phase, the shoemaker continued to retail products from his work place, and continued to fulfill functions as a master and worker, but also fulfilled a distinct merchant function. Merchants' associations developed to eliminate competition. The merchant function became increasingly important, and the master became a "merchant-master." When his shoes were not selling, he would accumulate inventory by using his apprentices to produce shoes at low wages. Unlike in the previous "customer-order" phase, when price was negotiated before any work was performed, now price was negotiated after the work was complete. This phase coincided with the emergence of a speculative market, and the master became increasingly focused on their merchant function, at the expense of their employer and worker functions.

The growing importance of the merchant-master function corresponded to the expansion of the free market with the development of water transportation. Shoe manufacturers began to cater to three markets: the customer-order market, the retail market, and the wholesale market. Different pricing of the same shoes in each market brought new problems. Although journeymen shoemakers did the same work to produce a pair of shoes regardless of which market it was sold on, the master-workman paid them the lowest compensation in the wholesale markets. This resulted in legal disputes.

Journeymen shoemakers in Philadelphia organized the United States' first trade union, existent from 1794 to 1806, in response to the payment of different wages for the same labor. The trade union demanded that wages be set at the high levels paid in the customer-order market. Employers responded by organizing their own

[13] Records from Boston reveal a charter for the Corporation of Shoemakers dated 1648, as well as a Corporation of Coopers (Commons *ibid*., p.767).

employer's association and insisted on setting wages at the lower levels paid in the retail and wholesale markets. The dispute was eventually settled in court, with the journeymen being convicted and sentenced for conspiracy (*ibid.*, p.768).

The next phase of merchant capitalism was the "wholesale-speculative" phase. This phase arrived after 1835 and saw the appearance of "merchant capitalists" or "commercial bankers." Unlike the master-workman, these merchant capitalists were no longer craftsmen. The merchant capitalist simply entrusted production technology to a master-workman who worked with his own employees in a small workshop and produced goods to fulfill small contracts. The merchant capitalist owned raw materials and a warehouse and offered raw materials to small contractors. This was the "sweatshop" phase of industrial development. The former master-workman became the boss of a sweatshop, and earned profit from the work of craftsmen, including himself.

Market expansion gave the merchant capitalist an advantage in bargaining, by allowing him to choose from among various manufacturing processes. He could import shoes from a foreign territory or make shoes in a distant place. Additionally, he could "make contracts with the governments for convict labor" (*ibid*., p.769). The former master-workman became a small contractor. Lacking capital, former master-workman was employed by a merchant capitalist as the boss of a sweatshop. Under these circumstances, commercial banks were born, and handled business capital rather than production technology. These commercial banks furnished short-term credit to their retailer and wholesaler partners, and as Commons explained, for "this reason we name his emergence the wholesale speculative stage of industry" (*ibid*., p.769).

During the merchant capitalism stage, there existed pressure from craftsmen to find substitutes for the merchant capitalist. This led to suggestions such as cooperative warehouses, joint purchase of raw materials, and joint shipments. Solidarity was not conspiracy, and the journeymen shoemakers of Massachusetts eventually won a judgment in 1842 that declared their activities legal. After this judgment, labor unions previously considered conspiracies became legal in the United States, a status they have maintained until the present.

Commons defines the stage of merchant capitalism from the perspective of market expansion. According to Commons, in the rural phase, the shoemaker went to farmhouses to serve customers. With the progress of urbanization, the shoemaker lived in town and customers instead came to his workshop. This was the phase of the customer order, and a phase of occupational craft guilds comprised masters and apprentices. The next phase was that of retailing from a workshop. In this phase, the function of the conventional master-workman evolved into that of the merchant-master and the speculative market developed. Furthermore, growth of water transportation expanded the market and led to its division into customer-order, retail, and wholesale markets. The emergence of these three markets in turn led to the dominance of the wholesale-speculative market. During this stage, merchant capitalists and commercial banks emerged. Former master-workers became small contractors, and masters who previously made shoes became sweatshop bosses.

In the next section, we will look at Commons's description of how merchant capitalism became employer capitalism.

2.3 The Stage of Employer Capitalism

The next stage in the development of capitalism saw the railroad and telegram magnify the size of the market. Simultaneously, machinery was introduced into industry. The shoemaking industry exemplified this trend. Before the 1860s, shoe production depended on craftsmen, but in 1857 the pegging machine appeared and was followed in 1862 by the McKay sole sewing machine. The market grew and the Civil War (1861–1865) caused prices to soar. Against this background, "the factory system came suddenly forth" (*ibid*., p.771). Small contractors became manufacturers who were dependent on middlemen, and craftsmen became employers rather than handworkers. The laborer lost his tools and changed from a servant to an employee. Associations of skilled craftsmen were replaced by industrial unions that did not ask about skillfulness. The Knights of Labor was formed as an organization of laborers. Manufacturers organized employers' associations "designed to keep down wages, and a manufacturers' association designed to keep up prices" (*ibid*., p.771).

Commons lived in an age when mechanization and powered machinery were extremely important. Commons witnessed the movement of many industries, such as men's clothing, from merchant capitalism to employer capitalism. This process occurred from the end of the nineteenth century through to the 1930s. Sweatshops became factories, and contractors became foremen. Manufacturers seeking to escape the chains of merchant capitalism pursued "vertical integration of industry" in an attempt to capture consumer markets and sources of raw materials. In the shoe industry, W. L. Douglas Shoe Company started to attempt this in the 1880s. "By setting up their own retail stores, and building up a customers' goodwill, they pass around the middleman's control of markets to the manufacturer's control" (*ibid*., p.771).

The next phase in the development of the shoe industry involved ownership. Ownership of the machinery used in shoe factories was separated from ownership of the factories themselves. The United Shoe Machinery Company leased shoemaking machinery to shoe manufacturers that produced in their homes and also performed maintenance of machinery and provided specialized machinery repair personnel. Additionally, they trained shoe factory workers to operate machines. This last was yet another innovation, it being common at the time for skilled craftsmen to refuse to teach their skills to unskilled workers. The lease system allowed manufacturers without large financial resources to access machinery and hence the courts ruled it legal.[14]

[14] "The Supreme Court in 1978, on petition of the government to dissolve the company, nevertheless, with three dissenting justices, approved this arrangement as not inconsistent with the anti-trust laws" (Commons *ibid.*, p.772).

From the above we can see that Commons used case studies skillfully[15] and convincingly charted the transition from merchant capitalism to employer capitalism. The stage of employer capitalism itself was not stable though, being characterized by fierce competition among companies. The phase of enterprise integration was imminent, and this became crucial in the next stage of the model of Commons.

2.4 The Stage of Banker Capitalism

According to Commons, company integration "started with the device of holding companies under charters enacted by competing states" (*ibid*., p.772). Because company integration was then viewed as having similarities to the establishment of a monopoly, the Supreme Court was called on to rule. Judgment of these disputes was based on common law legal precedents. The first two decades of the twentieth century saw the court affirm business practices associated with company integration in some cases and disaffirm such practices in other cases. Either way, Commons held that, "it was this integration and consolidation of plants that introduced the stage of the Banker Capitalism" (*ibid*., p.773). Commons detailed the rise of banker capitalism as follows:

> "During the Nineteenth Century of merchant and employer capitalism, the commercial banker, with his short-time credits, was the typical banker. During the Twentieth Century, the banking syndicate or investment banker, usually affiliated with commercial banks, arose... into a dominant position in the consolidation of industries, the sale of foreign and domestic securities to the public and the control of boards of directors... Millions of scattered investors now automatically enroll themselves under the leadership of bankers by transferring their savings to investments recommended by trusted bankers. When the bankers reach the limit of their ability, as in 1932, then the government itself organizes a huge reconstruction finance corporation to relieve the bankers of liability. Meanwhile central banks controlled by bankers raise to a new importance, and Banker Capitalism comes into control of industries and nations" (*ibid*., p.773).

Thus, Commons argued that banker capitalism system was a contemporary American phenomenon.[16]

[15] According to Gruchy, Commons "was in a position to apply what his former teacher, Richard T. Ely, had called the 'look-and-see' method of studying the behavior of the economic system. In Commons' hand the 'look-and-see' method became more than mere induction with an historical or descriptive bias, for he added to Ely's inductive approach a new technique of analysis, namely, the 'case' method" (Gruchy 1967, p.143).

[16] Gruchy, A., argues "Although the urgency of the situation after 1929 called for the application of specific measures for relief and reconstruction, Commons felt that such measures could not be really effective in the long run, unless they were the product of a scientific orientation which was significantly different form the orientation of the nineteen-century orthodox economists" (Gruchy *ibid*., p.151).

3 Three Stages of Economic Development: Eras of Scarcity, Abundance, and Stabilization

3.1 From Physical Control to Legal Control

Commons recognized modern American capitalism as the industrial stage of banker capitalism and also the economic stage of stabilization. To understand how Commons positioned the era of stabilization, we will use his own writings.

As described previously, Commons identified three industrial stages that resulted from changes in production technology. According to Commons, from a historical perspective, three stages of economic development can be distinguished, and these stages follow changes in institutions (*ibid*., p.766). The first stage is the era of scarcity, which coincides with the period before the Industrial Revolution. The next stage is the era of abundance, which lasted for more than a century as the Industrial Revolution progressed, and saw repeated excesses and shortages of supply. Finally, the third stage is the modern era of stabilization. This stage began in the twentieth century in the United States, as capitalists and workers enacted agreements to fix competitive conditions, with both sides adopting a principle of "live-and-let-live." Commons described the progression of these three economic stages in terms of the establishment and evolution of the principle of the "open market." He investigated the questions of how the open market was born in the era of scarcity, the origins of the principle of competition that resulted in the era of abundance, and how competition eventually led to the era of stabilization. Commons regarded these as an evolutionary processes of institutions that occurred through the accumulation of the judgments of common law courts.

The basic principle used to divide the three stages of capitalism involves the distinction between "physical control" and "legal control." As Commons described, "Physical control is technology. Legal control is the rights, duties, liberty, and exposure assigned to individuals by the community under existing circumstances of efficiency, scarcity, custom, and the physical force of sovereignty" (*ibid*., pp.773–774).

In an era of scarcity, especially in time of war, society allocates production and labor as a production factor. The role of physical force grows, and individual liberty is minimized. In the era of abundance, individual liberty is maximized, and the control of the governance mechanism is minimized. In the era of stabilization, new restrictions are imposed on individual liberty. In the United States, various associations such as corporations, trade unions, and other collective movements of manufacturers, labors, merchants, farmers, and bankers take concerted action.

In the era of scarcity, physical and legal control of goods remained connected. According to both custom and common law, there existed an understanding that physical transfer and legal transfer were the same. However, in the eras of abundance and stabilization, physical transfer and legal transfer became separated by the actions of businessmen and financiers.

3.2 *Era of Scarcity: Principles of the Open Market*

Commons started by describing how the modern custom of bargaining emerged after the feudal period in the age of mercantilism during the seventeenth and eighteenth centuries, a stage of industrial development he called merchant capitalism.[17] At this time, production remained small-scale, technological progress was limited, and middlemen were also retailers. During this stage economic actors thus regarded the transfer of goods to the market as transfer of ownership. At that time, market organization was generally achieved under charters that allowed special monopolies, known as "liberties." These charters were awarded to powerful individuals or ecclesiastical magnates and authorized the holding of fairs or other concourses of buyers and sellers, with the associated privilege of taking a profit (*ibid.*, p.775). Fairs gradually came to be governed by regulations decided by common law courts, which in turn followed market rules and regulations based on the principle of a "market overt" (open market). Under these principles, all buyers were equal and selling was free, just like a modern open market. The principles of the open market, which have been extended to all markets, can be summarized as publicity, equality, and liberty. However, these three principles are not inherent in nature, but rather developed over time on the basis of custom. But physiocratic and classical economists captured these principles as providence or the natural order of God.

The privilege to set up an open market came with the right to define standard weights and measures, appoint a weighmaster, and convene special courts. These courts were called "fair courts" or "pie poudre courts." They made quick decisions on disputes and were allowed to observe the fulfillment of contracts. The provision of such legal regulation was the duty of a lord authorized to hold a market in which the physical transfer of property occurred. The regulator was required to make laws and regulations governing the transfer of ownership and to control the behavior of buyers and sellers according to the law.[18]

In this way rules were made, and the negotiability of commodities was established. Rule of law was required for the functioning of an open market that was free, equal, and public. This "negotiability" began to extend from physical goods to intangible property. Commons charted the process by which control was extended from physical control to the legal control.

In the early era of scarcity, the buying and selling goods in excess of an amount that a trader could retail alone was considered to result in higher price and monopoly. Based on considerations of equality and freedom, common law thus effectively treated wholesale trade as illegal. The legitimacy of the wholesale market was recognized in England starting in 1772, and the wholesale market was fully opened in 1844. In the era of abundance, goods were bought and sold in large quantities and could be transported rapidly even between remote locations. Considering the

[17] See, Commons, 1924, especially the second half. Tsukamoto 2016b (in Japanese).

[18] Sir Edward Coke's *Institutes of the Laws of England*, published in four volumes during 1628–1644, outlines these common laws of England.

legitimization of wholesale trade as an expansion of customary law, Commons analyzed what had made it possible.

The advent of the wholesale market after 1772 contributed to the separation of the concept of legal control from physical transfer of goods. Sellers who possessed legal control over goods could negotiate with buyers based on product samples and specifications. This enabled the legal transfer of sovereignty to take effect at any physical location or future time agreed by the seller and buyer (*ibid*., p.777).

Legal transfer is a right to govern the disposal rights of property that is distinct from the physical ability to effect delivery. Legal transfer involves a compelling guarantee that physical delivery will occur at a particular time and place.[19]

Common law was established during the age of scarcity, in the middle of the eighteenth century. Accordingly, common law traditionally prohibited all kinds of intentions to limit transactions that seemed likely to damage public welfare by leading to monopolies and high prices. Common law aimed to eliminate bad business practices and encourage desirable ones. The basic principle of common law was that markets should be free, equal, and public. Commons wrote of the evolution of common law in the eighteenth century, "when governments were able to establish security and when inventions had ushered in the period of abundance, yet these four attributes of a free, equal, and open market have been more or less retained, namely, uniform standards of measurement, alienability, accessibility and publicity. It is these that make up what we call intangible property" (*ibid*., p.778).

Thus, Commons insisted that in the era of scarcity, especially through the middle of the eighteenth century, the establishment of common law marked the start of a system of government by legal control.

3.3 Era of Abundance: How to Restrain Competition

According to Commons, the era of abundance resulted from competition. However, he believed that excessive competition was inconsistent with the four characteristics of the open market described in the previous section and could have negative consequences. Excessive competition was destructive, so businessmen began seeking ways to limit such competition. According to Commons:

In the early seventeenth century such a competitive state had become a lawsuit, and that led to the court "to begin to support and sustain the great list of 'reasonable' restraints of trade coming afterwards under the general name of good-will, trade names, trade marks, and recently known as 'law of unfair competition'" (*ibid*., p.779).

[19]Commons insists the classical economists did not make such a distinction in their economic theories. Their labor theories of value were "open markets" (Commons 1934, p.778).

However, from the nineteenth century through the twentieth century, excess supply of goods occurred periodically, and periods of recession brought discount competition. Weak traders and manufacturers were eliminated, corporate mergers and acquisitions occurred, and strong businesses grew. These developments served to limit discounting and price competition. The spirit of the common law came to be about limiting destructive price competition, as demonstrated in the antitrust laws of the late nineteenth century. However, antitrust law was found ineffective in relation to transportation, manufacturing, trade unions, and banking. In these fields, the orientation of the law was toward encouraging stabilization rather than competition. Commons insists this is the orientation that modern American society seeks.

3.4 Era of Stabilization: How to Achieve Discrimination

Commons explains how to restrain competition, and how to achieve "stabilization," also known as "discrimination." Discrimination is contrary to the principle of the open market. However, courts in modern societies recognize discrimination as an intangible asset called goodwill, under a live-and-let-live policy that creates the practice of stabilization.

According to Commons, the principle of stabilization was promoted as a remedy in the four sectors of transportation, manufacturing, trade unions, and banking. The implementation of stabilization was also called discrimination.

During the era of scarcity, the concept of legal control began to develop and become important to the smooth operation of the open market. Buyers and sellers gathered under the protection that this concept offered when applied to market governance. This was the beginning of the open market. However, some sellers did not bring their own products to the market. Such sellers relied on customers visiting their establishments to buy, and these sellers offered service regardless of the customer's identity.[20]

According to Commons, in the early era of scarcity, the primitive common law required merchants to perform three duties as a matter of course: "(1) to serve all comers, (2) at a reasonable price, and (3) under a liability for damages if he did not have or did not exercise skill" (*ibid*., p.781). There was a list of occupations to which these duties applied. All of the listed occupations were what Commons called "common occupations" (*ibid*., p.781), and practitioners were permitted to

[20]Such arrangements can be seen today in transactions involving a seller who is a manufacturer and ships' cargo on an FOB basis, meaning the seller bears the transportation risks and costs. In the time of Commons, there was a business practice in the steel trade called "Pittsburgh Plus," according to which freight costs were calculated as if shipping was from Pittsburgh regardless of the seller's actual location.

operate only with written permission in the form of a business license, effectively creating a sort of monopoly. Occupations were listed based on there being a scarcity of practitioners and the occupations being of public benefit. Professions thus were chosen for special control based on consideration of both scarcity and existing customs.

Labor was abundant in the era of scarcity, resulting in an excess supply. This led to competition among suppliers of labor, and this continued in the era of abundance. More recently, the era of stabilization saw the organization of various industry groups, including trade unions, associations, corporations, and syndicates, and these groups began to take coordinated approaches. These organizations restrained "individual liberty in the interest of liberty for other members of the group" (*ibid*., p.782). The principle of stabilization became the principle of ensuring rational transactions in an era of abundance.

In public service provision, monopolies became common for both economic and legal reasons and were based on special commission by the authorities. Economic monopolies are usually treated as private property, and exclusive public service businesses are regional monopolies. These arrangements limit new market entrants.

In the era of scarcity, monopolies were legally recognized in commercial businesses, such as manufacturing. However, in the era of abundance, these industries came to have excess production equipment and hence production, which resulted in excess supply. The law clearly recognized these occupations as private business. Therefore, liability and equality were the principles of the open market in the era of scarcity. If these industries were subject to competition, the law upheld that competition.

In the era of stabilization, discrimination came to be considered ethical and legal, and thus the concept of discrimination was created. Modern business people think it is important to equalize conditions of competition. This can be achieved only in the era of stabilization. In the era of scarcity, discrimination was the extortion of exorbitant prices, a behavior that common law sought to control. Common law had not considered discriminatory price discounts to be a problem. However in 1897, the case of Parsons versus Chicago North Western Railway resulted in a trial over discrimination, namely, a fare discount for a particular customer. The Nebraska Supreme Court did not consider the discrimination unfair. However, in 1901, the Federal Supreme Court extended the common law by expanding the concept of illegal discriminatory treatment to include "different treatments" as well as the traditional "extortion of unreasonable price." Commons commented on the case as follows:

> "Thus, the Supreme Court lagged about fifteen years behind the popular and legislative change in the meaning of discrimination, and this may be figured on generally as its customary lag . . . It applies also to all industries that may properly be designated 'common occupations'" (*ibid*., p.787).

Under this new conception of discrimination, the court did not base its decision solely on whether the accused had created a monopoly, but on whether they had let a customer suffer a disadvantage. Commons explained as follows:

> "Thus the incoming of the distinction between discrimination and extortion arises with the incoming of the period of stabilization. Discrimination is not an evil during a period of abundance because every person has an available alternative. It has become the serious problem in a period of stabilization through concerted movements, live-and-let-live policies, and narrow profit, since stabilization means the absence of alternatives, and this, in turn, would mean stability of discrimination and extortions as much as stability of fair and reasonable values and price" (*ibid*., pp.787–788).

However, the development of the common law lags economic conditions, so it takes time for the courts to catch up and make ethical judgments. According to Commons, this time lag "takes into account the most important fact of the period of stabilization, the principles of futurity and narrow margins of profit decrease" (*ibid*., p.788). Modern business depends on large amounts of borrowed capital. Therefore, survival requires that a business maintain its ability to pay liabilities in the future. A modern business thus must be a "going concern," and its ability to build and maintain goodwill is an intangible asset. In this situation, the policy of "live-and-let-live" is the most important guarantee of the future of the going concern. This reality resulted in the custom of stabilization, and disputes are adjudicated in accordance with this practice. High-quality opportunities for business are limited because profit margins are thin. The goodwill founded on the principle of scarcity is built through the common law courts. Under these conditions, businesses try to keep existing customers and market share. As Commons put it, "this has become a part of modern 'business ethics'" (*ibid*., p.788). According to this ethic, lowering prices would not be in the interests of the customer.

Commons summarized his investigation with reference to Marx as follows:

> "It will be noted that this historical analysis of Scarcity, Abundance, Stabilization, bears some analogy to Karl Marx's dialectics .... But his was a materialistic interpretation based on technology, ...whereas ours is also an economic evolution from primitive scarcity which explains communism and mercantilism, to abundance which explains individualism, to the many modern schemes of regulation .... Marx's communism was foreordained, but modern stabilization may be communism, fascism, banker capitalism, or any of the concerted movements that endeavor to bring order out of conflict and instability" (*ibid*., p.788).[21]

The above summarizes the main features of Commons's views of industrial development and economic development. In the next section we reexamine the meaning of these two models and the interrelationships between them.

[21] Commons considers which system is best for America in the final chapter, "Chapter XI: Communism, Fascism, Capitalism" (Commons 1934, pp.876–903).

4 Commons's Evolutionary Stage Theory of Capitalism

Commons identified two sequences of stages in the development of capitalism, namely, industrial stages and economic stages. He noted that the two sequences can be separated, but their timings progressed in tandem.

With regard to the industrial stages, Commons focused on changes in technology and ownership (*ibid*., p.766). His merchant capitalism overlapped with the era of mercantilism and resulted from the expansion of the market. Employer capitalism resulted from technological progress. Moreover, current banker capitalism arose from the credit system on which capitalism depends.

However, with regard to the economic stages, Commons focused on changes in institutions (*ibid*., p.766). Commons began his development model from the era of scarcity, prior to the Industrial Revolution, and argued that in this era the special privileges held by influential figures were considered fair because liberty was based on charter. Sellers and buyers gathered under the protection of a market organizer, and legal control progressed from this. Publicity, equality, and liberty became the principles that defined the open market. Negotiability or alienability of goods was established in this process, as was common law. With regard to property rights, the rights associated with physical property were extended to intangible property, with the result that the concept of legal control developed alongside that of physical control.

The next stage was the era of abundance, realized by the Industrial Revolution. The main feature of this stage was competition. Along with the progress of the Industrial Revolution, excesses or shortages of supply have been repeated for more than 100 years. In times of recession, business people tried to adopt various strategies to avoid excessive competition, but such actions were contrary to the spirit of common law, which held competition to be a positive. Thus, antitrust laws appeared.[22] However, antitrust laws are ineffective in certain areas, most notably transportation, manufacturing, trade unions, and banking. Commons argues that in these fields, stabilization, rather than competition, has been the focus of policy efforts.

According to Commons, early common law treated certain occupations as exempt from competition, but required that such merchants "assumed a threefold duty; (1) to serve all comers, (2) at a reasonable price, and (3) under a liability for damages" (*ibid*., p.781). These occupations were classified as "common carriers" and operated under charters that functioned as business licenses. They were monopolies of liberties and were based on the principles of scarcity and public purpose. Competition did not spread into such occupations until the time of abundance.

In the era of abundance, common law found competition to be legal as long as the market was subject to liberty, equality, and openness, which were market principles in the era of scarcity. However, some industries tried to avoid competition and were

[22]These antitrust laws are Sherman Antitrust Act (1890), Clayton Antitrust Act (1914), and Federal Trade Commission Act (1914).

oriented to stabilization by organizing associations. This marked the beginning of the era of discrimination and stabilization, during which the idea of ethical and legal discrimination developed. The principle of stabilization became one of ensuring rational transaction. A typical example would be a public service that forms a regional monopoly.

Commons indicates that the idea of discrimination has changed over time. In the era of scarcity, discrimination meant the extortion of unreasonably high prices. Price discounting was not a problem. But in the era of abundance, discrimination came to mean discounts given to particular customers, as in the railway fare case mentioned previously. At that time, alternative means of protection against unreasonable prices were available to all, so price extortion ceased to be an issue. The distinction between "discriminatory treatment" and the "extortion of unreasonable price" thus emerged in the period of stabilization. In the words of Commons, "it has become the serious problem in a period of stabilization through concerted movements, live-and-let-live policy, and narrow margins of profit" *(ibid*., pp.787–788). Thus, in the period of stabilization, fair and reasonable prices are fixed. This means the problems of price extortion and discriminatory treatment become a problem of price fixing in modern America. It takes time for common law courts to catch up with modern business practices because modern business ethics lag modern business practices. American capitalism has reached an era of stabilization, and Commons sought to resolve the associated problems.

According to Commons, "it takes into account the most significant fact of the period of stabilization, the principles of futurity and narrow margins of profit" (*ibid*., p.788). Modern business depends on large volumes of borrowed capital. For this reason, modern businesses must maintain the ability to pay their debts in future, and therefore must become going concerns, and build up goodwill, which is an intangible asset. The live-and-let-live policy ensures the business as a going concern and is the most important policy. In the case of disputes that cause conflicts of interest, the common law court will adjudicate in accordance with these business practices of stabilization. This is an evolutionary process based on reasonable value. Commons advocated the "common law method," namely, the accumulation of precedents based on reasonable value. That would be a way to fill the lag before court rulings catch up with modern business practices. This common law method was Commons's answer to the problems of the era of stabilization, and he investigated the legal foundations of capitalism and the evolution of reasonable value.

Commons's stage theories clarified his criticism of orthodox economics. Unlike Veblen, Commons did not reject orthodox economic theories, and he deemed past economic theories to reflect historical stages of development. Thus, based on his two sequences of stage theories, Commons reached a recognition that modern capitalism was the era of collective action and so argued the following:

> "The problem now is not to create a different kind of economics—'institutional' economics—divorced from preceding schools, but how to give collective action, in all its varieties, its due place throughout economic theory" (*ibid*., p.5).

Given his stage theories, this assertion by Commons is no surprise. Japanese study of Commons in particular may have lacked this perspective on the relevance of the stage theory and economics criticism of Commons.[23]

To reappraise Commons's stage theories, it is apparent that his institutional economics is based on analysis of the historical evolution of capitalism and investigates American capitalism in this context. Commons recognizes that past institutions are embedded within current institutions and therefore can easily reemerge when present institutions experience a problem. Because past institutions and common law adapted to deal with past situations, they cannot respond adequately to current disputes. Inevitably there exists a lag before institutions and the law manages an adequate response. The recognition of this lag is a hallmark of Commons, Veblen, Mitchell, and others.[24]

Thus, the institutional economics of Commons, rather than remaining focused on the economics of institutions, has instead become about evolutionary economics. Specifically, it traces the evolution of the common law through the gradual accumulation of court judgments.

When we treat Commons's economics as evolutionary economics dealing with institutions, it becomes reasonable that economists of the regulation and conventional school, also known as the French institutional economic school, have tried to reappraise Commons and reconstruct new institutional economics.[25]

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS), the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

References

Bücher, K. 1922. *Die Entstehung der Volkswirtschaft*, Tübingen, H. 1922. Laupp'sche Buchhandlung; Trans. S.M. Wickett. 1968. *Industrial Evolution*. New York: Augustus M. Kelley.

Commons, J.R. 1924. *Legal Foundations of Capitalism*. New York: The Macmillan Company.

———. 1934. *Institutional Economics: Its Place in Political Economy*. New York: The Macmillan Company.

Gruchy, A.G. 1967. *Modern Economic Thought: The American Contribution*. New York: Augustus M. Kelley.

Keynes, J.M. 1972. *Essays in Persuasion*. In *The Collected Writing of John Maynard Keynes*, vol. 9. London: Macmillan.

Mitchell, W.C. 1927. *Business Cycles: The Problem and Its Setting*. New York: National Bureau of Economic Research, Inc.

[23] In Japan, studies of Commons often focus on his labor economic theory, but disregard of his historical analysis.

[24] According to Rutherford, "it was Mitchell who first characterized Commons' s *Legal Foundations* as a contribution to institutional economics" (Rutherford 2011, p.32).

[25] Nakahara, Takayuki, argued that "we name our own new institutional economics 'Commonsian based Regulationist and Conventionalist Institutional Economics: CRACIE'" (Nakahara 2013, pp.59–84; in Japanese).

———. 1969. Chapter XXI: John R. Commons and the Economics of Group Action. In *Types of Economic Theory: From Mercantilism to Institutionalism*, ed. Joseph Dorfman, vol. 2. New York: Augustus M. Kelley.

———. 1996. Money Economy and Modern Civilization (paper read before the Cross-Roads Club of Stanford, May 6, 1910) In Malcolm Rutherford (ed.). *History of Political Economy* 28(3): 329–357.

Nakahara, T. 2013. The Regulation Theory and Convention Theory: Unorthodox Economic Schools Encountered through J. R. Commons's *Institutional Economics*. *The Osaka City University Journal of Economics* 113(4): 59–84 (in Japanese).

Perlman, S. 1945. John Rogers Commons: 1862–1945. In John R. Commons. 1950. *The Economics of Collective Action*. New York: The Macmillan Company: 1–7.

Rutherford, M. 2011. *The Institutionalist Movement in American Economics, 1918–1947*. New York: Cambridge University Press.

Sasaki, A. 1967. *Methodology of Economics: Marx and Veblen (Keizaigaku no Houhouron)*. Tokyo: Toyo-Keizai-Shinpousha (in Japanese).

Sasano, K. 1982. *Introduction to the American Institutional School: Veblen, Mitchell and Commons*. Fukuoka: Sogensha (in Japanese).

Takahashi, S. 2015. J. R. Commons on the Administrative Approach: Methods of Adjustment in Response to Conflicts of Interest in Capitalist Society. Japanese Society of Evolutionary Economics. 19th annual meeting, May 22, 2015. http://www.jafee.org/conference/conference_files/ShingoTakahashi.pdf, 1–16 (in Japanese).

Tsukamoto, T. 2002. W. C. Mitchell's Money Economy: On his School of Evolutionary Economics. *The Nihon University Economic Review (Keizai Shushi)* 71(4): 217–235 (in Japanese).

———. 2015. How Did Commons Understand Veblen's Concepts of Intangible Property and Good-will. *The Nihon University Economic Review (Keizai Shushi)* 85(2& 3): 35–49.

———. 2016a. How Mitchell Understood Commons' Economic Theory: On Commons' Economics of Group Action. *The Nihon University Economic Review (Keizai Shushi)* 85(4): 11–29 (in Japanese).

———. 2016b. Why Mitchell Characterized Commons as an Institutionalist: On Commons' Legal Foundations of Capitalism. *The Nihon University Economic Review (Keizai Shushi)* 86(1): 1–17 (in Japanese).

Veblen, T.B. 1899 (original publication). *The Theory of the Leisure Class: An Economic Study of Institutions.* New York: Augustus M. Kelley (1975).

