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A COMPARISON OF THE INSTITUTIONAL ECONOMICS OF JOHN R. COMMONS AND DOUGLASS C. NORTH

By

Cheng-Ping Cheng

A DISSERTATION

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ABSTRACT

A COMPARISON OF THE INSTITUTIONAL ECONOMICS OF JOHN R. COMMONS AND DOUGLASS C. NORTH

By

Cheng-Ping Cheng

Owing to differences over method and theoretical style, there is considerable animosity between proponents of the old and the new American institutionalism. By comparing the institutional economics of John R. Commons and Douglass C. North, this dissertation shows that both camps share many views and can be seen as complements. The more current work of North, which departs from his earlier framework influenced by neoclassicism, is compared to that of Commons along several dimensions: methodological standpoint, concepts, theories, analytical process, and historical explanations.

It is found that the systems of Commons and North are not methodologically incommensurate but compatible, since both reject the rationality assumption, agree that economics can be a science, and believe that theories must be testable. Both use a descriptive rather than deductive style and view general modeling and the case study method as complementary.

The comparison of the four major theories of Commons and North – concerning the state, social control, property rights, and institutional change – reveals many commonalties. First, the state will use power and ideology to serve those who control government. Second, positive theories of ideology and the independent judiciary are needed to account for social control. Third, property rights emerge from the conflict of

interests and are a function of many complicated factors. Fourth, human behavior is guided by habit and ideology, and institutional change is a blend of design and evolution.

Commons puts transactions at the center of his main analytical process, whereas North focuses on transaction costs. Yet, both systems have common features, such as the view that workability, power, and ideology are critical for the operation of an economy.

Each man examined the great transformation to capitalism. The study compares their historical interpretations and finds that, although they raise different questions, Commons's interest in the history of legal foundations can complement North's concern about economic performance through time. Again, their case study and general modeling approach are compatible.

The study integrates the institutional economics of Commons and North at three levels: grand picture, analytical process, and ideas about transactions. Several suggestions are offered for further synthesis.

Finally, the study finds that the difficulty in communication between the two camps is the status of Commons's theory among new institutionalists. The reinterpretation of that theory in a modern framework is important work waiting to be undertaken. Overall, communication between the two sides will require much effort, and a great deal remains to be done.

Acknowledgments

The completion of this dissertation is a dream come true – becoming a historian of economic thought. The road to fulfilling this dream has been long and difficult.

In my junior year, I found that I wanted to pursue this discipline because it dealt with many ideals and grand views regarding issues fundamental to human beings. I was called "the prince of history of economic thought" by my classmates at National Taiwan University because I was one of a few students who were deeply interested in the course. There was not much encouragement to pursue this interest in my undergraduate and graduate study in Taiwan, where there are few economic historians.

In 1992, when I searched among the bookshelves in the library of the University of Pennsylvania, I saw Professor Warren Samuels's name on many volumes dealing with the history of economic thought; it was this and other factors that eventually attracted me to Michigan State University. There was still little support from classmates, friends, and teachers for this choice of field. First, it is difficult for a foreigner because it is so language oriented. Second, the job market (both in the United States and Taiwan) in this area is poor. I insisted on following my heart, especially since I was tired of purely technical economics.

Desire is not sufficient, however. During my first course at MSU, I hardly understood Professor Samuels's lecture, and my reading ability was so poor that I could not finish the required reading. Frustrated by my poor performance, I went to Professor Samuels and told him that I wanted to leave the field because it was beyond my ability. Surprisingly, he told me that he would be willing to supervise my dissertation, and it was his kindness that encouraged me to continue. At the early stage of this dissertation, my confidence was still weak. I was discouraged about my written English and only felt capable of dealing with very narrow issues. Professor Samuels seriously read my various drafts regardless of numerous grammar errors and unclear sentences. He offered praise, told me not to demean myself, and allowed me to tackle a relatively broad topic -- comparing the system of thought of Commons and North -- rather than focus on some small technical point. Indeed, with his continuous encouragement I slowly gained confidence, and it was his many insightful suggestions that helped me finish this dissertation and, furthermore, see many fruitful interests in the future.

Many other people have contributed to this effort. I thank Professor Jeff Biddle who patiently read and corrected my first drafts and gave me many valuable suggestions. Professor Stephen Woodbury's support and comments also were very useful. In addition, many of my friends helped with my writing and offered various suggestions: Marianne Johnson, Craig Smith, Karen Ford Krastev, Douglas Harris, David Wetzell, Heather Bednarek, Chien-Juh Gu, and Loe-Jiun Chou. The most crucial factor in making this dissertation readable was the help of Mrs. Elizabeth Johnston, whose revisions went far beyond ordinary copy editing.

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With all this help, I have transcended many difficulties. I see many promising issues and pleasures to pursue in this filed, and I hope to produce much fruitful academic work in the future.

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Chapter 1: Introduction

The purpose of this dissertation is to compare two of the most important figures in institutionalism: John R. Commons, a major cofounder of the old institutional economics (OIE), and Douglass C. North, who represents the rising school of new institutional economics (NIE).¹ The comparison examines the methods, main concepts, theories, analytical processes, and historical explanations of the two men. The main argument is that in almost all these aspects, their works not only do not conflict but also can be seen as complementary. Moreover, it is possible to integrate both systems to build a broad modern institutional economics.

Institutions have been neglected, either implicitly or explicitly, as an explanatory variable or a basis for analysis from the very beginning of economics. Yet, virtually every school has its own argument or theory about institutions, although most of these are implicit (Rutherford 1994b, p. 1). The only school of economic thought to make the evolution of economic institutions its central focus is the old institutionalism, which arose in the early twentieth century in the United States.

Despite the fact that institutional analysis has never been a dominant approach in the discipline, the work of was not in vain. Because of their efforts as well as changing circumstances, there has been a renaissance of institutionalism during the past twenty-five years (Samuels 1995, pp. 570-1). This revitalization emanates from several sources: (1)

¹ Old institutionalism refers to the school cofounded by Veblen, Commons, and Mitchell. Its younger generation, which includes John K. Galbraith and Warren Samuels, is called neoinstitutionalist in this dissertation. The definition of the new institutionalism varies. Some authors use a very broad definition that covers the Austrian school economists influenced by Hayek, neoclassical-wing institutionalists, Shackle's radical subjectivists, and neo-Schumpeterians (Hodgson 1989; Langlois 1989; Rutherford 1994b). This dissertation will focus on the neoclassical wing of new institutionalists, especially North's branch (Eggertsson, 1990).

the new generation of U.S. institutionalists; (2) institutionalist thinkers in Europe, who have not been part of the American tradition; (3) the post-Keynesians and social economists; and (4) the new institutionalists. The first three groups are heavily represented in such organizations as the Association for Evolutionary Economics, Association for Institutional Thought, Association for Social Economics, and European Association for Evolutionary Political Economy. Their research has been published mainly in the Journal of Economic Issues, Review of Political Economy, Journal of Post Keynesian Economics, and Review of Social Economy.

Among the new institutionalists, Ronald Coase, Douglass North, and Oliver Williamson are some of the leading figures. One common feature of their work is the use of neoclassical modeling tools to analyze a broad range of topics, such as economic history, law and economics, theory of organization, theory of the state, and theory of contracts. Their influence is gradually increasing, and their works have been published in the Journal of Institutional and Theoretical Economics, Journal of Economic History, American Economic Review, Journal of Political Economy, Journal of Law and Economics, American Journal of Sociology, and World Development.²

Although OIE and NIE are interested in many of the same broad issues, there is significant hostility between these two traditions.³ Rutherford (1994b, p. 173) notes that OIE "has frequently expressed outright opposition to more orthodox programs, anything less being seen as an undesirable lack of paradigm discipline. Similarly, the NIE is

² The new institutional economics is heavily represented in such organizations as the International Society for New Institutional Economics (ISNIE), Economic History Association, the Center in Political Economy (Washington University), Society for Economic Anthropology, and Society for the Advancement of Socio-Economics.

³ The hostility varies with respect to different branches within each school and does not seem to be great

associated with such negative views of the old that it would be impossible for anyone to admit to a serious interest in the old without casting doubt on their own theoretical credentials." Furthermore, many economists believe there is methodological incommensurability between the two camps.⁴ Yet, both schools have limitations and difficulties to resolve. This study asks: whether hostility is necessary between these two camps? Is there methodological incommensurability? Are there some heterogeneous programs within each school that make conversation between the two possible?

Comparison of the different features between OIE and NIE has been an interesting topic in the past few years. A special issue of the *Review of Political Economy* (November 1989) collected six articles that contrasted the two. Rutherford's *Institutions in Economics: The Old and the New Institutionalism* (1994) was the first book to compare both sides systematically in five respects: formalism and antiformalism, individualism and holism, rationality and rule following, evolution and design, and efficiency and reform. Groenewegen et al. (1995) claim that the institutionalism of Commons and North is completely compatible on three levels: problem definition, explanatory variables, and methods of inquiry. Rutherford (1995) believes a bridge can be built between the old and the new institutionalism.

Although there is no controversy in distinguishing the old institutionalists, authors differ in their identification of the new. In the *Review of Political Economy*, the latter group has been defined broadly. The Austrian-wing institutionalists, such as Menger and

between the Commons branch of OIE and North's branch of NIE.

⁴ OIE is usually described as methodological collectivism, habits and customs, an antitheoretical, preference for case study, a belief in deliberate design, and a stress on the workability of society as a whole. NIE is pictured as methodological individualism, and as assuming rational behavior, with an emphasis on formalism, a preference for general modeling, a belief in decentralized evolution, and a focus on efficiency

Hayek, have received more attention than the neoclassical wing, which includes Oliver Williamson and Douglass North. According to Rutherford (1994b), however, the focus on the Austrian School has been reduced, and the neoclassical economists have gained more attention. Groenewegen et al. (1995) and Rutherford (1995) give little attention to the Austrian-tradition in NIE.

Furthermore, two shifts have occurred. The comparison has gradually come to focus on the Commons branch of the old⁵ and the North branch of the new.⁶ Many economists claim that the Commons tradition in American institutionalism is more commensurate with NIE than with the Veblen-Ayres tradition (Langlois 1989, p. 271, n. 2; Rutherford 1994, p. 2). Both Groenewegen et al. (1995) and Rutherford (1995) focus almost exclusively on the comparison of Commons and North. In addition, the emphasis is shifting from methods positive theories. Whereas methodological to incommensurability was a main focus in the past, the recent trend is to stress compatibility in theoretical and empirical aspects (Groenewegen et al. 1995; Rutherford 1994b, 1995; Samuels 1995).

Given these trends, the objectives of this dissertation are as follows. (1) Attempt a systematic rather than piecemeal comparison of Commons's and North's systems of thought.⁷ (2) Analyze the topic in terms of positive theories and empirical applications, although I also deal with some methodological issues. The positive theory aspect includes

as the foremost value (see Chapter 3 of this dissertation).

⁵ This camp includes Selig Perlman, Kenneth Parsons, Edwin Witte, Warren Samuels, Daniel Bromley, and Allen Schmid.

⁶ Included are Ronald Coase, Harold Demsetz, Steven Cheung, Armen Alchian, Michael C. Jensen, and Thrainn Eggertsson, and etc. The works of this branch differs from that of Oliver Williamson and diverse public choice and game theoretical economists. See Eggertsson (1990) and North (1981, 1990).

⁷ Groenewegen et al. (1995) and Rutherford (1995) have compared the two, but their work only sketches the overall picture.

main concepts, primary theories, and general analytical processes. Moreover, both economists' historical explanations also will be compared in detail. (3) Indicate some possibilities for synthesis. The intention is not just to survey relevant topics, although that is inevitable in many areas, but to interpret and reinterpret the two systems of thought and provide insights for developing a general modern institutional economics.

This dissertation consists of seven more chapters. Chapter 2 sketches the thought systems of Commons and North and their evolution, especially changes in North's views. Methodological issues are analyzed in Chapter 3, which covers four dimensions: individualism and collectivism, rationality and rule following, mechanical science and human science, and efficiency and reasonable value. Chapter 4 compares Commons and North in terms of their main variables, such as institutions, organizations, scarcity, efficiency, time and futurity, custom and culture, and sovereignty and the state. Chapter 5 deals with their major theories regarding the state, property rights, social control, and institutional change. Chapter 6 explores the main analytical logic of both men with respect to transactions and transaction costs, through which their primary concepts and theories are connected. Chapter 7 examines their empirical works in terms of their historical explanations of the great transformation to capitalism. The final chapter will suggest some possibilities for integration.

Chapter 2: The Evolution of the Systems of Thought of Commons and North

I. Commons's System of Thought

A. General background

John R. Commons (1862 - 1945), along with Thorstein Veblen and Wesley C. Mitchell, is one of the founders of OIE. His collective perspective of analyzing economic behavior, lifelong interest in promoting social and economic reform, and empirical research style lie at the core of a version of American institutionalism known as the Wisconsin branch. Commons was a well-known authority on the labor movement and institutional theory, but his interests and work were very broad. Beginning in 1887, he wrote numerous articles and books, and he drafted many laws and practical policies.⁸ The scope of these works covers the fields of economics, sociology, philosophy, theology, politics, and law. The topics were ranged from individual behavior to collective action, from economic theory to empirical work, from methodological issues to historical topics, and from policy evolution to political-economic reforms.

Commons is an idealist. He continuously sought to improve the working conditions of wage earners, strengthen the trade union movement, resolve the conflicts between capital and labor, and save American capitalism.⁹ Yet, Commons was a pragmatist, and he never advocated a revolutionary solution, although he was criticized as

⁸ Forty selected papers are republished in Rutherford and Samuels (1997). The five most important books by Commons are: The Distribution of Wealth (1893), The History of American Labor (1918-1935), Legal Foundations of Capitalism (1924), Institutional Economics (1934a), and The Economics of Collective Action (1950).

⁹ "This near thirty years of my own experience, beginning with the Steel Company in 1907, I have written up in my *Institutional Economics*. I was trying to save Capitalism by making it good" (Commons 1934b, p. 143). "Yet what I was always trying to do, in my academic way, was to save Wisconsin and the nation from politics, socialism, or anarchism, in dealing with the momentous conflicts of 'capital and labor'" (Commons 1934b, p. 170).

a radical owing to the zealous reforms he favored in his earlier period. He asserted that economics must develop from real issues, and all theories must be tested by practical experience. Therefore, for him, practical participation and detailed investigation are two prominent methods of constructing economic theory. It is this belief that distinguishes him from most economists, especially those who are solely interested in constructing logically consistent models.

Unlike North, whose continuous change is discussed later in this chapter, a significant feature of the Commons system of thought is its coherence. That is, the central core of Commons's thought followed a main thread -- holism and problem solving -- throughout his entire life. This is not to say that his thinking underwent no change; it continued to develop during his lifetime.

In order to analyze the formation and evolution of Commons's system of thought, it is helpful to separate his career into two periods, before and after 1904, the year he became a professor at the University of Wisconsin, which was a turning point. In the early period, Commons was struggling to complete his education, earn respect from his students and colleagues, win success for his social reforms, and achieve the acceptance of his theory. After 1904, when he was offered a post by Richard T. Ely, chair of the department of at the University of Wisconsin, Commons underwent a dramatic change. Secure in a hospitable working environment, he was requested to participate in various social reforms and in policy legislation. He became an authority on labor and union issues and was a leader in various associations and groups. He attracted and influenced many students and disciples, and he founded the Wisconsin tradition of institutionalism.

Although this dissertation concentrates on Commons's theoretical work, his social

concerns cannot be neglected, because they are related to his theory. Therefore, in each period I explore both. With respect to theory, I approach it from three perspectives (1) interests and questions, (2) concepts and theories, and (3) relationship to mainstream and other variants of economics. The first perspective looks at Commons's extensive interests in each period. The second sketches the formation of and change in his main concepts and theories. The third examines the relationship of Commons to many economists/schools in his time, mainly American pragmatism, the German Historical School, orthodox economics (primarily classical and hedonic economics), and the Veblen-Ayres branch of American institutionalism.

Although I have tried to develop a new framework for examining the evolution of Commons's practical participation and theoretical system, I have taken advantage of much sound scholarship on Commons, including Harter (1962), Dorfman (1963), Samuels (1987a), Rutherford (1994a, 1994b), and Biddle and Samuels (1995).

B. Reform and practical participation

Early period (to 1904)

Commons was deeply influenced by the larger environment and his family in particular. He grew up in the wake of the Industrial Revolution, and he was sensitive to the transfer of dominance from the agricultural commercial economy to the powerful industrial state. The pervasive unequal distribution of wealth and conflicts between capital and labor led him to think "it would be his role to help accelerate the process of adjustment" (Dorfman 1963, p. i). Indeed, Commons believed that the U.S. economic system was unjust for consumers and workers, so that he had to work for many reforms (Harter 1962, p. 5).

Commons's reforming nature was deeply influenced by his family. "His parents had been active abolitionists and participated in the 'underground railway' for the escape of southern slaves to Canada and freedom" (Dorfman 1963, p. i-ii). Commons joined many important reform movements during his college days (Harter 1962, p. 23), engaging in efforts to improve working conditions, clear slums, renovate the tax system; improve the monetary system; and strengthen trade union (Dorfman 1963, p. viii).

Commons also believed that political reform was essential for the achievement of social and economic change. He zealously advocated civil service reform, the secret ballot, direct legislation, and proportional representation. His practical concerns also extended to religion.¹⁰ He joined a subgroup of the social gospel movement and, with Richard Ely, helped found the American Institute of Christian Sociology in which he served both as secretary and as associate editor of its publication, *The Kingdom* (Harter 1962, p. 39).

After he was dismissed from his post at the University of Syracuse in 1900, Commons obtained a temporary position with the United States Industrial Commission, which offered an excellent opportunity to observe many phases of unionism. In 1902, he worked as a general assistant at the National Civic Federation, which endeavored to bring together employers and union leaders to preserve industrial peace. Commons helped settle various strikes and had much contact with the union leaders, gaining experience as a negotiator and labor conciliator. These would be valuable assets in the later period of his career (Harter 1962, pp. 23-4).

¹⁰ His mother was a devout Presbyterian.