The Theoretical Connection Between John R. Commons and Regulation and Convention Theories

Hiroyuki Uni and Takayuki Nakahara

Abstract After discussing the uniqueness of Dewey's philosophy in relation to (1) the world's plurality and multiplicity, (2) the primary significance of multifarious interactions, and (3) the interrelation between habit and intelligence, we clarify the uniqueness of Commons's institutional economics: (1) value theory based on multiple causation; (2) transactions as the ultimate unit of analysis; and (3) the interrelation between habitual assumption and collective action. We examine the theoretical connection between Commons and regulation and convention theories. The former partly shares and develops the first characteristic listed above, multiple causation, while the latter shares and develops the third characteristic, the interrelation between habitual assumption and collective action. In *Institutional Economics* (Commons, J.R., Institutional economics: Its place in political economy. Macmillan, New York, 1934), applying the idea of "multiple causation," Commons approached macrodynamics based on the expansion of some key concepts and studies on income distribution and demand growth. This was a prototype of growth analysis based on the cumulative causation model with various forms of coordination, later formulated as regulation theory. Commons, following and developing Dewey's theory of habit and intelligence, created the concept of "habitual and customary assumptions" and discussed a collective process for achieving "reasonable values," such as the common-law method. Two-layered coordination in convention theory attempted to explain the psychological means and social mechanisms involved in the persistence of customs and institutions, which Commons briefly mentioned. Using Commons's theory as a medium, it may be possible to articulate the macrodynamics developed by regulation theory and the micro theory of human interaction developed by convention theory.

Keywords John R. Commons • John Dewey • Collective action • Cumulative causation • Regulation theory • Convention theory

H. Uni (✉)
Graduate School of Economics, Kyoto University, Kyoto, Japan
e-mail: uni@econ.kyoto-u.ac.jp

T. Nakahara
Hannan University, Matsubara, Japan
e-mail: nakahara@hannan-u.ac.jp

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8_7

1 Introduction

The purpose of this chapter is to clarify the uniqueness of Commons's institutional economics and to find a theoretical connection between Commons, regulation theory, and convention theory.

However, it is difficult to understand Commons's institutional economics. This is partly because of the sheer size of the book, which spans almost 900 pages, but the main reason is that his basic concepts, methods, and subject matter differ greatly from those of familiar classical economics and neoclassical economics. In the first half of *Institutional Economics*, he explained in detail the differences and similarities between his view and the views of other major economists, from John Locke to Carl Menger, taking into account historical institutional changes in capitalism. However, in his explanation, he moved from branch to branch of economic thought, sometimes returning to his own economics. This form of explanation makes it difficult to obtain a systematic understanding of his economic thoughts. In this chapter, we clarify the theoretical uniqueness found in the institutional economics of Commons.

Then, we refer to the uniqueness of Dewey's philosophy. As will be described in Sect. 2, Commons was clearly influenced by pragmatism, especially, with respect to the various social philosophies assumed by humans, Dewey's pragmatism. Dewey's pragmatism can be briefly characterized as follows: (1) the world's plurality and multiplicity, (2) the primary significance of multifarious interactions, and (3) the interrelation of habit and intelligence, which will be explained later. This chapter considers Commons's institutional economics as being based on Dewey's pragmatism, and commences by deciphering it in terms of the above three characteristics. We derive the following three unique characteristics of Commons's institutional economics: (1) value theory based on multiple causation, (2) transactions as the ultimate unit of analysis, and (3) the interrelation of habitual assumption and collective action.

Next, we examine the theoretical relationship between Commons's institutional economics as it is characterized above and the representative theories of contemporary institutional economics. It is well known that the new institutional economics introduced by Coase and named by Williamson partly inherited the second characteristic listed above: "transactions as the ultimate unit of analysis." Moreover, there are fertile studies on the relationship between them, such as Rutherford (1994). In this chapter, we will examine the theoretical connection between Commons and regulation theory and convention theory. The former partly features and develops the first characteristic listed above, "multiple causation," while the latter extends the third characteristic, "interrelation of habitual assumption and collective action." There has been no full-scale study on the connection between Commons, regulation theory, and convention theory, only brief remarks in Basle (2002) and Bessy and Favereau (2003). Basle, a regulationist, referred to the theory of Commons, as well as that of Veblen and Mitchell, in discussing what influence the American institutional school had on the regulation school. Moreover, Basle

noted that Commons was a pioneer in identifying various economic relationships in terms of credit and debt through money. According to Basle, Commons's concept of transaction goes beyond atomistic and methodological individualism, and is based on the collective, which is necessary from both holistic and institutionalist viewpoints. Further, it paved the way for the French institutional school and the convention school to study rules, norms, and wage–labor relations (Basle 2002, p.36).

Conventionists Bessy and Favereau said that Commons was defending an exceptionally innovative conception of rules with regard to their internal relationship in actions, rejecting the dualism that separated thought from action, and habits of thought from those of acting (Bessy and Favereau 2003, p.126). They went on to point out that herein lies the basis of the contemporary implications of Commons's ideas.

For these reasons, we will compare Commons's theory, regulation theory, and convention theory, in terms of the concepts "multiple causation" and "interrelation of habitual assumption and collective action."

2 Dewey's Pragmatism

First, we examine the uniqueness of Dewey's philosophy because the theoretical basis of Commons's institutional economics was clearly influenced by pragmatism, especially with respect to Dewey's pragmatism. References to pragmatism in *Institutional Economics* (Commons 1934) are as follows:

> We are compelled, therefore, to distinguish and use two meanings of pragmatism: Peirce's meaning of purely a method of scientific investigation, derived by him from the physical sciences but applicable also to our economic transactions and concerns; and the meaning of the various social philosophies assumed by the parties themselves who participate in these transactions. We therefore, under the latter meaning, follow most closely the social pragmatism of Dewey; while in our method of investigation we follow the pragmatism of Peirce (*ibid*., pp.150–151).

> Not until we reach John Dewey do we find Peirce expanded to ethics, and not until we reach institutional economics do we find it expanded to transactions, going concerns, and Reasonable Value (*ibid*., p.155).

From the above quotations, it can be seen that Commons followed Peirce's pragmatism with respect to a scientific method of investigation and Dewey's pragmatism with respect to "the various social philosophies assumed by the parties themselves who participate in these transactions." Although the contents of the former were described in considerable detail in Chapter 4, entitled "Hume and Peirce," Dewey's pragmatism was not explained beyond the above quotations. As will be discussed below, the uniqueness of the institutional economics of Commons broadly overlaps with the uniqueness of Dewey's philosophy. Therefore, knowledge of Dewey's pragmatism contributes significantly to understanding Commons.

Boisvert (1998) characterized Dewey's philosophy by his rejection of three traditional strands of Western thought. The first strand rejected by Dewey is "the Plotinian temptation." Plotinus explained all of existence as an emanation from "the One," his highest principle, and his ideal of life was an escape from the multiple and material world of the here and now (Boisvert 1998, p.6). For Dewey, the world is plural and irreducible to any of the single guiding principles selected as ultimate. For him, pluralism goes all the way down. The second strand rejected by Dewey is "the Galilean purification." Although he never wavered in his support of its use in science, he rejected as a method of philosophy the methodological procedure made prominent by Galileo. In this procedure, a law is considered under ideal conditions instead of under ordinary realistic conditions. Thus, he did not adopt the fictional "original state of nature" of Locke and Rousseau or the "original situation" of Rawls. For him, philosophical analysis always begins in *medias res*, and the context of ordinary experience is also the locus to which we must return (*ibid*., p.9). The third strand rejected by Dewey is "the asomatic attitude." As typically shown in the writings of Descartes, who codified the separation of mind from body, "rational" and "rationality" were defined in terms of a mind opposed to the body. Dewey rejected such modern bicompartmentalization of human beings and epistemology based on this dualism (*ibid*., pp. 9–10).

For Dewey, humans are participants in multifarious sorts of interactions within the world that encompasses them.[1] Ordinary experience reveals entities in multifarious forms of interrelationships. Therefore, a starting point for analysis is these interactions and experiences (*ibid*., pp.20–22). "Experience is a matter of functions and habits, of active adjustments and readjustments, of coordinations and activities, rather than of states of consciousness" (Dewey 1910, p.5).

It is habits, customs, and institutions that occupy an important place in human behavior when understood in this way. Habits, customs, and institutions are formed through the interactions between humans and the natural and social environment, through collaboration or mutual adaptation. According to Dewey (1927), customs and institutions are habits of the group, and most human habits are formed under the influence of the customs and institutions of the group. As habits, customs, and institutions are subject to inertia, it is difficult, but not impossible, to change them. Dewey (1922) mentioned education and the pluralistic structures of society as possible channels for reform and reorganization of customs and institutions. Education for the young who are not yet subject to the full impact of established customs might become a trigger for reorganizing customs and institutions. Another possibility exists in the complexity of cultures, as "the more complex a culture is, the more certain it is to include habits formed on differing, even conflicting patterns"

[1] Starting from these interactions, Dewey (1927) derived the term "public" and discussed democracy. It is interesting that he called an action with external effects a "transaction." Moreover, focusing on the spread of the consequences of an action, he distinguished two kinds of consequences: "those which affect the persons directly engaged in a transaction, and those which affect others beyond those immediately concerned." He found in this distinction "the germ of the distinction between the private and the public" (Dewey 1927, pp.12–13).

(Dewey 1922, p.128). That is, "the conflict of patterns involved in institutions which are inharmonious with one another" may produce great changes.

Intelligence plays a great role in the reform and restructuring of customs and institutions. Dewey (1922) mentioned that "only a hitch in its workings occasions emotion and provokes thought" and "a novel factor in the surroundings releases some impulse which tends to initiate a different and incompatible activity, to bring about a redistribution of the elements of organized activity between those that have been respectively central and subsidiary." Finally, "as organized habits are definitely deployed and focused, the confused situation takes on form, it is 'cleaned up'–the essential function of intelligence" *(ibid*., pp.172–180).

Thus, intelligence contributes to restructuring of customs and institutions, while "[h]abits are conditions of intellectual efficiency. [. . .] they restrict its reach, they fix its boundaries. [. . .] Outside the scope of habits, thought works gropingly, fumbling in confused uncertainty; and yet habit made complete in routine shuts in thought so effectually that it is no longer needed or possible" (*ibid*., p.172). As will be shown in Sect. 4.2, Commons's concept of "habitual assumption" was derived from Dewey's idea.

Dewey's position is one of "act consequentialism," according to which the importance of activities "lies in their objective consequences–their bearing upon future experiences" (Dewey 1917, p.15). From this position, the consequences of actions depend on whether or not one can reorganize customs and institutions. "The only power the organism possesses to control its own future depends upon the way its present responses modify changes which are taking place in its medium" (*ibid*., p.15). Thus, key is the capability to forecast the future, a capability organisms have to a greater or lesser extent. "For use of the given or finished to anticipate the consequence of processes going on is precisely what is meant by 'idea,' by 'intelligence.'" Therefore, "it can deliberately, intentionally, participate in the direction of the course of affairs" (*ibid*., pp.15–16).

Corresponding to the three unique characteristics of Dewey's philosophy mentioned above, the unique characteristics of Commons's institutional economics, regulation theory, and convention theory are shown in Table 1. First, "the value theory based on multiple causation" in Commons and "the growth regime based on cumulative causation" in regulation theory correspond to the pluralism and multiplicity of the world of Dewey. Second, Commons's transactions as units of analysis, the institutional forms as starting points of analysis in regulation theory, and the convention as the starting point of analysis in convention theory correspond to Dewey's start from multifarious sorts of interactions. Third, "the interrelation of habitual assumption and collective action" in Commons and "the two-layered coordination by regulative rules and constitutive rules" in convention theory correspond to the interrelation of habit and intelligence in Dewey.

As it is well known that Commons's concept of transaction has had a great influence on various schools of institutional economics, we focus on the first and third unique characteristics described above: "cumulative causation" and "interrelation of habitual assumption and collective action." The former is the core mechanism in his macrodynamics, which explains the macro process resulting in

Table 1 Comparison of Dewey, Commons, regulation theory, and convention theory

Dewey's philosophy	Commons's institutional economics	Regulation theory	Convention theory
Pluralism and multiplicity of the world: rejection of the Plotinian temptation	Value theory based on multiple causation	Growth regime based on cumulative causation	
Start from multifarious sorts of interactions: rejection of the Galilean purification	Transactions as ultimate unit of analysis	Institutional forms as starting point of analysis	Convention as starting point of analysis
Interrelation of habit and intelligence: rejection of the asomatic attitude	Interrelation of habitual assumption and collective action		Two-layered coordination by regulative rules and constitutive rules

reasonable value and stability, while the latter is the core mechanism in his micro theory of interaction, which explains how reasonable value is realized through the interactions of individuals. In Sect. 3, we examine Commons's value theory based on multiple causation and "the growth regime based on cumulative causation" in regulation theory. In Sect. 4, we examine "the interrelation of habitual assumption and collective action" in Commons and "the two-layered coordination by regulative rules and constitutive rules" in convention theory. In Sect. 5, we summarize our conclusions.

3 Macrodynamics and Various Forms of Coordination

3.1 Commons: Value Theory Based on Multiple Causation

In *Institutional Economics*, and the preceding manuscript written in 1927 titled *Reasonable Value: A Theory of Volitional Economics* (Commons 1927, referred to as "the 1927 manuscript" hereafter), Commons examined the theories of major economic theorists from John Locke to Carl Menger. According to Commons, a fallacy existed in the theories of value of classical economists and marginalists in relation to "the idea of building a whole system of economics, and even a whole social philosophy, upon a single principle, such as labor or wants." To overcome this fallacy, Commons proposed "a complex of many principles" (*ibid*., p.376) such as efficiency, scarcity, futurity, sovereignty, and custom, referred to as "theories of multiple causations" (*ibid*., p.8).

> When the older schools and their modern strict conformists worked out their theories they tried to select a single principle of causation, like labor or desire, whereas modern theories are certainly theories of multiple causation. Hence I do not think that "institutional causation" excludes other causations (*ibid*., p.8).

In the 1927 manuscript, Commons focused consistently on scarcity and efficiency and discussed how they related to value. According to Uni (2017), Commons formulated managerial transactions controlling efficiency and bargaining transactions controlling scarcity as "two entirely different types of transactions" for the first time in the 1927 manuscript. Moreover, with a mind to intra-firm coordination, he mentioned that these two types of transactions "are not allowed to fly off separately, for they are coordinated, more or less successfully, by the business policy of a going concern" (Commons 1927, Chapter 8, s.164). Furthermore, he explained how futurity, sovereignty, and custom related to value as follows: futurity is the essential element in valuation because "capital goods get their present scarcity value from the expected scarcity values of the consumption goods, through man's knowledge of causes and effect" (*ibid*., Chapter 8, s.132). His theory of value attached importance to suppliers' actions in withholding supply based on property rights and collective action that led to a judicial decision changing the definition of property rights.

The 1927 manuscript analyzed the multiple causation based on the five principles outlined above, focusing mainly on a firm that was a going concern. *Institutional Economics* mentioned multiple causation working at the level of the macroeconomy as a going concern. The core causation was a cumulative causation between productivity growth and demand growth. This cumulative causation is mediated by managerial, bargaining, and rationing transactions, and one of its possible results is stable reasonable value. We now examine how Commons approached this cumulative causation in the macroeconomy.

Commons developed a discussion on income distribution and demand growth in Section 4 entitled "Input–Output, Outgo–Income" in Chapter 8, "Efficiency and Scarcity," and in Section 7 titled "Collective Action/4. Price" in Chapter 10, "Reasonable Value," in *Institutional Economics*. This study on income distribution and demand growth in *Institutional Economics* signifies Commons's approach to cumulative causation in the macroeconomy.

In the following quotation, Commons explains the kind of macroeconomic change that was brought about by an increase in efficiency. He compared two cases with the same rate of increase in efficiency and different rates of decline in prices. In addition, in this quotation, the following deserves attention: "the increased efficiency came solely from more and better machinery and more and better management." It suggests a causal linkage between growth in demand and an increase in efficiency and corresponds to "Verdoone's law," "Kaldor's second law," and Boyer's "productivity regime."

> Two things happened in the establishment when efficiency was increased 75 per cent. The price of the suit was reduced, but not enough to deprive the producers of their gain in efficiency. The physical speed of the workers was not increased, because they had already been speeded up by piecework, and therefore the increased efficiency came solely from more and better machinery and more and better management. But the second thing that happened was that the hours of labor were considerably reduced, the wages and salaries per hour were greatly increased, and the profits of the establishment were decidedly increased.

> Had the prices of clothing been reduced 33 per cent, when the efficiency increased 75 per cent, then the buyers of clothing would have obtained all of the gain from increased efficiency, and the producers would not have gained the shorter hours, higher wages, higher profits, and increased amount of interest on increased investment, which came from their higher efficiency (Commons 1934, p.294).[2]

An analysis of a similar case is developed in more detail in Section 7 of Chapter 10, describing inflation and deflation in the United States since 1919. Commons examined a case where efficiency increased by 10 % in all industries and the prices of all goods decreased by 10 % (in "nominal price" terms, measured by money). In this case, all the results of the increased efficiency are distributed as decreases in commodity prices. Then, if purchasing power is constant, there is a possibility that the total demand for these products will increase. However, if the purchasing power of workers is reduced by a reduction in working hours and total wage income, the total demand and total output may not increase (*ibid*., p.799). Therefore, it would be undesirable for society to distribute all the results of increased efficiency as decreases in commodity prices.

> Yet while prices are institutional and exchange values are "real," prices are very real in the capitalistic sense—they determine who shall get the results of efficiency. This is increasingly important when the general increase in technological efficiency has proceeded at the unusual rate since 1921. The American Federation of Labor, at its convention in 1925, adopted a resolution looking toward cooperation with employers in increasing the efficiency of industry, provided labor should have its proper share of that increased efficiency in the two directions of higher wages as producers and lower prices as consumers (*ibid*., p.792).

With regard to this resolution of The American Federation of Labor, Commons asked himself the following question: "But should labor obtain these higher standards by means of higher rates of wages as producers or by means of lower prices as consumers?" (*ibid*., p.793). Clues to his answer to this question lie in the profit margin, total output, and total employment.

> Here is the significance of the margin for profit. If employers' prices fall, on the average, in proportion to the increased efficiency, the margin for profit remains where it was and employers are in no better position to grant increased rates of wages or shorter hours than they would have been if there had been no increase in efficiency. Their answer to the demands of labor must be that they have already passed along to them, as consumers, the gains in efficiency, and have nothing left for them as producers. The ultimate conclusion is the sad predicament of advocating a system of rationing or "staggering" the limited amount of employment so as to put all labor on half-time, or "short rations." This compels labor as a social class to finance its own unemployed, instead of stabilizing full employment. This suggests the alternative conclusion that, on the average, the prices of commodities should be stable, and labor should get its higher standards of living as producers at higher wages, shorter hours, and steady employment through the year, rather than as consumers at lower prices and unemployment (*ibid*., p.793).

Thus, Commons's answer that workers should receive the results of increased efficiency through a wage increase, rather than through lower prices, is based on

[2] As 1–(1/1.75) = 0.4286, the passage "the prices of clothing been reduced 33 per cent" should be replaced by "the prices of clothing been reduced 43 per cent."

his view that a general decline in prices leads to contraction of total output and employment. Commons derived this view on deflation from his observations of changes in prices, total output, and total employment in the 1920s.

> A rapidly rising price level in 1919 and again in 1923 quickly restored full employment. The rapidly falling price levels of 1920-21 and 1929-33 greatly increased unemployment. This is because industry operates on narrow margins of profit, and a slightly rising price level all along the line has a multiplied effect in enlarging the margins of profit and therefore increasing the demand, while a fall in the price margin reduces the demand for labor (*ibid*., p.805).

Distribution of all the results of increased efficiency as lower prices leads to a spiraling contraction of demand, output, and employment as follows: decrease in profit margin ➔ decrease in investment ➔ decrease in output of investment goods ➔ decrease in employment in investment goods sector ➔ decrease in demand for consumer goods ➔ decrease in output of consumer goods ➔ decrease in employment in consumer goods sector. Measures to avoid this vicious cycle include distributing the results of increased efficiency to producers (labor and management) as increases in wages and profits. In this case, a spiraling expansion of demand, output, and employment would occur as a result of the increase in the profit margin. As there is an upper limit to the amount of labor supply, if labor demand exceeds this limit, the wages–price spiral increases, that is, malignant inflation would occur as follows: wages rise higher than increase in efficiency ➔ decrease in profit margin ➔ price rise for recovering profit margin ➔ decrease in real wage ➔ wage rise to recover real wages. Commons argues that malignant inflation should be suppressed by the central bank's monetary policy, as follows.

> But if the level of prices is allowed to rise beyond the level of full employment, as in 1919, then it is mere inflation of prices and wages because there can be no possible increase of employment by production except by reduction in hours of work, when all are fully employed. Full employment is the reasonable limit of inflation. The matter was managed better in 1923. By selling securities and raising the discount rates, under the conditions of industry and banking at that time, the prices did not rise above the point of restoration of full employment (*ibid*., p.805).

As the institutions that stabilize prices, in addition to creating the monetary policy in each country, Commons proposed that "the governments of the world ought to authorize the Central Banks of the world to stabilize the value of money" (*ibid*., p.804). In this case, he assumed that only the central bank was an actor. However, he conceptualized collective action by the central bank, government, trade unions, and employers' associations, which all shared the same objective. Commons then suggested that the ideal index that could be used as a guide to policy-making was the maintenance of full employment.

> This social ideal of shortening the hours and increasing profits and wages by efficiency instead of scarcity brings us to the question of an ideal type of index numbers that shall be used as a guide, and to the administrative machinery that shall enforce the guide. In general, the most serious problem of capitalistic civilization is unemployment. The paradox of doubling, trebling, and even quadrupling efficiency, while perpetrating great alternations of employment and unemployment, makes it probable that war or communism or fascism may

> be preferable to peace and liberty. Consequently, with the great majority of people becoming a proletariat, the most important of all guides to stabilization is that of maintaining full and steady employment (*ibid*., pp.804–805).

Based on the considerations described above, Commons's framework of cumulative causation can be represented as shown in Fig. 1. The framework itself is very similar to those of Kaldor (1966) and Boyer (1988). This cumulative causation acts between the increase in efficiency and the growth in demand (and supply), but Commons does not set an objective for the quantitative growth in demand. Commons's objectives are to "get its higher standards of living as producers at higher wages, shorter hours, and steady employment through the year" (*ibid*., p.799). Here, Commons's focus on shortening working hours in addition to maintaining full employment deserves attention. These objectives are to be realized through the control of the quantity of supply and demand, but this control is achieved through collective action, namely, policies and institutions based on the "social ideal of shortening the hours and increasing profits and wages by efficiency instead of scarcity" (*ibid*., p.804). Commons mentioned that the ultimate guide to this collective action is "maintaining full and steady employment" (*ibid*., p.805). As clarified in this chapter, the concept of proprietary scarcity in *Institutional Economics* was founded on "public utility, public welfare, or public necessity" (*ibid*., p.197), which is shown in "honesty, fair dealing, fair competition, reasonable exercise of economic power, equal opportunity, live-and-let-live, good-will, and reasonable value" (*ibid*., p.143). Furthermore, the concept of rationing transactions, which was introduced in *Institutional Economics*, included institutional adjustments at the macro and meso levels affecting income distribution and redistribution. It is considered that Commons was able to introduce cumulative causation into his theory, as shown in Fig. 1, based on these conceptual expansions of proprietary scarcity and rationing transactions. "Reasonable value" is realized through this interdependence between the increase in efficiency and the growth in demand (and supply), which is mediated by the three types of transactions.

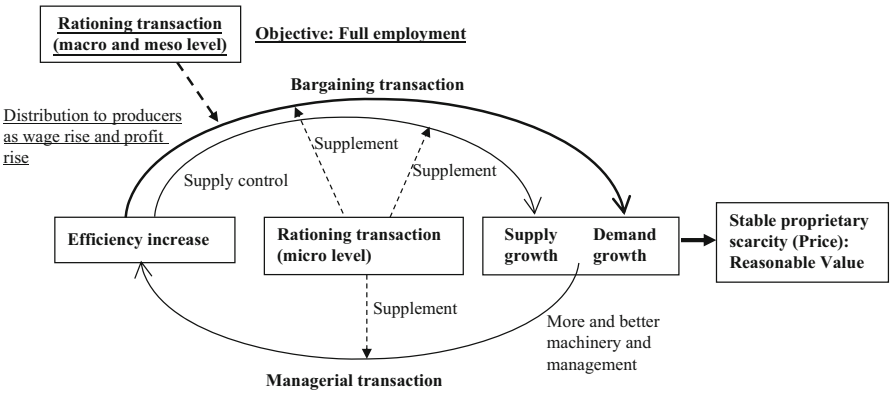


Fig. 1 Commons's framework of cumulative causation (Notes: *Underlined elements* and *bold arrows* show additions in *Institutional Economics*)

3.2 *Regulation Theory: A Growth Regime Based on Cumulative Causation*

The term "regulation" has a different meaning to the English term "regulation." The origin of its meaning can be found in Georges Canguilhem's contribution to *Encyclopaedia Universalis*, published in 1974. The term "regulation" means how entities that are a priori independent result in overall evolution compatible with their coexistence and persistence (Boyer 2004b, p.41). The first basic concept for regulation theory is the "mode of regulation," which consists of various institutional mechanisms inducing contradictory and conflictual behaviors of actors to conform with the collective principles of an "accumulation regime." The five "forms of institution" are as follows: monetary regime, wage–labor nexus, form of competition, nature of the state, and insertion into the international regime.

The fundamental subject of the regulation approach is analysis of chronic variability and spatial diversity of capitalism. From the latter viewpoint, regulation theory attaches importance to institutional changes in the process such as conflict ➔ compromise ➔ revision of the compromise ➔ conflict ➔ compromise. This process of institutional change has not only an economic dimension but also a political one. Institutional changes cause growth and a crisis of capitalism.

Another basic concept of regulation theory is the "accumulation regime" or "growth regime." According to Boyer (1988), its core structure is the following cumulative causation between productivity growth and demand growth at the macroeconomic level[3]. Boyer (1988) labelled the route from productivity growth to demand growth as a "demand regime" and that from demand growth to productivity growth as a "productivity regime." Using a macroeconomic model, he derived two functions that express each regime. These functions are affected by various institutional factors. The growth regime at the macroeconomic level is formulated by the cumulative causation expressed by these two functions. He also explained the transformation of the growth regime through the shift in the function as a result of changes in institutions with regard to the monetary regime, wages–labor nexus, form of competition, nature of the state, or insertion into the international regime. In macroeconomic analysis, regulation theory gives priority to the explanation of the process of cumulative causation, taking into account the effects of institutional forms. To clarify these effects, we divide each regime into two stages, as shown in Fig. 2 (Uni 2007).

The demand regime, that is, the route from productivity growth to demand growth, comprises two stages, namely, income distribution and income expenditure.

[3]Boyer's model is based in the ideas of Myrdal (1957) and Kaldor (1966). According to Kapp (2011), the principle of cumulative causation is at the core of institutional economics and sets it apart from earlier and contemporary noninstitutional approaches, in particular the mechanistic equilibrium approach.

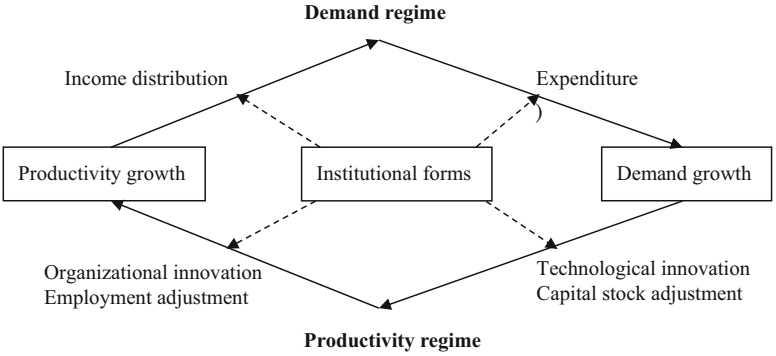


Fig. 2 Four stages in cumulative causation (Source: Uni 2007)

Income distribution in terms of the distribution of productivity gains is especially important. For instance, in some cases, it could be mainly distributed as either wage rises or profit increases. Moreover, it could be distributed evenly as both, or as a decrease in commodity prices benefiting purchasers (Petit 2005). An important factor affecting this distribution selection is wage institutions, which vary by country. For example, wage bargaining is decentralized differently by country. The second stage of the demand regime is expenditure of the distributed income. Wage and profit incomes are expended as either consumption or investment. The amount of each form of expenditure depends on various factors such as the amount of income, the price of the commodity, and the availability of credit. Therefore, in this stage, institutions that are concerned with redistribution of income and the financial system are important.

The productivity regime, that is, the route from demand growth to productivity growth, consists of adjustments of capital stock and employment. The main method of adjusting the quantity of labor is adjusting the extent of employment. However, because employment is directly related to a worker's life, the extent of employment is not a variable that can be freely changed based on a manager's decision. The flexibility of employment depends on factors such as legislation regarding employment protection and the power of unions in negotiations.

Thus, rates of productivity growth and demand growth, which are derived as solutions of the system of equations composed by the above two functions that express the demand regime and the productivity regime, depend on institutional parameters. The case of high growth in productivity and demand is called a "virtuous cycle" and that of low growth in productivity and demand is called a "vicious cycle." For regulationists, which type of cycle is brought about by a growth regime is an open question. Therefore, the system of equations that expresses the growth regime is underdetermined.

> The question of the viability of an economic regime linked to an institutional architecture is *a priori* opened: only observation *ex post* of such viability will give the illusion of a functionalism. [. . .] So, regulation theory develops intermediate concepts between a valid

> theory in every time and any place and the simple observation of macroeconomic data. It is therefore voluntarily underdetermined (Boyer 2004a, pp.40–41).[4]

According to regulation theory, this underdetermined system is closed by the emergence of the mode of regulation. In general, because institutional forms in different domains are independent of each other, their compatibility and coherence are not guaranteed. The mode of regulation brings about this compatibility and coherence. "So, institutionalized compromises are the founders of institutional forms. And, in general, they are independent of each other, only due to the specialization of different spheres of economic activity. How can a priori independent entities (by extension, institutional forms) result in overall evolution compatible with their coexistence and persistence, in short, form a system? If the answer is positive, we agree to call the resulting ensemble of economic mechanisms a mode of regulation" (Boyer 2004a, p.41). In Sect. 5, we will discuss a theoretical problem regarding the emergence of the mode of regulation.

In regulation theory, another aspect that corresponds to Dewey's pluralism and multiplicity of the world is the various forms of coordination that are alternatives to the state and the market, such as hierarchy, community, network, and alliance (Boyer 2002, p.325; Boyer 2004b, p.34). In relation to the growth analysis based on the cumulative causation model with various forms of coordination, regulation theory joins Commons's rejection of a single economic value and a single adjustment mechanism.

4 Micro Theory of Human Interaction and Collective Action

4.1 Commons: Interrelation of Habitual Assumption and Collective Action

Commons developed the concept of "habitual assumptions" in Chapter 10 of *Institutional Economics* as follows: "In order to understand why they act so and so, it is necessary to discover the assumptions which they take for granted as so familiar that they are not formulated in words" (Commons 1934, p.697). Once habitual assumptions are formed, "He forgets that they were novel when he began. He is unable even to explain them to outsiders. They have become routine, taken for granted. His mind is no longer called upon to think about them" (*ibid*., pp.697–698). According to Commons, "the habitual assumptions are fitted to complementary factors, or routine transactions, of his environment, while the intellectual activity is concerning itself with the limiting factor or strategic transactions" (*ibid*., p.698). Here, the limiting factor is "the one whose control, in the right form, at the right place and time, will set the complementary factors at work to bring about the results

[4]The original text is in French, so all quoted sentences hereafter are author translations.

intended" (*ibid*., p.628). Commons provides an example as follows: "A very little potash, if that is the limiting factor, will multiply the grain yield from perhaps five bushels to twenty bushels per acre" (*ibid*., p.628). Evidently, Commons basically followed Dewey's theory of habit and intelligence, when he said: "If the factors are continually changing, then the intellect must be lively to control the strategic ones; but if they run along as usual, then habitual assumptions are enough to take care of the complementary and routine factors" (*ibid*., p.698).

Moreover, Commons mentioned that, in a going concern, habits of individuals must conform to the customs of the concern. Here, "custom is not merely collective action in control of individual action—it is collective opinion in control of individual opinion" (*ibid*., p.698). If habits of individuals conform to the customs of the concern, habitual assumptions become "habitual and customary assumptions," which "are read into habitual and customary acts" (*ibid*., p.698).

However, Commons's theory differs from Dewey's in the following way. When Commons discussed habits and customs, he did not use Dewey's concept of "impulse" or Veblen's similar concept of "instinct." This led to criticism by Hodgson (2003)[5]: "He thus adopted Dewey's idea that there is a causal link from customs to individual habits. However, Commons did not complete the circle of causation and show, in turn, how habits help "customs persist"" (Hodgson 2003, p.555). Hodgson reduced the fundamental reason for Commons's failure to his neglect of "instinctive triggers": "Although custom is important, custom alone cannot provide the individual with behavioral predispositions and with a set of concepts and meanings to deal with the world. The individual requires a set of instinctive triggers to act in specific ways so that elemental habits of action and interpretation can be built up and so that customs and institutions can do their work" (*ibid*., p.558).

Although Hodgson did not refer to it at all, Commons explained, first, how "elemental habits of action and interpretation can be built up" and, second, how "customs and institutions can do their work" in Chap. 4 in *Institutional Economics* (Commons 1934, pp.156–157).[6] Regarding the first mechanism, Commons showed two conditions necessary for building up habitual assumptions, referring to Hume's arguments: "[A]ll of these feelings are called into existence only when an impression from without excites them, and their [i.e. individuals'] inference from that impression is belief. [. . .] These beliefs we shall name habitual assumptions" (*ibid*., p.156). According to Commons, an individual's mind is not "a tabula rasa on

[5] Kitagawa (2016) refuted the criticism by Hodgson (2003) from the perspective of instrumental pragmatism.

[6] Almost identical explanations are found in the 1927 manuscript (Commons 1927, Chapter 4, s.23). Compared with Chapter 4 in the 1927 manuscript, the major revisions in Chapter 4 in *Institutional Economics* are as follows. The text emphasizing the difference between habit and custom in *Institutional Economics* (Commons, 1934, pp.152–153) did not exist in the 1927 manuscript. The title of Section 2 of Chapter 4 in *Institutional Economics* is "From Habit to Custom," but in the 1927 manuscript, it is "Custom." The text referring to the habitual assumption (Commons 1934, p.156) did not exist in the 1927 manuscript, and Sect. 4 did not exist in the 1927 manuscript.

which customs can make their mark" (Hodgson 2003, p.558), but rather an active being that internalizes impressions from the outside as beliefs through inference. Regarding the second mechanism, Commons explained how consensus of belief was attained, referring to Peirce's pragmatism: As "beliefs are the individual's biased meanings of events[,] [i]t requires still further Peirce's consensus of belief of all who competently investigate, in order to eliminate bias and to attain scientific confidence of expectations" (*ibid*., p.156). Furthermore, Commons applied Peirce's pragmatism to economic relations. Because the 1927 manuscript explained it more clearly and succinctly than *Institutional Economics*, we quote from the former: "It requires, [. . .] in order to eliminate bias and to attain, not only Peirce's confidence of physical expectations, but also, as we shall see, that consensus of reasonable men acting collectively, which we name the Reasonable Value and Reasonable Practice which yield confidence in social expectations" (Commons 1927, Chapter 4, s.23). As we will explain below, a process toward the Reasonable Value and Reasonable Practice is a collective and historical process such as the "common-law method." Therefore, the persistence of customs and institutions is not assured merely by psychological means such as the formation of beliefs by inference discussed by Commons or the "instinctive triggers" presented by Hodgson. Commons believed and showed that both psychological means and social mechanisms are necessary for the persistence of customs and institutions. Hence, we cannot agree with Hodgson's criticism that Commons did not show how habits help customs to persist. However, we admit that there is insufficient evidence as a result of Commons's brief explanation, as we note below.

When comparing Commons's understanding of the roles of habits, customs, and intelligence with Dewey's, another difference is that Commons explicitly refers to a specific collective procedure for realizing reasonableness and reasonable value. This is called the "common-law method."

> But these customary standards are always changing; they lack precision, and therefore give rise to disputes over conflicts of interest. If such disputes arise, then the officers of an organized concern, such as a credit association, the manager of a corporation, a stock exchange, a board of trade, a commercial or labor arbitrator, or finally, the courts of law up to the Supreme Court of the United States, reduce the custom to precision and add an organized legal or economic sanction. This is done through the Common-Law Method of Making Law by the Decision of Disputes. The decisions, by becoming precedents, become the working rules, for the time being, of the particular organized concern (*ibid*., pp.72–73).

When Commons focused on value in reorganizing institutions by the common-law method, he called the goals of this procedure "reasonable value." He proposed four conditions for attaining this reasonable value; "equal opportunity," "fair competition," "equality of bargaining power," and "due process of law." He mentioned that these concepts had been gradually built into the intelligence of the court (*ibid*., pp.62–63). He described "the historical expansion of this doctrine of reasonable bargaining power" in the United States, using the examples of labor organizations, public utilities, manufacturing industries, the banking industry, farmers, and the federal government (*ibid*., p.345). Thus, reasonable value is a collective and historical concept. "But Reason differs from Reasonableness. Man

is not a rational being, as the Eighteenth Century thought [. . .] Yet, during all these years of the Age of Reason, the common-law courts were developing an institutional idea of reasonableness and reasonable value, in the process of deciding conflicts of interest and bringing order out of incipient anarchy. This institutional idea of reason[ableness] and reasonable value has been collective and historical, whereas the rationalistic idea was individualistic, subjective, intellectual, and static" (*ibid*., p.682).[7]

Reasonable value is "fair and reasonable as between all parties because there is no coercion or misrepresentation" (*ibid*., p. 260) through the method of precedent, choice of customs, unwritten laws, and assumptions under conditions of "equal opportunity," "fair competition," "equality of bargaining power," and "due process of law." In noninstitutional economics, an ideal perfect market is believed to bring about an equilibrium price without any coercion or misrepresentation under conditions of equal opportunity, fair competition, and equality of bargaining power. Why, then, did Commons attribute reasonable value to the common-law method rather than an ideal market? This is where one must consider the impact of Dewey's pragmatism on Commons's theory. Dewey rejected the idea of "Galilean purification" whereby a law is considered under predetermined ideal conditions in place of ordinary (realistic) conditions. For Dewey, philosophical analysis always begins in *medias res*, and the context of ordinary experience is also the locus to which we must return. As Commons shared Dewey's position, he chose to start from real, incomplete markets rather than from an ideal market: "Hence the practical theories of today, in the United States, are not the older theories of individual competition, individual property, the liberty of individual bargaining, the mechanism of free competition, nor even the communist theories of prohibition of bargaining. They are the theories of reasonable bargaining power" (*ibid*., p.345).

Commons discussed the institutional conditions for achieving "reasonable value" based on his own experiences by focusing on processes of decreasing conflict and promoting consensus among actors in conflicts of interest through institutions for negotiation such as the common-law method and the committee system. He thought that actors' weightings of private interests were decreased and their weightings of social welfare were increased in their value systems by exchanging opinions through a process of negotiation such as courts and committees. In the terminology of Bowles (2004), this change means an increase in weighting of "social preferences" that consists of "other-regarding" and "process-regarding" in making one's behavioral decisions (Bowles 2004, p.109). This process of changing social preferences is also confirmed by recent experimental economics studies on distribution (Tokumaru 2016; Bowles 2004; Fehr and Schmidt 1999). In these distribution experiments, it is observed that in cases where there exist social contexts such as communication or shared experiences among participants, weightings of the social preferences of actors in conflicts of interest are increased via their other-regarding and process-

[7]Based on the first sentence of this quotation, we infer that "institutional idea of reason" is a typographical error.

regarding attitudes compared with cases without such social contexts. Commons discussed the realization of "reasonable value" based exclusively on his own experiences participating in committees in Wisconsin; however, recent experimental studies show that his theories do not seem to be limited to particular cases, but rather hold a universality that can be extended to other cases.

Commons did not sufficiently show how individuals evaluate collective and social values and how they change their preferences endogenously in their commitment to collective action. For example, although Commons thought that "reasonableness" and "reasonable value" were realized through a collective and historical process, it seems that he did not sufficiently explain how the value system of individuals changed toward a more reasonable position by participating in collective action.

Convention theory, which we now turn to, includes advanced analysis of interactions at the micro level, attaching importance to the interrelation of habit and collective action, similar to Commons. In our opinion, convention theory is the equivalent to what developed Commons's thinking about habitual assumption and collective action.

4.2 Convention Theory: Two-Layered Coordination Constituted by Regulative and Constitutive Rules

Regulationists examine the diversity and variability of capitalism, focusing mainly on coordination at the macroeconomic level, while conventionists examine the variety and multiplicity of collective action focusing on coordination at the microeconomic level. However, "collective action coordinated at the microeconomic level" may be misunderstood, because in standard economics, the microeconomy simply means what results from the economic actions of independent individuals. Therefore, even if there are resultant collective actions, individuals do not represent the collective.

However, conventionists who start with the individual attempt to explain why the individual takes cooperative action[8]. Batifoulier and De Larquier (2001) note some fundamental differences between standard economics (in particular, game theory) and their theory.

[8]The following should be noted: the convention, as it is defined by conventionists, is a kind of structure that formalizes the individual comportments in collective action. Batifoulier and De Larquier state that "the main point is that there is no predetermined or conventional formation of convention. This comes from the fact that rules work as a convention because the rules have lost their origin" (Batifoulier and De Larquier 2001, pp.11–12). For that matter, the term "convention" appears only twice in Commons's *Institutional Economics* (Commons 1934, p.26 and p.249) and is used to explain the work of other scholars. However, the understanding by convention theory that conventions are rules that have lost their origin is similar to the understanding by Commons of habitual assumptions, as noted in Sect. 4.1.

> Convention is significant only in a collective. A person can follow the routine individually, but at least two persons are necessary to make the notion of convention relevant. [...] When the collective is identified, a convention will induce comportment. [...] Following a convention means choosing one from among several alternatives. This selection does not rest upon a close sectional list, so convention could be considered arbitrary. What is important is not convention itself but the fact that convention coordinates comportments (Batifoulier and De Larquier 2001, p.11).

Therefore, conventions are rules that coordinate interactions through the representation of the collective. What are those rules, then?

> Standard economics assumes that coordination is realized exclusively by the price system, while the analysis of coordination is oriented toward the analysis of rules by considering interactions. Among these rules, conventions occupy a particular status. There are two distinctive levels of rules: one is the level of regulative rules which make it possible to coordinate the comportments; the other is the higher level of constitutive rules which are concerned with domain of representation. The notion of convention can be found on these two levels, and plays unique and fundamental roles on them. [...] The advantage of conventions, unique rules impossible to represent at a form of contract, lies in making it possible to interpret essentially arbitrary solutions when faced with a plural number of modes of coordination that are considerable and indifferent to the agent. [...] The collective aspect of representation which gives the representation a role of focal point for the ensembles of actors, and the arbitrary nature of the representation due to its subjective basis both show the conventional basis of Keynesian theory. However, considering the representation supposes taking an approach to different rationality, which is conceived to be an action of judgement process based on an implementation of the environment. Here, conventions manifest themselves as the inherent framework of interpretation in every form of evaluation. [...] The possibility of coordination through regulatory rules (thus through conventions in the sense of strategic approach) supposes the formulation of conventional representation on constitutive levels (Chaserant and Thevénon 2001, pp.61–62).

Therefore, convention brings about two-layered coordination. It is because constitutive rules coordinate regulative rules that regulative rules can coordinate interactions. In other words, conventional rules control the individual on two levels: representation of the collective and interaction. If this is regarded as coordination of interaction, it could be called two-layered coordination. In the first step, an actor's arbitrary interpretation of regulative rules brings about a plurality of solutions. In the next step, the constitutive rules cause the actors' frameworks of judgment, interpretation, and evaluation to converge to the focal point.

Therefore, convention is, first, regulative rules that define interactions, but it permits arbitrary interpretation by the actor. However, for the actor to perform such acts, it is necessary for other actors who act according to the same representation of the collective to share the convention, which they refer to as their own framework. If actors have different conventions and do not compromise with each other at all, collective activities will not stabilize. In other words, it is necessary to have constitutive rules at the higher level to enable the conventions that various actors have at the regulative rules level to converge. This is what Boltanski and Thévenot call *cité* [city] (Boltanski and Thévenot 1991, Chapter 3, Section 2). Biencourt et al. (2001) summarize their discussion as follows:

> As an agent needs to coordinate himself or herself with others he or she does not know well. [...] coercion about the form of judgement will increase further. Individuals will

> bind themselves under the only condition that it is possible to anticipate reactions from other parties. For this, other parties should seek foundations in compromised and shared principles of judgement. [...] Then, Boltanski and Thévenot discussed "common superiors' principles" or *cité*. [. . .] These "common superiors' principles" support the model of evaluation or the model of judgement. They permit to assign a value, a "*grandeur* [worth]" in another terminology, to people or things. One principle draws one "common world," and individuals in that world evaluate events in similar ways. The objects of the collective, the way to achieve it, the qualifications of participants, and the things and instruments to measure significances would make a tacit accord. These principles constitute the *registres* [registers] of argumentation and justification which individuals mobilize in their actions. The term *cité* is used to designate such *registres* (Biencourt et al. 2001, pp.215–216).

There are six types of *cité*: "civique [civic]," "industrielle [industrial]," "marchande [market]," "domestique [domestic]," "inspire [inspirational]," and "renom [prestige]" (Boltanski and Thévenot, op. cit.). These could be called "shared spheres of values," which exist concurrently in the same era and in the same region. One of them embodies the "esprit" of the era (Boltanski and Chiapello 1999).

What is important here is that these spheres of values are arenas of coordination and that they are recognized and criticized by actors through discussion of values and thus obtain legitimacy throughout the entire society. However, this does not mean that a specific sphere of values predominates. Rather, several spheres of values find some form of compromise, which is then adapted to the social entirety.

Commons also argued for "formulating working rules for future collective actions in controlling individual behavior in the rationalizing process of justification" (Commons 1934, 682). In explaining how this process worked, he turned to the legal control of institutions, but at the same time, he never ignored the role that habitual and customary assumption plays in the going concern. Conventionists refine Commons's idea in a different way. Further, both Commons and conventionists pay attention to the process of legitimation because they consider that actors' values are multiple in their minds and differ by actor. Therefore, "arguments and pleadings" in various fields are necessary for them to take on sociality. In fact, conventionists consider that the dynamism of convention is clarified by an "analysis of negotiation process" (Rebérioux et al. 2001, p.269).

Although convention theory shares this point with Commons, it differs from Commons in that the former explicitly assumes the following reflective capacities of individuals.

> It is assumed that coordination and cooperation go beyond the interaction between the individuals, and have some representation about the collective which they are involved in. This representation is a cognitive supplement. [...] necessary to give meanings to rules. [...] The representation should be understood to be what results from the reflective capacities of the individuals, to introspect their own identity and conform to the convention of common goods (Batifoulier and Thévenon 2001, p.239).

According to Batifoulier and Thévenon, these reflective capacities are "the capacities of the individuals to give some meaning to collectivity (and thereby to judge collectivity), and to attach importance to the social dimensions of the individuals," in other words, capacities to develop social preferences, which seems to consist of two components. The first is "the reflective capacities of the individuals to judge their own preferences or intentions critically, and to correct the evaluation

of their resultant profits" (*ibid*., pp.240–241), in other words, the capacity to change preferences endogenously. The second is the capacity to "connect the representation of what they regard as Justice, or as achieving common good, with the collective," in other words, the capacity to evaluate collective and social values.

It is true that Commons does not explicitly discuss how individuals represent the collective. However, as described in the preceding section, Commons showed, as a condition for building habitual assumptions, the need for internalization of impressions from the outside as beliefs through inference. Moreover, he noted that to eliminate individual bias in beliefs and approaches to "reasonableness" and "reasonable value," collective and historical processes are required. However, his explanation regarding the relevant psychological means and social mechanisms was brief. It is probable that the conventionists are attempting to throw fresh light on the insights of Commons through a cognitive, interpretative approach.

5 Concluding Remarks

In this chapter, after showing the uniqueness of Dewey's philosophy, namely, (1) the world's plurality and multiplicity, (2) the primary significance of multifarious interactions, and (3) the interrelation between habit and intelligence, we clarified the uniqueness of Commons's institutional economics: (1) value theory based on multiple causation; (2) transactions as the ultimate unit of analysis; and (3) the interrelation between habitual assumption and collective action. We examined the theoretical connection between Commons and regulation theory and convention theory. The former partly shares and develops the first characteristic listed above, "multiple causation," while the latter shares and develops the third characteristic, "the interrelation between habitual assumption and collective action." Applying the idea of "multiple causation" in *Institutional Economics* (Commons 1934), Commons approached macrodynamics on the basis of an expansion of some key concepts and studies on income distribution and demand growth. This is a prototype of the growth analysis based on the cumulative causation model with various forms of coordination, later formulated by regulation theory. Moreover, Commons, following and developing Dewey's theory of habit and intelligence, created a concept of "habitual and customary assumptions" and discussed collective processes for achieving "reasonable value," such as the common-law method and the committee system.

For regulationists, the most important point is the emergence of a mode of regulation. For example, the emergence of a mode of regulation in Fordism was not possible solely through firm-level innovation by Henry Ford. "Collective actors, public intervention, laws, and collective conventions eventually brought about the shift to Fordism, but through institutional arrangements that were quite the opposite

of those imagined by Henry Ford" (Boyer 2002, p.322). Boyer notes the role of collective actions: "It does not mean that some innovations at the local level end up affecting the mode of regulation. The relays of collective action, of political deliberation, of law, prove to be necessary and decisive in the complex and seldom anticipated process of emergence of new regulations" (Boyer 2004b, p.148).

One of the most important challenges that regulation theory should address in its future development is the establishment of a macro social and institutional basis for microeconomics (Boyer 2002, p.333). To achieve this end, a further analysis of the emerging processes of the mode of regulation seems to be required. However, at present, the process of "co-evolutions of actors' strategies and institutional forms" (Boyer 2004b, p.148), which is an interactive process between institutional changes and changes of actors' preferences, remains unclear, and should be addressed by further investigations: "Regulation theory delivers, as a built system, only the result of interactions at the meso-economic level. It is not possible, for lack of data and of analyses, to distinguish between institutional changes and changes in preference" (Boyer 2004b, p.148).

Commons discussed the institutional conditions necessary for achieving "reasonable values" based on his own experiences by focusing on the processes of decreasing conflict and promoting consensus among actors in conflicts of interest through institutions for negotiation such as the common-law method and the committee system. As we explained, recent experimental studies show that his theory of reasonable value does not seem to be limited to particular cases, but rather holds a universality that can be extended to other cases. In this sense, it seems that Commons's theory of reasonable value could contribute to an analysis of the emerging processes of the mode of regulation.

However, Commons did not sufficiently show how individuals evaluate collective and social values and how they change their preferences endogenously in their commitment to collective action. We mentioned that the two-layered coordination in convention theory attempted to explain individuals' reflexive capacities to change preferences endogenously and to evaluate collective and social values. According to our analysis, convention theory developed contemporary meanings based on Commons's ideas of habitual assumption and collective action.

As we have noted, Commons approached the macrodynamics resulting in demand and productivity growth and price stability, which is a main focus of regulation theory. In parallel with this, he also approached the micro process of formation of reasonableness from the interaction of individuals, which is a main focus of convention theory. Therefore, using Commons's theory as a medium, it may be possible to articulate the macrodynamics developed by regulation theory and the micro theory of interaction developed by convention theory.

Acknowledgments This work was supported by the Japan Society for the Promotion of Science (JSPS), the KAKENHI Grant-in-Aid for Scientific Research (B) (grant number 26285048).

References

Basle, M. 2002. Acknowledged and Unacknowledged Institutionalist Antecedents of Regulation Theory. In *Régulation Theory: The State of the Art*, ed. R. Boyer and Y. Saillard. New York: Routledge.

Batifoulier, P., ed. 2001. *Théorie des Conventions*. Paris: Economica.

Batifoulier, P., and G. De Larquier 2001. De la convention et de ses usages (On the Convention and Its Usages). In Batifoulier (ed.) (2001).

Batifoulier, P., and O. Thévenon 2001. Interprétation et fondement conventionnel des règles (Interpretation and Conventional Foundation of the Rules). In Batifoulier (ed.) (2001).

Bessy, C., and O. Favereau 2003. Institutions et Économie des Conventions. *Cahiers d' Économie Politique* (Institutions and Economics of the Conventions. *Papers in Political Economy*) 44: 119–164.

Biencourt, C., C. Chaserrant, and A. Rebérioux 2001. L'État des conventions: l'affirmation d'un programme de recherche (The States of the Conventions: Affirmation of a Research Program). In Batifoulier (ed.) (2001).

Boisvert, R.D. 1998. *John Dewey: Rethinking Our Time*. New York: State University of New York Press.

Boltanski, L., and E. Chiapello 1999. *Le Nouvel Esprit du Capitalisme*. Paris: Editions Gallimard. (*The New Spirit of Capitalism*). Translated by Gregory Elliot. 2005. London: Verso.

Boltanski, L., and L. Thévenot. 1991. *De la Justification: Les Économies de la Grandeur* (On Justification: Economies of Worth). Paris: Editions Gallimard.

Bowles, S. 2004. *Microeconomics: Behavior, Institutions, and Evolution*. New York: Russell Sage Foundation.

Boyer, R. 1988. Formalizing Growth Regimes. In *Technical Change and Economic Theory*, ed. G. Dosi et al. London: Pinter Publishers.

———. 2002. Is Régulation Theory an Original Theory of Economic Institutions? In *Régulation Theory: The State of the Art*, ed. R. Boyer and Y. Saillard. New York: Routledge.

———. 2004a. *Théorie de la Régulation, 1. Les Fondamentaux* (Regulation Theory, Vol. 1. The Fundamentals). Paris: Éditions La Découverte.

———. 2004b. *Une Théorie du Capitalism est-ell Possible?* (Is a Theory of Capitalism Possible?). Paris: Odile Jacob.

Chaserant, C., and O. Thévenot 2001. Aux origines de la théorie économique des conventions : prix, règles et représentations (On the Origins of the Economic Theory of Conventions: Price, Rules and Representations). In Batifoulier (ed.) (2001).

Commons, J. R. 1927. Reasonable Value: A Theory of Volitional Economics. Manuscript. Collection of the Kyoto Prefectural Library. Call mark: /331.04/C85/, Material code: 1102508007.

Commons, J.R. 1934. *Institutional Economics: Its Place in Political Economy*. New York: Macmillan.

Dewey, J. 1910. A Short Catechism Concerning Truth. In *The Influence of Darwinism on Philosophy and Other Essays*, ed. Dewey J. New York: Henry Holt & Company.

———. 1917. The Need for the Recovery of Philosophy. In *Creative Intelligence: Essays in the Pragmatic Attitude,* ed. J. Dewey. New York: Henry Holt & Company.

———. 1922. *Human Nature and Conduct: An Introduction to Social Psychology*. New York: Henry Holt & Company.

———. 1927. *The Public and Its Problems*. New York: Henry Holt & Company.

Fehr, E., and K.M. Schmidt. 1999. Theory of Fairness, Competition, and Cooperation. *The Quarterly Journal of Economics* 114(3): 817–868.

Hodgson, G.M. 2003. John R. Commons and the Foundations of the Institutional Economics. *Journal of Economic Issues* 37(3): 547–576.

Kaldor, N. 1966. *Causes of the Slow Growth in the United Kingdom*. Cambridge: Cambridge University Press. (Republished in Kaldor, N., *Further Essays on Economic Theory*. London: Duckworth, 1978).

Kapp, K. W. 2011. *The Foundations of Institutional Economics,* ed. S. Berger and R. Steppacher. London: Routledge.

Kitagawa, K. 2016. Cumulative Causation in J.R. Commons's Institutional Economics from the Perspective of Instrumental Pragmatism. *Cahiers d'économie politique (Papers in Political Economy)* 70: 75–106.

Myrdal, G. 1957. *Economic Theory and Under-developed Regions*. London: Gerald Duckworth.

Petit, P. 2005. *Croissance et Richesse des Nations* (Growth and Wealth of Nations). Paris: La Découverte (coll. Repères).

Rebérioux, A., Biencourt, O., and P. Gabriel 2001. La dynamique des conventions entre consensus et conflit (The dynamics of the conventions between consensus and conflict). In Batifoulier (ed.) (2001).

Rutherford, M. 1994. Institutions in Economics: The Old and the New Institutionalism. In *Cambridge*. New York: Cambridge University Press.

Tokumaru, N. 2016. *Social Preference, Institution, and Distribution: An Experimental and Philosophical Approach*. Singapore: Springer.

Uni, H. 2007. Growth Regimes in Japan and the United States in the 1990s. *Revue de la régulation* 1: 1–20.

———. 2017. Scope of John R. Commons's Criticism on the Classical Theory of Value: Progress and Limits. In the 1927 Manuscript. In *Contemporary Meanings of John R. Commons's Institutional Economics: An Analysis Using a Newly Discovered Manuscript,* ed. H. Uni. Singapore: Springer.

Appendix

Excerpts from the 1927 Manuscript: *Reasonable Value, A Theory of Volitional Economics* by John R. Commons

Chapter 1 Method
Chapter 8 Scarcity and Efficiency

Editors' Note. This appendix contains excerpts from supposed manuscripts for *Institutional Economics*, written by Commons in 1927. One of the editors, Hiroyuki Uni, discovered the manuscript in the Kyoto Prefectural Library in 2012. We corrected words that were clearly typos in the original. Characters or words in square parentheses are added or replaced by us. Inserted [p. xx] shows page number in the original text. We changed the numbers of footnotes that were sequential in each page of the original text changed to sequential numbers in each chapter. We made efforts to make usage of dashes, commas, etc. uniform throughout the manuscript (such as the use of dashes in "use-value" and "scarcity-value".) We made other minor grammatical corrections for readability.

Hatsutaro Tanahashi (1893−1979) owned the only known copy of the 1927 manuscript. Tanahashi was a lecturer (and later, an assistant professor) at the Faculty of Agriculture, Kyoto University, and studied at the University of Wisconsin during 1926−1927, where he attended Commons's seminar. This manuscript seems to have been distributed in that seminar in 1927. In 1981, after Tanahashi's death, the bereaved family donated this copy to the Kyoto Prefectural Library (Call mark: /331.04/C85/, Material code: 1102508007). Please see Preface for a more detailed provenance and overview of the 1927 manuscript.

We sincerely thank the late Professor Hatsutaro Tanahashi for keeping this manuscript for five decades, as well as his family and the Kyoto Prefectural Library for making it available to the public. We also thank Woojin Kim and Emre Ünal for their effort digitizing this manuscript.

H. Uni (ed.), *Contemporary Meanings of John R. Commons's Institutional Economics*, Evolutionary Economics and Social Complexity Science 5,
DOI 10.1007/978-981-10-3202-8

Edited by
Adam Berg
Ph.D. candidate at the Graduate School of Economics, Kyoto University
e-mail: aj_berg@live.com

Natsuka Tokumaru
Kyoto University
e-mail: natsuka.tokumaru@gmail.com

Hiroyuki Uni
Kyoto University
e-mail: uni@econ.kyoto-u.ac.jp

[p.1]

Reasonable Value: A Theory of Volitional Economics

John R. Commons
April 1927
To be revised

Chapter I Method

1. Metaphysics

Economic theory should be looked upon as the work of inventing mental tools to be used in research and action. A history of economic thought is not so much a matter of curiosity or culture as it is an inquiry into the meanings which economists gave to words and events, the materials out of which they contrived those meanings, and the uses to which they put them in meeting current issues and constructing or justifying programs of action. Out of such historical review, one is able to discover changes in meanings, owing to changes in economic conditions and advances in general knowledge, and to construct or reconstruct meanings that may be used in modern economic investigations and plans of action.

If we attempt to reduce the subject matter of Political Economy to its simplest mental tools, found or implied in the writing of economists, these may be stated as the five ideas, Scarcity, Efficiency, Violence, Repetition, and Futurity. Each of these ideas has its own history in the evolution of economic thinking. Each is derived from common sense and other sciences, which serve therefore as materials. Each has been brought over piecemeal to the attention of economists, although, when used to explain events, they are found to be so interlocked in their [p. 2] dependence on each other that they cannot be separated in fact. The dimensions and interactions which they signify can, however, be measured directly or indirectly by modern statistical methods.

The ultimate fact of observation that man is a finite being whose powers are inadequate to satisfy all his longings is the universal presupposition of philosophy, but its special application as a social relation brought in to explain or advocate an economic or political policy begins only with Benjamin Franklin in 1751. The idea was extended to ethics and jurisprudence by Hume in 1740 and by Malthus in 1798 and finally extended to all living creatures by Darwin in 1859. Hume's and Franklin's expositions may be given the name Proprietary Scarcity and Darwin's and Malthus' the name Biological Scarcity, and the further extension of the principle to what may be named Psychological Scarcity was made independently by Gossen in 1854, Jevons in 1862, Menger in 1871, and Walras in 1873. The principle of scarcity had always been recognized in the theories of supply, demand, and price, but the idea itself had not been independently formulated in psychological terms prior to Gossen and indeed was not given its universal formula for economics until the simultaneous equations of Walras and Cassel in 1884 and 1900.

The principle of Futurity, likewise, is a universal fact of living creatures, so familiar, in the case of human beings, that it is always implied if not expressed, but it was not given a measurable interaction upon the other dimension of economic science until the work of Böhm-Bawerk in 1886, Cassel in 1903, and Fisher in 1906, although the discounting of the future was provided [p. 3] for by Bentham and Jevons. It was extended under the name of entelechy to all living creatures by Driesch in 1904.[1]

It follows that if man's present powers are limited and his longings unlimited, the principle of Efficiency or Productivity becomes interwoven with scarcity and futurity, and this idea becomes the central one in economic science with John Locke in 1689 and Adam Smith in 1776, personified under the name Labor. Locke's lead was followed by Ricardo in 1817 and by Marx and Proudhon in 1849. But human efficiency was not clearly separated from divine beneficence, or the productivity of nature's forces, or analogies to physical sciences, until the theoretical work of Veblen in 1900 and the engineering work of Frederick Taylor in 1890. It has always been, and is now, a central idea in practical affairs and economic theory, interlocked with the other dimensions, scarcity and futurity.