Later period (1904-1945)

Commons's early period was one of struggle, but his later period was one of success. In 1904, when Commons joined the University of Wisconsin, state government and the university administration were controlled by LaFollette's Progressive Party. He "found himself an insider whose talents were useful to those in power, where elsewhere he had been considered a dangerous radical. He could continue to engage in reform activities in Wisconsin, but he did so for the authorities instead of in spite of them" (Harter 1962, p. 45).

In 1905, Commons drafted the Civil Service Law for Governor LaFollette. In 1906, he participated in the National Civil Federation investigation of public utility and railroad issues. He also took on supervision of the labor portion of the Pittsburgh Survey (1907), which sought to improve safety conditions and gain compensation for injured workers (Harter 1962, p. 72).

These experiences provided a background for drafting two important Wisconsin laws. In 1907 he wrote the Public Utility Act, which became the model for many other states. He then drafted legislation that resulted in establishment of Wisconsin Industrial Commission, to which he was elected as one of the first members. This was one of the earliest laws to place the formulation and enforcement of industrial safety regulations under an administrative commission. Commons also contributed to another milestone Wisconsin law, the Unemployment Insurance Act of 1932, which provided the first unemployment compensation in the country (Harter 1962, pp. 72-89).

In 1907 Commons was elected secretary of the newly formed American Association for Labor Legislation, whose purpose was to draft labor laws. He was also active in the National Consumers' League, serving as president from 1923 to 1935, a group that organized boycotts of products of companies with unsafe or unsanitary working conditions. In 1910 Commons began eighteen months of work for the City of Milwaukee, where he and his students did an exhaustive survey that resulted in a number of money-saving plans for the city. In 1913, shortly after the expiration of his term on the Industrial Commission of Wisconsin, he was appointed by President Wilson to the U.S. Commission on Industrial Relations (Harter 1962, pp. 72-3).

Commons believed the solution to cyclical unemployment lay in monetary reform, so he became engaged in monetary policy. In 1922 he served as president of the National Monetary Association (Harter 1962, p. 75). Although he was not well known for his monetary theory in his early period, his insights won him an outstanding reputation in this field.¹¹ "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" (Commons 1934b, p. 193).

Commons also was prominent in many academic associations. For example, in 1917 he was elected president of the American Economic Association. In 1920, together with Wesley Mitchell and Malcolm L. Rorty, he founded the National Bureau of Economic Research and served as its associate director from then until 1928.

After Commons retired from the University of Wisconsin, his participation in reforms and policy making was significantly decreased by his physical and mental

¹¹ Irving Fisher, one of Commons's colleagues in the National Monetary Association, praised Commons as

condition. Throughout his active life, however, his practical experience played a vital role in the creation of his theoretical system.

C. The evolution of Commons's theoretical system

1. Interests and questions

Early period (to 1904)

The foremost feature of Commons's work is the close relationship between theory and practical concerns. Although he conceded the value of pure theory, Commons preferred working on issues that required immediate solutions. Economics to him was not an intellectual exercise but a study whose results must be tested in the real world (Harter 1962, p. 25). "Academic teaching ...' is merely brains without experience The 'practical' extreme... is experience without brains. One is half-baked philosophy—the other is rule-of-thumb" (Commons 1934b, p. 160).¹²

Given this orientation, Commons was interested such issues as how to combine modern economic theories and a practical approach to solve current social issues, the relationship between the church and social reform, the best kind of political reform, the relationship between political economy and law, and various organizations emerge and evolve.

Moreover, Commons raised many specific questions in his various books and articles written in the early period. For example, how to study social questions from both the scientific and Christian standpoint (*Social Reform and the Church*, 1894)? Why is proportional representation crucial for political reform (*Representative Democracy*,

a leading monetary economist of his age (Biddle and Samuels 1995).

¹² The statement was made by one of Commons's friends; see Harter 1962, and Commons (1934b, p. 160).

1900)? Why were monopolies on the rise, and how could their power be limited ("Production and Natural Monopolies", 1892, and *The Distribution of Wealth*, 1893)? How can the monetary system be reformed so that a stable level of prices can be maintained, thereby preventing depressions, with their vast unemployment ("Progressive Individualism," 1895)? What is the relation between tax revenue and a single tax ("The Single Tax and Local Taxation," 1896)?

This pragmatic inclination not only affected the questions Commons raised, but also dictated the methods he used in teaching and research. A comment about his early teaching style at Indiana University is illustrative: "Commons took an active interest in public affairs. He took his students to investigate municipal enterprises, to conferences on charities and correction; he went to Dwight, Illinois to investigate the Keeley cure, and in many ways kept himself and his students in touch with and interested in active life" (Dorfman 1963, p. v, citing James A. Woodburn, *History of Indian University*, [Bloomington: Indian University Press, 1940], vol. 1, pp. 413-4).

Later period (1904-1945)

Commons's practical inclination became even stronger in later years. Although he did not deny the value of orthodox economics, he discarded his earlier attempt to combine modern economics with his realistic approach. Instead, he wanted to construct his own institutional theory. It addressed many questions, such as the role of the judicial branch in general and the courts in particular in the operation of capitalism; the definition of reasonable value and public purpose; the interrelationships among individuals, going concerns, and working rules; state mechanisms for resolving conflicts; the fundamental nature of property rights; the psychological elements affecting human behavior; and why

the social economy continuously evolves.

Commons also was concerned about labor issues, public regulation, and problems of monetary policy. What is the relationship between trade unions and labor problems (in *Trade Unionism and Labor Problems*, 1921)? What is the relationship between labor organizations and politics ("Labor and Politics," 1907 and "Labor Organizations and Labor Politics," 1907)? How does tariff revision affect labor ("Tariff Revision and Protection for American Labor," 1908)? What is the process of industrial revolution ("American Shoemakers," 1909)? How can unemployment be prevented (numerous articles)? What is the relationship between unemployment and business organizations (*Can Business Prevent Unemployment*? 1925, and many articles)?

2. Concepts and theories

Early period (to 1904)

Although the seeds of Commons's system of thought were planted in his youth, his early works differ from later ones. The most important publication in the early period is *The Distribution of Wealth* (1893), and a series of articles titled "A Sociological View of Sovereignty" (published between 1899 and 1900).

The Distribution of Wealth (1893) was Commons's first attempt to use economic theory to deal with a social problem. For Commons, wealth distribution in his time was unjust because it "gives rise on the one hand to great wealth, bringing great luxury and extravagance, and on the other hand to insecurity of employment, with its inherent evils" (Dorfman 1963, p. xi). He combined modern value theories, which he had learned at Johns Hopkins, and his own realistic approach. He adopted many concepts from current theory, such as marginal productivity, diminishing returns, and perfect competition, but demonstrated how actual distribution departed from orthodox theory. This earned him many bad reviews from the economics profession, and most commentaries doubted his motivations and denigrated his contribution (Harter 1962, pp. 37, 215). *The Distribution of Wealth* revealed an early ambition to transform the narrowness of classical economics into a more comprehensive and organized body of theory, but eventually Commons realized that a realistic economic theory must be built on a broader system than the current doctrine (Dorfman 1963, p. xv).

"A Sociological View of Sovereignty" illustrated an inherent interest in a theory of socioeconomic evolution. Here, Commons delineated his early perspective on the development of society. He asserted that institutions developed "as men organized themselves to escape from the static customs and conventional and ceremonious methods. Men passed from stages where they blindly followed the set ways of the past to stages where reason opened the way for more freedom of choice" (Harter 1962, p. 216). Although these articles contain the embryo of subsequent work, they lack the elements of the dynamic theory Commons developed in his late period.¹³

Many of the major concepts and arguments of Commons's later works appear in the early period. For example, the importance of institutional structure was demonstrated in both *The Distribution of Wealth* and "A Sociological View of Sovereignty"; the relationship between property rights and the legal system was analyzed in *The Distribution of Wealth*. Ideas about collective bargaining and proportional representation emerged early.¹⁴ Nevertheless, many key concepts and arguments were developed in the

¹³ The account was constructed from (1) the evolution of custom and habits and (2) the process of resolving conflicts. See part 4 of Chapter 5.

¹⁴ Commons "wanted representation of various economic interests as distinct from representation by

later period, such as going concerns, working rules, and the process of resolving conflicts.

Later period (1904-1945)

Despite his involvement in many practical activities during the later period, Commons found time to make many contributions to the literature. Among his numerous articles, reviews, and books, the most important are the ten-volume *A Documentary History of American Industrial Society* (1910), four-volume *History of Labour in the United States*(1918-1935), *Legal Foundations of Capitalism* (1924), *Institutional Economics* (1934), and *The Economics of Collective Action* (1950).

The first two books mentioned above were begun by Richard T. Ely, who turned his materials over to Commons for the writing. Eventually, however, Commons (and his students) collected more documents and investigated many real cases, so that these contributions outweighed what Ely had offered. Both books won Commons a reputation as a leading authority on labor history and remain important even today.¹⁵ Indeed, there is no adequate substitute for their detailed coverage of the earlier years, and they are often quoted in the field (Harter 1962, p. 163).

The other three books mentioned above are the building blocks of Commons's institutionalism. Their writing was stimulated partly by his first book, *The Distribution of Wealth*, and partly by his extensive practical experience. Commons wrote to Ely in March 1896: "I am planning my work to center around the legal aspects of sociology – expanding the doctrines in my *Distribution of Wealth*" (Dorfman 1963, p. xiv). In his autobiography, he states that the books stemmed from his "twenty-five years' experience,

geographic distribution" (Dorfman 1963, pp. vii-viii).

¹⁵ Another successful book, *Principles of Labor Legislation* (1910), by Commons and a student, was considered the standard treatise on the subject for a long time (Harter 1962, p. 74).

from the Pittsburgh Survey of 1907 to the unemployment insurance law of 1932 in Wisconsin" (Commons 1934b, p. 201) with the development of his ideas on administration and collective bargaining. The result was his *Legal Foundations of Capitalism* (1924) and *Institutional Economics: Its Place in Political Economy* (1934), followed by the posthumous publication of *The Economics of Collective Action* (1950), which was intended to refine and explain the previous two. These three works contain almost all Commons's major theories and models which include:

a model of interpersonal relations specified in quasi-legal terms, such as rights, duties, exposures, and immunities; a behavioristic theory of psychology; theories of social control and social change; a theory of language and its role in the social construction of reality; theories of system and institutional organization, especially of property, markets, governments, and business firms; a theory of power structure and a correlative theory of legal-economic conflict resolution; and so on (Biddle and Samuels 1995, p. xxi).

In this period, Commons gradually formed his major ideas, drawing heavily on his practical participation. For example, he created his "going concerns" concepts after experiencing numerous disputes about what constituted property. "But now seeing the intense political conflict in Wisconsin over this same economic issue,¹⁶ I got my first idea of a 'going concern' existing wherever it does business, distinguished from a 'corporation' existing only in the state of its incorporation. In the course of the next thirty years I worked out the idea of going concerns as existing in their transactions of conflict, interdependence and order" (Commons 1934b, pp. 97-8). His notion of reasonable value was also derived from his experience in drafting legislation. Because the legal system was inevitably involved in many disputes about constitutionality, one constant issue was the determination of reasonable value, which ultimately depended on legal interpretation and

¹⁶ The identification of property in various taxation cases.

the court decisions.

3. Relationship with other schools/economists

Early period (to 1904)

Commons's early thought was influenced by four major sources: Darwinian evolution, the German Historical School, Pragmatism, and classical economics, including marginal utility theory. Commons was born at a time when American intellectual life was influenced by Spencerian and Darwinian notions of evolution (Biddle and Samuels 1995, p. xiii). His father was an enthusiast of Spencer, and Commons was interested in exploring the causes of social evolution. In contrast to the Darwinian argument of natural selection, Commons believed that society was humanly constructed, and eventually proposed his own ideas about social evolution – an artificial selective theory (see Chapter 5, part 4).

Commons's practical inclination as well as methodological standpoint were deeply influenced by the German Historical School through his teacher at John Hopkins University, Richard T. Ely, the most prominent German-trained American economist who promoted a variety of reform movements in that age (Dorfman 1963, p. iii). Ely stressed the practical aspects of economics and adopted an inductive approach to "dig up material, collect facts, and trace historical relationships better than he could reason deductively" (Harter 1962, p. 35).

Despite the fact that Commons was a pragmatist long before he was familiar with the proponents of Pragmatism, his conception of philosophy was closely related to those of such American thinkers as C. S. Pierce, William James, and John Dewey. Like them, Commons believed that practical experience is a better source of knowledge than abstract theories; human activity is an on-going attempt to control or influence the course of future events; and the value of an action for an individual depends on his expectations of its future consequences (Harter 1962, p. 26; Biddle and Samuels 1995, p. xvi).

In college, Commons had been taught many mainstream economic theories, but he showed little appreciation for them because most seemed to be remote from his experience in the world. At Wesleyan University, where he held his first teaching job, Commons tried to lecture in the orthodox traditions, but did not succeed. He had a distant relationship with classical economics throughout his life.

Marginal utility theory was a new tool which Commons learned at Johns Hopkins. In the 1890s, he tried to integrate his practical ideas with the abstract theories newly imported from Austria, but with *Distribution of Wealth*, he realized the limits of this hedonic doctrine. As a consequence, he discarded orthodox theories and created his own body of economic thought.

Later period (1904-1945)

In his later period, Commons further developed the ideals and methods of both the German Historical School and American Pragmatism into his own branch of institutionalism. In terms of the history of economic thought, two questions are relevant: What is the difference between the institutional economics of Commons and Veblen? What is the relationship between Commons's institutionalism and orthodox economics?

Thorstein Veblen is traditionally identified as the first institutionalist and Commons was not recognized as a leader in that field until the publication of his later period works. Those three books account for his status as an economic thinker and distinguish his Wisconsin school from the Veblen-Ayers branch of institutionalism. Within the institutionalist movement, these two distinct streams have differences. First, the Veblen-Ayers tradition focuses on the progressive role of technology, with which the Commons tradition is less enamored. Second, the Veblen-Ayers branch stresses the inhibitive role of institutions, whereas the Wisconsin school approaches institutions more neutrally by modes of collective action (Samuels 1987b, p. 864). Third, the Veblen-Ayers tradition uses the habits and customs of social life to account for socioeconomic evolution, whereas Commons points to court decisions stretching over several hundred years (Commons 1924, Preface).

Despite these differences, the two streams share sufficient theoretical perspectives and methods to be identified as only variants of institutionalism. Also, both are dissatisfied with the basic behavior assumptions and methodological standpoint of orthodox economics.

For Commons, mainstream economics has at least two weaknesses: (1) incorrect analogies in comparing economics to mechanics and (2) no theory of collective action. As to the first, Commons claims that traditional theory is unrealistic because it tries to compare economics to physical phenomena. Human beings have wills and are not just so many atoms acting in a completely predictably manner. As to the second, Commons asserts that the methodological individualism of orthodox economics is insufficient because human behavior is inevitably controlled, liberated, and expanded by collective action (Commons 1931, p. 648). Hence, economic analysis must include a collective perspective.

In contrast to Veblen-Ayers tradition, the Wisconsin branch tends to be less critical of mainstream economics. Commons does "concede that the usual price theory is adequate for analyzing such institutions as a stock exchange, a product exchange, a board of trade, or some organized market" (Harter 1962, p. 221). He also asserts that every school will have its own institutional economics and every "institutional economics, furthermore, cannot separate itself from the marvelous discoveries and insight of the classical and psychological economists" (Commons 1931, p. 648). Indeed, he treats his institutional economics as a supplement to orthodox economics.

II. North's System of Thought

A. General background

Douglass C. North (b. 1920), the 1993 Nobel Laureate in economics, is one of the major figures in the new institutionalism. His transaction costs approach (in his term, the University of Washington approach¹⁷) has profoundly influenced contemporary economic theory. Although North is well known as an economic historian, his interests are very broad. Since 1950, he has published nine books, two monographs, and more than eighty journal articles (North 1994).¹⁸ The scope of his works ranges from traditional historical topics to economic theory, from methodological issues to empirical applications, and from pure economic subjects to the complicated theme of the political-culture nexus.

North is an idealist who wants to understand why economies work badly or work well and how to solve important economic problems.¹⁹ He is not merely interested in

¹⁷ The approach was originated by Steven Cheung (1974, 1983) and developed at the University of Washington, most notably by Yoram Barzel (1982, 1989), Keith Leffler (with Klein, 1981), Masanori Hashimoto (1979), and Douglass North (1981, 1984). North claims that this approach is in contrast to that of Oliver Williamson (North 1990, p. 27, n.1).

¹⁸ The bibliography in North (1997d) covers publications before 1993. Since then, North has published a number of articles and co-edited a book, *Empirical Studies in Institutional Change* (1996), with Alston and Eggertsson.

¹⁹ In the interview with Michael Parkin, North said: "While I went to college in 1938, I was a concerned

detailed technical issues; he raises broad questions and attempts to build a grand theoretical system. In the past twenty years, North has devoted much effort to a general theory for economic history, in which institutional economics is a major branch. Furthermore, his recent ambition has been to reconcile "differences between economics and the other social sciences"²⁰ and to unify social science research (North, 1990, p. 5). North is also a pragmatist with an interest in real issues. Unlike many mainstream economists, he is not satisfied with a purely abstract theory that has little correspondence to the real world. In his works, no matter whether he is using existing theory or developing his own system, North seeks to explain and solve practical problems or settle historical issues. Therefore, North's theories can be viewed as a sort of problem solving and as practically oriented.

In order to explain and predict this world, North is willing to inspect the weakness of existing theory, including his own. His inherent practicality continually causes him to transcend his own work. Many of his earlier arguments, such as a necessarily efficient outcome of economic decisions and rational choice behavior, have been superseded by his later theory. Indeed, North's capacity to change is so dramatic, involving even certain propositions at the core of his system, that many economists have questioned the consistency of his theory. Therefore, it is important to explore the change and continuity in North's system of thought.

young man, and I became a Marxist because a Marxist had answers, or at least avowed to have answers, to the economic concerns that were so prevalent during the Depression.... I decided that I wanted to save the world -- like any good Marxist wanted to -- and I decided that the way to save it was to understand what made economies work badly or work well" (Parkin, 1997, p. 1).

²⁰ "Building a theory of institutions on the foundation of individual choices is a step toward reconciling differences between economics and the other social sciences" (North 1990, p. 5).