The idea of Repetition was always implied in the ideas of Custom, Habit, and Standard of Living, but was never clearly separated from ideas of natural law, or the idealism of ethics or subjective psychology, until the incoming of the behavioristic sciences of psychology with their emphasis on stimuli and response and the incoming of statistical methods for measuring the dimensions of the turnover, velocity, and rate of change. It was John Locke in 1689 and Jeremy Bentham in 1776 who eliminated custom but assumed repetition, the former by substituting a law of Nature and God, the latter by substituting the recurring pleasures and pains of individuals. But with Bentham and his followers, there was no avowed principle of Custom intervening between the individual and [p. 4] that organized monopoly of violence which we name Sovereignty. Hence economic theory was

[1] Driesch, Hans; *Gifford Lectures* (1904, 1905).

worked out with the two ideas, the Individual and the State. Bentham's *A Fragment on Government*, in 1776, was provoked by Blackstone's *Commentary on the Laws of England* in 1769, and henceforth jurisprudence, like economics, was separated in two directions: that of John Austin in 1830, who followed Bentham with only the two explicit ideas, individuals and sovereigns, and that of the English and American courts which followed Blackstone with a personified repetition and expectation which they called custom, intervening between the individual and the State.

In England, a bold attempt was made by McLeod in 1860 to shift economic theory completely from the ideas of physical things to the idea of legal rights created by Sovereignty, in the meaning of the common law derived from Custom, but his attempt succeeded only in part in the field of banking and credit, since he treated those legal rights, which are only legalized expectations, on the false analogy of physical commodities. In Germany, Schmoller in 1873 represents the high point of the historical school in his presentation of the claims of Custom, but he did not clearly separate it from subjective ethics. It was not until Webb's *Industrial Democracy* in 1900 and Veblen's *The Instinct of Workmanship* in 1910 that the idea of custom, in the realm of labor and productivity, was clearly separated from subjective ethics, and not until the rise of extrajudicial administrative commissions and arbitration boards of the past 30 years in America, dealing with the practices of business and labor, that the research material was at hand for study of Custom as one of the several [p. 5] factors in economic science. A flood of monographic work dealing with repetitive practices has appeared during this time, so that economic science seems to be resolving itself into the two types of phenomena, Practices and Prices. The presuppositions of these repetitive practices, conveniently summarized as Custom, have also "obtained" research material from the flood of monographs arising out of the so-called behavioristic psychology.

While Custom, in the quantitative sense, is the mere repetition of transactions, yet it is more than repetition because it functions with futurity and collective action. In the physical sciences, the idea of repetition is enough to create the notion of a law of nature, but in human sciences, it is the Futurity of Repetition that constitutes the important human relations, Security and Compulsion. For this reason Custom is more than repetition, in that it carries a coercive effect upon the practices of individuals, requiring them to conform in the future to what was familiar in the past, and is thus an expression, not of a law of nature, but a law of human nature. Thus custom is the *requirement* of repetition – and it is this aspect that has always associated custom with the idea of what *ought* to be – in the field of rights, duties, ethics, law, and conscience. Custom is a dimension that can be measured by modern statistical devices of repetition, duplication, variability, lag, velocity, etc., but it requires mental analysis to construct the meaning of a coercive power residing in expected repetition and dominating present behavior.

This meaning arises from the functioning of Time. Time, of course, is not a thing – it is an Idea whose meaning is repetition, motion, and variability. Doubtless the most important scientific [p. 6] change that has occurred during the past 40 years, not only in economics but in all sciences, is the incorporation of time in its various dimensions of repetition, duration, lapse, change, relativity, etc., in the primary concepts with which the sciences deal. In order to portray the meaning of

time, a real revolution is occurring in the methodology of all the sciences, including the mental tool of science and mathematics. It is found that Motion requires a fourth dimension to be incorporated in the elementary concepts themselves, instead of the older dualism of static bodies with dynamics somehow added from outside. In physics this four-dimensional idea reached its mathematical formula in the equations of Loren[t]z and Einstein, and its broad generalization, in such shape as to be applicable to mechanical phenomena, finds expression in Whitehead's two ideas, Event and Organic Mechanism,[2] which take the place of the older "atoms," "molecules," "objects," and their action and reaction. In biology the corresponding ideas are metabolism and organism, while in economics they are Transactions and Going Concerns.[3]

But economics contains a dimension of Time not contained in Physics, namely, Future Time. Transactions and going concerns are dominated by expectations, and a going concern is the collective expectation of repetition, duplication, and variability of transactions. As soon as this futurity disappears, the concern stops going.

If, on the foregoing basis, we summarize the history of economic theory with reference to what was taken to be the ultimate unit of investigation, we find that the units were first [p. 7] commodities and individuals, then the feelings of individuals respecting commodities, and then the present and expected transactions between individuals. Commodities were the physical output of labor for purposes of physical exchange, and these were the ultimate units for Locke, Smith, Ricardo, Marx, and Proudhon, for which reason we designate them Physical Economists, whose work terminates in the idea of efficiency. Next, feelings are the subjective side of commodities, and these became the ultimate units for Bentham, Jevons, Menger, Böhm-Bawerk, and their followers, the school known as Psychological Economists, whose work terminates in the ideas of scarcity and futurity. Finally, transactions are the modern substitute for the older physical idea of exchange of commodities, and in their threefold aspect of managerial transactions, bargaining transactions, and judicial transactions, they are the behavioristic units of investigation modified in their dimensions by the five variable dimensions, scarcity, futurity, efficiency, sovereignty, and custom.

Thus the historical movement of economic thought, from one point of view, is the history of a change in the subject matter of economics from commodities, to feelings, then to transactions or, more broadly, a change from a science dealing primarily with the relations of man to nature into a science dealing primarily with the relations of man to man.

From a related point of view, this historical movement is a change from a science whose unit is the individual to a science whose unit is a transaction. Since, however, an expected repetition of transactions is a going concern, the transition is one from individuals in a "state of nature" to individuals conceived [p. 8] as occupying positions, membership, citizenship or jobs, which are names for participation in

[2] Whitehead, A. N. *Science of the Modern World* (1924).

[3] See Commons, *Legal Foundations of Capitalism* (1925).

the repeated transactions of going concerns. Here the historical movement requires us to go back to John Locke, in 1689, who formulated the idea of natural rights to property and liberty derived from labor, as the foundation of both a theory of economic value and a theory of political sovereignty. Law and economics were with him inseparable, and labor was their common ground. But the modern idea of a going concern, developed in the practices of business and the decisions of American courts, restores John Locke's union of economics and law, not upon his personification of labor but upon that interdependence of expected managerial, bargaining, and judicial transactions which constitutes the changing unity of a going concern.

It is this idea of going concerns, now well established in the practices of business and labor as well as in the decisions of courts, that makes possible the idea of an interdependent unification, not in a single individual, but in a single process of many individuals, of the five elements previously mentioned, namely, scarcity, futurity, efficiency, violence, and repetition. These become primary interdependent factors which must be taken into account in any complete analysis of transactions and going concerns, since a quantitative change in the dimensions of a transaction or going concern, caused by a change in any one of them, is accompanied, preceded or followed by quantitative changes in one or all of the others.

A consideration of the way in which the idea of Time has entered into this historical development of economic theorizing reveals, as above suggested, the important distinction between the sciences of life and the physical sciences. In the physical [p. 9] sciences, the subject matter of investigation takes no account of future time, but in the human animal, especially, past, present, and future are memory, experience, expectation, wish, hope, and fear. Hence our historical review indicates a movement from the physical economists whose commodities were created in the past, to the psychological economists whose feelings occur in the present, then to the volitional economists whose present transactions and going concerns are dominated by the expectations of the immediate and remote future. Of course, futurity was always implied, but the mental tools and mathematical devices for separating it out and measuring it as an economic dimension have only recently been in process of construction.

A similar transition in ideas of Time has occurred in the regions of philosophy, psychology, biology, and jurisprudence, from the period when universal reason or divine beneficence was pictured as having laid down laws or commands in the past to be obeyed in the present to the modern pragmatic philosophy, anticipated by Hume and formulated by Peirce, which looks to future consequences for the guide to repetition of behavior in the present. It is this introduction of what is so plainly a set of immaterial imaginings of the future that requires the distinction to be made between what may accurately be named metaphysics and what may be distinguished as Trans-physics, Trans-biology, or Personification.

Human beings do not act upon perfect knowledge of the world, but upon the Meanings and Values for the future which they attribute to what they experience through the five senses in the present. The color red is supposed to consist of some 400 trillion vibrations per second and the color violet of some 760 trillion

per second. [p. 10] Hence the color red is metaphysical in the literal sense of the term nonphysical. We see red, but that is only the Meaning which we give to certain repetitions in the world's mechanism, which are not red at all. Red is our expectation of something that will happen, based on experience, repetition, memory, and our interest in the happening. It is the meaning we give to 400 trillion vibrations per second. And so with every object of nature, of human nature, and our own internal organism. Insofar as we act on experience, memory, and expectation, we do so as metaphysicians. Our knowledge is only the meaning which we give to nature's supposed vibrations, and this meaning is the intellectual side of what, on the emotional side, is value, and on the volitional side is choosing. From this point of view, economic science is and always has been metaphysical, in the literal sense of the term, quite the same as all science is metaphysical. The difference, however, from the physical sciences is that the subject matter of economics, human beings, is itself metaphysical as well as physical, whereas the subject matter of the physical sciences is believed to be solely physical.

We indicate this metaphysical quality of the subject matter of economics by the abstract term, Willingness, intending thereby to construct a mental tool that shall include the relation of futurity as a dimension operating in economic behavior. The term is a symptom of metaphysics in the same sense that electricity, or gravity, or energy is metaphysical, including, however, futurity as a dimension to be measured, which they do not include. Willingness is not a substance, a soul, or spirit, any more than electricity or gravity or energy is a substance. It is a mode of motion – transactions and going concerns – whose meaning cannot [p. 11] be grasped nor its dimensions measured without including futurity. Willingness indicates a mode of motion determined by the meanings given to words, ideas, and events, in view of the happenings expected; a mode of motion that is determined by the values, which are the feelings of relative importance excited by these immediately or remotely expected happenings; and the motion that is itself a repeated choosing between alternatives in view of these meanings and values. The word willingness is thus a sign given to what we mean by the threefold activity of meaning, valuing, and choosing.

The metaphysics here involved is to be distinguished from that other, the incorrect meaning of metaphysics, which is more accurately to be named trans-physics, trans-biology, or personification, in that it transfers physical, organic, or personified motions into transactions and going concerns. This false meaning of metaphysics we shall indicate by such verbs as hypostatizing, reifying, "thingifying," vivifying, personifying, and eternalizing and such nouns as animism, materialism, or false analogy. Those may be condensed in the three terms, mechanism, organism, and personification, since they consist in transferring to economics the ideas properly employed in physics, physiology, or an individual will. We shall find the history of economic theory filled with subtle and overt meanings of mechanism, organism, and personality, which we conceive can be avoided by substituting the ideas, going concerns, and transactions. Going concerns and transactions are to economics what Whitehead's "organic mechanism," or rather going mechanism, and "event" are to physics, or the physiologist's "organism" and "metabolism" to biology, or the

total personality to the particular acts of will. And the [p. 12] transfer of these mechanistic, organic, or personal meanings to economics is not metaphysics but hypostasis, materialism, animism, and personification, each of them belonging to the category of false analogy.[4] Wherever one or another of those transmigratory meanings occurs in economic theorizing, we consider the resulting intellectual tools unfitted for economic research or action, although, on account of the paucity of language, we are often compelled to use them by way of allowable dramatic analogy or figure of speech.

2. Formula of Transactions

Since transactions and their repetition as going concerns are the subject matter with which this book deals, and since the historical development of mental concepts suitable for their investigation is our method of approach, a preliminary statement will aid in the exposition to follow. Managerial and judicial transactions employ the social psychology of command and obedience, whether it be in the industrial transactions between employees and their foremen, superintendents, board of directors, or arbitrators or in the political transactions between citizens and policemen, executives, judges, legislatures, or supreme courts. The industrial transactions pertain to the working rules and customs of industry; the political transactions are known as process of law. The distinguishing mark of these managerial and judicial transactions is the absence of alternatives. The employee or citizen must obey or suffer punishment.

[p. 13] But bargaining transactions imply the social psychology of persuasion or coercion, in that the parties have each a choice of alternatives between which they can select without punishment. A coercive bargaining transaction is one in which the alternative for one of the parties is onerous, but not looked upon as punishment for disobedience. A persuasive transaction is one in which both alternatives for both parties are beneficial. Managerial and bargaining transactions shade off into each other and differ within themselves so that, in any particular transaction, there may be differences of opinion as to the classification. These differences require investigation and social standards of measurement.

A transaction is more than an exchange of goods or transfer of title – these occur at a point of time in the total process of a single transaction. One transaction arises out of others, begins with negotiations, advertizing, conferences, arguments, etc., leading to an agreement or decision, [and] then followed by the performance, avoidance, or forbearance agreed upon, the whole process occupying, in duration of time, a few minutes to 99 years, more or less. A transaction thus creates a working rule for the future, and then a repetition, duplication, and variability of transactions,

[4]Henshaw Ward has written a book on these mental operations which he calls Throbbing (1926). The foregoing distinctions were clarified for me by Dr. Erich Voegelin of Vienna.

when coordinated under working rules and customs, constitute a going concern. A going concern is the expected repetition of beneficial transactions.

It will thus be seen that the characteristic transactions of modern business are the commercial credit transactions which determine the legal control of industry. A commercial credit is to be looked upon as a single transaction with two sides, a commodity side facing toward the future on a commodity market of [p. 14] producers and consumers and a pecuniary side facing toward the present on a money market, where the same producers and consumers are acting as borrowers and lenders through the medium of transactions with bankers. On the commodity side, it is a promise to pay, enforceable at law, usually within 90 days, by one businessman to another businessman, for a quantity of goods at a price agreed upon. On the pecuniary side, it is the present value, discounted by a bank at a rate of interest for a lapse of time, of that promise to pay in the future, which thereupon serves as money, or the present purchasing power of checks enforceable on demand at the bank. Such a transaction, of which one side is future income and the other is its present purchasing power, when repeated and multiplied in billions of variable dimensions, not only determines the quantities and prices of commodities to be produced but also creates, cancels, and renews the quantity of money in the form of demand credit, needed to carry on the further production of commodities. These commercial credit transactions thus contain in themselves the businessmen's decisions as to the five dimensions of economic science above mentioned, namely, Futurity, Scarcity, Productivity, Custom, and Physical Force of the Government.

The subject matter of transactions is a highly complex set of changing economic and legal relations, and therefore the following formula is here offered in order to obtain precision of terms and to serve as a tool for critical study of the various economic theories to follow.

[p. 15] The familiar economic formula of a market is that of two buyers and two sellers between whom exists the threefold economic relations of competition, choice of opportunity, and economic power. Each relation, however, is influenced by the common fact of variable degrees of futurity characteristic of a credit system. The formula may be constructed as follows: in which B and B′ are competing buyers and S and S′ are competing sellers. Each comes upon the market with an idea of the price he is willing to bid or take for a given commodity, indicated here by dollars to be paid, say, in 90 days and discounted into present purchasing power by a commercial bank (Fig. I).

Fig. I Economic relations

B is the stronger buyer, in that he is willing to go as high as $100 payable in 90 days, whereas his competitor B′ is willing to go only to $90. S′ is the stronger seller, in that he is willing to take as low as $110, whereas his competitor S′ is not willing, if he can help it, to take less than $120.

On the other hand, B and B′ are competing for a choice of opportunities between paying $110 to S and $120 or less to S′, while S and S′ are competing for a choice of opportunities between selling to B for $100 or selling to B′ for $90 or more.

[p. 16] If a transaction actually occurs, it will occur between B and S at some point between $100 and $110 which will measure the relative economic power, that is, bargaining power, of the two bargainers. If the price agreed upon is $100, then that price measures the relation between expected degrees of scarcity for the two parties B and S. One is the degree of scarcity of money for B compared with the degree of scarcity of the commodity for him. The other is the degree of scarcity of money for S compared with the degree of scarcity of the commodity for S. The price $100 measures the relative scarcities existing between these four degrees of scarcity of money and commodity for B and S and is therefore a measure of the relative economic power of the two under all the circumstances and expectations of the actual time and place. This is the relation of price or the measure of the relation between the several degrees of scarcity, to which we give the name Economic Power.

But there are two other relations of scarcity for both B and S. These are opportunity and competition.

If it were not for the presence of S who sells for $100, and if B, as a consumer and buyer, were economically weaker in that the degree of scarcity of the commodity for him was greater than the degree of scarcity of money for him, then he might be forced to pay as high as his next worse opportunity, the $120 demanded by S′. The presence of S, however, enables him as a purchaser, to avoid this worse alternative outgo of money, in that otherwise he would be compelled to pay $120 instead of $100. This worse alternative may be given the name negative value, nuisance value, dis-opportunity value, or the value of the [p. 17] service which S renders to B under the actual conditions of relative scarcities, by furnishing to him the opportunity of buying at $100 instead of buying from S′ at $120. This value of service idea was suggested by Adam Smith and was made the basis of value by Bastiat in answering the Socialists and by the railroad and public utility corporations of America in the arguments against reductions of rates by railroad commissions. It is a scarcity-value enjoyed by having more abundant opportunities. We shall give to it the technical name Dis-Opportunity Value or Value of Service. Dis-opportunity value is the negative value to self, as a buyer, in avoiding a worse opportunity to buy.

Again, looking at the situation from the standpoint of the seller S, if it were not for the presence of B who pays $100, and if S, as a seller, were economically weaker in that the degree of scarcity of money for him was greater than the degree of scarcity of his commodity, then S might be forced to accept as low as his next best opportunity, the $90 offered by B′. The presence of B enables him to forego this worse alternative income in that otherwise he would be compelled to accept $90 instead of $100. This next best alternative which he must forego may be given

the name negative cost, or "utility cost" as it was named by Böhm-Bawerk, or "opportunity cost" as it was named by Davenport, for it is a cost, not in the positive sense of a positive outgo of the commodity which S sells, but in the volitional sense of a negative cost, namely, the alternative lesser income which he might have had but had to forego because he took the better income, $100, and could not take both the $100 income and the $90 income at the same time for the single commodity [p.18] which he had for sale. It is a scarcity cost imposed by limited resources. To this economic relation, we shall give the technical name Opportunity Cost or Cost of Service. Opportunity cost is the negative cost to self, as producer and seller, of foregoing a less beneficial opportunity to sell.

It will be seen, in this description and nomenclature, that legal tender money is the center and standard not only of measurement but also of the social relations involved and of the hopes and aims of all producers and consumers. Each producer must convert his product into money, and each consumer must have money in order to get products, so that money epitomizes both economic power and the largest freedom of choice in a world of division of labor. Thus money is the outstanding characteristic of modern economic life. Moreover, it is legal tender money, or the equivalent on demand of legal tender, because it is founded on a credit system whose standard is the expectation of what courts will do in the enforcement of contracts to pay money and to deliver commodities at specified dates in the future or unspecified dates on demand. For this reason, money is the all-important social institution for all producers and consumers. Yet the money in question is not a cash nexus except by metaphor – it is a credit nexus by actuality. For this important social reason, the nomenclature turns on money. Value is expected money income; Cost is expected money outgo; Value of service is alternative larger money outgo avoided; and Cost of service is alternative lesser money income foregone.

[p. 19] We thus have four economic dimensions for every economic transaction, all of them focusing on the legal institution of money with its settled expectations of what courts will do, and all of them highly variable for different transactions, but all of them found in the typical formula and anticipated in the theories of various economists. When stated in terms applicable to both money and commodities, they may be named Positive Income, Positive Outgo, Alternative Greater Outgo, and Alternative Lesser Income, but when stated with regard to money as the center of social importance, they may be named Positive Value, Positive Cost, Value of Service, and Cost of Service, all in terms of money or credit. The most general corresponding terms, designed to bring out the ultimate scarcity relations involved, are Bargaining Power (positive value and positive cost), Dis-opportunity Value, and Opportunity Cost. These concepts will be more fully analyzed when we come to the economists who first proposed them.

The terms Income and Outgo here employed carry with them the meaning of scarcity, since income is an addition to the quantity of commodity or money in possession of the recipient, thus diminishing its scarcity by increasing its abundance for him, while the term outgo signifies a deduction from the stock on hand, thus increasing its scarcity by decreasing the abundance possessed by the one who yields the outgo.

This changing relation between the individual and the quantities of his various possessions, we designate the *degree of scarcity* of each possession, which is continually changing with income and outgo. Mathematically, scarcity is a ratio between the quantity wanted and the quantity owned, and this [p. 20] scarcity ratio is diminished by income and increased by outgo. In other words, the degree of scarcity of a particular possession, assuming the quantity wanted does not change, varies inversely with income and directly with outgo. But since the quantity wanted of a particular possession cannot be known, except that it is continually changing, it is the *relative* scarcities of different possessions that can be known and measured by the choices and exchanges.

Thus, in the foregoing formula, B's income of commodity is exactly S's outgo of commodity, and B's outgo of money, $100, is exactly S's income of money. The outgo of commodity from S increases the degree of its scarcity for S, and the identical income of commodity for B decreases its degree of scarcity for B. So with the changes in the degrees of scarcity of money for B and S. The outgo of money has increased its degree of scarcity for B and decreased its degree of scarcity for S.

But these degrees of scarcity for individuals are subjective and immeasurable. All that we can know from the transaction is relative scarcities. The scarcity of money for S, prior to the transaction, was greater than the scarcity of the commodity for him, but after the transaction, his scarcity of money was reduced by the income of money, and the scarcity of commodity increased by the outgo of commodity. The inverse is true of B. Relatively, we know there are these changes in the various degrees of scarcity, measured not by degrees of scarcity but by relations between the several degrees of scarcity.

[p. 21] It is these relative scarcities for different individuals, which are ratios between their different degrees of scarcity, the latter being also ratios, but immeasurable, that we name Bargaining Power. Bargaining power is the power of relative degrees of scarcity to induce action, and the only system of measurement which we have, however inexact, is the money system which measures the relative scarcities and the changes in relative scarcities during that process of outgo and income of commodities and income and outgo of money, which we name transactions.

These scarcity meanings have here been examined because it is believed that they were not distinguished by the early physical economists and their present day successors, from the efficiency ratios of output and input. It was assumed by the labor theorists that output was identical with income and input identical with outgo. But the difference here intended to be expressed by the two sets of terms is as different as scarcity and efficiency. Efficiency is a purely physical relation between an amount of energy put in and the amount work done. The former is input, and the latter is output. If there is no loss, then the ratio of output to input is 1 to 1, 100 % efficiency. If there is a loss, then the degree of efficiency is reduced by that amount, so that the degree of efficiency varies directly with output and inversely to loss. Since, however, in the case of human labor, there is no way of measuring degrees of efficiency, because there is no measurement of the input in terms of human energy, practical purposes are met by relative efficiencies, where the man-hour is the unit and the relative efficiencies vary directly with output per man-hour.

[p. 22] This output is here designated use-value and has no functional relation whatever to human wants, that is, to the ratio between quantity wanted and quantity available. It is purely a physical concept of the quantity of use-value added by human labor, the characteristic value of the physical economists from Locke to Marx and McCulloch.

Whether this output shall become income for the laborer depends upon the legal and economic situation. The output of a slave is not his income – it is his master's income. The commodities which the slave receives in exchange are his income and his master's outgo. Nor is the output of a wage earner his income – it is his employer's income. The money which he receives from his employer is his money income and his employer's money outgo. Only in the case of the isolated worker, or the worker who is both worker and proprietor as understood by John Locke and Adam Smith in the case of their typical laborer, the farmer, manufacturer, or merchant, was his output his income.

Likewise with outgo and input. Outgo signifies a deduction from a supply on hand, but input, being a physical concept, has no reference to the scarcity concept, supply. Hence there is a treble meaning of labor, which we shall come across, either an outgo of energy from a limited supply of energy owned by the laborer (Locke) or an outgo of pain from a limited supply of happiness enjoyed by the laborer (Smith) or an input of energy from a human machine without regard to its property rights or happiness (Ricardo, Marx).

[p. 23] If we go in a different direction and inquire what are the elementary but variable dimensions of an individual's behavior in his choices as a participant in a transaction involving these economic dimensions, we find that they can be reduced to the three dimensions, performance, avoidance, and forbearance. While these terms indicate universal dimensions of all behavior,[5] their applicability may be pointed out in the foregoing formula of a transaction. S, for example, "performs" when he makes the agreement with B and delivers the commodity. He "forbears" insofar as he does not take full advantage of his presumable economic power, but accepts $100 instead of the $110 he might perhaps have been able to exact. He "avoids" in that he forgoes the $90 offered by B′. On the other hand, B "performs" by promising and paying $100; he "forbears" in that he does not use his presumable economic power to force S down to the $90 which he might have been able, under the circumstances of competition, to compel S to accept. He "avoids" paying the $120 asked by S′ by reason of having the opportunity of getting the commodity from S at $100.

These three dimensions of each individual's behavior are found in all transactions and will be found to be the dimensions that come up for investigation in courts of law.

The efficiency idea means a different type of transaction from the scarcity idea. This we name the Managerial Transaction, distinguished from the Bargaining Transaction. The bargain[ing] transaction is typified in the forgoing formula of

[5] Cp. Commons, *Legal Foundations*, 69 ff.

four parties with the three scarcity relations of bargaining power, choice of [p. 24] opportunities, and competition. Here the psychological terms applicable are persuasion or coercion, and the parties are legal equals, though economic unequals.

But the managerial transaction exists only between two persons who are legally superior and inferior, such as foreman and employee, and the psychological relation between the two is command and obedience or punishment. The bargaining transaction results in prices (including wages), signifying the reciprocal scarcity relations of income and outgo, but the managerial transaction results in production, signifying the efficiency relation of output to input. Of course, both these managerial and bargaining transaction are continually changing through legal and economic changes, from slavery, serfdom, small manufacturers, merchants, and farmers to modern factories and world markets.

The psychological terms above employed require a further distinction to be made. While the biological psychologists are satisfied with such terms as "stimulus and response," these terms acquire a specialized application in human relations which may be distinguished as inducements and sanctions. Inducements are the stimuli applied to individuals by other individuals, but sanctions are the stimuli applied to individuals by a collection of individuals acting in concert. Inducements are indicated as the psychological relations between four individuals in the preceding formula of a transaction. Usually, also in the case of sanctions, an individual represents the group, as an executive or foreman, and it is this that gives him the position of superior. And the sanction, rather than inducement, which he employs, is derived from the expected collective action in case of disobedience. [p. 25] Sanctions are commands and punishments authorized by collective action; inducements are persuasion or coercion exercised by individuals.

It is this distinction that connects managerial transactions with judicial transactions. When a decision is made by a judge or arbitrator, it takes the form of a command requiring obedience, enforced by that alternative collective action which we name punishment, but which, from the standpoint of the stimulus to obey, is named the sanction.

Inducements and sanctions equally operate on the will as offering a choice of alternatives, but inducements offer alternatives which only individuals, as such, can execute, while sanctions offer alternatives enforced by the concerted action of groups, directly or through their authorized representatives.

This classification of inducements and sanctions requires a further distinction between the kinds of inducement or sanction. These may be distinguished as moral, economic, and physical. The moral inducement or sanction is only the collective good opinion to be obtained by acceptance or obedience, without any economic gain or loss, or any fear of violence. Economic inducements and sanctions are profit, loss, bankruptcy, wages, employment, unemployment, and the many other varieties of income or outgo obtained or suffered by reason of individual or collective action. Physical inducements and sanctions are simply violence employed or threat[en]ed by individuals and collection[s] of individuals.

It is impossible, in many transactions, to separate these three types of inducements and sanctions, since they are all operating together, but the whole progress of

law and economics [p. 26] through the centuries consists in trying to separate them, first, by eliminating physical violence from transactions, then eliminating unequal economic power, and leaving the field for moral power.

In all of these three types of bargaining, managerial, and judicial transactions and in each of the three dimensions of bargaining transactions, conflicts have arisen which have required decisions to be made by superiors who enforce the collective sanctions, and the legal or extralegal relations thus emerging require also a formula based upon the sanctions. By legal relations we mean those whose sanctions are violence; by extralegal relations, we mean those whose sanctions are economic or moral.

This formula, in order to be complete, is highly complex, as [outlined] below, and applies to any dispute that may arise between any one of the four participants in the bargaining transaction and any other of the four, as well as participants in the managerial and judicial transactions, and to all of the sanctions whether physical, economic, or moral.

On analysis, it will be seen that all economic disputes arising from bargaining transactions may be classified under the three heads, bargaining power, value of service, and cost of service, while all disputes arising from managerial and judicial transactions may be brought under the head of the extent of authority which the superior as executive or judge has over the inferior.

These four types of disputes, however, can all be brought within a single formula of legal or extralegal relations, first devised for legal relations by Hohfeld and then developed by Corbin[6] [p. 27] to which we have added the corresponding collective action directed toward the opposing individuals.

We also find it necessary to make the distinction between Opposite Persons and Collateral Persons. Opposite persons signify the two parties, of which the following are typical: buyer and seller in bargaining transactions, foreman and employee in managerial transactions, and court and litigant in judicial transactions. Collateral persons are "third parties," who interfere or threaten to interfere with the process of the transaction, and these, in the bargaining transactions, are those who interfere with bargaining power, competition, or choice of opportunities. The formula of Legal Relations applies to both opposite persons and collateral persons, with differences to be noted later.

There is, however, a double meaning of the term opposite – economic opposites and legal opposites. The legal opposites are plaintiff and defendant, and these may be either economic opposites or economic collaterals, according to the nature of the economic dispute at issue. The legal opposites are sufficiently implied in the terms plaintiff and defendant. The economic opposites and collaterals are given explicit designations in the following formulae.

Furthermore, the formula, when it gets down to the actual physical behavior of the individuals upon which the legal and economic relations depend, signifies one or

[6]Hohfeld, W.N. Some Fundamental conceptions as applied in Judicial Reasoning, 23 *Yale Law Journal* 16; 26 *Yale Law Journal* 710; Corbins, A.L., Legal Analysis and Terminology, 29 *Yale Law Journal* 163; Commons, *Legal Foundations of Capitalism* 91 ff.

Legal Relations

Plaintiff			Economic Opposites		Defendant	
Legal Relations	Collective Action	Auxiliary Verbs	Collective Expectations	Auxiliary Verbs	Collective Action	Legal Relations
Right	Security	Can	Sanction	Must	Compul-sion	Duty
No Right	Exposure	Can not	No Sanction	May Need not	Liberty	No Duty (Privilege)
No Duty (Privilege)	Liberty	May Need not	No Sanction	Cannot	Exposure	No Right
Duty	Compul-sion	Must Must not	Sanction	Can	Security	Right

Fig. II Legal relations

all of the three dimensions of human action, namely, performance, avoidance, and forbearance, as the case may be. The formula applies therefore to any [p. 28] issue involving the individual behavior of performance, forbearance, and avoidance, for the sake of the resulting economic issues of Efficiency and Scarcity in their aspects of management, value, value of service, cost, and cost of service (Fig. II).