B. The evolution of North's thought

Although change is the most impressive feature of North's doctrine, certain elements permeate the whole system. The first is his strong belief in scientific method: Economics and other sociological subjects must be explored by using a "scientific approach." Logical consistency and deniable theory (testable hypotheses) are two key elements. He thus criticizes traditional economic history as full of ad hoc descriptions but lacking a theoretical structure (North 1961, p. vi; 1966, p. vi; 1990, p. 131).²¹ In his early work, North sought to employ existing economic theory and quantitative methods to reappraise Western economic history. In his later period he has adopted a broader perspective, such as a theory of ideology, but he still insists that the new system must be built upon refutable propositions.

The second constant element is North's interest in exploring economic performance through time. In contrast to the continual change in his theory, his interest is consistently in economic growth and income distribution. The implicit evaluation of performance involves success versus failure and efficiency versus inefficiency. Therefore, comparing performance among different countries is always one of his major concerns.

Aside from these common features, it is difficult to treat North's work as a consistent system. Any division into periods is somewhat arbitrary, I envision three: (1) early stage, 1950-1968; (2) experimental stage, 1968-1978; and (3) broad stage, 1978-present.

North's early works focus on applying mainstream theory associated with quantitative method to historical issues. Before 1968, North was a major advocate and

²¹ In North's definition, "theory" has a similar meaning to "model." He defines the latter as "a logical

defender of the New Economic History. His early books have been regarded as outstanding works on cliometrics.²² Thereafter, North began to address the deficiency of mainstream theory. Organizations and institutions played no role in his early works until his 1968 "Sources of Productivity in Ocean Shipping, 1600-1850," in which he began to analyze institutions.²³ Thus, 1968 can be treated as the end of the first period.

After the first period, North did not restrict himself to merely applying existing theory; instead, he tried to build a theory of institutional change. His first model appeared in a 1971 book (with Davis) and was further extended and applied in a 1973 book. This theory was mainly based on the mainstream rational choice model, according to which existing institutions are necessarily efficient. Yet, within this model it was difficult to explain how real property rights formed and why the pervasive existing institutions blocked economic growth. Myhrman and Weingast (1994, p. 190) claim that this model is "the naive theory of property rights." Political-legal and cultural factors do not play a crucial role until North's 1978 "Structure and Performance: The Task of Economic History" in which the importance of "state" and "ideology" are already stated.²⁴ Therefore, the 1978 article can be treated as the second watershed, or the end of the experimental period.²⁵

structural that relates a set of assumptions to a certain set of conclusions" (Davis and North 1971, p. 4). ²² Sutch (1982), one of North's students, claims that North championed the New Economic History during 1960 to 1968.

²³ The major theme of this article is that technological change is not a crucial factor in accounting for the widely disparate experience of national economies. The decline in piracy and improvement in economic organization were more important than technological innovations in accounting for productivity change during those centuries.

²⁴ Libecap (1992, p. 231) believes North's 1978 article indicates a new direction of his research. Sutch (1982, pp.32, 37, 38) asserts that institutions did matter after North's 1968 article, and North intended to look beyond "microeconomic theory" in his 1978 paper.

²⁵ The major focus of North's institutional theory in this period is what factors decide the level and timing of institutional innovations. Since that is not a central issue in his later stage, I call this model experimental.

Since the 1978 paper, many non-economic ideas have been brought into North's system, and transaction costs together with property rights theory have replaced price theory as the major analytical focus. North's institutional framework has become more mature, although he continually revises and expands it. The common features in his works after 1978 are so different from the earlier ones that it is meaningful to identify 1978 to the present as a separate period.

To help characterize each period, four aspects will be used: (1) interests and questions, (2) concepts and theories, (3) political economic nexus, and (4) relationship with neoclassical economics. The first perspective explores North's extensive interest in each period. The second sketches his main concepts and theories. The third focuses on how North's system evolves from a self-sustained economy toward a broader world. Finally, the complicated relationship between North and neoclassical theory is explored from the last perspective.

1. Interests and questions

Most of North's early works center on American economic history. *The Economic Growth of the United States 1790-1860* (1961) and *Growth and Welfare in the American Past* (1966) are considered two major building blocks of the New Economic History. North's lifelong interest in economic performance throughout history is revealed in these two books, which seek "to shed light upon the determinants of the pace and character of American growth" (1961, p. vi) and "to present a non-technical reappraisal of America's economic experience" (1966, p. v). The topics explored in the early stage include the role of life insurance, ocean shipping, regional exchange, and international trade in accounting for American history. In the experimental period, North's interest in history began to expand from America to other Western countries. *The Rise of the Western World* (1973) compares economic performance among different economic systems, mainly France, Spain, the Netherlands, and England. In addition to economic growth and income distribution, the success or failure of an economy have become an important facet of North's interest. The most significant change in this period is the emergence of the argument that "institutions matter." In *Institutional Change and American Economic Growth* (Davis and North 1971) is North's first time attempt to model how the change in exogenous factors affects institutional innovations and, in turn, creates an incentive structure to facilitate economic growth.

During the broad period, North's research domain was been enlarged to include Russia, Asia, and the Third World. One of his new interests is why the West has been mostly successful but the Third World has not. The most significant change, however, is the shift in theoretical direction. North has recognized the limitation of orthodox economics as well as his previous theories, and most of his work now focuses on creating new theories rather than applying the conventional theories. The central questions are (1) what accounts for the pervasiveness of inefficient institutions and (2) how to explain the evolution of institutional frameworks that induce economic stagnation or prosperity.

2. Concepts and theories

As a propagandist of the New Economic History in his early stage, North sought to use orthodox price theory together with statistical methods to reappraise American economic history. The main framework he used were theories of trade, production, and marginal utility. Similarly, he adopted concepts from mainstream economics:

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specialization, division of labor, comparative advantages, market expansion, efficiency, price changes, resource allocation, and so on.

In the experimental period, North no longer restricted himself to existing theory. Instead, he intended to break out of the traditional micro and macro dimensions of neoclassicism and built a new branch--institutional theory. Indeed, he used this new model and neoclassical price theory, associated with certain arguments from the public choice and interest group literature, to account for an efficient organization as a major factor in the economic growth of Western countries. A number of new analytical concepts emerged, such as technological analogy, present values, benefit and cost principle, property rights, incentive, private rate of return, social rate of return, and the free-rider problem.

In the broad period, North's thinking has expanded dramatically. In the 1978 article, he outlines his grand theory for economic history, based on a theory of demography, a theory of growth in the stock of knowledge, and a theory of institutions. With regard to institutional change, his interest has shifted from the levels and the timing of institutional innovations to a new structure: a theory of property rights, a theory of the state, and a theory of ideology. North's general analytical process is no longer decisively based on price theory. Instead, the transaction-cost analysis of exchange has become the major mechanism that connects his various arguments. The main concepts in this period consist of formal and informal institutions, measurement cost, implementation cost, incomplete information, mental constructs, subjective perception, persistent inefficient institutions, and path dependence.

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3. The Political-Economic Nexus

The political-economic nexus is an important dimension to consider in the evolution of North's thinking since it reflects (1) changes in how North treats the relationship between the economy and other aspects of the world and (2) how he broadens his system to include non-economic variables.

In the early stage, North views the economy as self-sufficient; except for population and technology, there is little room for noneconomic variables to play a role. In his 1961 book, the crucial factors accounting for American economic growth are markets and the export sector. In his 1966 book, organizations, technology, and human capital become three main sources of economic growth. In this period, North's "organizations" are equivalent to markets. Even though government is studied in his work, it plays the typical restricted role envisioned by neoclassicism. In this static and self-sufficient world, institutions have no dominant influence.

In the experimental stage, North sees the economy as no longer independent of the complicated world. Legal and political factors enter his theory. Two examples illustrate the changes. First, government plays an important role in North's institutional model (1971). North applies the benefit and cost principle to account for the formation of governmental institutional arrangements (1971, pp. 7-12), and he borrows from the literature on interest groups and free riders to explain the factors controlling government (1971, pp. 30-5). In his 1973 book, government and political structure are the dominant forces in differential economic performance across Western countries.

Second, equilibrium was an important concept in North's early stage, but now it is no longer stressed. Instead, the emphasis is on multiple equilibria and the importance of adjustment processes, especially political processes (1971, pp. 26-7). North focuses on several domains: the factors that make the government the preferred sector for arranging change, the relationship between politics and the rules of the game, what encourages groups to endeavor to redistribute income, and how the interaction between monarch and Parliament affects economic performance. A number of political and legal concepts enter his institutional economics: coercive power, interest groups, passionate minorities, manipulation to control government, voting systems, and law and politics.

Even though the economy is no longer given and self-sufficient, North's broadening political-economic nexus is still not mutually interacting. In his 1971 book, almost all political and legal factors are set into the model as initial conditions. Given these exogenous conditions, his institutional-innovation theory is driven by pure economic rationale. The analysis in his 1973 book is more vigorous and realistic; he uses more details to describe the economic effect of changes in property rights, incentive structure, and personal behavior. Nevertheless, there is still an external non-economic world and an internal economic mechanism. North's theory in the experimental period is a typical comparative statics model in which all crucial political power and legal foundations are treated as exogenous.

In the broad period, North's theory has become more dynamic. Not only does the economy closely interact with the polity and judiciary, but also the latter are more important than, or at least as important as, the former. "Broadly speaking, political rules in place lead to economic rules, though the causality runs both ways" (North 1990, p. 48). The theory of the state, now one of the three major elements of North's institutional economics, has been extended to include such fundamental forces as bargaining

processes. The function of government has been transformed from the neoclassical neutral or restricted role, although North still treats it as a negative actor in an economic system : "the source of man-made economic decline" (1981, p. 20).

North does not clearly distinguish between polity and judiciary; the former represents both. The way polity enters his system can be viewed from the three major dimensions of his logic: choice (preference), constraints, and processes. First, preference is not fixed; North claims that an individual's taste will be affected by many factors, including political-legal variables. For example, the common law, commercial law, and patent law together create a general incentive structure that affects how individuals innovate and invest. Indeed, an evolving legal system associated with a theory of ideology explains why individual tastes continually change.

Second, North's idea of constraint is far more complicated than the traditional notion of pecuniary restriction. Indeed, all broad institutions are treated as constraints; political rules, economic rules, and contracts form the major contents of North's formal constraints. Therefore, a hierarchy of rules -- including constitutions, statutes and common law, specific bylaws, and individual contracts -- shape the opportunity set and affect people's decision making.

Third, political and economic processes together are crucial factors in structural change. North's political processes involve individual perception, interest conflicts, collective bargaining, political trade, and power. In association with a theory of ideology, his political and economic processes are employed to explain various political-economic structures, such as (1) a ruler versus constituents, (2) a ruler versus a representative body, and (3) a democracy with various interest groups. Also, the inclusion of ideological issues

and individual perceptions bring in a variety of cultural, ethical, and moral considerations.

In sum, in his latest period, North is trying to make most political and legal factors endogenous to his institutional model. Although his theory is still developing, a picture of a dynamic political-economic nexus is emerging.

4. The relationship to neoclassical economics

In terms of the history of economic thought, North has a complicated relationship with various schools. He was a Marxist before he became an economics professor; he then came to believe that mainstream theory was more powerful in explaining the real world than Marxian theory. Later, in trying build a grand theory for economic history, he draw on Marx as well as Schumpeter for numerous insights. The mainstream has gradually lost its dominant status in North's system. North has employed many contemporary theories in his system, such as public choice and game theory, but he subsequently criticized and departed from them. The most interesting of these relationships is that with neoclassical economics.

North's attitude toward the neoclassical school is dialectical. He has promoted, applied, extended, criticized, and challenged the core assumptions of it; he claims that his institutional theory is "consistent with, and built upon, the basic assumptions of neoclassical theory" (1971, p. vii); "consistent with and complement to standard neo-classical economic theory" (1973, p. vii); "complementary to neoclassical, but beyond the traditional neoclassical bounds" (1981, p. vii); and "complementary to the choice theoretical approach of neoclassical economic theory" (1990, p. 5).²⁶ Semantics aside, the

²⁶ In his 1990 book, North's "complement to neoclassical theory" argument becomes quite weak. The complete sentence is: "Defining institutions as the constraints that human beings impose on themselves makes the definition complementary to the choice theoretic approach of neoclassical economic theory.

conflict between his system and neoclassical theory may be more real than apparent.

In the early stage, North's major works were in economic history. Before the rise of the New Economic History, however, the field was dominated by traditional historical methods, mainly descriptive. North was criticized of the fact that

economic historians do not make use of the theory we do have. While it is true that we have no overall theory of economic growth worth the name and that therefore the grand theme of the economic rise and fall of nations cannot be treated in a formal fashion, we still know a good deal about productivity change and its sources; but little of the literature in economic theory reflects any awareness of this fact. And for the rest of economic history, much of it deals with problems in which various fields of economic theory are directly relevant (North 1965, pp. 86-7).

His early major works were full of orthodox economic theories and numerous statistical tables. Although North inevitably covered much broader topics than pure economic theory, he did not bring in many noneconomic variables until later.

In the experimental period, North recognized that it is impossible to overlook the deficiency of neoclassical economics. He joined the Harvard wing of the New Economic History and questioned the weakness of mainstream theory.²⁷ In "Institutional Change and Economic Growth" North wrote:

The tools that the new economic historian inherited from the economist were not intended to deal with long-run economic change as twenty-five years of groping by the economist concerned with development should attest. The economist not only accepted tastes, technology, and population as given, but also he accepted equally the current basic ground rules within which both market and non-market decisions were made. For that matter, the theory did not recognize the possibility of making economic decisions via the political process. Information was assumed to be perfect and costless (North 1971, p. 118).

Building a theory of institutions on the foundation of individual choice is a step toward reconciling differences between economics and the other social sciences" (1990, p. 5).

²⁷ This wing formed by graduates of the Harvard seminar, and questioned the limitations of neoclassical

Although North's perspective went beyond the New Economic History, his naive institutional theory was still built upon mainstream doctrine. His intent was not to critique or revise neoclassical economics, but to break the traditional micro/macro logic so that a new branch of economics could be built. Thus, rationality and the cost-benefit principle were key in his new institutional argument.

The discrepancy between North's new theory and neoclassical economics gradually enlarged, and he wanted to inspect economic theory from a more realistic perspective: a long-term economic growth instead of momentary adjustments, a more influential government rather than a limited one, the political process as a crucial factor in economic performance, a world with uncertainty and incomplete information.

In his broad period, the change in North's attitude toward neoclassical economics has become stronger. He no longer treats neoclassical theory as a key foundation of his system and criticizes its limitations: (1) It lacks a theory of economic structure and cannot explain variation in economic performances among countries (1981, p. ix). (2) It does not directly deal with economic growth (1990, p. 133); it cannot be used to explain long-run economic performance; it does not and cannot explain the dynamics of change (1981, p. 57). (3) It cannot account for the persistence of an inefficient economy or long-term stagnation. (4) A change in relative prices cannot entirely account for institutional change (1990, p. 85). (5) It cannot explain people's altruistic motivations and large group behaviors; it cannot account for the free-rider problem (1981, pp. 31-2; 1990, p. 21).

According to North (1990, p. 131), "we have paid a big price for the uncritical acceptance of neoclassical theory." Indeed, his apparent unawareness of these problems in

the early stage made his system unpersuasive to some.²⁸ Yet, even though he has criticized neoclassical economics, North has not gone so far as to discard it. Instead, he seeks to revise the system, but his modification may be too fundamental to be called modification.

North attempts revision in at least two ways: use his own theory to complement mainstream theory, and change the basic neoclassical assumptions. With respect to the first, although his theories can be seen as modifications of neoclassicism, some of them, such as his theory of ideology, may be incompatible with it (see chapter 5 for North's theory of social control).

With respect to the second, North states: "I believe that these traditional behavioral assumptions have prevented economists from coming to grips with some very fundamental issues and that a modification of these assumptions is essential to further progress in the social science" (1990, p. 17).

Based on Sidney Winter's summary of the seven key behavioral assumptions in orthodoxy (North 1990, p. 19), North has established his own. (1) For most of the issues that concern us, there is not one equilibrium, but multiple equilibria. (2) Individual actors are confronted with many unique and nonrepetitive choices for which information is incomplete and outcomes are uncertain. (3) Historical evidence suggests that preference changes over time. (4) Information feedback may be so poor that actor cannot identify better alternatives. (5) Competition may be so muted and signals so confused that adjustment may be slow or misguided. (6) The condition of the world is much more complex than simple rational non-cooperative behavior. (7) The behavioral assumptions

²⁸ Three of the most important critiques of North's theory are those by Fishiow (1964) and Fenoaltea (1975), who criticized its superficial treatment of the historical record, and Field (1981), who challenged its unattainable methodological promise. See also Field et al. (1993) and Sutch (1982).

of economics are inadequate to deal with many issues confronting social scientists (North 1990, p. 24).

North's "modification" is dramatic. Indeed, there is a significant tension between his system and neoclassicism, and the compatibility between them is quite questionable. An interesting question is whether North's contribution enriches neoclassical theory or represents a new paradigm. The answer depends on the definition of neoclassical doctrine. Thrainn Eggertsson (1990),²⁹ a major interpreter of NIE, has identified the elements of the core and protective belt of neoclassical theory by using Lakatos's framework. Eggertsson (1990, pp. 5-6) maintains that "an alteration of elements in the core represents a switch over to a new research program."

We can use this statement to test whether North's arguments have altered the core elements of neoclassical economics, and whether his system represents a new research paradigm.

Eggertsson (1990, pp. 5-6) lists three characteristics of protective belts:³⁰

1. Specification of the type of situational constraint the agent faces;

- 2. Specification of the type of information the agents have about their situation;
- 3. Specification of the type of interaction that is studied.

Eggertsson (1990, p. 6) believes North has developed "a modification of the protective belt of neoclassical economics, primarily, as we shall see, by introducing information and transaction costs and the constraints of property rights."

²⁹ Eggertsson's (1990) *Economic Behavior and Institutions*, which was written with North's help, is the most important survey of the New Institutionalism. North's agreement with the book can be seen by his words on the back-cover of the book and the preface of North's (1990) book.

³⁰ The three elements were identified by Knudsen (1986). Eggertsson (1990) claims that "the new approach constitutes a modification of the protective belt of neoclassical economics" (pp. 5-6). The "new approach" refers to the new institutionalism.