In explanation of the formula, the legal right of one person is the equivalent legal duty of the opposite person, but since this right-duty relation is limited, the boundary is the point of no right[,] no duty, the latter given the name "privilege" by Hohfeld. But the parties have reciprocal rights and duties, so that each person in a transaction has a field of right, no right, no duty and duty.

Yet these legal relations are of no significance except as they carry an expectation of penalty or sanction to be imposed by collective action. A legal right means a correlative and equal duty imposed upon the opposite party by an expectation of the sanction of collective violence in case of disobedience; and a legal right without such a sanction is no right. Only by hypostasis can it be [p. 29] called a legal right, because if there is no sanction of violence, then there is no legal duty, although there may be an economic duty or a moral duty sanctioned by collective action other than violence.[7]

The economic correlatives are evident. If one person has a right to the exercise of bargaining power, or managerial or judicial power, it signifies that he has the

[7]These analogous economic and moral duties and sanctions will be introduced in the chapter on Bentham.

security of collective action for those expectations against the opposite party who thereby is burdened by a duty enforced by collective compulsion, exactly equivalent to the scope of the security. If he has no duty (privilege) with its absence of collective compulsion, then he enjoys liberty, and this liberty is exactly equal to the exposure of the opposite party to such bargaining power or managerial or judicial authority, as the privileged party is able and willing to exercise. The reciprocal relation holds likewise. Hence, each person in a bargaining, managerial, or judicial transaction has four collective relations to an opposite person, with their equivalent collaterals, namely:

[1.] Security insofar as he has a right to require collective compulsion in another;
[2.] Exposure insofar as he has no right to require collective compulsion on another;
[3.] Liberty insofar as no collective compulsion is imposed on him;
[4.] Compulsion itself insofar as he is required by collective action to perform, forbear, or avoid for the good of other.

In order to interpret these collective relations to the individuals in terms of their behavior, Corbin has expressed them by a set of auxiliary verbs of Capacity or Capability, indicating [p. 30] the expectations of a person with reference to using collective action. These legal auxiliaries are applicable to any one of the verbs indicating performance, avoidance, or forbearance. Thus the verb "can" serves to indicate the expectations of one to whom the collective actions of physical force are available against another, while the verb "must" or "must not" indicates the correlative collective action upon the opposite person upon whom is the duty of a performance, an avoidance, or a forbearance.

Or course the negative, indicating "no right" and its correlative exposure, is the verb "cannot" indicating that collective action is not available to him, and this leaves the opposite person in the position where, instead of "must" or "must not," he "may" or "need not" perform, forbear, or avoid as he pleases, within the limit of this his immunity from collective action.

Thus each person in every transaction, with reference to what he may expect from collective action, has the various expectations of can, cannot, may, need not, must, and must not, each of them applicable to any one or all of the three dimensions of his behavior – performance, avoidance, and forbearance – and the resulting economic relations of management, bargaining power, competition, and choice of opportunities.

While all of these four forms of correlatives are present in all transactions, yet certain regroupings of them have emerged which are coming to be known as the distinction between Intangible Property and Incorporeal Property. Intangible property is the expected profitable transactions based on liberty of competition, liberty in choice of opportunities, and liberty in the use of such bargaining power as one may possess. It applies to all bargaining [p. 31] transactions and may be represented by the following regrouping of the preceding collective relations. The characteristic feature of these transactions is the absence of collective sanctions, generally known as "free competition" (Fig. III).

In contrast to intangible property where there are no rights and no duties and therefore no sanctions of collective action available on either side, whatever may be

Intangible Property --Bargaining Transactions

Plaintiff			Opposite Persons		Defendant	
Legal Relations	Collective Action	Auxiliary Verbs	Legal Expectations	Auxiliary Verbs	Collective Action	Legal Relations
No Right	Exposure	Cannot	No sanction	May	Liberty	No duty (Privilege)
No Duty (Privilege)	Liberty	May	No sanction	Cannot	Exposure	No right

Fig. III Intangible property – bargaining transactions

Incorporeal Property --Managerial Transactions and Contracts

Plaintiff			Opposite Persons		Defendant	
Legal Relations	Collective Action	Auxiliary Verbs	Legal Expectations	Auxiliary Verbs	Collective Action	Legal Relations
Right Duty	Security Compulsion	Can Must Must not	Sanction Sanction	Must Can	Compulsion Security	Duty Right

Fig. IV Incorporeal property – managerial transactions and contracts

the performance, avoidance, or forbearance, the term Incorporeal Property may be distinguished as that where there are duties of performance, the principle economic examples being the duty to pay a debt or deliver a commodity and the duty to work in obedience to the commands of a proprietor or his representative. This formula is a regrouping, as follows, the essential feature being the sanctions (Fig. IV).

[p. 32]

A complete economic and legal analysis of transactions requires, as indicated above, the distinction to be made between economically opposite persons, sometimes described as first and second parties, and economically collateral persons, sometimes known as all third parties.

These terms are not without objection but they seem appropriate in distinguishing the economic equivalents of what in legal terminology is the distinction between rights *in personam* and rights *in rem*. Rights *in rem* are rights against all collateral persons who might interfere with the bargaining or managerial transaction or the enforcement of the performance, and here the correlative duty is always one of avoidance expressed by the auxiliaries “can” and “must not.” Collateral persons may also be opposite persons, in that the collateral duties apply usually to first

Plaintiff		Economic Collaterals			Defendant	
Legal Relations	Collective Action	Auxiliary Verbs	Legal Expectations	Auxiliary Verbs	Collective Action	Legal Relations
Right	Security	Can	Sanction	Must not	Compulsion	Duty
Duty	Compulsion	Must not	Sanction	Can	Security	Right

Fig. V

and second parties as well as third parties, in the process of transactions. They must not practice fraud, misrepresentation, extortion, discrimination, and so on. In other words, they must not interfere with the process of a transaction by methods deemed unlawful. The following formula indicates the distinction between [p.33] the foregoing relations of opposite parties and indicates also that no tangible, intangible, or incorporeal property expectations are complete if these collateral rights and duties of avoidance are not available. These are all duties of avoidance (Fig. V).

Thus the three important grouping of economic and legal relations are the intangible property of no rights and no duties, the incorporeal property of rights and duties of performance, and the collateral rights and duties of avoidance.

The foregoing formulae of transactions are more outlines deemed advisable to be placed at this point for economy of reference wherever, in the following pages, we deal with economic or legal thinkers and judicial decisions which involve them. In the present form they are highly abstract, as befits mental formulae, but we shall find them filled with blood when we come to the economic, legal, and political issues that turn upon them.

[p.88]

Chapter VIII: Scarcity and Efficiency

1. Use-Value, Scarcity-Value, and Value

(1) Value and Wealth

With the coming of Malthus and Ricardo, economic science began its nineteenth-century divisions which terminate in the distinction between scarcity and efficiency. They developed their contrasted theories together in conversation and correspondence and published them during the period of depression and unemployment that followed the French Revolution. The scarcity theory of Malthus gave way, during

the century, to the productivity theory of Ricardo, to be restored at the end of the century by J.B. Clark, while Ricardo's theory passed through the hands of Karl Marx and came out the efficiency theories of scientific management.

Malthus, in 1815, published the application of his principle of population to the origin of rent,[8] and Ricardo published his contrary version in 1817.[9] Adam Smith and the Physiocrats, said Malthus, had given to rent the characteristics of a monopoly; Jean Baptiste Say had based it on private property and external demand; Sismondi had represented it to be "a mere nominal value" resulting from scarcity and Buchanan "a value unnecessarily and injuriously transferred from one set of people to another."[10]

But Malthus distinguished three kinds of monopoly, an artificial monopoly, like a patent; a natural total monopoly, like certain vineyards of France; and a partial monopoly, "fairly applicable to rent."[11]

[p.89] The scarcity of land, according to Malthus, is not enough to account for the high price of raw produce. This high price is to be explained on the principle of population: (1) The fertility of the soil yields more necessaries of life than is required for the maintenance of the persons employed on the land; (2) these necessaries have the peculiar quality of "raising up a number of demanders in proportion to the quantity of necessaries produced."

These qualities of fertility are different from those of all artificial or total natural monopolies, in that the latter do not create their own demand, but fertility does. Therefore, the prices received by monopolists diminish with abundance, and increase with scarcity, since "the demand is exterior to, and independent of, the production itself." But, "in the case of strict necessaries, the existence and increase of the demand, or the number of demanders, must depend upon the existence and increase of the necessaries themselves." Thus the cause of high prices of food and other necessaries above cost of production "is to be found in their abundance, rather than their scarcity," and is therefore "essentially different from the high prices occasioned by artificial . . . and natural monopolies," which is to be found in their scarcity rather than their abundance."[12]

With this immense distinction, Malthus asks, ["]Is not rent, instead of being a monopoly, or a nominal value, or a mere transfer, on the contrary a clear indication of a most inestimable quality of the soil, which God has bestowed on man – the quality of being able to maintain more persons than are necessary to work on it?["][13]

Malthus added a third peculiar quality, the "comparative scarcity" or "partial monopoly" of more fertile land. This arises from [p. 90] the expansion of population

[8]Malthus, *an Inquiry into the Nature and Progress of Rent and the Principles by which it is regulated* (1815).

[9]Ricardo, David, *Principles of Political Economy and Taxation* (1817).

[10]Malthus, 3–7, 15, 20.

[11]Malthus, ibid., 8.

[12]*Ibid.*, 13.

[13]*Ibid.*, 12–16.

which derives cultivation down to less fertile land. "While fertile land is in abundance" he said, "nobody of course will pay a rent to a landlord. But diversities of soil and situation must necessarily exist in all countries . . . The accumulation of capital beyond the means of employing it on land of the greatest natural fertility, and the greatest advantage of situation, must necessarily lower profits; while the tendency of population to increase beyond the means of subsistence, must, after a time, lower the wages of labor." Consequently, "the expense of production will be diminished, but the value of the produce, that is the quantity of labor and of the other products of labor besides corn, which it can command, instead of diminishing, will be increased."

No rent would be paid on the last portion of land brought into cultivation, even though profits and wages are low on that land. But since the price of food, in terms of power to purchase labor, has increased, and this price will be received by the cultivators of richer land, the latter would either pay rent to a landlord, or cease to be "mere farmers," and become landlords as well as farmers, "a union by no means uncommon."

Yet even those "partial monopolies" received by landlords under the name of rent "are neither a mere nominal value, nor a value unnecessarily and injuriously transferred from one set of people to another," as is the case with total monopolies. They are the most real and essential part of the whole value of the national property and placed by the laws of nature where they are, on the land, by whomsoever possessed, whether the landlord, the crown, or the cultivator.[1]

[p. 91] Thus Malthus, while he explained artificial monopolies and natural total monopolies on a principle of absolute scarcity, explained the partial monopolies of rent upon a principle of differential scarcity. But differential scarcity was different from total scarcity, since it applied only to fertility. Fertility creates population but monopoly does not. His principle of population comes in to explain the high price of food above cost of maintenance of labor, notwithstanding the beneficence of God in furnishing abundance of fertility.

But his principle of population is none other than the principle of scarcity. So, he discovered the two principles, universal scarcity and differential scarcity – the principle of population and the principle of rent. But his differential scarcities were not extended to artificial or total monopolies. Differential scarcity pertained to fertility, and it was beneficial to man because it indicated the support of a larger population. But total or absolute scarcity, illustrated by monopolies, was injurious to man because it took something for nothing by raising prices without either an equivalent in exchange or an augmentation of population.

When Ricardo read these conclusions of Malthus, he repeated Buchanan and wrote to Malthus: "I think that rents are in no case a creation of wealth; they are always a part of wealth already created, and are enjoyed necessarily, but not on that account loss beneficially to the public interest, at the expense of the profits of stock . . . The arguments of those who contend for a free trade in corn remain in their original full force, as rents are always [p. 92] withdrawn from the profits

of stock."[14] "Rent is always a transfer, and never a creation of wealth – for before it is paid to the landlords as rent it must have constituted the profits of stock, and a portion is made over to the landlord only because lands of a poorer quality are taken into cultivation."[15]

Where Malthus therefore had identified the interest of the landlord with the interest of public, Ricardo made "the interest of the landlord always opposed to that of the consumer and manufacturer . . . All classes, except the landlords, will be injured by the increase in the price of corn. The dealings between the landlord and the public are not like dealings in trade, whereby both the seller and the buyer may equally be said to gain, but the loss is wholly on one side, and the gain wholly on the other."[16]

And Ricardo proceeded to construct his theory of value which should fit this difference between himself and Malthus. The prevailing idea of value, accepted by Malthus, placed the origin of value in the wants of consumers. Ricardo placed it in the process of production. Consequently, the prevailing idea confounded value with wealth or riches and "led to the contradiction that by diminishing the quantity of commodities, that is to say, of the necessaries, conveniences and enjoyments of human life, riches may be increased."[17] But if you double the quantity of riches of wealth, Ricardo says, you thereby "double the quantity of utility . . . Which Adam Smith called value in use," but you do "not double the quantity of value" if the quantity of labor required to produce it is no greater.

[p. 93] Here the distinction evidently is between use-value and scarcity-value. Use-value is wealth, but scarcity-value is personified as the quantity of labor required to overcome the resistance of nature in the process of production. The greater the resistance of nature, the greater is the quantity of labor required to produce a commodity, and consequently the greater is its "value." This greater value is identical with a greater exchange-value, and hence both value and exchange-value are distinguished from use-value and wealth. The distinction is none other than that between use-value and scarcity-value.

This was Ricardo's great service to economic science, and it was this that called forth the enthusiasm of McCulloch. "Its discovery," he said, "has shed a flood of light on what was previously shrouded in all but impenetrable mystery; . . . What the researches of Locke and Smith did for the production of wealth, those of Ricardo have done for its value and distribution."[18]

The discovery, however, was the distinction between scarcity-value and use-value. Ricardo's "value" was scarcity-value, discovered in the scarcity of nature's resources, where Locke, Smith, and Malthus had found value in their abundance. The discovery was the distinction between augmenting the supply of use-values

[14] *Letters of Ricardo to Malthus*, ed. by Bonar, 59 (Feb. 1815). See also *Ricardo's Works*, 243.

[15] *Letters*, 155, (Aug. 20, 1818).

[16] Ricardo, David, *Principles*, 203 (ed. By McCulloch).

[17] Ricardo, *ibid.* 166, 167.

[18] *Ricardo's Works*, Introduction by McCulloch, XXIV.

and restricting the supply. Both occur together in the same process of production. The total supply is augmented by increasing the quantity of labor, but each unit of that total supply requires a quantity of labor corresponding to the resistance of nature.

[p. 94] Thus the quantity of labor consists in two dimensions, the number of laborers and the time at work. It is labor-time. But this quantity varies inversely to its productivity. "The wealth of a country may be increased in two ways . . . by employing a greater portion of revenue in the maintenance of productive labor, which will not only add to the quantity but to the value of the mass of commodities; or it may be increased, without employing any additional quantity of labour, by making the same quantity more productive, which will add to the abundance but not to the value of commodities."[19]

That is to say, in the first case the quantity of use-values (wealth or riches) would be increased, and also the sum of scarcity-values would increase by the same amount because the resistance of nature is constant per unit of labor, but the number of laborers is greater. In the second case, "wealth would increase, but not value," which is to say, use-values would increase but not the sum of scarcity-values, because the resistance of nature has diminished per unit of labor.

If we convert Ricardo's statements into time units, then productivity is the rate of output per unit of time. The higher the rate of output the less is the quantity of labor, and the lower the rate of output the greater is the quantity of labor. Hence value, measured in labor-time, is exactly opposite to value measured in productivity. The latter measures an increase in quantity of use-value; the former measures resistance to the increase. But the higher resistance means a smaller output of use-value per unit of labor-time; and inversely, it means a larger quantity of labor-time per unit of output. A smaller output means greater scarcity [p. 95], and therefore greater scarcity is identical with larger quantity of labor. Ricardo short-circuited this logic by personifying scarcity as quantity of labor and giving to it the name value, instead of scarcity-value.

Yet it was a great discovery, in 1817, to change the meaning of value from abundance of use-values to scarcity of use-values. The fact that he stated his discovery in terms of labor instead of terms of scarcity may be explained by the circumstances of the time. The idea of scarcity had been associated with the monopolies of Mercantilism. Lord Lauderdale had said, according to Ricardo, that if water becomes scarce and exclusively possessed by an individual, "you will increase his riches because water will then have value; and if wealth be the aggregate of individual riches, you will by the same means also increase wealth."[20] This was exactly the fallacy of Mercantilism, and Ricardo replied by distinguishing monopoly from scarcity. A monopoly was artificial scarcity, but the scarcity of nature's resources was natural. In the case of monopoly, the individual monopolist would charge higher prices for the same supply, and would thereby be richer, but

[19] *Ibid.*, 168.

[20] Ricardo, *Works* 167.

others would be poorer, because "all men must give up a portion of their possession for the sole purpose of supplying themselves with water, which they before had for nothing." Likewise in the case of a general scarcity of water not monopolized, all individuals would be worse off, but in this case they would have to devote a part of their labor to procuring water, and they could therefore produce only less of other commodities. "Not only would there be a different distribution of riches, but an actual loss of wealth." That is to [p.96] say, the *value* of water would be greater in case of general scarcity because labor is required to procure it, but the wealth of the community would be less because a smaller quantity of use-values is produced all around.

Thus it is to be inferred that Ricardo meant by a monopoly a process of marketing, but by scarcity he meant a process of production. Scarcity is a natural condition; monopoly is artificial. Scarcity arises from the limited quantity of labor available and the different degrees of resistance of nature. Value increases as scarcity increases, but, instead of calling it scarcity, he personified it as an increase in the quantity of toil and trouble of the laborer.

Another circumstance of the time was the method, inaugurated by Smith, of controverting mercantilism by setting up labor instead of money as the measure of value. Ricardo changed Smith's method of measuring the scarcity-value of wealth by the quantity of labor which it could purchase upon the markets, to the method of measuring it by the quantity of labor required to produce and bring it to the markets – that is, from "commanded labor" to "embodied labor."

Yet he was not deceived by the illusion. "We have no knowledge," he said, of a commodity "which at all times requires the same sacrifice of toil and trouble to produce it," but "we may hypothetically argue and speak about it as if we had" and thus "improve our knowledge of the science," by showing, as he did, the difference between wealth and value. In other words, we may use the current personification of value in terms of labor to show the difference between use-value and scarcity-value. McCulloch was disturbed by Ricardo's later weakening on the validity of this personification [p. 97], and he continued it faithfully until the last edition of his *The Principles of Political Economy* in 1864[21] when it had already been appropriated by Karl Marx.

Malthus had followed Smith in making the measure of value the quantity of labor commanded in exchange, whereas Ricardo made it the quantity of labor embodied in production. While Malthus found his scarcity-value in the demand of consumers, and Smith found it in the pain of production, they reached a similar result for an obvious reason. If value means scarcity-value, then it is a ratio between a quantity wanted (demand) and a quantity available (supply).[2] This scarcity ratio can be changed by changing either the demand side or the supply side. Smith, like Ricardo, assumed demand to be unlimited, and therefore his cause, regulator, and measure of scarcity-value were labor pain which limited supply. But Malthus asserted that

[21] McCulloch, J.R., *The Principles of Political Economy*, 1st ed., 1325, 5th ed. 1864; *Literature of Political Economy*, 4th ed. 1895.

demand was limited by the number of demanders who could be sustained by the existing food supply or by the possession mainly of land or money. Hume directed his attention to the demand side of scarcity-value and his cause, regulator, and measure were the consumer's "will and power" which augmented or reduced the demand. While Smith's regulator of scarcity-value worked by changing the supply side, Malthus' regulator worked by changing the demand side, of the same scarcity ratio of quantity demanded to supply available.

Each paid attention to what, for him, was the limiting factor in the same scarcity ratio. For Malthus the cause of scarcity-value was the demand of consumers for an increase of supply; for Smith it was labor pain which limited the supply. For Malthus the regulator of value was the proper proportioning of demand for labor among the [p. 98] different occupations by the will of man collectively; for Smith it was the automatic proportioning of labor pain among occupations by individuals separately. For both Malthus and Smith, the real measure of scarcity-value was the amount of labor that could be purchased by commodities, wealth, or money. Thus "commanded labor" became, for each, the measure of scarcity-value, whether that scarcity was caused by Smith's labor pain or by Malthus' demand of consumers.

But Ricardo's cause of scarcity-value was not the demand of consumers, which, for him, was unlimited,[22] but was the resistance of nature, and this resistance was identical with the quantity of labor required to overcome it. Hence, "embodied labor" became his measure of "natural" scarcity-value. But the quantity of embodied labor varies inversely to the productivity of labor. Therefore, the quantity of use-value for Ricardo varies directly with the productivity of labor, but scarcity-value varies inversely to its productivity. Labor produces use-value but the inefficiency of labor produces scarcity-value.[23]

Another circumstance prevalent at the time of Ricardo was the attempted distinction between real and nominal value and natural and artificial value. Ricardo converted those terms to fit his own meanings of value. Nominal value with him was any form of scarcity-value, measured by purchasing power upon the markets, and not [p. 99] conforming to real value in the process of production. Money, monopolies, and even wages were "nominal values." "Wages" he says "are to be estimated by their real value, viz., by the quantity of labor and capital (stored up labor) employed in producing them, and not by their nominal value either in coats, hats, money, or corn."[24]

But his "real value," as we have seen, was also a scarcity-value. Hence, if scarcity-value on the markets conforms to scarcity-values in the process of

[22] Page 97. Below Menger ooo.

[23] Cp. Hollander, J.H., "The Development of Ricardo's Theory of Value." 18 *Quar. Jour. Econ.*, 455, 591 (1909). Hollander seems to hold that Ricardo included "scarcity" in his concept of value in use (p. 458). I believe this reads back into Ricardo later ideas which were not there prior to the Austro-hedonic economists. If so then the "commanded labor" of Smith and Malthus was their measure of scarcity-value on the markets, while the "embodied labor" of Ricardo and Marx was their measure, not of use-value but of scarcity-value in the process of production.

[24] *Works, ibid.*, 32.

production, then they are real value, the "natural price" paid by man for commodities. But if market prices do not thus conform to natural prices, then they are nominal value.

The distinction was controlled by the contrast with use-value. Use-value was wealth and riches, the necessaries and conveniences of life, whose augmentation increased happiness. But both real value and nominal value were exact opposites of use-value – they placed a limit upon this augmentation. In other words, they caused scarcity-value. The normal or natural regulator of scarcity-value is the quantity of labor under conditions of free competition. Free competition would keep scarcity-value on the markets in conformity with real value or natural price. The abnormal, unnatural regulator of scarcity-value was any obstacle to free competition, like the collective action of mercantilism. These kept scarcity-values of some commodities above their real value by keeping other scarcity-values below their real value.

But the dominant idea of the time, which Ricardo controverted, was the idea that value had its origin in the demand of consumers. "I sometimes suspect that we do not attach the same meaning to demand," wrote Ricardo to Malthus in 1814.[25] "If corn [p. 100] rises in price (you) perhaps attribute it to a greater demand." This Malthus did, for he attributed it to an increase of population pressing on the means of subsistence. "I should (attribute) it to a greater competition," said Ricardo, meaning by competition the effective demand of those who produced other things to be offered in exchange for corn. "The demand cannot, I think, be said to increase if the quantity consumed be diminished, although much more money may be required to purchase the smaller than the larger quantity. If it were to be asked what the demand was for port-wine in England in the years 1813 and 1814, and it were to be answered that in the first year she had imported 5000 pipes and in the next 4500, should we not all agree that the demand was greater in 1813. Yet it might be true that double the quantity of money was paid for the 4500 pipes."[26]

This was, indeed, the difference between Malthus and Ricardo. Value, for Malthus, was scarcity-value on the markets, caused by demand of consumers and measured by money. But scarcity-value on the markets was, for Ricardo, the opposite of use-value. Use-value was increased by productivity and measured by gallons and barrels. A higher price for Malthus was an increase in demand; a larger output for Ricardo must precede an increase of demand. Malthus was interested in prices and believed that quantities would follow prices, but Ricardo was interested in quantities and did not care what became of the prices. For Ricardo an increase from 4500 to 5000 gallons of use-value, wine, was an increase in wealth, although the price might fall from $2.00 to $1.00. But for Malthus a fall in price was a *decrease* of wealth because the inducement to produce wealth was thereby reduced.

[p. 101] It resolves itself into the difference between power to *produce* wealth and power to *induce* production. "We agree," said Ricardo, "that effectual demand

[25] *Letters*, 42 (Aug 1814).

[26] *Letters*, 42.

consists of two elements, the *power* and the *will* to purchase; but I think the will is very seldom wanting where the power exists, for the desire of accumulation will occasion demand just as effectually as a desire to consume; it will only change the objects on which the demand will exercise itself. If you think that with an increase of capital, men will become indifferent both to consumption and accumulation, then you are correct in opposing Mr. Mill's idea, that in reference to a nation supply can never exceed demand."[27] For Mill had developed Smith's idea that it is production, not consumption nor money, that creates effectual demand.[28]

"I go much further than you in ascribing effects to the wants and tastes of mankind; I believe them to be unlimited. Give men but the means of purchasing, and their wants are insatiable. Mr. Mill's theory is built on this assumption."[29]

But, for Malthus, wants were limited. "It is unquestionably true," he said, "that wealth produces wants; but it is a still more important truth that wants produce wealth."[30]

Thus difference between Malthus and Ricardo was the difference between the increasing wants of an increasing population, thereby maintaining scarcity-values, and the increasing productivity of all producers, thereby increasing the quantity of all use-values without changing their scarcity-values in exchange.

The issue between these two concepts of value arose with the widespread depression, unemployment, and falling prices that followed [p. 102] the Napoleonic wars and stimulated this discussion between Malthus and Ricardo. Malthus needed actual demand in order to increase a nation's wealth, whether this demand arose from the possession of money, or the possession of labor power, or the increase of population, or the possession of rents, or even the protective tariffs on grain that increased the purchasing power and therefore the demand of landlords for labor. Without this demand there would be nothing produced, and it was the falling off of demand to which he attributed the existing depression and unemployment.

Hence he was not disturbed by the fall of profits. If profits were too high, then too much would be produced relative to existing demand. There must be an increase of consumption that keeps up prices, not an increase of production which reduces prices. Therefore Malthus proposed an increase of consumption as a remedy for unemployment. But Ricardo wrote, "It is against this doctrine that I protest and give my decided opposition."[31]

What Malthus proposed in order to increase consumption was an increase of taxation, an expansion of public works, and an increased expenditure by the wealthy on their estates, all of which was "unproductive consumption" since it did not produce commodities that came upon the markets and reduced prices.

---

[27] *Ibid.*, 43,44, (Sept. 1814).

[28] Above, chapter on Smith.

[29] *Ibid.*, 49. (Oct. 1819).

[30] Malthus, *Pol. Econ.* 363 (1821).

[31] Malthus, *Pol. Econ.* 395 ff (1821).

A hundred years later following another world war, this was exactly the remedy proposed by a National Unemployment conference called by the President Harding. The conference recommended an increase in public works during periods of unemployment, to take up the slack of private employment.[32] Malthus would have called it [p. 103] "unproductive consumption," but he meant the same thing. It would be "unproductive" because it would not create a product that comes upon the market and would therefore not add to the existing depression of private employment by further reducing prices.

Ricardo, too, needed actual demand in order to increase a nation's wealth, but his demand must come from an increase in production by capitalists at the lower levels of prices, and this increase was prevented when the capitalists could not make a profit at those lower levels. The reason, therefore, for the then existing unemployment was not the falling prices caused by a falling demand, it was the high rent, high taxes, and high wages, the latter caused by the obstinacy of labor. "The laborers are immoderately paid for their labour, and they necessarily become the unproductive consumers of the country." If wages should be reduced, "there would be little diminution in the quantity of commodities produced; the distribution only would be different; more would go to the capitalists and less to the labourers."[33]

Thus, starting with the opposite concepts of scarcity-value and use-value, Malthus and Ricardo were led to two different concepts both of national wealth and the remedy for unemployment and overproduction. For Malthus, national wealth would be augmented by increasing the demand of landlords, taxpayers, and wage earners. Demand was his limiting factor. But for Ricardo, national wealth is augmented by increasing the output of capitalists by reducing rents, taxes, and wages. Production was his limiting factor. For Malthus, there were general overproduction, low prices, and unemployment, because demand was limited and the remedy was an increase of this limited demand on the part of ultimate consumers, which would thereby increase production without reducing prices and wages.

[p. 104] But, for Ricardo, there was only a semblance of overproduction and no real overproduction in general, because wants were unlimited and the remedy for unemployment was low wages, low rents, and low taxes, so as to afford a profit for capitalists as their inducement to put laborers to work and increase the creation of wealth at the lower level of prices. For Malthus the "unproductive" expenditure of landlords, taxpayers, and laborers creates a demand for labor without reducing prices or wages; but for Ricardo this unproductive expenditure was found in high rents, high taxes, and high wages and was a deduction from the profits of capitalists which thereby prevented them from increasing the output of wealth at the lower level of prices.

[32] *US Monthly Labor Review*, Nov. 1921, p. 129, 132, *Report of the President's Conference on Unemployment*, 89–106. *Supt. of Documents*, Government Printing Office (1921).

[33] *Letters*, 189 (July 1821).

Thus Malthus had to have a population of consumers increasing faster than the increase of food; Ricardo needed only a population of producers and considered that consumers could enlarge their effectual demand only by becoming producers. Malthus started with the pressure of population on the means of subsistence, whereby the scarcity of food would not be permanently diminished, no matter how great its abundance. Ricardo started with the resistance of nature to the labor of man whereby the supply of use-values would be limited by the diminishing efficiency of man on lower margins of cultivation. The limiting factor for Malthus was demand that depended primarily on population. Goods would always be produced if they had a scarcity-value. The limiting factor for Ricardo was production. There would always be a demand for all the use-values that labor could produce.

Thus where Malthus, Lauderdale, and others found their meaning of wealth and riches in the scarcity-values that depended upon the demand of consumers, Ricardo found his meaning of wealth and riches [p. 105] in the total quantity of use-values supplied by the producers. "Real" scarcity-value was found by Ricardo in the process of production, personified as labor overcoming nature's resistance, and it was this that limited the supply of use-values under natural conditions.

We thus can see the shift in meaning of the word Value from Smith and Malthus to Ricardo. For Smith value meant abundance of use-values, and nature assisted man in producing abundance. Hence his cause of scarcity-value was not nature, but the pain of labor, which placed a limit on the quantity of use-values produced. But, for Ricardo, value meant scarcity of use-values, and nature resisted man's effort to produce abundance. Hence his cause of scarcity-value was the resistance of nature, or its equivalent, the inefficiency of labor, which placed a limit on the quantity of use-value produced. Smith personified both abundance and scarcity and found his wealth of nations in abundance of use-values furnished by divine providence cooperating with man and his scarcity-value in pain of labor. Ricardo materialized nature but personified scarcity and found his wealth of nations also in abundance of use-values, but produced by labor against the resistance of nature, and found scarcity-value under the guise of real value or natural price, in the quantity of labor required to overcome this resistance.

Malthus was the confused transition from Smith to Ricardo. He found his scarcity-value in the sinfulness of man and his wealth of nations in the beneficence of God and the labor of man. Hence the cause of his scarcity-value was overpopulation which raised up a demand faster than the combination of divine beneficence and sinful labor could increase the supply.