Eggertsson (1990, pp. 5-6) also identifies three elements of the hard core of neoclassical theory:

- 1. stable preference;
- 2. the rational-choice model;
- 3. equilibrium.

Eggertsson concludes that NIE, of which North is a founder of NIE, is closely connected to the core of neoclassical doctrine, but this study finds evidence that North has deviated from that core. Briefly, North argues that preference is continually changing; the subjective perceptive model should substitute for the rational choice model; and that process is more important than equilibrium. Therefore, I maintain that North's institutional economics constitutes a new program (paradigm).

The final question is why North pays lipservice to neoclassical doctrine even though his major argument conflicts with the core of traditional theory. There are various possible reasons, but one key factor is his strong feeling for science. Among current theories, neoclassical doctrine is the only one that meets scientific criteria: logical consistency and testable hypotheses. According to North (1978, p. 974), "to abandon neoclassical theory is to abandon economics as a science."

Chapter 3: Methodological Issues in the Institutional Economics of Commons and North

I. Introduction

Methodology deals with the most fundamental issues in a discipline; it is "usually taken to denote the study of method, an activity concerned with the procedures and aims of a particular discipline, along with an inquiry into the manner in which the discipline is organized" (Lawson 1994, p. 67). Indeed, every school of thought has its own methodology, which a certain extent predetermines or restricts its key questions, concepts, analytical processes, theories, and systems. Therefore, methodology affects the degree of communication and interaction among schools. For example, many economists believe there is methodological incommensurability between neoclassical economics and American institutionalism. Even within institutionalism there are those who see the same problem between OIE and NIE.

As noted earlier, OIE is usually described as methodological collectivism and antitheoretical, with a focus on habits and customs, a preference for case study, a belief in deliberate design, and a stress on the workability of society as a whole, while NIE is pictured as methodological individualism and formalist, with assumption about rational behavior, a preference for general modeling, a belief in decentralized evolution, and a stress on efficiency as the foremost value (Rutherford 1994b, pp. 3-6). To some extent these differences exits, but the methodological standpoint of each camp is complex, and oversimplification may block communication between the two. Furthermore, every school is heterogeneous, and it is possible to find some commonality between certain subbranches. This chapter attempts to do so by comparing the methodological standpoint of John R. Commons with that of Douglass North in his later stage.³¹

The comparison focuses on four dimensions: individualism and collectivism, rationality and rule following, mechanical science and human science, and efficiency and reasonable value. This framework is closely related to that of Rutherford (1994b), who uses five dimensions to compare OIE and NIE: formalism and antiformalism, individualism and holism, rationality and rule following, evolution and design, and efficiency and reform. I substitute collectivism and reasonable value, which are terms directly from Commons, for holism and reform, respectively. I employ "science" instead of "formalism" because the former is better in covering the concerns of both Commons and North. Also, I postpone the evolution and design issue until chapter 5. In addition to Rutherford (1994b), I will draw on research that has made significant contributions to a comparative approach, such as Rutherford (1995) and Groenewegen (1995).

II. Individualism and Collectivism

Traditionally, methodological individualism and methodological collectivism stand at the two extremes of economic analysis.³² The former insists that individuals are the most fundamental and final unit of economic activity, while the latter asserts that individuals are formed and guided by organizations, groups, customs, and culture. In examining the views of Commons and North on this issue, I explore the extent to which they stand on the different sides and to which communication between them is possible.

³¹ As discussed in chapter 2, this stage (1978 to present) is very different from the two earlier periods. In particular, the analysis in this chapter concentrates on the North who is no longer attached to the orthodox methodology.

³² According to Samuels (1974, pp. 308-9) "by methodological individualism is generally meant the view which holds that meaningful social science knowledge is best or more appropriately derived through the study of individuals; and by methodological collectivism, the view which emphasizes the study of group

A. Commons's standpoint

It is well known that Commons stresses the importance of collective action, and his theory is an economics of collective action. That action is practiced through various going concerns, which are equivalent to organizations, such as schools, churches, political parties, commercial corporations, and labor unions. Going concerns are formed by individuals, but they are not merely the sum of individuals, since they are more powerful than the pure aggregation of individuals and inevitably involve the public interest. "But 'society' is not the sum of isolated individuals, like a census of population. It is multiple of cooperating individuals -- to follow the mathematical analogy -- each far more powerful for both the public interest and for the interest of participating individuals when organized than when added together as separate units" (Commons 1950, p. 132).

There is a mutual interplay between individuals and collective action. For Commons, people are born into a world full of collective action, so their personalities as well as habitual assumptions are formed and guided by customs and various working rules of groups and organizations. Moreover, Commons asserts that, typically, the personality of "each organized individual is higher and more capable than the personality of unorganized individuals" (1950, p. 132) because people develop personalities and abilities as they specialize in modern corporations' transactions. The positive effect of organizations on individuals is based on Commons's belief that organized groups work under a merit system, as opposed to an unorganized self-interest (1950, p. 134).

Commons's emphasis on the importance of collective action does not mean that the individual is unilaterally dominated by this influence. Instead, people can vary the goals and working rules of collective action. Commons stresses the decision making of pivotal individuals, such as a leader in an organization and a judge in the court. These social elites hold and exercise the collective interest, and they often can change the collective will through their private will. For example, the interpretation of a legal dispute, based on a judge's habitual assumptions and psychological character, may make a new rule which becomes a part of collective action.

For Commons, individuals are controlled, liberated, and expanded by collective action, on the one hand, but they also implement and may vary it, on the other hand. Thus, Commons is not an extreme individualist or collectivist but a blend of both. Because collective action interacts with individual behaviors, both methodological individualism and methodological collectivism are appropriate for economic analysis. Indeed, Commons treats them as complements: "Collectivism and individualism are not incompatible except when reasoning from extremes at either end" (1950, p. 237).

B. North's standpoint

North stresses the importance of institutions, but he asserts that economic theory must start from individuals. "Institutions are a creation of human beings. They evolve and are altered by human beings, hence our theory must begin with the individual" (North 1990, p. 5). In his theory, individual behavior basically follows the neoclassical rationality assumption,³³ which implies that individuals maximize their own utility.

In order to capture various interests, individuals form organizations. Yet, people who belong to a group do not necessarily have the same objective function. For North,

³³ Although North (1986, p. 232) claimed that "the basic building blocks of a theory of institutions are first, an individualistic behavior assumption that implies that individuals maximize their own utility," he later strongly criticized the neoclassical rationality assumption. See section III of this chapter.

they may share the same interests, but they do not maximize the same utility function because of high transaction costs. In an organization, "individuals have different objective functions, mirroring their own individual utility; and they stand to gain in a world of high cost information by maximizing their own utility rather than that of the group or organization" (North 1986, p. 232). Therefore, although North asserts that organizations are crucial in accounting for the evolution of social institutions, he does not stress the importance of collective action. His organizations are an aggregation of individuals with common interests. North claims that Marx's classes are based on ad hoc reasoning, whereas "the individualistic calculus of neoclassical economics is a better starting point. Aggregation determined by commonality of interest allows for more flexibility in the model without sacrificing consistency. Aggregation indeed may be as large as a class -- as when the members view themselves as having common interests" (North 1981, pp. 61-2).

In North's theory of ideology, however, organizations and groups are more than a simple summation of individuals; they also contain a collective element. This enters North's model by two routes: (1) institutions as constraints and (2) the effect of ideology on individual perception and learning processes. Regarding the first, North (1981, p. 19) argues that "the absence of some degree of individual restraint from maximizing behavior would render the political or economic institution nonviable." Individual behavior needs constraints, which include various formal and informal institutions, such as social taboos, norms, and customs. Regarding the second, North (1994a, p. 364) uses the term "collective learning" to show the social influence on individuals: "Collective learning -- a term used by Friedrich A. Hayek -- consists of those experiences that have passed the slow test of time and are embodied in our language, institutions, technology, and ways of

doing things." These common experiences, such as ideas, ideologies, myths, dogmas, and prejudices, form our language, institutions, technology, and ways of doing things. Collective learning forms individual perceptions of value, and thus affects objective functions.

In sum, although North's early work is heavily based on neoclassical methodological individualism and seldom uses the term "collective," his later work shows a grand view of society that stresses the collective or shared influence of culture, norms, and belief systems. Therefore, North presents a mixture of methodological individualism and methodological collectivism.

C. A comparison

1. Difference

Groups and individuals. Commons and North deal differently with the interplay between individuals and groups. First, Commons repeatedly stresses that individual personality and ability will be improved by participating in good groups, but in North's theory it is not clear how organizations directly affect individual behavior, although North asserts that individual perceptions are affected by ideology. Second, Commons believes that pivotal individuals can directly change collective action, but North views individuals as relatively homogeneous. Third, Commons believes individuals in the same group value their common objective more than private interest, whereas North asserts that they will maximize their private utility functions, rather than the group's common interest, owing to high transaction costs.

2. Similarity

Individual as the basic unit. Both men view individual as the basic unit of

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economic analysis. For Commons, collective action originates in individuals, who can change and influence the collective will. For North, individuals are the starting point for economic analysis.

Collective influence. The collective perspective is foremost in Commons's argument because individual behaviors are controlled, liberated, and expanded by collective action. Although North seldom uses the term "collective," his theory recognizes the effect of collective action, mainly from ideology and cultural factors. Therefore, both agree that collective influence plays a critical role in human behavior.

Institutional individualism. Commons views both methodological individualism and methodological collectivism as effective perspectives for economic analysis. North, in his later period, departs from methodological individualism and stresses the importance of collective forces in individual behavior. Therefore, both men are not extreme individualists or collectivists, and they would like to find a middle way, which is closer to Agassi's concept of institutional individualism (Agassi 1975; Biddle 1990b, p. 30; Rutherford 1994b, p. 50).³⁴

III. Rationality and Rule Following

Another methodological controversy in economics is whether individuals follow the rules or use different rationality strategies. Orthodox economists adopt the rationality assumption, that is, human beings maximize their utility according to different

³⁴ Agassi (1975) suggested the "institutional individualism" in opposition to the traditional dichotomy between individualistic psychologism ("developed by the more traditional eighteen-century writers from the classical economists, sociologists, and psychologists" (Agassi 1975, p. 151)) and institutionalistic holism ("with the romantic nineteenth-century tradition and its offshoots, especially Marxism and functionalism" (ibid.)).

circumstances, but most OIE proponents assert that people mainly follow habits and customs.

A. Commons's standpoint

Commons observes that people follow the habitual assumptions they take for granted, and these assumptions are shaped by the universal collective action. Each individual, either temporarily or continuously, is involved with a going concern and is affected and guided by it. "If he has had experience with many concerns or with only one concern, he has acquired ways of looking at things when making his decisions, choosing his alternatives, and dealing with others in his transaction. These ways of looking at things we name his habitual assumptions" (Commons 1934a, p. 697).

Although he stresses habits, Commons does not mean that people act only on their habitual assumptions. Many circumstances are not routine, and people have to make a new decision. Indeed, Commons distinguishes between two kinds of decision making: the conscious and deliberate and the instinctive, habitual, and unconscious (Samuels 1996, p. 30). In Commons's view, the former relates to routine matters, but the later involves new limiting factors. In general, habitual assumptions are sufficient to handle the routine environment, but in the face of change, a lively intellect is required (Commons 1934a, p. 698).

Commons does not ignore self-interested calculation or the utility maximizing assumption, but he stresses the complicated nature of human behavior. He argues that, in many circumstances, human behavior is not rational, and his theory incorporates the Malthusian concept of a human nature which contains element of passion, stupidity, ignorance, and admiration (Commons 1934a, p. 874). Commons also emphasizes the importance of human will, which consists of many complicated elements -- intellect, judgment, leadership, and psychological factors -- and which is continuously interacting with external circumstances. "The will itself -- including what economists often refer to as self-interest and what psychologists refer to as identity -- is continually redefined in terms of purpose reacting to experience" (Samuels 1996, p. 30).

B. North's standpoint

In his early years, North advocated neoclassical "rationality" and regarded it as a basic building block of a theory of institutions. He eventually realized that rationality cannot explain most of human behavior, which is more complex than the notion embodied in the individual utility function of economists' models. "Many cases are ones not simply of wealth-maximizing behavior, but of altruism and of self-imposed constraints, which radically change the outcomes with respect to the choices that people actually make" (North 1990, p. 20). He recognizes that the assumption of self-interested calculation only can apply to limited areas, since most real situations are full of interactions and uncertainty. The rationality assumption "may be correct for individuals making choices in the highly developed markets of modern economics, but it is patently false in making choice under conditions of uncertainty" (North 1994a, p. 362).

Lately, he believes that economists who still advocate the rational expected utility argument have reached a dead end. For example, he states that "diminishing returns has long since set in exploring the dimensions of a rational choice world. Gary Becker and an army of like-minded social scientists have effectively exploited most of the economic and non-economic margins and squeezed them - maybe not dry but nearly so" (North 1993b, p. 161). Despite the weaknesses of substantive rationality, North does not discard it. He asserts it should be restricted to certain domains: "Don't misunderstand me: this is not an argument to abandon the rationality argument. In those markets where low-cost transacting exists the rationality argument is the right tool" (North 1993b, p. 161).³⁵

North's intention is to adapt the rational choice approach so that it fits into a broad theory of institutions. This new effort leads North to explore two particular questions of human behavior: (1) what motivates people? and (2) how do individuals decipher the environment? North finds that individual purpose is driven not only by wealth maximizing but also by ideology, altruism, and self-imposed standards of conduct. That is, many "issues of free-riding, fairness, and justice enter the utility function and do not necessarily fit neatly with the maximizing postulates in the narrow sense just described" (North 1990, p. 21). He stresses that institutions may alter individual self-interested behavior and that ideas, ideologies, dogmas, myths, and prejudices matter.

With regard to deciphering the environment, North first distinguishes ordinary behavior from behavior under uncertainty. When individuals are performing repeated actions, they have full knowledge about alternatives and always reach stable equilibrium: "90 percent of our actions in a day do not require much reflection. But in fact, it is the existence of an imbedded set of institutions that has made it possible for us not to have to think about problems or to make such choices" (North 1990, p. 22). Under uncertainty, individuals face a complicated situation, they have no knowledge about alternatives, and stable equilibrium is impracticable. "The more complex and unique the issues we confront, the more uncertain the outcome. We simply do not posses theories to predict

³⁵ However, North became more critical on the rationality assumption later. "It is necessary to dismantle the rationality assumption underlying economic theory in order to approach constructively the nature of human learning" (1994a, p. 362).

effectively the outcome, and the information we receive in such circumstances frequently does not permit us to update our models to improve them" (1990, p. 22).

Because there are no economic models that explain human behavior under uncertainty, North is building his own theory of cognitive behavior. He finds that individuals decipher their world "by processing information through preexisting mental constructs through which they understand the environment and solve the problems they confront" (North 1990, p. 20). These constructs are derived from ideas, ideologies, and norms. His notion of shared mental models (Denzau & North 1994) further illustrates how common experiences affect the way people interpret the world.

C. A comparison

1. Difference

The basic assumption: habit and self-interest calculation. While habitual assumptions are crucial in Commons's concept of human behavior, North does not pay much attention to them, even though he recognizes that most exchanges follow a habitual pattern. For North, utility maximization is the basic assumption, although he adds individual learning processes in his later works to account for the influence of ideology and cultural factors. For Commons, self-interested calculation is not basic behavioral pattern; he stresses human will, psychological factors, and bargaining strategies.

2. Similarity

Limit of rationality. Both men claim that rationality only accounts for a limited part of human behavior. Commons emphasizes the complexity of human beings, including the Malthusian notions of human passion, stupidity, and ignorance. For North, his early theory was based on the rationality assumption, but lately he has recognized its limits and argues that human behavior is shaped by many other forces, such as ideas, dogma, and behavioral codes.

Different behavior in different conditions. Although habitual behavior is not a key part of his theory, North recognizes that people have different reactions in different circumstance. Along with Commons, North asserts that people are (1) rule followers in repeated circumstances and (2) strategy-choosers in new or complex circumstances. In the first case, Commons stresses habitual assumptions, while North asserts the maximizing rule. In the second case, North uses a shared mental model to explain choice making, while Commons employs the limiting factors and strategic transactions argument. Neither thinks that just one kind of behavior can account for actual decision making.

IV. Mechanical Science and Human Science

In the past several decades, one of the most important changes in economics has been its gradual scientization. There is extensive debate about this trend because it is related to many complicated issues. In terms of OIE and NIE, the issues include formalism versus antiformalism, deduction versus induction, and general modeling versus case study. Some would view OIE as anti-formalism, inductive, and case study oriented, and NIE as formalist, deductive, and general modeling oriented.

The key questions in this section are: Whether such a dichotomy fits the arguments made by Commons and North about economics as a science and whether their arguments are compatible or in conflict. I will use four dimensions to explore these issues: economics as a science, deductivism versus the comparative method, general modeling versus case study, and the limits of economic science.

A. Commons's standpoint

1. Economics as a science

Unlike today, economics was not overwhelmingly scientized in Commons's time. Commons (1950, p. 203) asserts that economics can be defined as a science and "is a science of activities", but he believed it should be viewed as a science of human beings, not a physical or biological science. In other words, the science of political economy should not be limited to the traditional mechanics of consumption, production, exchange, and distribution of wealth; it should include law and ethics as well (Commons 1934, p. 387). Because economic activities inevitably involve bargaining and negotiation, economics must deal with power, psychology, and ethical problems. If defined as a physical science, then economics will be restricted to the analysis of production, exchange, and distribution.

Commons recognized that scientific tools can be useful. For example, he saw the value of measurement for economic analysis and advocated statistical method in investigation. He also agreed with the Popperian view that theories should be constructed from testable hypotheses. "The theories are the hypotheses which guide the search for similarities of activities. The theories are tested or proved by control of diversities through control of a few similar activities" (Commons 1950, pp. 120-1).

Owing to the complexity of human activities, however, Commons felt that economic analysis could not rely solely on equations and statistical data. He believed that the methods of argument and dialectics were more essential than quantitative and mathematical tools. "Economics is a science of activities.... more a matter of argument and dialectics than a science proper which goes only as far as experts can agree upon the measurements and equations" (1950, p. 203).

2. The deductive versus comparative method of reasoning

Commons did not advocate the deductive method for economics and he did not regard it as scientific. "Deductive reasoning from a single cause goes in a circle and its prevalence marks the dogmatisms of theorists and dictators instead of the investigations by scientists" (Commons 1950, p. 156). Instead, he proposed his own approach, the comparative method of reasoning, which seeks "similarities and differences within a complex of future indeterminate causes, purposes, and events" (Commons 1934, p. 53). Although it simplifies and generalizes, this method is based on numerous detailed investigations rather than a few abstract assumptions.

The comparative method advocated by Commons originated from a practical source -- the Anglo-American common-law courts in which judges use it to search for valid precedents in previous cases. Commons considered the comparative method of reasoning scientific because it investigates "the apparent similarities themselves in each individual experiment as to whether it is really similar, and, if not, then treating these new cases differently by different similarities" (Commons 1950, p. 157).

Indeed, Commons's theories are mainly constructed from this method and the case study approach (see below). For example, in his theory of transactions, Commons generalizes three types of transactions and three groups of psychological factors involving a transaction according to the principles of differences and similarities (see chapter 6).

3. Case study versus general modeling

The case study method is a major element in Commons's work. This approach stresses the specificity of every human activity or historical event and the importance of rejects the possibility that an event/conflict can be worked out without considering its particular contexts. As applied to historical analysis, the method interprets the past through numerous details, and these rather than a few abstract variables are used to reconstruct the story.

Commons does not mean that economic analysis must rely solely on case studies, which should be used in conjunction with other methods. For example, he suggests that the case study and comparative reasoning methods can be combined in many circumstance.

Let them [simplified assumptions] be considered, however, as elementary assumptions with which human beings unconsciously or habitually guide their economic activities. Then it is possible to treat them as mere similarities and to use them as our own consciously constructed mental tools, simplified as much as possible, and then recombined into thousands of special cases which we are called upon to investigate (Commons 1950, p. 113).

Does Commons reject general modeling? The preceding paragraph indicates that he viewed it as a useful tool. Furthermore, according to Biddle and Samuels (1994, pp. xvii-xviii), Commons's holism contains abstract elements because it searches for "general themes or shared principles that characterize the system or class of cases from which they arise (the whole)" and suggests that "a study of general themes or shared principles and their interrelationships will bring a clearer understanding of each individual case." That is, Commons's case study method is implied by his holism, and is completely compatible with the general modeling approach.

4. The limitations of science.

For Commons, if economics is viewed as a physical science, then several limitations are imposed.

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First, human beings are treated as atoms rather than subjects with free will; this means that people are controlled by external forces, and human activities are reduced to a blind war of atoms. "During the stages of the economic science when the economists imitated the physical sciences, the individual was treated in economic theory like atoms, molecules ... and the like, controlled by external forces and not self-controlled[That] science was founded on materialism" (Commons 1950, pp. 154-5).

Second, the analysis is incomplete. Commons asserts that the fundamental feature of human beings is free will, which reflects their motivations and psychological factors. Economics as a physical science neglects this basic attribute, and hence its analysis is incomplete. Indeed, Commons (1950, p. 114) claims that "no method of investigation, however scientific, can have the answers to the puzzles of human progress. Ultimately progress rests with the human will."

Third, there is a normative bias. Commons argues that human activities are purposeful, and inevitably involve value selection. Although it pretends to be value free, economics as a physical science prejudiced and dogmatic (Commons 1950, p. 185).

Fourth, measurement alone is inadequate. Commons recognizes the usefulness of scientific measurement and statistical tools, but he believes these are irrelevant in many cases because they are based on the law of average and past data. That is, scientific measurement may not be useful in explaining specific human activity or in exploring future human activities (Commons 1950, p. 170)

Although Commons opposed the notion of economics as a physical science, he was not against the general scientific method. For example, he considered his comparative method of reasoning scientific and urged that statistical approaches be used

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in investigation.

B. North's standpoint

1. The scientific method in economics

North believes that economics not only can be but also should be a science. In his early stage, he advocated cliometrics, that is, the use of scientific tools to reappraise economic history, and he criticized previous work as subjective and ad hoc because it did not use the scientific method. "If history is to be something more than a subjective reordering of the facts of the past as man's perspective changes with each generation, we must apply the disciplines of the social sciences to historical research, and apply the methods of the science inquiry to test the resultant hypotheses" (North 1966, p. vi). Because it lacked the scientific element, the old history was limited to narration, classification, and description (North 1971, p. 3).

North believed that economic history must be rewritten and reinterpreted by using economic theory and quantitative methods. "It is impossible to analyze and explain the issues dealt with in economic history without developing initial hypotheses and testing them in the light of available evidence. The initial hypotheses come from the body of economic theory that has evolved in the past 200 years and is continually tested and refined by empirical inquiry" (North 1966, pp. 1-2). For North, statistics test theory by providing precise measurement and empirical evidence, and the existence of appropriate theory dictates the limits of inquiry.

The criteria North proposed for economics as a science were: logical structure, testable hypotheses, predictable theory, and specific results rather than indeterminate consequences. First, the importance of logical structure can be seen in his evaluation of neoclassical theory and the old history: he praises neoclassical economics for its consistent logical structure and criticizes the old economic historians for this lack.³⁶ Second, North agrees with the Popperian view: "In order to make a contribution to knowledge, the theory must be potentially refutable: testable either directly from hypotheses contained in the study or indirectly from logical derivative hypotheses that follow from the argument" (North 1981, p. x). North (1966, pp. 12-3) lists four examples of testable hypotheses in American economic history:

- (1). British policy was vindictive and injurious to the Colonial economy after 1763.
- (2). The railroad was indispensable for American economic growth.
- (3). Speculators and railroads (through land grants) monopolized the best western lands in the nineteen century and slowed down the westward movement.

(4). In the era of the robber barons, farmers and workers were exploited (North 1966).³⁷

North (1977, p. 188) referred to the other two criteria in his appreciation of cliometric history, which uses "simple theory which can produce (a) predictable (b) specific results rather than indeterminate consequences."

Most of North's scientific arguments are from his early stage. He drew on economic theory, especial neoclassical price theory, to reexplain history and employed historical data to support or test, in words, his arguments. There is very little statistical material in his later work, particularly after 1978, and orthodox microeconomics is no longer a crucial part of his theory.

³⁶ Precliometric economic history "was built on bits and pieces of theory and statistics that had no overall structure, it did not lend itself to generalizations or analysis beyond the essentially ad hoc character of individual stories. The cliometric contribution was the application of a systematic body of theory – neoclassical theory – to history and application of sophisticated, quantitative techniques to the specification and testing of historical models" (North 1990, p. 131).

³⁷ To make these statements testable, North (1966, p. 14) refined them.

2. The deductive method versus literary style

It is clear that the early North was a deductivist. He criticized the old history because it did not use the deductive method. "The best of the historian's work has all too often been rooted not in sound logical deductions from explicit premises but in brilliant historical intuition" (North 1971, p. 4).

The best example of North's early deductivism is the model in Davis and North (1971, p. 62), which has typical deductive elements: (1) a set of behavioral axioms or maximizing assumptions, (2) initial exogenous conditions, (3) logical structure, and (4) conclusions from logical deduction. "They [model and theory] will both refer to a logical structure that relates a set of assumptions to a certain set of conclusions. In economics, it is initially assumed that a firm attempts to maximize its profit and that it is constrained in its production possibilities" (North 1971, p. 4). North believed that if economic models could meet the initial conditions in the real world, then any conclusion derived from a logical deduction had predictive or explanatory power.

Rutherford (1994b, pp. 22-3) claims that the later North is hardly a deductivist. There is some evidence in support of this observation. First, North has not tried to build an explicit model since his unsuccessful attempt in 1971. Second, he has attempted to endogenize all economic, political, and cultural factors into his theory, but he realizes these complicated interactions cannot be condensed into a few axioms and initial conditions. Third, he uses fewer and fewer mathematical tools and quantitative methods in his work.

North's later work is mainly descriptive, as opposed to the equations, tables, statistical data, and mathematical models of contemporary neoclassical deductivists.

Despite its logical structure, his style is literary.

3. General modeling versus case study

It is likely that North sees a general structure within different economies/polities and historical contexts. Moreover, this common structure can be modeled. Indeed, his theory of institutions intends to come to grips with common features. In one of his experimental models, North (1971, p. 6) states: "It is hoped that the theory will contribute to our understanding of that process and that such an experiment might make it possible to modify the model so that in the future it can be used to explain change in certain noneconomic institutions and in certain non-American environments."

North does not view general modeling and case study approach as conflicting. He is aware that general modeling must start from case studies. For example: "What accounts for this phenomenon--that the United states and a small part of the world have been so successful, and the rest of the world relatively ineffectual in achieving a high standard of living? This book is a case study of the country that has been most notably successful in this pursuit" (1966, pp. 5-6).

In many historical explanations, North stresses the importance of the specific characteristics of different circumstance³⁸ and recognizes the limitations of cliometrics. "The new economic history cannot explain particular events. It in no way provides us with explanations of specifics" (1977, p. 188). Indeed, North's awareness of the limits of general modeling is seen partly in his gradual abandonment of neoclassical price theory

³⁸ In criticizing traditional national income accounting for concealing the critical features of institutional efficiency, North also stresses the importance of case studies. "Detailed case studies of the costs of queuing, of the time (and hence costs) involved in getting permits to do business, of cutting through red tape, of bribing the necessary officials, etc., are essential to understand the nature and importance of nonmarket transaction costs" (North 1987, p. 428).

and the deductive method and partly in his recognition of the complex cultural factors underlying change and continuity.

4. Limitations of the scientific method

Although North advocates testable hypotheses and quantitative methods in economics, he is quite aware of the limitations of these tools. First, "it is a Utopian dream to expect that the economic historian will ever have all the precise quantitative information to test his theories.... The important point to keep in mind is that it is a rough and crude proxy for precise measurement, and the historian must be self-conscious about the implicit weights he is using in employing such discrete and quantitative information" (North 1966, p. 2). Second, economic theory can explain the behavior of only the representative individual, not any specific person. Unlike mechanical principle, economic laws are uncertain. "Even if the theory is conjoined with a relevant set of initial conditions and is in principle operational, the historian must realize that the 'laws' (i.e. predictive or explanatory statements) that can be derived from the theory are probabilistic, not mechanical, ..., the economic theorist can predict the behavior of typical firms and consumers but cannot make meaningful predictions about the behavior of single decisionmaking units" (North 1971, p. 5). Third, it is impossible to make a precise test in economic history. With a qualifying phrase, North recognizes that "to the degree that definitive tests of explanations of the economic past are not possible" (North 1981, p. x), Therefore, he admits that his work falls short of his goal: "The history I include is illustrative, designed to show the promise of the approach, but far from providing for the kind of hypothesis testing that must ultimately be done" (1990, p. vii).

North finds that economics as a science has greatly advanced both economic

theory and economic history but also has concealed some basic issues. "Economic history gained in rigor and science pretension, but at the expense of exploring a much more fundamental set of questions about the evolving structure of economics that underlies performance" (1978, p. 963). Owing to the inherent limitations of scientific methods, it is inevitably that there are many different explanations in economic history. "We can expect competing explanations to persist and to be used in the service of diverse and conflicting current-day policy prescriptions" (1981, p. x).

C. A comparison

1. Difference

Economics as a science. In terms of modern theory, economics as a science is central to North. He continuously asserts that economic theories must have a logical structure, theoretical foundation, testable hypotheses, statistical tools, and real data. He mainly admires neoclassical theory for its scientific characteristics: "To abandon neoclassical theory is to abandon economics as a science" (North 1978, p. 974). Commons probably would not disagree, but he considers science only one element in economics, not the ultimate criterion for economic theory.

2. Similarity

Economics can be a science but with limits. Both men believe economics can be a science. Commons criticizes the mechanical style of economic science and addresses many of its limitations, but he considers economics a science of activities. North prefers scientific tools more than Commons does, but he also clearly recognizes the limits.

Characteristics of economic science. Both men agree on some common criteria for economic science. For North, these include logical structure, testable hypotheses, and

solid data. Commons does not devote much attention to the subject but understands that economic theory must be structured and testable (Commons 1950, pp. 120-1). Commons also recognizes the usefulness of measurement and statistics.

Descriptive style. Since economics explores the complex relations of human beings, Commons regards measurements and equations as important tools but views arguments and dialectics as more essential. North appreciates the logical deductive mode, but today he rarely uses axiom-style models and quantitative methods to construct his theories. Despite a difference in degree, North's style is not very far from that of Commons.

Case study and general modeling. Both men would agree that economic analysis must use both the general and the case study approach. For Commons, the case study is a major method in doing economic analysis as well as in practical investigation, but it is always incorporated with his comparative method of reasoning which has general modeling characteristics. Indeed, not only does the case study approach not exclude other methods, but also it should be used to complement general modeling. North has a strong inclination to generalize economic theory, but he also recognizes the need for case studies. Despite some difference in emphasis, the two are not far apart.

V. Efficiency and Reasonable Value

Every school has its normative appraisal, or ideology, which shapes questions, concepts, and theories. It is said that OIE values the process of problem solving, while NIE attaches importance to neoclassical efficiency. Is this true of Commons and North? What normative appraisals underlie their systems of thought?

A. Commons's reasonable value and public purpose

The ideology of Commons starts from his concept of value. Unlike orthodox economics, which stresses the value of production and exchange, Commons focuses on workability.³⁹ According to Samuels (1996, p. 88), "one critical theme is that the most fundamental realm of 'value' in economics concerns not the price of goods and factors of production, but the values ensconced in the working rules of a going economy and going concerns." Commons often uses the term "reasonable value," which contains a collective meaning. "By reasonable value Commons means that values as to the working rules which are deemed to be reasonable as they emerge through the total societal decision-making process" (Samuels 1996, p. 6). Indeed, in a system of stabilized values, reasonable value emerges from the process of proportioning the complex factors of multiple opportunities and choice of alternatives (Commons 1950, p. 164).

Owing to inevitable conflicts of interest, reasonable value is further ensconced in the ability to reconcile conflicts and must be worked out through negotiation and bargaining. Since conflict of interest differs from case to case, Commons asserts that reasonable value must be defined in its specific historical situation, and he believes there is no better workability than the best existing practice; hence he rejects all impractical utopia, such as the proposals of communism, socialism, and fascism (Rutherford 1994b, pp. 145-6).

Because it results from collective decision processes, reasonable value can be further understood by another of Commons's important concepts "public purpose," which

³⁹ The normative value in Commons's social reforms and practical participation is equal opportunity in earning a living. In his later theoretical works, this ideal becomes implicit in his notion of "reasonable value," which implies an equal opportunity, through collective bargaining, for weaker people to defend their

initially is defined by the individual's psychological feeling about value but also is related to collective action. According to Samuels, public purpose consists of three elements: "First, to the ultimate feeling of value, the emotional process of valuation that tinges all definitions; second, an emotional valuation of quantities and faculties in the process of social life; and third, to futurity: purpose in anticipations of the future, and pulls forward. Public purpose is a matter of values and expectancies and thereby of behavioral psychology" (Samuels 1996a, pp. 100-1).

The critical theme for Commons is not the dichotomy between private and public purpose, but to which "private purpose will government be used to support because it is deemed to have a public purpose" (Samuels 1996a, p. 94). Therefore, the problem is not private versus public purpose but whether the private purpose is also a public purpose (Commons 1924, pp. 326-7).

In Commons's theory, the working out of public purpose, as well as reasonable value, must relate to the role of government in general and of the court system in particular. Because every collective purpose inevitably involves dispute, the decision of judicial functionaries is required in interpreting various working rules (Commons 1924, p. 321). Through the interpretations of the court system, conflicts are resolved, and the collective will is implemented. "The collective will ... is no longer a merely capricious unaccountable will of a personal sovereign, but it is a will that proceeds by deliberative process of law" (1924, p. 356).

Moreover, for Commons, the courts system also forces individual values to conform with reasonable value. That is, reasonable value is not any individual's opinion of what is reasonable; it is "the court's decision of what is reasonable between plaintiff and defendant. It is objective, measurable in money, and compulsory" (Commons 1936, pp. 244).

B. North's economic performance and efficiency

North's ultimate concern is economic performance. His work attempts to explain why desirable economic performance occurs and persists in certain times and places but not others. He claims that his economic history focuses on two main issues: "First, it examines the over-all economic growth, stagnation, or decline of a society. Second, it turns to the question of what happens to people within the society in the course of such growth, stagnation, or decline. The latter issue is a consideration of the relative economic welfare of groups" (1966, p. 1). That is, North's economic performance means both economic growth and income distribution. "By 'performance' I have in mind the typical concerns of economists--for example, how much is produced, the distribution of costs and benefits, or the stability of production. The primary emphasis in explaining performance is on total output, output per capita, and the distribution of income of the society" (1981, p. 3). Income distribution, however, is only an implicit target⁴⁰; his major concerns are economic growth and stability.

North's foremost value is efficiency. In his early work, North asserted that existing institutions were efficient and sought to explain the reasons behind them. Since 1981 he has dropped that assertion, but efficiency is still his ultimate criterion. In particular, he now focuses on inefficiency, or what causes the ubiquitous and persistent

⁴⁰ North does not directly deal with wealth distribution. His treatment of it is related to the incentive structure of economies. His typical argument is that wealth distribution will affect capital accumulation, which in turn will affect the incentive structure, which dictates economic growth.

existence of inefficient institutions.

North's efficiency is different from Pareto-efficient conditions. He asserts that the latter may be attainable for a world of pure exchange but cannot explain the evolution of complicated institutions. North's definition of "efficient" is related to economic growth and thereby the supporting system of property rights. "Economic growth essentially means increasing efficiency -- that is, what makes a country grow and become better off per head is that it produces more output per person" (1966, p. 6). An efficient system of property rights is one that maximizes social output and encourages economic growth. "Lack of economic growth is attributed to 'inefficient property rights' that arise out of the attempts of those who control the apparatus of the state to generate rents together with problems of measurement and transaction costs" (Rutherford 1994b, p. 161).

In his later period, North goes beyond allocation efficiency, which occurs under frictionless circumstances at a moment in time. Rather, he uses a new term, "adaptive efficiency," to account for time as well as more complicated conditions. Adaptive efficiency is concerned with the rules that shape the way an economy evolves through time and the willingness of a society to acquire knowledge, induce innovation, undertake risk and creative activities, and resolve problems through time (North 1990, p. 80). That is, it emphasizes the dynamic conditions that support innovation and economic growth.