[p.106]

(II) Value and Price

The further development of Malthusian version of scarcity-value waited until the rise of the psychological economists, while Ricardo's version waited for Karl Marx. Although Gossen, 1854, Jevons in 1862, Menger in 1871, and Walras in 1874 originated independently the so-called psychological theories of value, we select

Menger's exposition, because his psychological analysis furnishes the foundation for the transition from hedonistic to volitional psychology and from psychological to quantitative economics.[34]

Menger distinguished four prerequisites in order that a material thing may be an economic good in the sense that it has utility (Nützlichkeit), namely:

(1) The knowledge or expectation of a human want (Bedürfniss)
(2) Such physical qualities of the object (Güterqualitäten) as make it fit to satisfy the want
(3) Knowledge, correct or erroneous, of this fitness
(4) Such control over the thing, or of other things as instruments, that it can be obtained and used to satisfy the want (die Verfügung über dieses Ding)

The first and third of these prerequisites we designate by the word Meaning, since they indicate not exact knowledge but the intellectual process of attaching importance to the object for human purposes. The second we designate Use-value, since it is a physical quality that does not diminish with abundance nor increase with scarcity and is equivalent to Ricardo's meaning of riches or wealth. The fourth we distinguish as either Physical Control which Menger identifies with Technology or Property Rights which he identifies with economy.[35]

[p. 107] Up to this point the concept of scarcity does not appear in Menger's prerequisites. He introduces this concept by his distinction between wants (Bedürfnisse) and quantity wanted (Bedarf).[36]

Wants are strictly psychological and subjective, but quantity wanted is both subjective and quantitative. Wants are mere feelings which differ in intensity. Quantity wanted is adaptation to circumstances. Quantity wanted is the quantity of a particular use-value (Güterqualitäten) wanted at a time and place. Hence it is always a limited quantity wanted at a particular time and place by a particular person. The error of preceding economists in holding that wants were unlimited, said Menger, was their failure to distinguish quantity, time, and place. Wants may be unlimited in point of indefinite time, but the quantity wanted here and now is a limited quantity.[37]

Menger devotes considerable space to showing that his newly formulated concept of "quantity wanted" is both a familiar concept and has an objective quantitative meaning. Wants in themselves (Bedürfnisse) are purely feelings of different degrees of intensity and have no intellectual reference to the objective quantity wanted which is always a limited quantity at the time and place, for a particular purpose and then and there intended. The quantity wanted has reference to actually recognized needs, which are not needs for an indefinite quantity, but for a limited quantity at the moment when greater or less quantities are being weighed in the balance relative to the greater or less quantity of other things wanted also, and in view of our limited

[34] Menger, Carl, *Grundsätze der Volkswirtschaftslehre*, (1871), Second edition (1923).

[35] *Ibid.*, 1st ed., 3; 2d ed., 11. Below p ooo.

[36] *Ibid.*, 1st ed. 32; 2 s ed. 32 n.

[37] *Ibid.*, 1st ed 35 ff; 2d ed. 32 ff; especially 32 n.

total control over quantities of all things wanted, at the time and place. We do not want an unlimited quantity of beefsteak at a particular dinner – we want only just enough of [p. 108] the right kind and we want several other things with it. The manufacturer does not want an unlimited quantity of pig iron here and now – he wants only just the right amount to fit into the quantities of rolled steel products which customers will take off at profitable prices. These facts are so commonplace and familiar that they are accepted by all, and the only question is how shall they be incorporated into economic theory.

This incorporation turns ultimately on the problem which John Locke raised. All that we really know is the feelings that go on in our own mind. These feelings, from the time of Bentham, if they had the character of desire, happiness, or avoidance of pain, were given the name "utility," equivalent to the subjective meaning of use-value. Bentham attempted to measure them as a "lot" of units of pain or pleasure. Then later economists, especially Gossen and Jevons, discovered that there was a certain law of diminishing intensity of feeling along with an increasing quantity available and inversely an increasing intensity of feeling of want along with diminishing quantity available. Hence they devised a formula of "diminishing utility," which was diminishing intensity of successive units of pleasure accompanying additional units of the commodity available.

The objection of this formulation is that it is subjective and nonquantitative, in that it splits up the feelings that imaginary units of sensation, like dollars and cents,[38] and that it attaches all importance to the last single unit of feelings, which is named marginal or final utility. This unit is the cause or regulator of value attached to all the other units of feeling.

[p. 109] But Menger, by his distinction between feelings of want (Bedürfnisse) and feelings of quantity wanted (Bedarf), brought the intellect and the will into play and projected these feelings into knowledge, correct or erroneous, not of particular internal sensations treated as separate units arising from separate units of external objects, but of a total limited external quantity wanted relative to a total limited quantity available, at the time and place. It now becomes not a marginal increase of commodity nor a marginal intensity of feeling that is to be considered all-important, but it becomes the whole quantity wanted in relation to the whole quantity available, under all the circumstances of time and place. This whole quantity can afterward be split up into the customary units of ounces, tons, dollars, and cents or even into imaginary units of sensations, if one is so inclined. But these objective units of quantity are the conventional units of measurement, and they, of course, do not determine value — Value is the value of the limited total quantity wanted here and now – and the increments or units are conventional fixed dimensions devised for measuring it. This marginal utility confuses measurement with valuation. The alleged units of feeling and corresponding increments of commodity belong to theory of measurement and have no effect whatever on the values which can be measured.

[38] See Mitchell on Bentham, above ooo.

It is to be noted in Menger's analysis that this total limited quantity wanted for certain limited objective purposes is always again limited by another limitation, the total quantity available, controllable, disposable, or purchasable, here and now. The quantity wanted is thus inseparable from the quantity available, increasing if the latter increases but decreasing if the latter decreases.

[p. 110] This is evidently none other than the universal phenomenon of scarcity, applicable to all living creatures whether acting instinctively or intelligently. It is the relation between a variable but limited quantity wanted and a variable but limited quantity available, at the time and place. The fact that Menger unfortunately used the hedonistic term, utility (Nützlichk[ei]t) in conformity with the tradition of Bentham, has concealed the real contribution of Menger and directed attention to the subjective intensity of wants, whereas, instead of diminishing utility in the hedonistic Benthamite sense of degrees of intensity of feeling, he was really developing the idea of diminishing scarcity in the quantitative sense of total quantity wanted relative to total quantity available.

This relation we name the degree of scarcity, instead of the Degree of Intensity of Feeling. His diminishing utility is diminishing scarcity. Diminishing utility is the Benthamistic calculus of sensational units of pain and pleasure. But diminishing scarcity is the Mengerite quantitative relation between total quantity wanted and total quantity available. Menger merely reduced the old formula of supply, demand, and price, which had been applied to a world of buyers and sellers, to a personal formula applying to each individual. His quantity wanted is the individual's demand; his quantity available is the share of the total supply available to the individual at current prices. The repetition and duplication of Menger's individual is the world demand, supply, and price.

This fact is of universal and commonplace knowledge, and the main question for economic theory is how shall it be interpreted and grounded upon universal known facts of human psychology. It may be interpreted by Bentham's sensational psychology of successive units [p. 111] of feeling, as was done by Jevons, or by what may be named a volitional psychology of Menger. The latter was worked out by Wieser.[39]

Wieser, however, like Menger, misled his followers by using the Benthamite term "utility" and thus failed to impress the economic world with his great elucidation of what he acknowledged was the contribution of Menger. Had he used the term diminishing scarcity instead of diminishing utility, and the term marginal scarcity instead of marginal utility (Grenznutzen), then it would have been plain that what he was doing was the explication of a strictly objective and quantitative theory of value in the only sense that anything is objective and quantitative, namely, the felt probability that something external exists in limited quantities which, therefore, has meaning and value at the time and place for ourselves or others.

[39] Wieser, Friedrich, von, *Natural Value*.

Since the consideration of this problem is, in fact, a consideration of the transition of economic science from psychological economics to volitional and quantitative economics, we shall go through it with painful detail.

Wieser's extension of Menger's analysis turned on the distinction between Value and Price, which he clarified under the name Paradox of Value. The same distinction was afterward made by Fisher, and it is evidently the distinction customary in all popular discussions and all quantitative economics and statistical computation. "Value" is the value of a quantity, but price is the value of a unit of the quantity. The distinction is simple enough and quite commonplace – in fact so simple that economists have avoided it because it did not furnish them with a basis for getting at the fundamental psychology which they thought must be used in explaining value. Thus Fetter, in criticizing Fisher's distinction between Value [p. 112] and Price, which is Wieser's distinction, quotes Fisher as saying, "Value, as here explained, is not a subjective magnitude in the mind of man, but purely objective, as *money*-value wheat-value. It has, of course, subjective causes, but these do not concern us yet."[40]

Fetter then criticizes: "Value is here turned to a use already filled. Any unit, either of price or of quantity of goods, is arbitrary, and must be always indicated either expressly or by implication, whenever a price is stated; as price in cents, ounces of bullion, per bushel, wagon-lead, ton of grain, cotton, iron, etc. Conversely the term aggregate is an arbitrary one, and may be deemed a unit, if one please. Thus a bushel of wheat is but an aggregate of grains of wheat. Consequently the word price can be used without confusion either for the conventional unit or the aggregate of the units, and nothing is gained by the innovation. On the other hand, the loss of terminology is great when the term value is taken from its subjective use in which it is indispensable, for thereby an understanding of recent value-discussion is made hopeless." And cites Young, who, he said, had used the term with the Wieser-Fisher meaning, under the apprehension that he was using it with the psychological meaning.

Fetter's criticism turns on the validity of the popular distinction between a quantity and the customary fixed unit by which that quantity is measured. Wieser's paradox of value will enable us to see that it is this very distinction of fixed units, as against Fetter's variable units, that furnishes the customary means employed in all sciences of isolating a variable factor by making all other factors constant. In this case it is the method of isolating [p. 113] productivity from scarcity, and use-value from scarcity-value, by assuming that one factor is constant, in order that we may measure the variability of the other factor.

Wieser's formulation of the paradox is merely an adaptation of this usual scientific method of measuring separately two variable quantities that go to make up a variable resultant, by assuming first that one is constant in order to measure the variability of the other and then assuming that the other is constant in order to

[40]Fisher, Irving, *Nature of Capital and Income* 45, 15 (1906).

measure the variability of the first.[41] The following illustration will suffice using, however, for reasons given, the term scarcity, where Wieser employs "utility," and using definitely the meaning of physical use-value, where Menger and Wieser had converted it into the Benthamite meaning "utility."

If "price" is the quantity of money which a fixed physical unit, say one bushel of wheat, will command in exchange, then price, or the ratio of exchange between a bushel of wheat and a variable number of dollars or cents, is the variable scarcity ratio of wheat relative to money. This is the scarcity-value of wheat measured by the variable number of standard units of money. The physical unit wheat is here made constant by supposition, and we then measure the changes in the scarcity, or so-called power in exchange, or purchasing power, to which is given the name price of wheat, but which is, in terms of value, the scarcity-value of wheat.

If, on the other hand, the scarcity ratio is assumed to be constant, or is corrected by mathematical computation of index numbers, so as to be made into an unchanging price, that is, a [p. 114] constant ratio of scarcity relative to money, then, with the scarcity-value (prices) thus made constant, we separate out and measure by bushels the variable quantities of use-value produced, in the form and quality known as wheat, say, a billion bushels, two billion bushels, and so on. This is the familiar process of statisticians when they wish to measure changes in the real wealth or annual production of a country having at hand only the money values from which to calculate. They eliminate what they call "nominal changes due to variations in the purchasing power of the dollar," which is to say, they eliminate the scarcity-value of commodities by making prices constant, in order to measure the variability in number of bushes, tons, etc. of use-value.

If, lastly, we combine the two variable dimensions, a variable number of bushels of use-value and a variable price or ratio of scarcity-value, we arrive at the meaning of "value" as propounded by Menger, Wieser, and Fisher and understood by everybody in business, agriculture, and statistics. Stating it in customary terms, if the physical quantity is doubled, from one billion to two billion bushels, but the price remains constant at $1.00, then the "value" has doubled from one billion dollars to two billion dollars of value. Likewise, if the price is doubled but the quantity remains the same, then the value has also doubled from one billion dollars to two billion dollars of value.

The paradox arises from the functional relation between demand, supply, and price, such that the price, or scarcity-value, tends to fall with a decrease of the quantity wanted, or to rise with an increase of the quantity wanted, or, on the other hand [p. 115], to fall with an increase of the quantity supplied or rise with a decrease in the quantity supplied – a patent fact of experience. Its significance, however, for economic theory is, as Wieser shows, that the point of highest value is not the point of highest price. There is an increasing and diminishing *value*, depending upon the two variables, the physical quantity and the degree of scarcity. The change in

[41] By the term constant, we do not mean a total fixed quantity; we mean the same quantity for each unit. It is a constant unit, not a constant quantity.

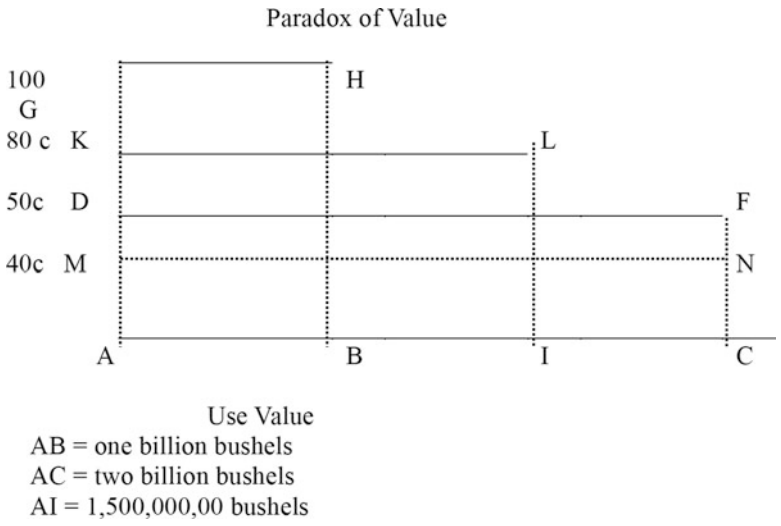


Fig. VI Paradox of value

scarcity is its change in scarcity-value or price, the change in quantity is its change in quantity of use-value. And the combination of the two variables is this paradox of value.

This may be pictured by the following diagram (Fig. VI).

If an increase in physical quantity of use-value, from one billion bushels of wheat to two billion bushels, (AB, AC) is accompanied by a fall in scarcity-value, from $1.00 to 50 cents per bushels (AG, AD), then the "Value" remains at one billion dollars (ABHG or ACFD). But if the scarcity-value falls to 40 cents, owing to the increase of abundance faster than the increase [p.116] of quantity wanted, then the larger physical quantity, two billion bushels, has a lower value, $800,000,000 (ACNM), than did the preceding billion bushels at a scarcity-value, $1.00. The largest "Value" is at the point where the declining price, caused by increasing abundance, is not heavily counterweighted by the increasing physical quantity, say, for example, 1,500,000,000 bushels at 80 cents where the resulting highest value is $1,200,000,000 (AILK). Less than this amount of "Value" is both the smaller quantity at the higher price, 1,000,000,000 bushels at $1.00 per bushel, and the larger quantity at the lower price, 2,000,000,000 bushels at 50 cents per bushel. If, now, we draw another diagram showing the change in *value*, we shall have the following (Fig. VII).

Here the value, composed of two dimensions, enlarging quantity of use-value and diminishing scarcity-value, rises from one billion dollars, when the quantity is a billion bushels and the price $1.00, to its maximum $1,200,000,000, when the quantity is 1,500,000,000 [p.117] and the price is 80 cents, and then declines to $800,000,000 when the quantity is 2,000,000,000 and the price 40 cents.

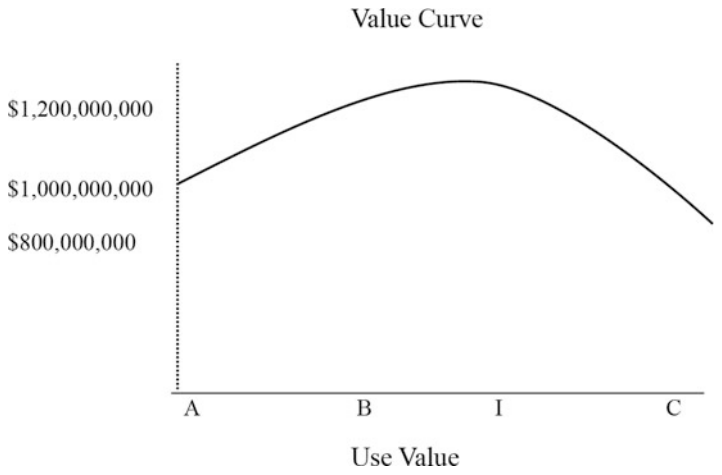


Fig. VII Value curve

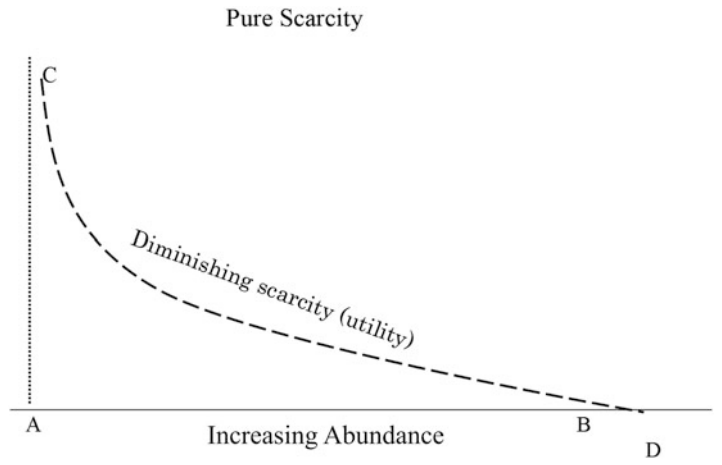


Fig. VIII Pure scarcity

This Value Curve should be compared with the Scarcity Curve, which is the usual formulation of the curve of diminishing utility. This curve usually starts with an imaginary absence of any supply whatever, in a desert – and then progress with an imaginary succession of increments of commodity and corresponding diminishing utility. This we may distinguish as the mental formula of pure scarcity, irrespective of time, place, circumstance, quantity wanted, and quantity available, as follows (Fig. VIII).

An increasing physical quantity of use-value (AB) is merely the correlative of diminishing scarcity (CD), and the hedonistic form of statement as diminishing

utility, i.e., diminishing intensity of successive units of pleasurable feelings, is merely a dramatic personification of diminishing scarcity. Increasing abundance is diminishing scarcity.

[p. 118 is missing.]

[p. 119] And the paradox of value is discoverable from the device of measurement, since it arises from the circumstance that supposing the scarcity of money relative to all other commodities is assumed to be constant, then an increase in the physical quantity of wheat is accompanied by a fall in price, and this fall in price is also a fall in its exchange-value relative to other commodities in general, the latter epitomized as a stable general purchasing power of money. The rate, or elasticity, at which this fall occurs, depends on its own factors of demand and supply which work in part independently of the rate at which its own physical productivity augments the quantity available. This rather belabored statement is condensed by clearly distinguishing the two meanings of value, use-value and scarcity-value, which, thus distinguished, are the ultimate description of the paradox of value. Use-value refers solely to the useful physical qualities of things – scarcity-value refers to the quantity of use-values wanted, relative to the quantity available.

Hence both the terms value and price indicate scarcity-value, and the paradox arises from the opposite directions in which use-value and scarcity-value are augmented. Use-value is increased by increasing the number of physical units of good things regardless of how intensely they are wanted. Scarcity-value is increased by the opposite process of reducing relative to demand the quantity of good things so that they are wanted more intensely.

The resultant is a threefold meaning of value – use-value, scarcity-value, and value – use-value, the sum of physical units, bushels, tons, or even man-hours devoted to production and stored up in the accumulated use-values; scarcity-value, the supply and [p. 120] demand dimensions, measured by multiples or fractions of dollars per unit of the physical dimension; and Value, the sum of the then scarcity-values of each physical unit accumulated or stored up, each having the same scarcity-value at the same time and place, although all of them may vary equally with changes in demand or supply.

From these threefold meanings, it appears that Value may be increased in two ways: increasing the quantity of use-values measured in physical units, Wieser's "upgrade" (Fig. VII), without corresponding reduction of their scarcity-value, measured in reduced prices, or by an increase in their scarcity-value, measured by an increase in price, but without increasing and even by reducing, relative to demand, the quantity of use-values. Since the bulk of producers have an eye on demand, it is the first method that they instinctively imply, and consequently they merge the meanings of use-value and scarcity-value in the ambiguous meaning of value. They produce, of course, what the public wants, taking for granted, of course, that in order to produce value, they must produce in limited quantities because the public wants only limited quantities.

This ambiguity of the word value has extended in economic writing from the physical economists down to the psychological economists. The term production, for example, always means the production of something valuable. But what is

the kind of value? Is it the more physical meaning of augmenting the output of use-values, or the scarcity meaning of augmenting the intensity of desire by limiting supply, or the value meaning of augmenting the quantity of scarcity-values without reducing their scarcity-value? The first, we have seen, was the meaning of production at the hands of Ricardo; the second and third were his meanings of value and distribution.

[p. 121] The different meanings of wealth and riches were thus confused by the threefold meaning of value, and we can see, by the help of Wieser, how it was that Malthus and Ricardo disagreed in their meanings of wealth. Ricardo meant by wealth an increase of the quantity of use-values, but Malthus meant an increase in scarcity-value by increase of population and an increase in the quantity of scarcity-values by production without reducing the scarcity-value. This is the Menger-Wieser-Fisher meaning of value.

So it is with the modern meanings of psychological value. All value is psychological, no more so today than with Adam Smith. But the question is what kind of psychological value? Is it use-value, where the psychological factor is an intellectual appreciation of the expected happiness of man by an increase in the quantity of physical use-values whose scarcity-value, it is assumed, would not diminish because wants were unlimited? This was the meaning of use-value for Smith and Ricardo and the meaning of utility for Bentham. Or is the kind of psychological value the diminishing feeling of intensity of desire, with each successive feeling, measured by an imaginary unit of intensity until the final intensity is reached? This is the pure scarcity-value, according to the psychology of Jevons remodeled from Bentham. Or is psychological value the kind of value intended by Menger and Wieser where the individual, in view of all the present and expected circumstances of demand, supply, and price, of all commodities wanted, determines the total limited quantity wanted at the place and time relative to the total limited quantity available at the same place and time?

Each of these types of value is psychological, but in order to distinguish them, we may name the first psychological Parallelism, since the intellectual element predominates and an increase in the [p. 122] quantity of physical use-value was assumed to be accompanied by a parallel happiness of welfare of mankind. This, we take it, was the meaning of Adam Smith under the name use-value and of Bentham under the name utility, as adopted by Ricardo. The second we may name psychological Functionalism, since the diminishing intensity of successive units of pleasure is correlated with additional units of commodity. The third we may name Volitionism, since the valuation is made with reference to proposed action and is a valuation of the total quantity wanted relative to the total quantity available with reference to all the circumstances of demand, supply, and price at the place and time and in view of the expected consequences of the action about to be taken.

It is this volitional meaning that Wieser intends, since he makes plain that by his term "subjective value" he means the personal attitude taken by the individual toward the external condition of supply, demand, and price to which one must adjust himself. It is not subjective in the functional sense of units of feeling relative to units of commodity, but in the volitional sense of "economizing his own resources,

in order to decide for himself what attitude he may take up with regard to things outside of him." Thus the contrast between "subjective" and "objective" turns out to be the contrast between the individual and society. Objective value is price, and this is "a social fact," but "internal valuations of personal interest do, always and without exception, attach to objective value also, but these valuations are only subjective, being greater for one and smaller for another."[42] What is significant [p. 123], therefore, about Wieser's subjective value is the difference between persons, especially the rich and the poor, in their influence on objective value, the prices. "This personal attitude can have no effect on the movement of goods in the great economic exchange between one economy and another, or in the end between any economy and his own, except insofar as he may succeed in influencing the prices of goods. It is the prices that absolutely decide in exchange. Goods fall to those who pay the highest prices, and – what is most important – the amount expended upon production is regulated by the prices expected from the sale of the goods."[43]

In other words, the individual comes upon the market with the three concepts of value in his mind, the use-value, the scarcity-value, and the quantity which is the value of what he purchases. The three are inseparable and his choice takes the three into account, and it cannot be oversimplified by a psychology that takes only one into account. He finds "a going price" to which he must adjust himself. He finds different qualities of the same kind of goods, and different kinds of goods, and he finds variable quantities available at the going prices. He must choose upon the basis of kind, quality, price, and quantity available relative to quantity wanted. The process is not simple and its psychological quality cannot be shortened to anything less than that volitional psychology which hesitates and weighs in the balance of all the factors and then acts for better or worse.

Wieser worked out his theory of "natural value" on the hypothesis of a communist state which, however, was a state without collective action restraining or coercing individuals.[44] It was [p. 124], in fact, an anarchistic state such as Proudhon pictured the essential feature being individual action without the intervention of money. In this state, "utility" carried the meaning of pure scarcity, marginal utility the meaning of price, and value the combined meaning of use-value, scarcity-value, and quantity of commodity. This hypothesis was made in order to eliminate the confusion caused by the institution of money, and the conclusion is that the same laws of value and price hold in a moneyless economy as those that hold in a capitalistic economy.

This method of approaching the problem is indeed scientific in that it assumes certain factors constant, such as a stable purchasing power of money, or eliminates certain factors, such as collective action or money, which afterward can be introduced. Our method, however, starts with collective action first and then revolves the individual into the position, job, or membership which he holds within

[42] Wieser, *ibid.*, 52.

[43] *Ibid.*, 50, 51.

[44] *Ibid.*, 60 ff.

the varieties of collective action to which he must adjust himself. Yet without Menger's and Wieser's analysis developed by their method, it would be impossible to portray collective action. The going price, to which the individual must adjust himself, results from many forms of collective action which determine his rights, duties, liberties, and exposures with regard to that price. And modern economic conditions have produced such dominating varieties of collective action that a better interpretation is made by beginning therewith. The simplest form into which collective action can be reduced is that of a transaction as we have explained it, and this transaction involved in itself the very contrast which Wieser made between subjective and objective value. It is at least four individuals adjusting their personal attitudes to the collective, customary, legal, or concerted restraints and immunities that surround [p. 125] them. From this transaction we go in one direction to the individual and in other direction to the collectivity.

With Menger's analysis and Wieser's distinction between value and price, we are now in position to notice the way in which it furnishes the groundwork for interpreting the divergent views of Malthus and Ricardo respecting wealth and value. They were dealing with the opposite terms of the same scarcity ratio of total quantity wanted to total quantity available. But Malthus took one side of the ratio, the total limited quantity wanted by the total increasing population, while Ricardo took the other side of the ratio, the total limited quantity available owing to the increasing scarcity of nature's resources. The shortest way of explaining this divergent method of handling the same fact is by means of a diagram as follows. The diagram [Fig. IX] represents Ricardo's analysis of agriculture, but not manufactures, since in the latter case he assumed an average amount of embodied labor per unit, whereas in agriculture he built on the differential in amount of embodied labor on better soil up to marginal cultivation.

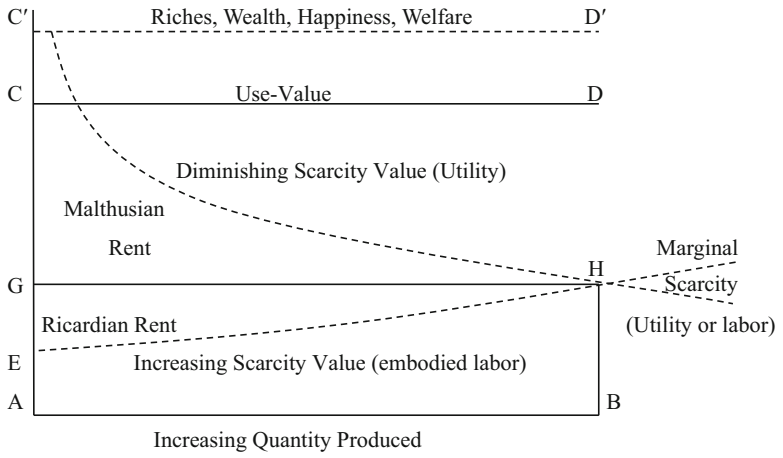


Fig. IX

[p. 126] If the total quantity of wheat produced for a total population is augmented successively by added increments, starting at A and limited at B, then physical use-value, CD, is augmented to the same extent, the unit of measurement of this kind of use-value being the bushel. This physical use-value was Ricardo's meaning of riches or wealth and Smith's and Bentham's parallel meaning of happiness or welfare C'D'. Use-value, whether physical or psychological, increases with abundance.

But Ricardo's diminishing productivity on lower margins of cultivation is an increase in the quantity of embodied labor per bushel, and this is equivalent to an increasing scarcity-value per unit (EH), since his embodied labor is a personification of scarcity. If, finally, there is perfectly free competition, then the exchange-value, or price, will be one price at the same time for all bushels, measured vertically from AB to GH. This uniform exchange-value will be determined by Ricardo's marginal "Value" BH, which is the largest quantity of embodied labor since it is the quantity contained in the wheat produced on the then margin of cultivation. In short, this marginal quantity of labor per bushel is his personification of marginal scarcity. Finally, Ricardo's "Value" of the total product is the parallelogram, ABHG.

Converting this into the version of Menger and Wieser, which is the Malthusian version, this quantity of wheat, AB, is the quantity available, controllable, or purchasable, for the population as a whole at that time and place. Had there been a smaller quantity available, then the utility, now to be defined as scarcity-value instead of either utility or use-value, would have been a higher value – the assumed diminishing scarcity-value shown by the curve C'H. But with the quantity available as it is, at AB, and with the [p. 127] quantity wanted by the society also what it happens to be (and again with perfect competition assumed), then the exchange-value, or price of each bushel, will be the one price for all bushels, AG to BH. This is not causally determined by a single unit, the marginal utility, but is an equal scarcity-value for all equal physical units of the total quantity. And again the term value indicates what is measured by the parallelogram ABHG.

Now this uniform exchange-value, CH, for each unit of product was what Ricardo meant by Value; but for him, it was a uniform scarcity-value regulated by the marginal scarcity, personified as embodied labor, and when accumulated for each unit of the physical quantity became the total market value of the total quantity produced. And this uniform exchange-value is also Wieser's meaning of Value, but, instead of attributing the causal influence to the marginal unit, as did Jevons or Ricardo, he and Menger attributed it to the total quantity wanted relative to the total quantity available.

On the other hand, the curve, C'H, is the revised Benthamistic formula, given by Gossen and Jevons, for diminishing utility with each additional increment of quantity available, and to this we have given the name diminishing scarcity instead of the hedonistic sensational term diminishing utility. The subjective term is a concept of pure scarcity-value personified and subjectified and separated from all circumstance of time, place, demand, supply, or price. But the term diminishing

scarcity indicates what is meant objectively and quantitatively, for diminishing scarcity is none other than increasing abundance.

[p.128] Thus the term "Value" has the same meaning for Menger and Wieser as it had for Ricardo and later Karl Marx, but from the standpoint of opposite terms of the same ratio of quantity wanted to quantity available. Ricardo had clearly made the distinction between productivity and scarcity, between technology and economy, and between wealth and value, but by personifying scarcity as embodied labor and giving it the name Value, he had read into the process of production a double meaning of production, involved, as we can see, in the two dimensions of value, the physical dimension and the scarcity dimension. Technologically, labor produces use-values. This he made clear. Economically, it produces use-values in limited quantities. This he also made clear. But his terms labor and value had this double meaning. Labor means exertion to produce something, and, of course, no sensible laborer would exert himself to produce something that had no scarcity. The personification concealed the contradiction of use-value and scarcity-value, and Karl Marx walked into it.

Ricardo could not have made this personification except that he took it for granted that wants were unlimited. But this did not mean that wants were eliminated. Indeed, he replied to Malthus that he laid more weight on wants than did Malthus because he considered them unlimited whereas Malthus considered them limited. We now see that, by unlimited wants, he meant the psychological parallelism of Smith and Bentham. Hence he did not eliminate wants. What he actually did was to make them constant per unit of commodity, no matter how great the increase of quantity available. If wants are unlimited, it is the same as saying that the intensity of the want is constant for each added increment of supply. This means a [p. 129] constant price, so far as demand is concerned, and this is identical with a meaning of absolutely inelastic demand. Ricardo, by assuming wants unlimited, started his theory with the assumption of inelastic demand.

This is proper enough if you wish to measure the changes in some other factor. What he was measuring was changes in productivity, and so he assumed demand to be constant per unit of product. You assume the scarcity dimension is constant by assuming demand and price are constant per unit, and then you attempt to measure the effect of the technological factor upon prices. This was Ricardo's device. But by personifying it as embodied labor, he injected into it the double meaning of productivity and scarcity, use-value and scarcity-value. Productivity of labor was the physical dimension which increased the quantity of use-value, but resistance to labor was the scarcity dimension which limited the quantity available. Hence his laborer is both producing use-value by increasing the quantity and producing scarcity-value by uniformly limiting the quantity.

Thus he reached the same result as Menger and Wieser, but from the opposite term of the same scarcity ratio between quantity wanted and quantity produced. His "embodied labor" meant a limitation of quantity available as supply, but Menger's diminishing scarcity (utility) meant a limitation of quantity wanted as demand. With each of them the term value had the same meaning of a quantity with two dimensions, a physical quantity of use-value and a scarcity-value relative to other

commodities. Ricardo's capitalist would not increase the supply of embodied labor in the form of capital if there were no profit in it, and Menger's quantity [p. 130] available would not be produced if expected consumers would not pay the price plus profit. Always Ricardo's capitalist produces in limited quantities, in order that his embodied labor may have an equivalent scarcity-value including profit on the markets; and always Menger's diminishing scarcity places a limit on this scarcity-value. It is the same scarcity ratio of quantity wanted to quantity available, but for Ricardo the variable quantity is the limited quantity available in the technological process of production, while the constant quantity per unit is demand, and for Menger and Wieser the variable quantity is the limited quantity wanted, while the constant quantity per unit of product was technologically the process that determines the quantity available.

We have given the name Variable Degrees of Scarcity to Menger's variable ratios of the quantity wanted to the quantity available, which, when measured off into fixed units, become a physical unit, the bushel, etc., and a variable number of other physical units of another commodity, thus separating out the ratio of scarcity from the physical dimensions. But this variable unit of another commodity has also its variable degrees of scarcity according to the variations in its quantity wanted and quantity available. Menger and Wieser gave to this variability of the ratio of two commodities in exchange in this moneyless economy, the names utility and marginal utility, but since the meaning of scarcity had already been injected into the meaning of utility, evidently the terms scarcity and marginal scarcity are equivalent to utility and marginal utility.

[p. 131] If one of these commodities, physical money, is selected as the standard unit of exchange, to which all other degrees of scarcity of all other commodities is to be referred, it also has its own degree of scarcity, variable according to the total quantity wanted relative to the total quantity available. When it now comes to measurement by selecting fixed physical units, the bushel, ton, etc., on the one hand, and 25.8 grains pure gold on the other hand, then the term marginal utility becomes the degrees of scarcity of all commodities relative to the degree of scarcity of money, and the term "price" becomes the equivalent of marginal utility in the sense of the measurement of relative scarcities. Thus the term marginal utility is merely a personification of the uniform scarcity of each equal physical unit of the total quantity. And since value is the total scarcity-value of the total number of these equal physical units having the equal degree of scarcity, so in the money economy, where the degree of scarcity of money is substituted as a standard unit in place of the many degrees of scarcity of other commodities, the term price becomes the equivalent of marginal utility, and the term value becomes the scarcity-value in terms of money of the total physical quantity of the commodity under consideration.

Thus we have two meanings of the relative scarcity existing between different degrees of scarcity: the relative scarcities of all commodities to each other without regard to money, determining the ratios at which their units shall exchange and the many degrees of scarcity of all commodities relative to the degree of scarcity of money, determining the ratios at which the money unit shall exchange with units of the others. The causes of these varying degrees of scarcity are matters

of investigation, and no single [p. 132] cause, such as a "quantity theory" or a "commodity theory," can be used as explanation; what we start with is the scarcity relations between total quantities wanted and total quantities available, which are different for every commodity at different times, and then, by investigation, ascertain what were the probable factors affecting each.

Inseparable from his concepts which we have named degree of scarcity of each commodity and relative degrees of scarcity of all commodities, Menger developed what he or others afterward named Capital goods and Complementary goods. Capital goods, the term introduced by Clark, are the physical instruments through which we expect to obtain control of consumption goods. The latter directly satisfy wants, the former indirectly. Capital goods get their present scarcity-value from the expected scarcity-values of the consumption goods, through man's knowledge of causes and effect, and Menger names the latter "goods of the first or lowest order," while the former are goods of the second, third, or fourth order back to the land and the labor, which are goods of the highest order. Menger's "goods" are Clark's "capital goods," either Clark's "active" capital goods, which are the land and fixed capital, or Clark's "passive" capital goods which are the raw material passing through the process of production. The same principles of valuation appear, and Menger revealed the double meaning of fixed capital goods, just as Malthus and Ricardo had struggled over the double meaning of circulating commodities. It was again the distinction between efficiency and scarcity. All capital goods must have use-values, which are the physical qualities that fit them to produce the future use-values of consumption goods. This is Technology and [p. 133] Efficiency. But capital goods must have scarcity-values because they will not be produced in greater quantities than the expected scarcity-values of their output will warrant. This is Economy and Scarcity. And it is technology and efficiency that produce wealth. Economy restricts supply where technology augments it. Technology produces use-values, and economy regulates scarcity-values.

Hence Menger throws futurity into his meaning, both of utility, which we name scarcity-value, and of the useful physical qualities, which we name use-value. Use-values are the expected useful physical qualities of both consumption goods and capital goods, regardless of quantities, and scarcity-values are the future degrees of scarcity of consumption goods reflected back to the present control of quantities of instruments, by means of which the future quantities may be obtained. The distinction is that between technology and economy. Technology is the production of expected use-values through physical control of instruments; economy is the human purpose that connects the quantity of present goods as instruments with the quantity of future goods as ends.

But in order to obtain future goods, a combination of several present instruments is needed, such as materials, labor, and land, and this combination has both a technological and economic connection. The technological connections are the physical apportionment of complementary goods for the production of use-values, the province of the engineer, and managerial transactions. The economic connections are the proportioning of the quantities of these complementary goods

according to the present and expected degrees of scarcity of each,[45] the province of the businessman, and bargaining transactions. It is the latter that bring us back to the [p. 134] relative scarcities upon the markets that determine prices.[46]

Menger's meaning of private property is quite the same as Hume's. It arises from scarcity. Insofar as the total quantity controllable by a total population is limited, relative to the total quantity wanted by the population, the collective action known as property is required in order to apportion to individuals or groups, the control of that part of it which bears the aforesaid relation of the quantity available for individuals to the quantity wanted by them. Since this control by individuals is a limited control apportioned by collective action, we name it the rights, duties, liberties, and exposures of individuals in their limited control of that limited quantity of use-value, which becomes thereby scarcity-value.

Hence the concept of scarcity-value which we may derive from Menger may be reduced to the give characteristics: use-value, property rights, degree of scarcity, relative scarcity, and futurity. Use-value is the physical qualities of goods; property rights are the collective rules and customs of apportionment of these limited quantities of goods; degree of scarcity is the ratio between quantity of a particular commodity wanted and the quantity available; relative scarcity is the various ratios between various degrees of scarcity; and futurity is the valuation of present scarcity goods as instruments for the purpose of obtaining control of the future scarcity goods as ends.

Thus Menger worked out in detail, under the name utility, the concept of scarcity-value which Malthus had treated in gross. Where Malthus began with a total population pressing upon the means [p. 135] of subsistence, Menger began with an individual, and then, by duplicating the individuals, arrived at the total population. Where Malthus, in practice, restricted the scarcity meaning of value to exchange-value on the markets and made value in use "the intrinsic utility of an object"[47] regardless of abundance of scarcity, Menger made utility itself a scarcity concept, applicable both to value in exchange on the markets and value in use in the process of production. Where Malthus measured "real" value in terms of its power to command commodities and labor in exchange and "nominal" value in terms of money, Menger made the term "nominal" equivalent to scarcity under the name "utility," and then Wieser converted this into a moneyless economy whose relative scarcities are measured by their marginal scarcities, under the name marginal utility. Where Malthus took property rights as self-evident, Menger itemized them as indispensable for making scarce goods controllable by individuals. Where Malthus implied futurity, Menger made it stand out as the essential element in valuation, and where Malthus assumed that capital goods of course derived their present value from the expected wants of consumers, Menger revealed the mental mechanism of expectation by which it occurs. Thus Menger, in 1871, restored for succeeding

[45] Menger, *ibid.* 1st Ed. 7: 2d ed. 23, 72.

[46] Menger, *ibid.*, 1st ed. 172 ff; 2d ed. 182 ff.

[47] Malthus, *Pol. Econ.* 49 (1821).

economists the Malthusian version of scarcity-values, found in the limited wants of consumers, by extending their meaning back into the process of production, where Malthus had found scarcity-values only in the marketing process, and saw only physical use-values in the process of production.

Ricardo had assumed unlimited wants of consumers for commodities in general and so found his version of scarcity-value in the resistance of nature in the process of production. Neither [p. 136] Malthus nor Ricardo had connected consumption with production, Ricardo because he assumed wants were unlimited, Malthus because production was a technological process of creating physical use-values. But Menger tied them together by Futurity. The demand for capital goods – goods of the higher order – is limited because the future demand of consumers for their products is limited.

We have thus, with Menger, both capital goods, or commodities, and consumption goods, or their ultimate using up in the hands of consumers, governed by the same principles of limited quantity wanted relative to limited quantity available. This limited quantity available may be limited by property rights of other or by the technological resistance of nature. With Ricardo we have only the latter reason of limitation, because, for him, any other limitation on supply was not property but monopoly. The defect of both Menger and Wieser was again the personification of scarcity. Where Ricardo personified scarcity objectively as embodied labor, Menger personified it subjectively as utility. These personifications were apparently useful for the pioneers in the infancy of the science, but they pass away when the science becomes quantitative and statistical. They were talking poetry when they thought they were talking prose.

III Fund and Flow

Ricardo's scarcity injected two class struggles into economics, where, with Smith's abundance, had been harmony – the struggle of capitalist and landlord and the struggle of capitalist and laborer. The landlord's rent, if enhanced by a tariff on imports of food, was a deduction from profits, and profits were also reduced by an increase of wages, but were increased if wages were reduced. Since the total product is limited by nature's resistance [p. 137], a larger share taken by landlords and laborers leaves a smaller share for capitalists.

Ricardo was thus the first clearly to distinguish the sharing of a limited product among classes from the personal incomes of individuals. For Smith the problem had been the augmentation of the product by nature and individuals, and the laws of distribution were similar for profits, wages, and rent. For Ricardo the problem was the distribution of a limited total product, and the laws of profit, wages, and rent were dissimilar. Ricardo had passed from the merchant-capitalist stage with its small manufacturers, farmers, and retail merchants, who worked along with their laborers, and had entered the employer-capitalist stage where the farmer, manufacturer, merchant, and banker were the capitalists, paying rent to landlords

and wages to laborers. Himself as a financier on the money markets, he figured out the shares in distribution like the shares in a limited liability company. He took profits and interest for stockholders and bondholders as a matter of course, without which industry could not operate, and gave no explanation other than that they were what was left after paying rent and wages. Leaving the matter in this shape, and after showing that the landlord's rent was a payment of something for nothing, it remained for Marx to show that profits and interest were also a payment of something for nothing. This nothing was the property rights of landlords and capitalist; this something was the product of labor.

Marx consolidated Ricardo by beginning with society as a whole, where Ricardo began with Smith's division of labor among individuals. He thus merged all individuals and their products [p. 138] into two opposing Funds, a Fund of Capital-value and a Fund of Labor power. Individuals might come and go, but the fund flows along, with waves and oscillations, indeed, but intact. These funds were not a mental analogy – they were as real as a river. They were constructed by a process of averaging and blending.

"Some people might think," he said, "that if the value of a commodity is determined by the quantity of labor spent on it, and the more idle and unskillful the laborer, the more valuable would his commodity be, because more time would be required in its production. The labor, however, which forms the substance of value, is homogenous human labor, expenditure of one uniform labor-power. The total labor-power of society, which is embodied in the sum total of the values of all commodities produced by that society, counts here as one homogenous mass of human labor-power, composed though it be of innumerable individual units. Each of these units is the same as any other, so far as it has the character of the average labor-power of society, and takes effect as such; that is, so far as it requires, for producing a commodity, no more time than is needed on an average, no more than is socially necessary."[48]

Thus, for Marx, individuals and differentials disappear, and funds take their place as homogenous capital-value and homogenous labor power, divided into the aliquot parts, dollars, and hours.

This picturesque analogy was afterward reproduced by J. B. Clark, but with harmony instead of struggle. "The term Labor," says Clark, "is sometimes used to describe a permanent aggregation of laborers no one of whom lives and works through more than a brief [p. 139] period. Labor is thus analogous to capital and laborers to capital goods. A permanent working force is composed of perishable beings as a permanent producing fund is composed of perishable goods. Both are commonly described by the use of abstract terms, but both are in reality concrete things; and actually to reduce either to a mere abstraction would be to put a material entity out of existence. We instinctively speak of a value – a given number of dollars – in describing a man's capital, but it is dollars "invested in" productive instruments; and we instinctively speak of labor when we mean an abiding force of

[48] *Capital* 1:46.

workingmen. Neither capital nor labor is like an immaterial soul that can live apart from its body. Each consists of a permanent body with a shifting composition. A permanent sum, on the one hand, a permanent amount of working energy, on the other, are always present, but they are in goods and men respectively. Each may well be described by the use of an abstract term, and in practical life it commonly is so; but it is a concrete reality. Capital is this permanent fund of productive goods, the identity of whose component elements is forever changing. Capital goods are the shifting component parts of the permanent aggregate."[49]

Thus Clark's capital, like that of Marx, is a capital fund, composed of a succession of capital goods, which are Marx's commodities. And Clark's fund of Working Energy is Marx's Social Labor Power, measured likewise in dollars by Clark but man-hours by Marx. Clark followed Malthus and Marx, but Marx followed Ricardo. Like Malthus, Clark pictured society as one "great composite consumer["] and, like Marx, as one ["]great composite producer.["] While ultimate [p. 140] consumption is individualistic, yet consumers are buyers, and, as such, they are the "social valuers and appraisers" who "somewhere in the social organism" participate in fixing the values of goods.[50] And, like Marx, it is not individuals who produce – "only society in its entirety is an all-round creator of goods." Also, like Marx, "division of labor and exchange merely describe in different ways the organized process of creating wealth, as contrasted with the method of isolated and independent production."[51]

Marx came upon this twofold social process in his discussion with Proudhon prior to 1847.[52] Proudhon, like Smith and Ricardo, started with an individual producing utility-values, who then turns to other individuals and proposes an exchange of products. But Proudhon, unlike Smith and Ricardo, separated production from marketing and made utility-value the opposite and contradictory of exchange-value. His "utility-value" was Smith's and Ricardo's physical use-value, which increases with abundance, described by him as "the capacity possessed by all products, natural or industrial, to serve the subsistence of man." His exchange-value was Ricardo's "value" which decreases with abundance, described as "the capacity they have of being given in exchange for each other."[53]

What Proudhon therefore meant by utility was physical use-value, whose increase is an increase in the happiness of man; what he meant by exchange-value was scarcity-value whose increase reduces the happiness of man. They were opposite and contradictory, for Proudhon, just as they had been for Ricardo. For this was [p. 141] Ricardo's distinction between wealth and value, Menger's between goods quality and goods value, and Clark's between absolute utility and effective utility. Proudhon's utility-value was *valeur en soi*, Ricardo's wealth and Riches,

[49]Clark, J.B., *Essentials of Economic Theory*, 29, 35–36. (1909).

[50]Clark, J.B., *Distribution of Wealth*, 25, 245, 24.

[51]Clark, *ibid.*, 11; Marx, *Poverty of Philosophy*, 34.

[52]Cp. Engel's preface to Marx's *Poverty of Philosophy*. 9 (tr from original 1897).

[53]Marx, *Poverty of Philosophy*, 33 (tr).

Menger's goods quality, and Clark's absolute utility – in short, physical use-value. And his exchange-value was Ricardo's Value, Menger's goods value, and Clark's effective utility – in short, scarcity-value. Scarcity-value is the opposite and contradictory of use-value, for it increases by reducing the supply, but use-value increases by enlarging the supply. "Proudhon therefore is right," says Wieser, "when he affirms the antimony of exchange-value. Every undertaker finds it to his advantage when he succeeds in turning free goods which he cannot sell, into economically scarce goods which he can sell."[54]

Marx discovered that this contradiction arose from Proudhon's antithesis of production and marketing. Production creates use-value, and marketing creates scarcity-value. Proudhon, in Hegelian fashion, had reconciled the antithesis by his idea of "constituted value." Constituted value was "synthetical value," the synthesis that reconciled the thesis, use-value, and its antithesis meant the value that would be freely agreed upon by two persons on a market if they were entirely equal and entirely free of any form of collective compulsion either by the government or any other association.[55] His synthesis was anarchism.

[p.142] But Marx denied the antithesis both of production versus exchange and of use-value versus exchange-value. They might be antithetical if we start with individuals producing in isolation, who then look around for other isolated individuals with whom they purpose to exchange their surplus products. But this is a false start. There are no such surplus products. None are produced for self with a surplus produced for others. All are produced for exchange. Production does not end before exchange starts. They are the same labor process, and hence exchange is itself a form of production. Division of labor and exchange are merely descriptions of social production. "From the moment that you suppose more than one hand assisting in production you have already supposed a whole system of production based on the sub-division of labor." Other individuals are indeed collaborators, as Proudhon had suggested, but this means that they are not *individuals*. They are different functions in the same social process. "The collaborators, and the diverse functions, the division of labor and the exchange which it indicates are all existing already . . . It would have been just as well to have supposed exchange-value in the first place."[56]

This is what Marx did. There is therefore, for him, no opposition or contradiction between use-value and exchange-value. Exchange-value is simply a "form" that use-value takes in the social process of production. The use-values of society are not a sum of individual use-values; they are each of them already a social use-value in the very process of production for use by others through division of labor and exchange. Exchange does not add to the value of commodities, nor deduct from their value, nor

[54]Wieser, *Natural Value*, 55. But Wieser goes on to show that the antimony does not exist in the 'upgrade' of his paradox of value.

[55]Proudhon, P.J., *Systeme des Contradictions Economiques, on Philosophe de la Misere*, book I, chap II. (1st ed. 18[46]), (2d ed. 1850).

[56]Marx, *Capital* Book I, Chapter 1.

contradict their value, any more than the "form" of a bushel of wheat changes the [p.143] amount of wheat when it passes from a farmer's wagon to a merchant's bin. In the parallel words of Clark, the terms "division of labor" and "exchange-value" merely describe the organized process of creating wealth, contrasted with isolated and independent production. Clark's capital goods do not change their value when the businessman buys or sells them and thereby changes them from capital goods to capital fund. And Marx's "Commodities" do not change their value when they become capital.

Thus while Proudhon's antithesis of use-value and exchange-value led to the equality and liberty of individuals in the synthetic values of anarchism, Marx's identity of use-value and exchange-value led to the subordination of individuals in the social values of communism. Their difference arose out of the difference between Merchant capitalism and Employer capitalism. Proudhon had his eye on the great merchants and bankers who controlled the commodity markets of the small employers, farmers, and laborers working together, thereby reducing them to a sweatshop competition, but Marx had his mind on the process of production itself where the capitalist was the employer, controlling production and exchange and reducing the wage earners to competitive slavery. Hence, Proudhon would oust the wholesale merchants and the bankers from the markets by cooperative marketing and banking, retaining, however, individual production; but Marx would oust the employers from the shops by common ownership and governmental organization of production and exchange. Proudhon did not distinguish rent, profit, and wages when paid to small producers. They were different forms of the same compensation for labor. Proudhon was Smith [p.144] anarchized. But Marx communized Ricardo's unearned incomes of landlords and his unaccounted profits of capitalists by merging them into a common fund of social use-value produced by social labor power, but extracted and accumulated by capitalists in the process of production. Marx's laborers were a hive of bees and his capitalist their owner.[57]

But, while Marx condemned Proudhon for his antithesis of producing use-value and then marketing their scarcity-value, Marx had already changed the physical use-value of Smith, Ricardo, and Proudhon to the scarcity-value of Ricardo. It was none other than Ricardo's Value – scarcity by value personified as embodied labor. He thought he was following Ricardo, but he had not retained Ricardo's distinction between use-value and value. Ricardo's use-value was riches and wealth; his "value" was scarcity-value. Marx was answering Proudhon's contradiction of use-value versus scarcity-value by the similar contradiction of "producing" scarcity-value, and this was done by changing the meaning of use-value to scarcity-value. His social use-value was not Ricardo's riches and wealth; it was Ricardo's scarcity-value personified as embodied labor.

Marx plainly understood that Ricardo's meaning of value was scarcity-value, and he quotes against Proudhon and Ricardo's criticism of Lauderdale and Malthus. "It is through confounding the ideas of value and wealth, or riches, that it has

[57] Marx, *Capital* 1:000.

been asserted that by diminishing the quantity of commodities, that is to say, of the necessaries, conveniences and enjoyments of human life, riches may be increased."[58] Thus Marx understood Ricardo's "value" to be [p.145] equivalent to scarcity-value and Ricardo's wealth to be equivalent to abundance of Adam Smith's meaning of use-value. He uses Ricardo in this connection to show that Ricardo had already exposed Proudhon's fallacy, when he answered Lauderdale and Malthus, but in other connections he changes Ricardo's meaning of use-value to Ricardo's contradictory meaning of value.

This is seen in his assertion that demand was essential to Ricardo's meaning of value. A thing had to be in demand, else embodied labor could not give value to it. "The difficulty of Proudhon" he said "is simply that he has forgotten *demand*, and that a thing can only be scarce or abundant according as it is in demand. Demand once set aside he assimilates exchange-value to *scarcity* and use-value to abundance." Consequently, Proudhon, after making exchange-value equivalent to scarcity, and utility-value equivalent to abundance, "is astonished not to find utility-value in scarcity and exchange-value, nor exchange-value in abundance and utility-value." He never will find them together "while he continues to exclude demand." Proudhon's "abundance," said Marx, "seemed to be something spontaneous. He all at once forgets that there are people who produce and that it is to their interest never to lose sight of the demand."[59]

In other words, Marx's "producers" not only produce use-value but also limit its quantity in the process so that expected demand will give exchange-value to it. His use-value is already a scarcity-value.

It must be noted that by the value of commodities, Marx meant the total money value of all national wealth as measured by [p.146] the census, but, instead of measuring it in dollars, he measured it in embodied labor. Commodities, for him, were every accumulation of embodied labor, no matter how great their scarcity-value, so long as they had actually or potentially exchange-value. Thus they included all land values, all monopolies, all buildings, all machinery, all soil fertility, and all circulating commodities up to the point of final delivery to the ultimate consumer. By his process of averaging and eliminating differentials, he reduced this total value of a nation to the average scarcity-value produced by a nation of homogeneous labor.

At first sight, in his volume on *Capital*, it must be conceded that in his analysis of a commodity, he does not appear to have changed Ricardo's meaning of use-value from physical abundance to volitional scarcity. Sometimes his meaning is ambiguous, as when he says "nothing can have value without being an object of utility. If the thing is useless, so is the labor contained in it; the labor does not count as labor and therefore creates no value."[60]

Here the question arises, is it useless because its physical qualities are such that it cannot be used – like rotten apples – or is it useless because the quantity available

[58] Marx, *Poverty of Philosophy*, 38, 39.

[59] *Poverty*, 4[0], 4[1].

[60] *Capital*, 48.

is larger than the quantity wanted – like too many good apples? Is it useless as use-value or useless as scarcity-value?

In some cases Marx seems to mean that use-value is only a physical quality. Thus he says that the exchange-value of commodities "manifests itself as something totally independent of use-value."[61] "Use-value is independent of the amount of [p.147] labor required to appropriate its useful qualities." "Use values furnish the material for a special study, that of the commercial knowledge of commodities."[62] "Use-value as such lies outside the sphere of investigation of political economy."[63]

But at other places he indicates clearly that by use-value he means useful insofar as the quantity supplied is not in excess of the quantity wanted or needed for use and useless if too abundant. He says "use-values become a reality only by use or consumption." "When treating of use-value we always assume to be dealing with definite quantities, such as dozens of watches, yards of linen, or tons of iron."[64] "Use value has a value only in use and is realized only in the process of consumption. The same use-value may be utilized in various ways. But the extent of its possible applications is circumscribed by its distinct properties. Furthermore, it is thus limited not only qualitatively but also quantitatively."[65] "The same labor may be embodied in two bushels of wheat in a favorable season, and only in one in an unfavorable season. In this case, scarcity or abundance, as natural conditions seem to determine the exchange-value of commodities, because they determine the productivity of certain kinds of labor which depend on natural conditions."[66]

In other words, use-value varies directly with scarcity of nature's resources and inversely to the abundance of resources because if resources are scarce a greater quantity of labor is required to produce the commodity wanted, but if resources are [p.148] abundant a lesser quantity of labor is required to produce it. It is exactly Ricardo's idea of value and not Ricardo's idea of use-value. But it is Ricardo's personification of scarcity-value as the quantity of labor paid to nature for commodities. What Marx actually says is that both use-value and exchange-value are scarcity-values because the amount of labor required to produce them varies directly with their scarcity and inversely to abundance. The reason for this is, as quoted above, that the producer of use-value is producing in limited quantities because he has an eye on the limited quantity wanted by consumers.

We conclude that Marx's use-value is not Ricardo's or Smith's physical use-value which increases with abundance; it is that limited quantity of use-value that can be realized in consumption – Menger's ratio of quantity wanted to quantity available – and it is only the scarcity of labor power needed to make available this

[61] *Capital*, 45.
[62] *Capital*, 42.
[63] *Critique*, 21.
[64] *Capital*, 42.
[65] *Critique*, 20.
[66] *Critique*, 35.

limited quantity of use-value that is his "socially necessary labor-time."[67] But a limited quantity wanted, relative to a limited quantity available, is scarcity-value.

By "socially useful labor" and socially useless labor, therefore we infer that Marx means to include the creation of both physical use-value and that concrete scarcity-value which a particular quantity of use-value has at a time and place when and where wanted. He had not analyzed it, like Menger, but that is what he meant. Useless labor is that which creates something not wanted then and there, either because its qualities are physically useless or because labor is wasted by producing more than consumers can utilize. But labor is that which produces things physically useful and in the limited quantities wanted at a time [p.149] and place by users. It produces both use-value and scarcity-value in the same process, by producing use-values in limited quantities with regard to the demand of consumers.

If we attempt to explain systematically Marx's contradiction contained in his idea of producing scarcity-values, we shall cover the following particulars: (1) the method of reasoning from physical analogy, (2) the personification of scarcity, (3) the fallacy of averages, (4) the concept of unlimited demand, (5) the elimination of the paradox of value, (6) the confusion of income and outgo with output and input, and (7) the confusion of a physical process with a proprietary process.

(1) By his method of physical analogy, Marx looked upon use-value as merely physical qualities of value, contrasted with the "form" exchange-value given to them by his composite value-creating substance, embodied labor. Use-value has its significance for him only in the fact that different kinds of use-value are a condition without which there would be no division of labor and no exchange of commodities. "Use values cannot confront each other as commodities, unless the useful labor embodied in them is qualitatively different in each of them."[68] Hence use-value is the kind of value embodied by different kinds of labor – shoemakers, hat makers, etc. This is social use-value because it is used by others not the specific producer. But the common substance underlying all use-values and exchange-values is the homogeneous human labor power, stripped of its different kinds. When commodities are "looked at as crystals of this social substance, come on to them all, they are – Values."[69]

[p.150] Thus the *kind* of value is the different physical qualities of use-value, the *form* of value is its exchange-value; the *cause*, the "value-creating substance," the "unsubstantial reality" in each commodity, is this "mere congelation of homogenous human labor," whose magnitude is measured by its two dimensions, number of hours and rate of output per hour.[70]

So it is with all kinds and forms of production, whether determined by the greater or less productiveness of agriculture in different seasons, or by the average amount of skill, or the state of science, or the degree of its practical application, or the

[67] *Capital*, 46.
[68] *Capital*, 99.
[69] *Capital*, 45.
[70] *Capital*, 45.

extent and capabilities of the means of production, or by physical conditions. In all cases "the value of a commodity varies directly as the quantity, and inversely as the productiveness of the labor incorporated in it."[71] Which, being converted into the distinction between value and price, means that the value of a commodity consists of the two dimensions, the physical dimension of the number of hours devoted to its production and the scarcity dimension of the ratio of exchange with nature which varies inversely to the resistance of nature's forces.

(2) The personification of scarcity arises from this twofold dimension of value as the number of labor hours devoted to producing the commodity and the price paid per hour to nature in exchange for her products available for man's use. If nature is productive, like a bumper crop, the price paid per bushel in terms of labor was low. If nature was niggardly, like a scarce crop, then the price per bushel was high in terms of labor [p.151]. This personification of scarcity was useful in getting away from the money prices and artificial scarcities of mercantilism, and it resolved prices into natural prices which then could be used as a standard in contrast to artificial prices. If two producers exchange their hats and shoes at the same ratio at which each had paid to nature, then their market prices were natural prices, otherwise nominal prices. What the two producers paid as outgo for an income from nature was their labor power accompanied by toil and trouble. It was a natural scarcity substituted for the artificial scarcities of mercantilism. And if, therefore, they exchanged their two commodities on the markets at the same ratios of exchange as their exchange with nature, then the market price was a natural price – otherwise a nominal price.

Consistently with this idea, Marx's unit of natural scarcity, like Ricardo's, was a labor hour unit instead of a money unit. It was the quantity of labor per hour paid for a quantity of commodity per hour. Hence the physical units of measurement, the bushel, the yard, and the ton, were eliminated, and all the different kinds of use-value and their different kinds of measurement were reduced to the uniform average use-value received in exchange for a fixed unit of purchasing power, the average man-hour. Consequently the customary unit of scarcity, the dollar, was also eliminated. The scarcity of a bushel of wheat was measured, not by the money paid per bushel, but by the number of labor hours per bushel. The measurement occurs in the process of production and not upon the markets. The unit of scarcity was the man-hour, and the relative scarcities of different products varied inversely to the quantity of use-value received for this fixed unit of measurement [p.152]. And the value of a certain quantity of product was the number of labor hours paid for it at this price per hour.