C. A comparison

1. Difference

Reasonable value and efficiency. Commons and North have different normative appraisals. Foremost in Commons's theory is reasonable value, or the workability that emerges from the total societal decision-making process, such as conflict resolution.

Reasonable value is also an outcome of public purpose and is worked out by the best existing practice. For North, the foremost value in an economic system is (adaptive) efficiency, which consists of two elements: economic growth and stability. For North, an efficient system of institutions should be able to create an incentive structure that leads to persistent economic growth

2. Similarity

Problem solving. In North's system, even if workability is not primary value, it is very important. North is not satisfied with the orthodox static model and intends to figure out the dynamic interaction among individuals, institutions, and economic performance. Through economic history he explores the workability that explains persistent economic growth. For Commons, problem solving and conflict resolution are the paramount goals of an economic system.

Role of organizations. Both men treat organizations as the most important instruments for arriving at reasonable value and achieving economic growth. In the Commons system, workability is defined by various going concerns as well as the state in general and the judicial system in particular. In the North system, in order to pursue their interests, purposeful organizations seek to change the rules and institutional framework by trial and error, so that the economy eventually reaches the adaptive efficiency path.

VI. Conclusion

The comparisons in this chapter show that, despite some differences, Commons and North share many views on methodological issues. The primary difference between the two is their normative appraisal: Commons stresses reasonable value, while North prefers efficiency. Even in this area workability represents common ground. That is, both economists stress the importance of a dynamic process to keep the economic system going. There are other differences. For example, Commons stresses collective action and the collective will; North is inclined toward individuals decision making, although he recognizes the influence of ideology and culture. North views science as essential in developing economic theory, whereas Commons considers it one of many tools.

More significant than the differences are the commonalties between the two. Both see individuals as institutional; both reject the rationality assumption and assert that human behavior is mixture of rule following and strategy making; both agree that economics can be a science and that theories must be testable; both use a descriptive rather than deductive style; both view general modeling and the case study method as complementary.

It is inaccurate to describe Commons as a methodological collectivist who is antiscientific and indifferent to wealth issues, or to picture North as a methodological individualist who is deductivist and views economic growth as the only ultimate goal. Thus, the traditional simplistic dichotomization of OIE and NIE is not appropriate for North and Commons. As argued by Rutherford (1994b, 1995) and Groenewegen (1995), the systems of North and Commons are compatible in terms of their overall approach and are not methodologically incommensurate.

Chapter 4: Main Concepts in the Institutional Economics of Commons and North

I. Introduction

A system of thought is constructed from theories, and theories must be developed from concepts, which are the foundation of all thinking. Most concepts reflect only a certain aspect of reality, since reality is complex and not easily divided into independent parts. A concept involves simplification, which is an artificially selective process predetermined by the creator's normative values and methodological standpoint. Therefore, to explore a concept is not merely to describe but also to inspect the complicated implications behind it.

In this chapter, I will compare the major concepts in the institutional economics of Commons and North. The major ideas of Commons start from institutions, going concerns, and working rules. In addition, Commons found "five assumptions or hypotheses to be primary in interpreting modern economic activity. These five simplified assumptions -- sovereignty, scarcity, efficiency, futurity, and custom -- are logical assumptions, made for the purpose of attaining systematic interpretation and understanding in a world of diversity" (Commons 1950, p. 73). Several other concepts permeate his works: property, transactions, negotiational psychology, reasonable value, and public purpose.

North's concepts have continuously evolved and changed, although certain ones dominate in different periods (see chapter 2). This study puts more weight on his later period, but it is necessary to explore the evolution of his main ideas in each stage. Before 1968, North used many neoclassical notions: relative price, specialization and division of labor, comparative advantage, gains from trade, and efficiency. In his experimental period (1968-1978), the benefit-cost principle, institutional innovation, property rights, incentive, private and social rate of return, and the free-rider problem emerged as key ideas. Since 1978, North's major concepts have been formal and informal institutions, organizations, third-party enforcement, measurement cost, enforcement cost, mental constructs, subjective perception, ideology and culture, persistent inefficient institutions, and path dependence.

Some ideas are specific to each man, and thus it is difficult to draw comparisons. For example, negotiational psychology concerns Commons but has no correspondence in North's thought. Similarly, transaction cost is crucial to North but it is not given much weight by Commons. Some concepts have a very close relationship, they are grouped together. For example, in order to compare organizations/going-concerns, we must consider institutions, organizations, and their rules. In sum, the categories examined this chapter are: (1) institutions, organizations, and their rules, (2) scarcity, (3) time and uncertainty, (4) efficiency, (5) custom and culture, and (6) sovereignty and the state.⁴¹

II. Institutions, Organizations, and Their Rules

A. Commons's institutions, going concerns, and working rules

1. Institutions and collective action

Commons found that the term "institution" is complicated and carries various

⁴¹ I find the following concepts in the theories of both economists: institutions, organizations/going concerns, rules/working rules, transactions/exchanges, property rights, value/reasonable value, time/futurity and uncertainty, efficiency, custom/culture, and state/sovereignty. Among these, transaction/exchange, value/reasonable value, and property rights will be analyzed in later chapters. The concept of scarcity is also included in this comparison, since it is crucial for Commons and also dealt with by North.

meanings.

Sometimes an institution seems to mean a framework of law or natural rights within which individuals act like inmates. Sometimes it seems to mean the behavior of inmates themselves. Sometimes anything additional to or critical of the classical or hedonic economics is deemed to be institutional. Sometimes anything that is "economic behavior" is institutional. Sometimes anything that is "dynamic" instead of "static," or a "process" instead of commodities, or activity instead of feelings, or mass action instead of individual action, or management instead of equilibrium, or control instead of laissez faire, seems to be institutional economics (Commons 1931, p. 648).

In order to generalize about common features, Commons (1931, p. 648) defines an institution as "collective action in control, liberation and expansion of individual action." Individuals "are born into this process of collective action and become individualized by the rules of collective action" (1950, p. 21). Collective action forms people's value systems and controls their behaviors through various inducements and punishments. But collective action is more than control -- it is "a liberation of individuals" (1931, p. 651). And collective action is more than control and liberation of individuals" (1931, p. 651). For example, through collective action, the head of a great corporation can implement his/her will, which is impossible as an isolated individual.

2. The forms of institution: custom and going concerns

In Commons's theory, the forms of institutions are unorganized customs and organized going concerns; examples of the latter are families, corporations, trade associations, labor unions, the reserve system, and the state. Hence, going concerns are similar to organizations but encompass more, since they are not static. Indeed, the term "going" suggest a dynamic and evolving nature. "The concern 'goes' as long as the participants earn a living or a profit through collective action" (Commons 1950, p. 34).

Furthermore, a going concern is not only a group but also a process of working things out. This idea can be further understood by two other important concepts in Commons's theory: working rules and collective bargaining.

3. The rules of institutions: working rules and collective bargaining

For Commons, working rules are the rules, regulations, or by-laws of collective action. They more or less govern what individuals can, must, or may do by employing three kinds of sanctions: the moral sanctions of opinion, the economic sanctions of deprivation of property, or the bodily sanctions of physical force (Commons 1950, p. 40). Individuals' rights, liberties, and immunities come from the working rules by imposing duties on all individuals.

For Commons, working rules originate neither in natural rights nor in the intellectual logic of philosophers and economists but in the resolution of conflicts of interest through the collective bargaining of ordinary people. That is, working rules develop from "the arguments, debates, conferences, compromises, mass meetings, agreements, disagreements, negotiations, propaganda--among ordinary people themselves, like business men, laboring men, farmers, or professional classes, where forced or persuaded to consider their common interests" (1950, pp. 28-9). In short, the working rules arise from collective bargaining.

Collective bargaining is the most important procedure for making working rules and laws. In Commons's day, this procedure was frequently applied in the conflict between capital and labor. "Collective bargaining, in the case of labor relations, means that the representatives of two organizations, the labor union and the capitalists, meet together as equals and agree upon working rules that shall govern all individuals within the two concerns" (Commons 1950, p. 23). Collective bargaining also applies to economic conflicts settled in the courts. "It rests, for us, on the common law of England and America, carried forward from the decisions of American Supreme Courts on 'reasonable' value, reasonable practices, and fair competition, in place of the free-competition theories of the economists" (Commons 1950, p. 25).

Since working rules are the outcome of negotiation and bargaining, they are artificial and by no means fixed. Indeed, they are continuously evolving and will do so into the future.

B. North's institutions and organizations

1. Institutions and their forms

In contrast to orthodox economists, who neglect institutions, North asserts that it is hardly controversial to say that institutions affect economic performance and that the way they evolve determines the diverse performance of economies over time. North finds that current economic theory does not show many signs of appreciating the role of institutions in economic performance. He thus intends to develop an analytical framework that integrates institutional analysis into current theory and economic history.

The major role of institutions is "to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction" (North 1990, p. 6). "Institutions are the rules of the game in a society or, more formally, are the human devised constraints that shape human interaction" (North 1990, p. 3). Indeed, institutions as constraints are the key feature. North's institutions are classified into two groups: formal constraints, such as rules and laws, and informal constraints, such as conversations and codes of behavior. The former directly shape the framework of a society, while the latter dominate the evolution of the structure of a society.

2. Institutional changes and evolution

For North, institutions emerge mainly in two ways: They are created, such as the U.S. Constitution, or they evolve over time, such as the common law. These institutions are not fixed but continuously evolve. North (1990, p.6) asserts that institutional changes occur at the margin as a consequence of changes in rules, in informal constraints, and in kinds and effectiveness of enforcement. Institutional changes are also driven by other factors, such as changes in relative prices, military technology, capital stock, and individual perceptions of justice.

Another crucial factor in the dynamics of institutional change is organizations, which North (1990, p. 5) defines as "groups of individuals bound by some common purpose to achieve objectives." He classifies four kinds of groups: political, economic, social, and educational.⁴² The role of organizations is primarily as agents of institutional change; that is, "institutions are the rules of the game and organizations are the players" (1993, p. 12). While institutions, together with the standard constraints of economic theory, create opportunities in a society, organizations are formed to take advantage of those opportunities. They are created with purposive intent in consequence of the opportunity set, and as they evolve, they alter the institutions. "Entrepreneurs and members of organizations invest in the skills and knowledge which lead to revised

⁴² Respective examples are political parties, the Senate, a city council, and a regulatory agency; firms, trade unions, family farms, and cooperatives; churches, clubs, and athletic associations; schools, universities, and vocational training centers.

evaluations of opportunities, which in turn induce alteration of the rules or the gradual revision of informal constraints" (1993, pp. 12-3).

Institutions (and organizations) operate through rules which define the way the game is played. Following these rules, various organizations and individuals achieve their objectives by "a combination of skills, strategy, and coordination; by fair means and sometimes by foul means" (North 1990, p. 5). North distinguishes three kinds of rules. "Constitutional rules are the fundamental underlying rules designed to specify the basic structure of property rights and control of the state" (1981, p. 203). Operating rules specify the terms of exchange within the framework of the constitutional rules, such as a statute law, common law, or voluntary contracts. Normative behavioral rules are "codes of behavior aimed at legitimating the constitutional and operating rules" (ibid.). These rules are revised relative to the perceived costs of compliance. For example, constitutional rules are more costly to modify than are operating rules and normative behavioral codes. "Therefore the existing technology of measurement, costs of enforcement, and moral and ethical behavioral norms all enter into the calculus of rule making" (ibid.).

C. A Comparison

1. Difference

Organizations as agents. In North's theory, a significant argument is that organizations are the agents of institutions, which determine the opportunities of the society within which organizations pursue their goals. By using various strategies and resources, organizations seek to win as well as to change the rules and frameworks, so that institutions are altered and evolve. Although Commons also asserts that there is a

mutual interplay among individuals, going concerns, and institutions, he does not explicitly use the principal-agent logic. Also, Commons sometimes mixes institutions and organizations.

2. Similarity

Similar terms. Despite slight differences, Commons's concepts of institutions, going concerns, and working rules are similar to North's institutions, organizations, and rules. Commons usually mixes the three: "Hence our 'institutions' are, in reality, 'going concerns.' A going concern is an organization" (Commons 1950, p. 34). His institutions plus working rules are equivalent to North's institutions, which mainly mean rules devised by humans. Commons's going concerns are equivalent to North's four groups of organizations: economic, political, social, and educational. Commons's working rules contains all the elements in North's three groups (constitutional rules, operating rules, and normative behavior codes), although for Commons the working rules of organizations are also a major part of institutional rules, which is not so much the case for North.

Institutions not given and fixed. Both Commons and North assert that institutions form the structure of a society and determine the opportunity set of economic activities, hence, institutions matter. Moreover, both claim that institutions are not given but continuously evolve and change. Economic decision making, therefore, must take account of institutions.

Institutions as constraints. Both men agree that institutions function as restrictions on individual behavior. Commons defines institutions as collective action in control of individual action, and North treats institutions as human-devised constraints that shape human interaction.

Formal and informal institutions. Both Commons and North classify institutions into two groups: formal/organized institutions and informal/unorganized institutions. For Commons, organized institutions are going concerns, and unorganized institutions are custom. For North, formal institutions mean rules that human beings devise, and informal institutions are norms and codes of behavior. Both argue that formal institutions determine the framework of a society while informal institutions tend to guide individual behavior and the evolving structure of society.

III. Scarcity

Scarcity is crucial for Commons because conflict, which has a major place in his system, is derived from it. The concept is not often used in North's work, but many of his ideas, directly or indirectly, can be traced to resource scarcity. Hence, this is a meaningful dimension for comparison.

A. Commons's scarcity and conflict

Scarcity is a crucial concept in Commons since it induces a fundamental feature of human activity: conflict. For Commons, disharmony is universal owing to the universality of scarcity.

Commons's "scarcity" is in contrast to Adam Smith's "abundance," which ensured universal harmony and no need for institutions and property rights. "If there were unlimited abundance of everything there would be no self-interest, no injustice, no property rights, no ethics" (Commons 1934, p. 6). Indeed, Commons finds that scarcity and institutions came piecemeal into economic theory, "usually in order to counteract anarchistic, communistic, idealistic, or other revolutionary programs" (1950, p. 89). Such programs envisioned elimination of the state and property rights. It was Hume and Malthus who corrected that naive view. For example, Malthus argued that greater population "would again press upon the means of subsistence and would compel England to restore substantially the existing institutions of private property and government" (Commons 1950, p. 90).

In contrast to those programs, Commons claims that "institutional economics openly avows scarcity, instead of taking it for granted, and gives to collective action its proper place of deciding conflicts and maintaining order in a world of scarcity, private property, and the resulting conflicts" (1934, p. 6). Because of unsatisfied wants and desires, the acquisition of scarce things must lead to disputes and bargaining. One phenomenon of the twentieth century is the rise of the large corporation and labor unions and of collective bargaining as the major form of resolving conflicts.

Scarcity has a close relationship to property. "Scarcity value adheres to property rights in what is scarce or expected to be scarce" (Commons 1950, p. 89). Property is derived from scarcity because collective action creates the rights and duties of property based on relative scarcity. "Scarcity in economics is property in jurisprudence, and the rights and duties of property are the working rules of sovereignty in control of scarcity" (ibid.).

Scarcity does not merely produce conflict; it also makes for cooperation and mutual dependence among people. That is, although Commons asserts that conflict of interest is the dominating principle in human behavior, he also considers mutuality and order important. "I make conflict of interests predominant in transactions. But I conclude that this cannot be allowed to be the only principle, because there are also mutual

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dependence and the maintenance of order by collective action" (Commons 1934, p. 6).

B. North's scarcity and signals

Most of the citations in this section are from the third edition (1983) of North's *Growth and Wealth in the American Past*, originally published in 1966. Much of the neoclassical logic favored by North at that time remains in the third edition. It is not clear how he would deal with this concept today, so the following text may reflect a bias that no longer exists.

For North, scarcity is one of humanity's oldest problems; it produces immense issues of hunger, famine, and subsistence in human history. It forces people to make choices in the face of limited resources. Indeed, scarcity decides the change in relative price which is the principle of resource allocation. "The relative cost of each of these productive factors is determined by its relative scarcity or abundance. Abundance tends to lower price; scarcity elevates it" (North 1983, p. 44).

Scarcity also dictates the form of an economy. During the colonial period, because America had abundant rich land, scarce labor, and scarce capital, "the colonies turned to agriculture, which provided the major source of economic activity for perhaps 90 percent of the population" (North 1983, p. 44). Moreover, scarcity, together with the growing exchange economy, determines the type of state. For example, the manorial system of the Middle Ages ceased to be efficient as the scarcity of land increased and was replaced by the national state.

North observes that people were concerned about the increasing scarcity of natural resources, during the energy crisis of the 1970s and believed that it would block economic growth. A common argument is that "a growing scarcity of resources in the

world dictates an even larger role for government" (1983, p. 170). North does not agree, although he is not against government. He does oppose a solution that would seek "to restrict energy prices, to regulate producers and consumers, and to subsidize alternate energy production" (1983, p. 171).

North argues that "resource scarcity has not provided an absolute limit to growth" (1983, p.163) because the change in relative price conveys a signal to the economic system that it must make some adjustments, such as improving technology or seeking substitutions. Yet, most government policies scramble the signals. "The desire to cushion the shock of rising energy prices and the failure to understand the importance of price alterations led to institutional changes that hampered the adaptive process" (ibid.).

For North, "a market system operating through a structure of property rights provides signals that help resolve problems of scarcity" (1983, p. 172). Therefore, before implementing any policies, we have to determine "whether the signals regarding scarcity are correct and whether the institutions provide an incentive for people to react to the signals" (ibid.). Obviously, North believes, government policies of controlling resources certainly distort the signals.

Dramatic growth in production has allowed the West to soar above the poverty level, so that the problems of hunger, famine, and subsistence are not as major in the west as they once were (1983, p. 6). Therefore, scarcity may not bring a crisis to the modern Western world, but the threat still exists because of our incorrect response to resource scarcity. "In this sense, the modern-day Malthusians who envision a dismal future may be right, but for the wrong reasons. Our future will not be dismal because resources are being used up but because the institutions are not providing proper signals and incentives for people to resolve the problems" (1983, p. 172).

C. A comparison

The logic of scarcity. Commons argues that scarcity inevitably leads to conflict of interest, which must be resolved by collective action. In modern society, collective rules are worked out by collective bargaining. North sees scarcity as leading to relative price change, which in turn sends signals to alter the economy about the need to change the incentive structure. Then producers and consumers will alter their behavior, so that technology can be improved and substitutions can be created. Eventually, scarcity will be solved through adjustments in institutions and people's behavior.

2. Similarity

Scarcity and institutions. Both Commons and North agree that scarcity causes the limitation of choices and conflicts of interest. In order to capture scarce resources, competition and bargaining are inevitable. Despite the fact that North does not use the term "collective bargaining",⁴³ his idea of competition among the ruler, his agents, and his constituents conveys the same notion. Both men also agree that, owing to scarcity, the state and well-specified property rights are necessary.

IV. Time and Uncertainty

A. Commons's futurity and uncertainty

1. Futurity and security

Futurity is another critical concept in the institutional economics of Commons

⁴³ Commons's collective bargaining is a procedure based on the formation of voluntary collectives to represent all interest groups (Rutherford 1994b, p. 149). "Collective bargaining, in the case of labor relations, means that the representatives of two organizations, the labor union and the capitalists, meet together as equals and agree upon working rules that shall govern all individuals within the two concerns" (Commons 1950, p. 23). Collective bargaining also applies to economic conflicts settled in the courts.

because value is the present value of futurity, and various transactions inevitably involve the future. It also is related to the universal requirement of security. "Without this security of expectations, there would be little or no present value, present enterprise, present transactions, or present employment. Value is present worth of future net income" (Commons 1950, p. 104). Commons asserts that institutional economics advocates security, classical economics stresses wealth, and hedonic economics stresses demand (subjective pleasure).

Futurity requires security, which in turn requires the existence of government and various institutions. Therefore, Commons asserts that institutional economics begins with "the legislative, administrative, and judicial decisions of both governmental and private collective action on which depend the security of present expectations of future profits, investments, jobs, and contracts" (Commons 1950, p. 104).

2. Futurity in transactions: negotiational psychology

Commons observed people's daily transactions as well as the court's arbitration and found "futurity always there, not in production or consumption, but in the persuasions or coercions of bargaining transactions, the commands and obedience of managerial transactions, and the arguments and pleadings of rationing transactions, which will ultimately determine production and consumption" (Commons 1934, p. 7). Indeed, futurity embodies in people's various transactions elements of uncertainty, psychological factors, and power. Individuals must use their physical and mental resources to collect information, propose strategies, and persuade or coerce others.

In Commons's system, futurity is related to and sometimes equated with negotiational psychology, which is "the psychology of persuasion, coercion, duress,

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command, obedience, fear or hope; the truly behavioristic psychology of business, of labor, of politicians, of propagandists, of legislatures, of executives, or courts. Its simplification in one general term is futurity" (1950, p. 105). It carries the feature of futurity because it is the psychology of all collective action "where it is necessary to agree upon prices or wages that will be paid in the future, upon deliveries that will be performed, or upon future rules of action that will be followed" (1950, p. 109).

3. Legal control and physical control

In contrast to classical and hedonic economics which stress contemporary consumption and production, Commons's institutional economics emphasizes future production and consumption. Indeed, it is futurity that distinguishes legal control and physical control. The former establishes the latter; that is, it determines in the past what physical control will exist in the future. In the real world, collective bargaining determines the rights and duties of working rules that direct future production and consumption.

For Commons, futurity offers not only a way to distinguish between institutional and orthodox economics, but also a way to integrate the two. "Institutional economics is not divorced from the classical and psychological schools of economists -- it transfers their theories to the future" (Commons 1931, p. 657).

B. North's uncertainty, information, and time

1. Uncertainty and information

North (1981, p. 5) asserts that the real world differs from the neoclassical world in which "the costs of acquiring information, uncertainty, and transactions costs do not exist." The real world is full of uncertainty, and it is costly to transact and acquire

information. As long as we face an unknown circumstance, routine principles are not helpful and uncertainty emerges. "The more complex and unique the issues we confront, the more uncertain the outcome. We simply do not possess theories to predict effectively the outcomes, and the information we receive in such circumstances frequently does not permit us to update our models to improve them" (North 1990, p. 22).

Uncertainty is further aggravated by the complexity of human interaction. Information is incomplete because individuals' mental constructs and subjective perceptions are incomplete. "It is sufficient to say that uncertainties arise from incomplete information with respect to the behavior of other individuals in the process of human interaction. The computation limitations of the individual are determined by the capacity of the mind to process, organize, and utilize information" (North 1990, p. 25). North does not agree with the neoclassical substantive rationality assumption, which asserts that individuals can completely decipher their circumstances, in part because the information feedback process is perfect. Instead, he postulates procedural rationality. That is, the actors, guided by subjective models, are incompletely informed and can only very imperfectly correct their models with information feedback (1990, p. 108).

2. Time matters

North criticizes neoclassical theory for lacking a treatment of time. He stresses the importance of time in both economic theory and economic history, although he does not offer a promising theory of time. His argument is mainly based upon the short-run and long-run dichotomy.

The long run is important for North because it illustrates the critical role of time in constructing credible commitment. "Time is crucial for the constituents since uncertainty

about the ruler's behavior can only be mitigated by the ruler establishing a reputation for integrity" (North 1994b, p. 382).Over time, credible commitment can be demonstrated, and uncertainty can be eliminated, so that both economic growth and the rule of law can emerge from a complex exchange relationship. Time is also essential for the stability of an exchange system, since it allows a polity to demonstrate a credible commitment to long-term contracting (1994b, pp. 381, 385).

C. A comparison

1. Difference

Different dimension of theorizing. North's argument about time and uncertainty is closely related to information, information cost, and feedback processes, while Commons seldom uses these concepts. Legal control is a key dimension in Commons's idea about time and uncertainty, but it is not important for North. Both men consider time importantly, but Commons does not use the long-run versus short-run perspective, which is North's main method in analyzing time.

Regularity and predictability. North believes there is a common structure behind various circumstances. This implies that if shared mental constructs and information processes can be well specified, then the future may be predictable. Commons appears not to have much confidence in prediction; instead, he stresses special circumstances in different situations, although he is not against general modeling.

2. Similarity

Security and futurity: Both men argue that human interactions require security, so futurity matters. Both agree that only a stable and credible government and property system can offer security. Hence futurity is an important concept in understanding the emergence and existence of institutions.

The source of uncertainty. Both Commons and North assert that the unknown future is a source of uncertainty. Moreover, both claim that uncertainty is due to complicated human interactions involving power, psychological factors, and strategies making. North uses the notions of incomplete information, mental constructs, and subjective perception to illustrate the complexities, but these could be understood as elements of Commons's negotiational psychology.

V. Efficiency

A. Commons's efficiency

Efficiency is one of five main principles in Commons's theory, but it is not as important as the others. It is treated as a universal principle because of scarcity; that is, efficiency overcomes scarcity by cooperation. Yet, Commons does not agree with the traditional argument that efficiency is the outcome of harmony. Indeed, he argues that efficiency must emerge from conflicts of interest, or at least from an order that results from collective bargaining. Efficiency "overcomes scarcity by cooperation. But cooperation does not arise from a presupposed harmony of interests, as the old 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 cooperators" (Commons 1934, p. 6).

Commons distinguishes two kinds of efficiency: man-hour efficiency (wealth) and dollar efficiency (asset). The latter is also called business efficiency, which means the increase of assets. Because dollar efficiency is a kind of transfer of assets, which is different from the increase of wealth, Commons (1950, p. 100) claims that it "is not efficiency but is the relative scarcity of bargaining transactions.". Hence, efficiency is man-hour efficiency, or "output per man-hour regardless of money value" (1950, pp. 98-9).

Commons finds that, in the past, a key issue was how to increase the output for each laborer; in the modern world, wealth has been greatly increased, but there are still many laborers who do not have equal opportunities for employment. Hence, the issue has shifted from efficiency to unemployment. That is, Commons is concerned with "the problem of obtaining employment by equality of opportunity in times of prosperity and depression, rather than the problem of efficiency or the problem of bargaining power over prices or wages" (1950, p. 102).

Commons does not agree with the view that efficiency will solve the unemployment problem. "The optimism of enormously increased opportunities, when output per man-hour is now probably ten times as great as it was a hundred years ago, is frustrated by the unemployment and part-time employment that forbids access to this magnified equipment and tenfold greater efficiency" (1950, pp. 102-3). The problem must be resolved by setting up new institutions, such as an unemployment compensation program.⁴⁴

B. North's efficiency

Efficiency is one of North's foremost values. In his early period, North viewed it the same as orthodox production and exchange efficiency, and he made what was essentially an efficiency argument, asserting that existing institutions were efficient in

⁴⁴ Commons had experience with a successful unemployment compensation program in the Chicago

general because "changes in relative prices create incentives to construct more efficient institutions" (North 1990, p. 7). He no longer makes this assertion,⁴⁵ but efficiency is still his ultimate concern. His new effort is to explain what causes inefficient institutions and to create a new perspective -- adaptive efficiency -- to account for the necessary conditions to achieve institutional efficiency.

To North "economic growth essentially means increasing efficiency -- that is, what makes a country grow and become better off per head is that it produces more output per person" (North 1966, p.6). Indeed, a system of institutions is deemed efficient if it leads to increased productivity. "I have used the term efficient in this study to indicate a condition where the existing set of constraints will produce economic growth. Specifically, institutions that enable the parties in the exchange to capture more of the gains from trade will grow relative to those that fail to realize this potential" (North 1990, p. 92).⁴⁶

North's efficiency is different from Pareto-efficient conditions. North asserts that the latter may be attainable in a world of pure exchange but cannot explain the evolution of complicated institutions.

Pareto efficiency or Pareto superior conditional criteria simply don't make a great deal of sense. The reason is clear. As long as transaction costs are positive and large, we have no way by which to define an efficient solution with any real meaning, because we have no way of specifying what an efficient "government" underlying the economic structure of property rights is. Without being able to specify efficient government,

clothing market in 1925. See Commons 1950, pp. 98-100.

⁴⁵ In *Structure and Change in Economic History* (1981), North admitted that inefficient institutions are universal in history, and existing institutions were not necessarily efficient. He states: "In *Structure and Change in Economic History* I abandoned the efficiency view of institutions" (North 1990, p. 7).

⁴⁶ A similar definition is given in North (1981, p. 7, n. 2). "The terms "efficient" and "inefficient" as used throughout this study are designed to compare implications of two sets of constraints -- in one, maximizing behavior on the part of the participants will produce increases in output; in the other, it will not produce

we really cannot talk about Pareto efficiency (North 1986, p. 236).

In his later period, North views efficiency as more than allocation efficiency, which occurs in frictionless circumstances at a moment in time. In order to account for time as well as more complicated conditions (such as uncertainty, learning, innovation, risks, and resolving problems), North uses a new term. "Adaptive efficiency is concerned with the kind of rules that shape the way an economy evolves through time. It is also concerned with the willingness of a society to acquire knowledge and learning, to induce innovation, to undertake risk and creative activities of all sorts, as well as to resolve problems and bottlenecks of the society through time" (North 1990, p. 80). His "adaptive efficient path" reflects his two persistent values: economic growth and stability. The "adaptive efficient path allows for a maximum of choices under uncertainty, for the pursuit of various trial methods of undertaking activities, and for an efficient feedback mechanism to identify choices that are relatively inefficient and to eliminate them" (North 1990, p. 99).

C. A comparison

1. Difference

Efficiency as a foremost value. North's foremost concern is efficiency in economic activity. He has abandoned the earlier institutional efficiency argument, but he still considers adaptive efficiency as the normative goal for a society. Commons sees efficiency as a way to overcome scarcity but stresses the need for equal employment opportunity as well as the progress of the human character of working people (see chapter 6).

2. Similarity

Efficiency as a basic problem. Although efficiency is not Commons's ultimate value, he views it as a basic problem in economics. "Economists are interested primarily in the problems which arise from the production of wealth and the distribution of income. Virtually all economists would agree with this generalized statement" (Commons 1950, p. 21). Indeed, his efficiency (man-hour efficiency) is similar to North's concept even though Commons does not develop a notion like North's adaptive efficiency.

VI. Custom and Culture

A. Commons's custom

In the theory of Commons, custom is unorganized institutions and may be more fundamental than organized institutions. Custom offers security and stability so that future transactions are possible. "Custom is such similarity of behavior as may be expected to continue almost unchanged in the future" (Commons 1950, p. 110). Custom not only guides and shapes individual habitual behavior but also strongly influences the formation and evolution of various working rules.

Through a complicated social process, custom forms individuals' habitual assumptions. People must adjust to the similarity derived from custom, simply because it has become habitual. Custom compels through the rules governing transactions and through various collective sanctions, especially opinion punishment. Although custom usually does not involve physical sanctions, it exercises very powerful control over human action. "Even a sovereign dictatorship would hesitate to introduce revolutionary changes in custom" (Commons 1950, p. 110). Indeed, any attempt to establish practice or

policy that deviates from custom will break down "because juries will not convict, or witnesses will not testify" (ibid.).

The power of custom is not restricted to opinion punishment; it may entail economic and physical punishment in the form of working rules and laws. Indeed, lawmaking by the common law method is one of Commons's most significant theories. Lawmaking arises through disputes and collective bargaining, and agents include courts, boards, commissions, and the legislature.

This enforcement of "custom" constituted the "common law" of negotiable instruments in its early stages. A similar common law method of creating "judge made" law by "finding" it already in existence, as a custom, converts the customs of chambers of commerce, and the like, if deemed reasonable, into the common law enforced by the courts. The same practice goes on in arbitration boards, which are constantly establishing new customs by new decisions in settling disputes in the field of employment.

Finally this creation of new law may be taken over by the legislature, but even then the legislature entrusts the administration to courts or commissions which go on to modify the statutes through decisions in settlement of disputes. When these decisions are accepted generally, they become the still further extension of custom and the common law (Commons 1950, p. 112).

Moreover, in Anglo-American jurisprudence, judicial decisions are more important than the laws, and the Supreme Court's interpretation of the Constitution is more crucial than what is written in the document. Therefore, custom has a powerful way to influence the legal system: by affecting judges' decisions. That is, custom forms their individual habitual assumptions and molds their collective reasoning, the process of reasoning and valuing (Commons 1934, p. 717; see chapter 6).

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B. North's cultural factors

1. The nature of cultural factors

North does not often use the term "custom", but he has a similar concept -cultural factors -- which are the crucial aspect of informal institutions. In North's theory, those factors form and guide both the framework and patterns of society and individual behavior. "In our daily interaction with others, whether within the family, in external social relations, or in business activities, the governing structure is overwhelmingly defined by codes of conduct, norms of behavior, and conventions" (North 1990, p. 36).

Culture can be defined as the "transmission from one generation to the next, via teaching and imitation, of knowledge, values, and other factors that influence behavior" (1990, p. 37). For the individual, culture not only offers the pattern of routine behavior but also dominates the deciphering process "Culture provides a language-based conceptual framework for encoding and interpreting the information that the senses are presenting to the brain" (ibid.).

In society as a whole, the influence of culture is pervasive. Indeed, cultural factors largely account for the emergence and persistence of informal constraints. "Even the most casual introspection suggests the persuasiveness of informal constraints. Arising to coordinate repeated human interaction, they are (1) extensions, elaborations, and modifications of formal rules, (2) socially sanctioned norms of behavior, and (3) internally enforced standards of conduct" (1990, p. 40).

2. Change and continuity: culture and path dependence

The most striking facet of culture is the persistence of so many aspects of a society despite wholesale changes in the rules. Indeed, "the persistence of cultural traits in the

face of changes in relative prices, formal rules, or political status makes informal constraints change at a different rate than formal rules" (1990, p. 87). While the formal rules can be altered dramatically, the culturally derived informal constraints "will not change immediately in reaction to changes in the formal rules. As a result the tension between altered formal rules and the persisting informal constraints produces outcomes that have important implications for the way economies change" (1990, p. 45).

For North, the persistence of culture can account for a major issue in economic history: continuity and change. "The cultural filter provides continuity so that the informal solution to exchange problems in the past carries over into the present and makes those informal constraints important sources of continuity in long-run societal change" (1990, p. 37).

North uses the term "path dependence" to illustrate the most striking regularities in economic history. It "can account both for the pervasive influence of the past on the present and future, and also for those occasions when abrupt changes in the path of a society do occur" (1994b, p. 385). Indeed, it is the cultural processing of information which plays an important role to account for the incremental way of path dependence. In short, it is belief systems that are the underlying determinant of path dependence, one of the most striking regularities of history" (ibid.).

North admits that "we still are a long way from having any neat models of cultural evolution, but we do know that cultural traits have tenacious survival ability and that most cultural changes are incremental" (1990, p. 45). He attempts to model his tentative cultural theory into a game theory context, a transaction cost framework, and many other contexts.

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C. A Comparison

1. Difference

Law making and cognitive process. In Commons's theory, custom not only shapes individual behavior, but also is the principal foundation of law making. Important elements in his work are the common law and how custom affects the decision making of judges. North agrees that culture affects individual routine behavior, but he does not develop the relationship between culture and law. Instead, his focus is on building a personal cognitive process to account for how cultural factors influence information processing by individuals.

2. Similarity

Custom and culture as informal institutions. Both men distinguish between formal (organized) and informal (unorganized) institutions, and both treat custom/culture as informal institutions. Both assert that custom/culture affects individual behavior and has compulsory power. Both recognize that informal institutions underlie the most crucial part of social structure.

Stability and changes. Both Commons and North examine the stable nature of custom and culture. Commons asserts that since custom persists for a long time, it provides security and stability in a society. North observes that informal constraints (cultural factors) change at a much slower rate than formal constraints, lending continuity to social structures, which in turn leads to North's argument of path dependence.

VII. Sovereignty, the State, and Third-Party Enforcement

Sovereignty is a key concept in Commons's system. It is used to justify collective

violence and the existence of the state, and it accounts for the inseparable nature of the political-economic nexus. North does not use the term "sovereignty" but agrees that collective violence is necessary in modern society. North bases the emergence and existence of the state on impersonal exchange, which requires a neutral third party (See theory of government in chapter 5).