Therefore, in his system, we do not measure the different *kinds* of use-values at all, by the ordinary physical units of bushel, yard, or ton; we measure only their scarcity-values. And we measure these not by the number of dollars and cents paid per bushel, yard, or ton but by the number of labor hours paid per bushel, yard, or ton. Hence the measurement of all use-values is eliminated, and all scarcity-values of all commodities are merged into one grand sum of scarcity-values, under the

[71] *Capital*, 47.

name Social use-value, measured by the number of scarcity units, each unit being the average quantity of labor per hour paid to obtain them.

(3) This uniform time unit is Marx's fallacy of averages. It is evident that he could not have merged all the different kinds of use-values into one social use-value and all the different personified prices paid by man to nature into one social labor power except by this fallacy of averaging the rate of output per hour. Ricardo had made two uses of this labor-time unit, one applying to agriculture, the other to manufactures. In the case of agriculture, there is an increasing labor outgo per unit of product, that is, an increasing nature price – as production is forced down to lower levels where embodied labor, the price per bushel, is larger. At any particular stage in this pressure of population, however, the then set of natural prices is a set of differential prices owing to differences per unit of product in the amounts of embodied labor paid out. The value, therefore, of the total supply at that particular stage, owing to the one-price principle of free competition, is determined by the highest [p.153] price, which is the highest natural price per unit, because it is the largest amount of embodied labor per bushel, as found at the then margin of cultivation. (See Fig. IX, the marginal embodied labor BH.)

But in Ricardo's manufactures, there was no differential productivity, since here he also used averages instead of differentials. Hence the amount of embodied labor per unit – the natural price of, say, a pair of shoes – is the same for all shoes of the same kind. The value, therefore, of a quantity of shoes varies directly with the number of hours, a thousand pairs having a value equal to a thousand times the natural price or value per unit, which is the quantity of embodied labor per pair.

Thus embodied labor, in manufactures, was a uniform price paid to nature, that is, a uniform natural price per unit of product, and the total market value of the total quantity is simply the sum of the equal natural values of all the unit of output. But, in agriculture, the embodied labor was a set of differential prices paid to nature, expressed as differences in embodied labor, and here the total market value of the total quantity is not the sum of equal unit values – the one-price principle prevents that – it is the sum of the marginal unit values, so that the result of the differential unit values, combined with the one-price principle on the markets, is rent. (See Fig. IX, the marginal embodied labor BH and the differentials measured from EH to CH.) But Marx eliminated all differentials by averaging them and thereby applied to all industries the uniform natural prices paid to nature which Ricardo applied only to manufactures.

[p.154] Since he was interpreting the total money values of all monopolies, corporations, land values, improvements, and personal property, as shown by the census of national wealth, his process of averaging reduced them all, regardless of differences, into the total number of labor hours devoted to their production, at the average rate of production per hour. The process, however, is not so very different from that of the census takers. They measure the national wealth in terms of scarcity, using the dollar as the unit. Marx measured the national wealth also in terms of scarcity, but used the labor hour as the unit.

(4) We have already commented upon the effect of Ricardo's idea of unlimited demand of consumers. Unlimited demand by consumers does not eliminate demand

altogether. There can be no concept of scarcity without a concept of consumer's demand. Hence the elimination of their demand is an assumption that their demand is constant per unit of product, and therefore we can only say that it is an inelastic demand regardless of the great or small quantity of commodities produced to satisfy it.

But Ricardo had a limit of demand, for it was the limit of effectual demand of producers whose products offered in exchange were the effectual demand for other products offered in exchange. If demand of consumers, therefore, is inelastic and constant, it is the same as saying that no matter how large the quantity produced, it will have no effect on the ratios of exchange but will merely cause the other products to be increased to the corresponding amount and thus maintain their ratio of exchange constant at the same point as before. This equalization was effected, according to [p.155] Ricardo, by an automatic immediate transfer from the product overproduced to the product underproduced, and, as long as this transfer is unobstructed, assuming total demand unlimited, any increase in production in any branch of industry immediately induces a corresponding increase in all other branches with which the increased product is exchanged. Thus his limit of demand was not the diminishing quantities wanted by consumers, as Menger afterward showed, but was the limited quantity supplied by producers. Relative scarcities still remained, but they belonged to the process of production and equalization of productivity through transfers from one branch to another according to the relative natural scarcities of each.

In this he was followed by Marx, who although he charged Proudhon with forgetting demand of consumers, he also forgot it, or rather assumed that it was constant and absolutely inelastic, since he had no method of measuring it as a limiting factor, diminishing until it stopped at the point of final or marginal utility.

(5) This idea of constant, or inelastic demand for all commodities, no matter how large or small the quantity of each, eliminates the paradox of value, afterward propounded by Wieser but having many illustrations in all branches of economics. The paradox of value arises from the fact of diminishing scarcity (utility) that goes along with increasing abundance. If scarcity does not diminish with increasing abundance, then there is no paradox of an "upgrade" when physical quantity increases faster than diminishing scarcity or "downgrade" when diminishing scarcity exceeds the increasing abundance. It is the paradox of two variables, physical quantity and relative scarcity. The scarcity dimension is [p.156] isolated and measured if the unit of one commodity is fixed by custom or law, the bushel, ton, etc., and then the variable number of fixed units of other things exchanged for it is the measure of the scarcity of the one that is fixed, namely, its price expressed in the variable quantity.

It turns out that three different kinds of units of these variable quantities have been used in economic theory with which these relative scarcities may be measured.

(1) The unit of money, the dollar or other unit of pure gold or silver, is the customary unit, and the variable number of these units received in exchange is the customary measuring of price. And the sum of the prices determined by the number of the physical bushels or tons having this same price is the customary meaning of value. Money value is the number of physical units each having the same number of

units of money exchanged for it. But in order to get away from the artificial money economy, the two "natural" units have been substituted.

(2) The hedonistic economists substituted a unit of feeling, utility, which, if it has any dimensions, is the variable number of supposed fixed units of intensity of feeling enjoyed or expected, upon receipt of a fixed unit of the commodity. The marginal utility is the number of these feeling units obtained at any point in the scale of diminishing number of feeling units, which, at the time, is set by the quantity available. Wieser thereupon construed the concept of value as an adaptation of the customary concept of the total number of physical units of commodity, each having the same number of units of intensity of feeling exchange for it. This is evidently a personification of money price and money value, worked [p.157] out in order to illustrate the changes in pleasurable income resulting from increasing abundance and its equivalent, diminishing scarcity.

(3) The other personification of natural price worked out by Marx in his elaboration of Ricardo was not the number of fixed units of money, nor the number of fixed units of feeling received, but was the number of fixed units of labor-time, one hour, paid by the average laborer in exchange for the fixed unit of commodity. The quantity of commodity is fixed as one unit, but the number of units of labor-time is variable, and this variability is the natural scarcity. The Marxian concept of value was therefore, likewise, an adaptation of the customary concept of the total number of physical units of commodity each having the same number of labor hours exchanged for it. This again is a personification of money price and money value, worked out not to show the changes in intensity of pleasurable income but the changes in quantity of painful outgo resulting from abundance or scarcity.

It is this meaning of value distinguished from price, but with an ever-present but constant demand, that explains Ricardo's and Marx's meaning of value with the difference, however, that they did not measure the physical dimension of value by the number of physical units (bushels, yards, or tons), but by the number of labor hours required to produce the quantity. And they did not measure the scarcity dimension of value by the number of dollars and cents per bushel, yard, or ton, but they measured it by the number of labor hours at the given rate of product per hour. Hence the Ricardo-Marxian concept of value is the same as that which afterward became Wieser's paradox of value, but without the paradox [p.158] because demand was made inelastic. The value of a single commodity is of two dimensions, the physical dimension measured by the number of man-hours required to produce the quantity and the scarcity dimension measured not by a diminishing price but by an average price for that commodity, the number of labor hours.

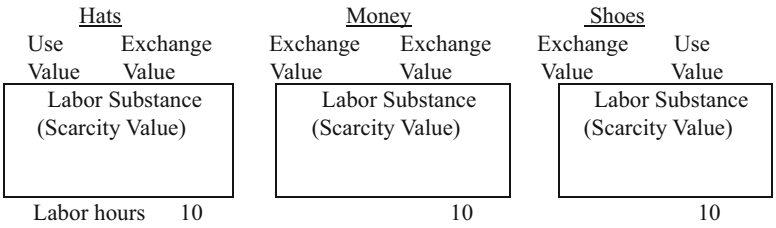
Consequently, in Ricardo's manufactures and Marx's social use-values, the paradox of value does not occur – there is a uniform price paid to nature – the uniform unit value of embodied labor. And this occurs, no matter how large the quantity of output. If the quantity of output is increased by working longer hours, it is the same quantity of labor per unit – the same quantity of unit value or price paid to nature. Hence nature's resistance is reduced to average resistance; this average resistance is, of course, uniform for each unit of output; and the total value of the

social output is composed of the two dimensions, the physical dimension of total product and the uniform scarcity dimension of an average price paid to nature in terms of embodied labor.

The method is analogous to a modern cost-keeping system where the various costs of labor and fixed charges are reduced to a time-unit basis, the minute, second, or hour, and the total estimated cost of a product is the number of time units required at the average cost per unit of time. The paradox of value is here also eliminated because prices and wages are assumed by the cost accountant to be constant and are taken at what they happen to be at the time. He therefore says that so much *value* is produced per hour, and the value of the product is the number of productive hours, although the value thus produced is the scarcity-value at existing prices and wages and has nothing to do with use-value. It is not [p.159] the accountant's function to attend to the probable effect on relative scarcities if the quantity of output is enlarged – that is the businessman's function. And Marx, by eliminating demand, had eliminated the business function and thus had resolved the whole subject of political economy into a clerical system of cost keeping at current prices in the process of production.

Hence, for Marx, it is not a paradox nor a contradiction to say that social labor power produces scarcity-value. Scarcity-value has already been read uniformly into each unit of output, just as the cost accountant takes it to be an unchanging set of prices and wages. And, therefore, if production is measured by labor-time, if each unit of labor-time is a uniform unit of scarcity-value, and if this scarcity-value is personified as a uniform price in terms of labor paid to acquire income from nature, then the personification conceals the contradiction of "producing" scarcity-value. To augment the quantity of scarcity-values is merely to augment the physical quantity of an output, each unit of which already contains the same scarcity-value because it does not diminish with abundance. And this is not different from the familiar practice, already mentioned, of speaking of value as composed of two dimensions, the physical dimensions of quantity produced and the scarcity dimension of money price per unit of that quantity. The only difference is that the scarcity dimension is the number of average labor hours instead of the number of dollars.

The formula for Marx's reasoning wherein the paradox of value is eliminated on the assumption of unlimited and therefore constant demand may be diagrammed as follows [p.160]:



Measuring horizontally the number of labor hours, and vertically the uniform amount of embodied labor per hour, that is, the uniform natural price, it follows that the same number of hours devoted to a commodity has the same quantity of embodied labor whether in hats or shoes or money, and therefore they exchange at the ratio of the number of labor hours. The unit of scarcity-value is not the price per hat or pair of shoes, it is the number of labor hour units. The medium of exchange is metallic money, which, however, has no use-value yet has equivalent exchange-value determined also by the number of its embodied time units of labor.

Since, however, this uniform labor substance is merely a personification of a uniform price paid to nature at each hour of production, it follows that the value of the hats, or shoes, or money, whether it be the "kind" of use-value or the "form" of exchange-value, will always be proportional to the number of hours of the accumulated cost prices per hour paid to nature. The paradox of value has been eliminated by eliminating the elasticity of demand, and all rents and differentials are eliminated by averaging the natural prices paid to nature, so that the value of each commodity, including money, is the sum of as many hours which constitute the physical dimension, each hourly unit representing the same [p.161] exchange ratio between an hour of labor as outgo and an hour of use-value as output.

The diagram illustrates how it was that Marx found his surplus value in long hours of work instead of inequalities of bargaining power. He eliminated inequalities of bargaining power by eliminating demand and thereby assuming that demand was constant and absolutely inelastic. Thereby he reversed cause and effect or put the effect for the cause. Long hours of work are a consequence of inequality of bargaining power, and inequality of bargaining power is inequality of needs for commodities or services at the time and place and all the inequalities that determine relative scarcities. It is the difference between explaining events by personification or physical analogy and explaining them by transactions.

The fallacy is, at bottom, the fallacy of confusing efficiency with scarcity and is not apparent until use-value is distinguished, as Ricardo attempted to do, from scarcity-value. But even then it is not apparent when the output of use-values is measured either in embodied labor units or in embodied dollars, both of which are the units of scarcity-value. The distinction becomes clear only when consistent terminology is employed and the output of physical use-values is measured in man-hours, but the scarcity of that output is measured in dollars. Marx confused efficiency and scarcity by measuring a sum of scarcity-values by the man-hours required to produce them instead of measuring efficiency by man-hours and scarcity by dollars.

[p.162] (6) This confusion of efficiency with scarcity is equivalent to a confusion of output with income and input with outgo. The engineering concept of producing an output is not distinguished from the scarcity concept of acquiring an income; and the engineering concept of an input of energy is not distinguished from the scarcity concept of an outgo which lessens the limited supply on hand. By assuming that, of course, the purpose of production is to acquire income, the assumption is made that production consists in producing an income, whereas it produces only an output of use-values. And conversely by assuming that a person would not willingly suffer

an outgo which diminishes his limited stock unless he expected an income which augments this or another stock, the personification is made that the input is a price paid for an income, whereas it is only a physical input compared with an expected output, regardless of demand, supply, or price.

The distinction may be cleared by noticing the well-recognized double process of production and acquisition that occurs in any factory. An output of, say, 1000 tons of a kind of use-value known as pig iron is produced during, say, 10,000 hours of human labor. Human labor is the input, and use-value is the output. The process is technological and has nothing whatever to do, as such, with demand, supply, or price. All that is told is the rate of efficiency – the productivity of labor and management in that establishment. The ratio of output to input is the measure of efficiency – one ton per ten man-hours or one tenth of a ton per man-hour.

But these thousand tons are added to a stock of pig iron on hand, increasing thereby the "invisible supply," that is, the supply not yet offered to the markets. It adds to inventory. It becomes [p.163] thereby proprietary income for the owner of the inventory. It increases supply.

The opposite of this is outgo – the conversion of this invisible supply into visible supply offered on the markets. The income augments the owner's invisible supply, thus tending to decrease the scarcity-value per unit of the stock on hand; but the outgo augments the visible supply, thus tending to reduce the unit price on the market by augmenting the visible supply. The very process of outgo, which reduces the owner's inventory and tends to increase the value per unit of his invisible supply, is an offer of income for the buyer, tending to increase the visible supply and reduce its price upon the market.

The ratio of income to outgo of inventory is therefore a rate at which scarcity and abundance of invisible supply are being increased or diminished. If the income added to inventory is 1000 tons, but the outgo, deducted from the inventory, is 3000 tons during the unit of time, say, one day, then the rate at which invisible supply is being reduced is 3 to 1, a reduction of 2000 tons per day, and, conversely, the rate at which visible supply is being increased by that operation is the same 2000 tons per day. This is to be compared with the rate at which other parts of the visible supply are being taken off the market by buyers, in order to ascertain the increasing or decreasing rate at which scarcity or abundance of visible supply is being augmented or reduced.

Other illustrations occur. Evidently the output-input relation is wholly different from the income-outgo relation. They involve two entirely different types of transactions, the managerial transaction of producing an output and the bargaining transaction of [p.164] determining how much and at what prices visible and invisible stocks shall be increased or diminished by buying or selling. The output-input rate per man-hour is the measure of efficiency; the income-outgo rate is the measure of the rate at which supply, visible or invisible, is increasing or decreasing. The two, while entirely different, are not allowed to fly off separately, for they are coordinated, more or less successfully, by the business policy of a going concern.

But by merging the two in the physical process of production, Marx contradictorily says that the laborer produces an income whereas it produces an output

and pays to nature an outgo in exchange for income, whereas it is not outgo, but is input. Ricardo's meaning, however, fits the distinction between different rates of efficiency, which measure the output of use-values regardless of scarcity, and different rates of increase or decrease of supply which are the income and outgo of limited quantities of use-values. But he and Marx personified input. It was not a mere technological fact – it was an outgo from a limited stock on hand, a natural price paid by man to nature in exchange for a limited income of use-values. They merged the efficiency process of output of use-values relative to input of labor with the scarcity process of limited quantities of income and outgo relative to the existing quantities of supply and demand.

Hence the Ricardo-Marxian meaning of exchange-value has a redundant meaning – it is already a production, not of output but of income before the exchange is made, and again a production of income from other persons when the exchange is made. Had the distinction been drawn between the technical process of producing [p.165] use-values as output, and the proprietary process of acquiring ownership of these use-values as income, then Marx's special-use-value would not have contained the redundant meaning of producing an output and producing an income. Social labor power is input and use-values are output, but the business control determines income and outgo. One is the principle of efficiency with its managerial transactions, the other the principle of scarcity with its bargaining and credit transactions.

(7) To confuse the two is the confusion of a physical with a proprietary process. It is upon this distinction between physics and property that the distinction between use-value and scarcity-value rests. Marx and Ricardo used the term "exchange" in the same physical sense as the term production. Production and exchange were the labor process of producing limited quantities of commodities and delivering them physically in exchange [for] one with another. Thus the business process of regulating or controlling supply, demand, and price was read into the physical process of producing an output. Proudhon had correctly distinguished exchange from production. Exchange, for him, was the business process of marketing and of borrowing and lending for purposes of marketing, and production was the physical process of producing not scarcity-values but use-values.

This business process is a proprietary process of holding, withholding, and transferring the legal control of goods, but the production process is the labor process of physically producing and physically delivering the goods. Whoever controls the legal process controls the relative scarcities of goods by controlling their supply, demand, and price. This was Proudhon's Merchant and Banker [p.166], whose property was "robbery," and should be displaced by cooperative marketing and banking.

But Marx, like Ricardo, extended this proprietary process into the factories. With him it was the employer who was the proprietor, and the marketing process was, in fact, the labor market at the doors of the factory, where legal control of input and output was decided. Hence the employer controlled the relative scarcities not only of commodities already produced as did the merchant, but the relative scarcities of labor and commodities in the process of production itself. The employer controlled the supply, demand, and prices both of the input of labor and the output of labor.

But Marx's "employer" was not an individual employer – it was a social combination of employer-merchant-banker, all of them "capitalist colleagues" in control of the government, and their combined property was "exploitation" of labor on the labor market. While, for Proudhon, property was the control of relative scarcities on the markets after commodities had been produced, for Marx property was the sheer threat of physical violence by sovereignty compelling laborers to work long hours in the physical production and physical delivery of goods in the social process of division of labor and then physically taking from them by threat of violence the social use-values which they created. It was Clark who reduced Marx's violence of sovereignty to the economic scarcity-values of property.

If we observe the distinction above noted between the efficiency ratio of output-input and the scarcity ratio of income-outgo, we are in position to separate the double meaning of production as wealth productivity and value productivity, employing the distinction [p.167] made by Ricardo, but not by Marx. Starting with the collective action of all producers of a certain commodity, wealth production is the augmentation of the output of physical use-values, but value productivity is the restriction of outgo in order to maintain or augment its scarcity-value. The restriction of outgo on the markets is, indeed, usually regulated by restricting the output in the process of production, but the two are not identical, for the output first becomes income which augments the invisible supply, and the outgo from that invisible supply does not coincide in time and amount with the invisible income. Hence, since it is mainly the effect on market prices that the businessman has in mind, the technically correct statement is restriction of output. For, if the term output is restricted to the physical engineering process, as it should be, then it is not the engineering function to restrict output – his is the function of augmenting wealth by enlarging output. But he is controlled by the business function which perceives the depressing effect of too much output if it forces too much outgo of visible supply on the markets. Since, however, the engineer is controlled by the businessman, the shortcut, popular, and elliptical way of stating the scarcity relation is to state it as restriction of output. Since restriction of output maintains or augments scarcity-values, it is in this way, of course, that income is augmented in the sense of a larger income of other products received in exchange. The ratio of this income received to this outgo suffered is the relative scarcity, at that time and place, of the two products exchanged.

[p.168] With this distinction in mind, therefore, the concept of productivity is composed of three constituent dimensions, the efficiency ratio of output to input per standard unit of time, the man-hour; the number of hours and the number of workers. This is the Marxian formula of the quantity of value contained in commodity, and it is the correct formula if by value is meant Ricardo's use-value, but not if the meaning is Ricardo's value or Marx's social use-value. The quantity of use-value may be measured by the accumulated number of man-hours required to produce it, and this method of measurement is useful when comparing the efficiency of one establishment with another or the same establishment at successive periods of time. But it is output, not income, use-value, not scarcity-value, that is measured. The physical analogy of embodied labor is the quantity of labor required to produce the

quantity of use-value, measured by the three dimensions of rate of output per hour, or efficiency, number of hours, and number of men. This gives the physical concept of capital-value as the amount of embodied labor, but the kind of value intended is its use-value as a productive instrument which is useful because it increases, in turn, the quantity of the different kinds of use-value produced by the useful qualities of the said capital. It is the use-value of a steam engine for the purpose of increasing the quantity of use-values in the shape of shoes.

If, however, the very different scarcity dimensions are to be measured as they accompany these physical changes, then the standard unit of measurement is the dollar. When the output becomes income added to the inventory, it is so many dollars invested in output as wage payments and other payments, usually in the form of promises [p.169] to pay at a later date, but immediately transformed into added dollars' worth of business assets valued at the current or expected prices on the commodity market. Hence the income is dollars' worth of income added to assets at the cost prices which, by analogy, is the quantity of embodied dollars promised as future outgo in order to obtain the present income. And when these physical goods are taken out of inventory and sold, they become outgo of dollars' worth of assets sold for an income of money or rather for a promise to pay which the bank converts into money equivalent. Hence, the formula for an inventory of assets, which now is not capital in the Ricardian sense of producing use-values but in the Malthusian sense of producing scarcity-values, is composed of these constituents: the rate at which dollars' worth of income is added to assets relative to dollars' worth of outgo deducted from assets, the total changing quantity of assets on hand that is inventory valued in dollars, and the liabilities in dollars deducted from assets.

This rather meticulous description seems necessary in order to point out the notable confusion displayed when the term productivity is employed to mean value productivity. It does mean value productivity indeed, but it is physical use-value. This, however, is not the meaning given by Marx, Clark, and others when they speak of value productivity or production of an "income" where they should say "output." The only fit meaning that can be assigned to their terms is scarcity-value, and scarcity-value is not produced – it is bargained. It is, as Veblen says, the sagacious withholding of beneficial service.

[p.170] Clark's analysis of a commodity turns also on its scarcity-value, and his fund of social labor energy also produces scarcity-values. Unlike Marx, however, but like Menger, he begins with the consumer's limited wants, where Marx began with the producer's limited supply for those wants. For Clark, scarcity is essential to wealth, and he uses the illustration which Ricardo resented in distinguishing value from wealth.[72] "A bucketful of water on the shore of Lake Superior is of no importance to the man who has it... If, however, fresh water were scarce, every bucketful would have its importance, and the loss of that quantity would make a distinct impression on the man's well being. Whenever each particular part of the supply has this power to make a possessor better off than he would be without it,

[72] Above ooo.

the substance is a form of wealth. The quality of being *specifically* important, is, therefore, the essential attribute of all forms of concrete wealth . . . Water in Lake Superior has the power to quench thirst, but . . . not the attribute which would make it a form of wealth, namely specific importance. Particular parts of the supply may be lost with impunity."

Thus Clark's "specific importance" is Menger's relation of quantity wanted to quantity available at the time and place, and to Marx's limited quantity of use-values needed by consumers, but is the opposite of Ricardo's meaning of wealth. To his own meaning, Clark gives the name "effective utility," because "the presence of the particular bit is a positive element in conducing to the man's welfare." But to utility in general, the physical meaning of Ricardo's and Smith's, he gives the name "absolute utility," because [p.171] it is the capacity of rendering a service whether actually wanted or not at the time and place.[73]

Thus "absolute utility" is Smith's value in use and Ricardo's wealth, but it has no place in Clark's meaning of wealth. On the other hand, "effective utility," which is Menger's scarcity-value, Ricardo's Value, and Marx's social use-value, is Clark's meaning of wealth, as it was Malthus' meaning.

Like Ricardo and Marx also, but unlike Malthus, Clark finds his scarcity-values in the process of production. His capital goods are "productive goods,"[74] and what they produce is not use-values as such, but use-values in the limited amounts which make them scarcity-values.

Clark's capital goods, like Marx's commodities, include all lands, all fixed and circulating capital, and all goods in the hands of wholesalers and retailers up to the point where they are physically delivered over to the ultimate consumer, when they become consumers' goods for Clark, "realized" values-in-use for Marx. They are, in short, the census estimate of natural wealth in terms of scarcity. For both Clark and Marx, they are a "means to an end" and Clark's equivalent of wealth. "Wealth is always mediate . . . Capital goods are not wanted for their own sake, but for something else that is directly useful." The savage's fishing net is a capital good, because it ["]is wanted only for the sake of the consumer's wealth which it will help to produce. The end in view has all the while been fish."[75] They are "passive capital goods," in the form of materials and circulating capital, and active capital goods, known usually as fixed capital.[76]

[p.172] Land also is a capital good, since it "is a form of wealth which produces other wealth." And, like Malthus, he defines wealth as the value of land. "Land is the original gift of nature to humanity, and wherever there are people enough to make the possession of a particular piece of it important, it becomes a form of wealth. It can be valueless only when population is sparse; and then an increase in the number

[73] Clark, *Essentials*, 6, 7.

[74] *Essentials*, 29, et.

[75] *Essentials*, 16, 17.

[76] *Essentials*, 21.

of people dwelling on it gives to it clearly the attribute of specific importance. The land that is accessible to a growing population cannot long be a superabundant."[77]

Thus wealth is scarcity of land. Its value is its scarcity-value, its use-value is valueless if abundant, and wealth is scarcity of use-value. Wealth is increased by the pressure of population – the Malthusian idea of wealth, contrasted with the Ricardian idea.

So also with the products of labor. Here is the meaning of value of Ricardo and Marx. "It is necessary for man to exert himself in order to get the goods that he needs in the condition in which he can use them . . . Of course the supply of them is limited, since labor is so."[78] Ricardo and Marx would have personified it. "Value" of the goods is determined by the quantity of labor embodied in them, but this is the same as Clark's saying labor produces a limited supply of goods. The quantity of embodied labor is this limitation of supply. But such is the meaning of scarcity-value.

With wealth defined as scarcity-value, Clark's "labor," like Marx's "labor power," also produces scarcity-values by producing use-values in limited quantities. "Labor is wealth creating effort, and there is no labor that is successful in attaining its [p.173] purpose that does not help to bring into a serviceable condition something that can be identified as an economic good or a form wealth."[79]

Since an economic good, or wealth, has been defined as a limited supply relative to demand, so labor creates wealth by not creating too much of it. "Some effort, indeed, fails in what it attempts to do and therefore, produces nothing. We may build a machine that will not work, or may make a product that no one wants; but labor that attains a rational purpose is always economically productive."[80]

Here the question arises, as it arose in the case of Marx. Does no one want the product because it is not a physical use-value – a machine that will not work – or because everyone already has all the machines wanted that will work? Is labor useless because it does not produce a use-value or because it does not produce a scarcity-value?

Clark means both, as did Marx. The distinction is between "productivity" and "economic productivity." Productively, labor produces physical qualities that will work; economically, labor does not produce too much of them. Productively, it produces use-values; economically, it produces scarcity-values.

Thus Marx and Clark, by the same physical analogies, arrive at similar results, but from opposite terms of the same scarcity ratio of total quantity wanted by society relative to total quantity available for society. Use-values in the sense of Ricardo's wealth disappear from Clark's computation, as they disappear from that of Marx, but for opposite reasons of the same scarcity ratio. For [p.174] Clark they disappear through changes in the quantity wanted, but for Marx, they disappear through

[77] *Essentials*, 9.

[78] *Essentials*, 9.

[79] *Essentials*, 9.

[80] *Essentials*, 10.

changes in the quantity available. It is the same scarcity ratio but the variable factor for Clark is limited demand, whereas for Marx it is the limited quantity produced.

Each considers the effective demand of consumers a limited demand, but for different reasons. Clark finds the limit in the diminishing final utilities of goods to consumers; Malthus had found it in the unwillingness of consumers to buy; Marx had found it in the inability of consumers to buy on account of exploitation by capitalists; and Ricardo had found it in the exploitation of capitalists by landlords and laborers.

Both Marx and Clark find their scarcity-values in the process of production and each for the similar reason that the producers have an eye on the demand of consumers and do not produce in greater quantities than the consumers will take at a price. Hence each considered production to be a production of scarcity-values and not Ricardo's use-values, thus using the term production in the double meaning, against which Ricardo protested, of producing value and producing wealth – the double meaning of producing scarcity-value by withholding supply and producing use-value by augmenting supply. This is undoubtedly what happens, but the physical analogy conceals how it happens and who it is that causes it to happen.

Each constructed a capital fund of social scarcity-value, to be measured by dollars, and a flow of social labor energy producing limited quantities of goods, also to be measured by dollars. Marx's "social labor power" is Clark's "permanent amount of working energy," whose total is constant, but the individuals are changing [p.175]. In each case that which is constant is scarcity-value, and that which changes is the flow of scarcity-values. Each looked upon these funds and flows as "concrete realities" and not as mental abstractions.

Where Ricardo started with the individuals and unlimited demand and reached a theory of relative scarcities on the markets determined by the relative scarcities of nature's resources, Menger started with the same individuals, but with limited demand, and reached his relative scarcities in view of the relative demands of consumers. But Marx and Clark started with society, the one following Ricardo, the other following Menger. Ricardo's relative scarcities disappeared, in the hands of Marx, in the average total scarcity of all goods produced in limited quantities by a great composite producer, society. And Menger's relative scarcities disappeared in the hands of Clark, in one grand composite capital fund limited by the diminishing wants of a composite consumer and the limited supplies furnished by a composite producer.

There is no particular objection to these figures of speech except that they cannot be used for research and testing out hypothesis. Modern economics has, indeed, something analogous to funds and flows, yet expressed in transactions, their repetition, duplication, and expectation. They indicate a permanent number of jobs or positions into which individuals come and go, but they come, stay, and go by repetition of transactions, and the interesting points are summarized as labor turnover, such as hirings, firings, quits, layoffs, absenteeism, etc. This may be pictured as an inflow and outflow of labor or commodities, but it is poetry, not economics. No particular use can be made of it for [p.176] understanding what happens or for correcting or forecasting what happens. Marx, indeed, built upon

his physical analogy a proposed dictatorship of the proletariate, but when it came to the actual dictatorship, they had to accommodate themselves more or less to the customary transactions that farmers, investors, borrowers, and laborers were addicted to. Clark built up a harmonious economic system in which everybody gets exactly what he produces – but what he produces is scarcity-values. What each was picturing in terms of physics was a repetition, multiplication, variability, and expectation of billions of bargaining, managerial, and judicial transactions which make up the economic process of going concerns.