A. Commons on sovereignty, the state, and property

1. Sovereignty and collective control

In Commons's system, sovereignty is a key principle since it is the source of power. Commons (1950, p. 74) defines sovereignty as collective action in control of violence, that is, "the collective effort to take violence out of private initiative by regulating it." Sovereignty is the monopolization of violence. Individuals are prohibited from using violence. "If individuals start something violent and contrary to the rules, then a procedure is set in motion, the simplest formula for which is the relation between plaintiff, defendant, and an official of sovereignty who decides the point and commands obedience" (ibid.).

For Commons, sovereignty is not good or bad, because violence is not good or bad. "We usually think of violence as wrong. But it was not always wrong. It was the honorable profession of the feudal nobility, by which they obtained wealth. It is honorable today in the military profession. It is honorable in prize fights" (ibid.). Indeed, sovereignty is a useful tool which will serve whomever can control it.

2. Sovereignty, the state, and power

Sovereignty is "the collective effort to take violence out of private initiative by regulating it. The process of regulation is 'the state'" (ibid.). In addition to that regulation,

the state helps and restrains everybody in getting a living or getting rich.

Commons see two types of governments in modern society. The first is traditional hierarchical government, which reflects the conventional idea of one sovereignty superior to others, such as the American scheme of federal and state sovereignty. The second is "industrial" or "economic" government, which has its own legislative, executive, and judicial departments. Examples are labor unions, trade associations, and religion organizations, which have sovereignty over their members (1950, pp. 74-5).

Sovereignty is exercised through moral, economic, and physical power. The difference lies in the kind of sanctions each employs. Moral power is the sanction of collective opinion, which is used by and is the only power of ecclesiastical government. Economic power resides in scarcity, or the withholding of property rights from others, and is practiced by economic government. Finally, physical power is organized violence to prevent individuals deviating from the rules, and only traditional governments (the state) can use it.

3. Sovereignty and property

Beginning with William the Conqueror in 1066, Commons finds that sovereignty is not separate from property, that is, sovereignty holds both physical and economic power. Although some maintain, there is historical trend to separate sovereignty from property based on the assumption "that private property was a natural, primordial right of individuals, independent of sovereignty which might artificially and unjustly interfere with it." Commons claims this argument is "a substitution of justification for fact" and is often used to support a certain ideology in economics and politics (Commons 1950, p.

41).

The old economists wanted to take sovereignty away from property by using the labor theory of value, which asserted that property should belong to whoever "had embodied his labor in it by giving to nature's materials the quality of usefulness" (ibid.). Commons believes this theory is not valid in the modern credit-and-debit economy, in which performance is no longer measured by the labor embodied in property.

Indeed, Commons claims that sovereignty is inseparable from property because sovereignty holds the final word in conflicts. "It is the sanctions of sovereignty that make property what it is for the time being in any country, because physical force, or violence, is the last and final appeal when the other sanctions are deemed inadequate to control individuals" (ibid.). Similarly, arguments advocating pure exchange are impractical because exchange must involve the transfer of ownership, which must be certificated by the courts.

The ineffective efforts to separate sovereignty and property show that government is inevitably involved in human activities, and the legal branch of sovereignty plays the key role in various transactions.

B. North's third party enforcement and government

1. Impartial third party enforcement

Why do we need the state? How important is it in economic activities? One way According to North, many exchanges are impersonal and inevitably must involve a third party, because opportunism, cheating, and shirking rise in complex societies. North claims that "a coercive third party is essential. One cannot have the productivity of a modern high income society with political anarchy" (1990, p. 35).

North has described his ideal type. "In principle, third-party enforcement would

involve a neutral party with the ability, costlessly, to be able to measure the attributes of a contract and, costlessly, to enforce agreements such that the offending party always had to compensate the injured party to a degree that made it costly to violate the contract" (1990, p. 58). These strong conditions are seldom met in the real world. First, it is costly to measure the attributes and to enforce agreements. Second, the enforcer may maximize his or her own utility function. The ideal third party can best be realized by developing "the state as a coercive force able to monitor property rights and enforce contracts effectively" (1990, p. 59). But what is a state, and is it possible for a state to be impartial?

2. A wealth-maximizing ruler

North (1981, p. 21) has defined a state as "an organization with a comparative advantage in violence, extending over a geographic area whose boundaries are determined by its power to tax constituents." More specifically, the state in North's model is a ruler characterized by one of two theories of the state: the contract theory and the predatory or exploitation theory. The former assumes that the state is impartial and maximizes wealth for society. The latter asserts that the state is the agency of a group or class and extracts income from the constituents for that group or class.

North believes that these two frameworks are not inconsistent. "It is the distribution of 'violence potential' that reconciles them. The contract theory assumes an equal distribution of violence potential amongst the principals. The predatory theory assumes an unequal distribution" (1981, p. 22). He believes that the two can be combined, and his wealth-maximizing ruler is a compromise between them. On the one hand, the ruler maximizes his or her own interest; on the other hand, the ruler "is constrained by the opportunity cost of its constituents since there always exist potential rivals to provide the same set of services" 1981, p. 23).

North recognizes that a strictly wealth-maximizing state cannot be neutral because those who run the state will use coercive "force in their own interest at the expense of the rest of the society" (1990, p. 59). As a consequence, property rights, which cannot be separated from the state, are selectively contrived and not impartial, since the state intends to use violence to gain control over resources (see Chapter 5 for further analysis of property rights and the state.)

C. A comparison of Commons's sovereignty and North's state

1. Difference

Wealth-maximizing ruler. North's model of the state is based on a constrained maximizing ruler who pursues his or her own interest rather than social welfare. Commons mainly concentrates on the modern democratic state and stresses the cooperation and bargaining relations among different branches instead of a single ruler. For Commons, the state is an area in which various interests conflict, bargain, and seek to reach a compromise.

2. Similarity

Necessity of collective violence and the state matters. Both men maintain that collective violence is necessary to prevent private violence. North's argument starts from impersonal exchange. If there is no third party, then shirking, cheating, and opportunism make the exchange impossible. Commons views collective violence as necessary to eliminate individual violence and to build social order. For him, the state is inevitably involved in specifying property rights and dealing with economic activities. Similarly, North asserts that property rights are inseparable from the state, which deeply influences economic growth or stagnation. Both men believe the state matters.

State as a tool. Commons claims that sovereignty is inevitably involved in exchange and conflict resolution. The form and rules of sovereignty are the outcomes of collective bargaining, which is deeply affected by power. Sovereignty is not good, bad, or neutral. North recognizes that an impartial third party is an impossible ideal, because the groups who control the state can use the potential violence to gain control over resources. In sum, both Commons and North imply that the state is a tool which serves whomever can control it.

VIII. Conclusion

My analysis treats most of Commons's and North's concepts as independent and thus neglects their complicated interrelationship. As Commons states, each of his five main principles "is in itself a complexity having several divergent applications according to the points of contact where they infringe on other simplifications" (Commons 1950, pp. 113-4). North's concepts are also complex and have divergent applications.

It is to be expected that the two men have their differences. North treats institutions merely as constraints, while Commons believes they can liberate and expand individual action. North sees organizations as the agents of institutional change, whereas Commons does not stress the difference between institutions and going concerns. For North, scarcity signals markets, but Commons claims that scarcity leads to the necessity for collective bargaining. In Commons, futurity shows the importance of legal control; in North, credit commitment emerges only in the long run. North considers efficiency one of the foremost values in economics, while Commons only treats it as a way to solve

scarcity. To Commons, custom is the main foundation of law-making; for North cultural factors affect individuals' deciphering process. North's state is a welfare-maximizing ruler, and Commons's state is a combination of various collective bargaining agents.

Despite these many differences, there are numerous shared characteristics, especially from the perspective of mainstream economics. First, institutions matter, and they can be divided into formal and informal types. Second, Commons and North agree that scarcity is the source of conflict, which in turn has required the state to become involved. Third, both attribute uncertainty to complicated human interaction and unknown future, and they believe economics must take into account uncertainty and time. Fourth, despite different weights given to the value of efficiency, both men define it as an increase of output, and both see it as an important issue in economics. Fifth, custom and culture are crucial in forming individual behavior and are the major aspect of informal institutions. Both men stress the stable features of custom and culture, which also explain continuity of economic-political structures. Sixth, Commons and North agree about the need for collective violence to control private violence, that is, the state is crucial. Finally, both assert that the state cannot be neutral and is a tool which serves whomever can control it.

Overall, many of the key concepts are compatible and possibly can be integrated. For example, North's idea of institution could include Commons's notion of the liberation and expansion of individual action. Also, Commons's going concerns could absorb North's principal-agent function of organizations.

Chapter 5: Main Theories in the Institutional Economics of Commons and North

I. Introduction

Commons's theoretical system is mainly developed in three books: Legal Foundations of Capitalism (1924), Institutional Economics (1934), and The Economics of Collective Action (1950). His system is very broad and covers many theoretical areas, such as: organizations, government, habits and customs, property, discourse analysis, and institutional change.

North's institutional theories are mainly expounded in *Structure and Change in Economic History* (1981), *Institutions, Institutional Change and Economic Performance* (1990), and his papers published since 1978. He claims that his institutional economics is built upon a theory of the state, a theory of ideology, and a theory of property rights. In his late works he also develops a theory of institutional change and a theory of cognitive behavior.

Both men thus share three common theoretical focus: the state or government, property rights, and institutional change. North's theory of ideology, which can be viewed as a watershed in his thinking, is not unlike Commons's thought on habits and customs, although the term "ideology" is not used. Despite different terminology, both explore how collective action (mainly custom, ideology, and culture) affect individual behavior. Hence, I use the term "social control" to cover both and consider this a fourth common theoretical focus of the two men.

II. Theory of Government

A. Commons's theory of government

Commons seldom uses the term "theory of government," but his treatment of government is at the center of his institutional economics. Commons considers the relationship between sovereignty and government, the key features of government, government and the laissez-faire myth, the evolution of government in American history, industrial government and the collective democracy of economic organizations, the superior role of the judicial sovereign in American government, and the ideal government.

To Commons, government is the institution of sovereignty, or "the monopoly of physical force by taking violence out of private hands" (1936, p. 246). It also is "the first collective action that helps and restrains everybody in getting a living or getting rich" (1950, p. 74). Government inevitably is involved in various kinds of conflict of interest, such as deciding who has the right to property. The key question is not whether government is neutral or minimized but whom it supports. Markets are formed and guided by various working rules and going concerns, among which government plays a crucial role.

Commons views the term "laissez-faire" as the way older economists tried to eliminate sovereignty from economics. That is, the ideology of laissez-faire was intended to support the status quo. "By laissez faire was really meant a maxim of advice to these officials of sovereignty recommending the use of physical force against persons who interfered with ownership, but alternatively recommending the use of physical force in favor of the owners themselves" (1950, p. 82). For Commons, the ideas and forms of government evolve continuously. In American history, the traditional territorial government was dominated by the ideology of individualism, which favored antimonopoly legislation and the judicial prosecution of conspiracies. Owing to the expansion of transportation and banking, which initiated national economic organizations of labor and capital, the government of the United States was gradually converted from "the sectional, local, and other territorial organizations of representative government into national economic organizations of corporations and unions, overriding state boundaries" (1950, p. 261).

Another great change, also driven by increasing economic power, was the shift from physical to industrial or economic government. This change required a more pluralistic form of organization to pursue various interests. "Capitalism in its highest form, as found in the United States, is built upon this legal foundation of private property, latterly modified by the emergence of joint-stock corporations, holding companies, banks, labor unions, and political parties, seeking control of the sovereign power of the state" (1950, p. 22). By industrial government Commons means such private organizations as corporations, unions, and political parties -- that have various working branches (such as executive, legislative, and judicial). In modern democracy, these organizations seek to further their interests by influencing government.

To resolve the emerging conflicts of interest, Commons advocates establishing a fourth branch of government, the administrative branch, which would be "an investigational branch with administrative economics" (Commons 1950, pp. 218, 224, 236). The best way to solve conflicts of interest is to form different boards or commissions in which each interest is equally represented and through which solutions

can be worked out. The new branch of government must use an investigative method which is a case study approach, stressing the examination and comparison of individual problematic solutions through interviews and statistical analysis.

Commons's intention is to build a collective democracy.⁴⁷ "If American democracy is 'saved,' it will be saved by collective economic organization of corporations and labor unions. Instead of the traditional equilibrium between equal individuals of economic theory, the alternatives today are between an economic government based on balance of power between self-governing corporations and unions, and a suppression of both organizations, or their leaders, by military power" (1950, p. 263). Commons believes that the American people do not really understand the meaning of collective democracy owing to the universal fear of communism (1950, pp. 261-6).

As it is well known, at the center of Commons's theory of government is the legal branch of the state, which in the United States means the court system and the Supreme Court. The latter is especially influential, since it "is sovereign over both the states and the executive and legislative branches of the federal government" (1936, p. 246). Moreover, because it has the final say in conflicts, it dominates the explanation of various laws and the Constitution, and it decides the meaning of property rights.

According to the different kinds of pressure, influence, or sanction, which anyone may use, Commons groups power into three categories: moral, economic, and physical. These distinctions refer to differences in "the intensity of the inducement, or pressure, upon the will of the individual toward a particular performance, forbearance, or

⁴⁷ Such a democracy encourages "the formation of voluntary collectives to represent all interest groups" (Rutherford 1994b, p.149) instead of the extension of government power. Commons also thinks that collective bargaining in collective democracy is the only refuge from totalitarianism (Commons 1950, pp.

avoidance, ranging from mere friendly advice to fear of loss of livelihood, fear of violence or imprisonment, or even death" (1950, p. 40). In order to maintain its interest, government will use each kind of power to exercise control. For example, various sanctions will be employed by the state "to bring the individual into conformity with the rules, as the moral sanctions of opinion, the economic sanctions of deprivation of property, or the bodily sanctions of physical force" (ibid.).

Unlike classical and neoclassical doctrine, Commons has a positive expectation of government. Through his practical experience in formulating public policy, he recognized that government is necessary for settling conflict. Indeed, his ideal of government is that it carries civilization forward and transforms conflict into mutuality. Despite his implicit argument that government will serve the one who controls it, Commons claims that government's major job should be to protect private property through the due process of law.

B. North's theory of government

Although North uses the term "a neoclassical theory of the state," his view differs from the traditional orthodox theme that government is neutral or should be minimized. North recognizes and treats the state as an important institution in an economy. In Western history, he finds that the state is the key factor in accounting for economic fluctuation. He argues that "the existence of a state is essential for economic growth" (1981, p. 20). Nevertheless, as the mainstream economists argue, North believes "the state is the source of man-made decline" (ibid.).

North's state mainly means the ruler who is interested in maximizing power and

self-interest but who faces constraints. These include competitive and transaction-cost constraints. Competitive constraints arise from the various bargaining relationships among the ruler, his agents, and his constituents. The ruler offers protection and services in exchange for constituents' taxes. Since he has monopoly power, he will discriminate against various constituents in different situations. If the ruler faces a potential competitor, however, such as a Lenin-type party, then his constituents will have stronger bargaining power. Furthermore, in order to maximize revenue, the ruler will use various agents, such as the guilds in feudalism, as collectors. Typically, the ruler grants certain privileges in exchange for the agents' loyalty. Yet, owing to different considerations of interest, there is always a gap between the ruler and his agents, who may eventually become a source of revolution.

The ruler sets up different systems of property rights according to circumstances, but transaction costs generally dictate the form of property rights. In many cases, the ruler wants a monopoly structure rather than a competitive environment; the latter is more costly but more efficient than the former.⁴⁸ Transaction costs also determine the various organizations through which the ruler is able to manipulate his interests. In history, most agents were chosen because the ruler could thus reduce his measurement cost and enforcement costs.⁴⁹

⁴⁸ North's terms "efficient" and "inefficient" are designed "to compare implications of two sets of constraints -- in one, maximizing behavior on the part of the participants will produce increases in output; in the other, it will not produce increases in output" (North 1981, p. 7, n. 2). North's "efficient" differs from Pareto efficient conditions, which North claims do not make a great deal of sense: "We have no way of specifying what an efficient government underlying the economic structure of property rights is" (North 1986, p. 236).

⁴⁹ North's measurement costs are related to the formalized description of a good or service and to the detection of deviations from the rules, regulations, or stipulated contract agreements. His enforcement costs are related to instituting and enacting punishment (or reward) (North 1981, pp. 18-9).

North's theory of the state tries to explain two important issues in economic history: "the widespread tendency of states to produce inefficient property rights and hence fail to achieve sustained growth; and the inherent instability of all states, which leads to economic change and ultimately to economic decline" (North 1981, p. 23). With respect to the first issue, North believes that his competitive and transaction-cost constraints can explain most historical cases. For the second issue, in addition to the theory outlined above, two other aspects have to be considered. One is that changes in a few external factors (such as information costs, technology, and population) may cause instability. The other is that the theory of the state has to be combined with the theory of ideology. North claims that neoclassical benefit-cost theory cannot account for altruistic and large group behavior, both of which should disappear due to severe free-rider problems. Without explaining the free-rider problem, it is impossible to explain social/political adjustment processes, such as revolutions.

North (1994c) have recently incorporated two new concepts, time and belief systems, into his neoclassical theory of the state. The importance of time was contributed by Yoram Barzel (1993), who suggests that "over time both economic growth and the rule of law could emerge from an exchange relationship" (North 1994b, p. 381).⁵⁰ The argument is based on the long-run behavior between the ruler and his constituents. The ruler continually faces a trade-off between the higher income he obtains from relaxing restrictions on his constituents and the increasing insecurity caused by this relaxation. Similarly, the constituents also face a dilemma between their increasing wealth and possible confiscation by the ruler. The best way to resolve the uncertainty for both sides is

⁵⁰ An exchange relationship means a bargaining relationship between the ruler and his constituents. As

for the ruler to construct the rules of the game. Gradually, both efficient property rights and the rule of law emerge from this exchange over a long period. Therefore, time is crucial for both the ruler and constituents.

Although North believes Barzel's argument is essential for understanding the development of institutions, he claims that it fails to explain the historical fact that many polities do not fit this description. North attributes the reason to Barzel's neglect of the crucial role of belief systems in accounting for diversified performance among different states in history. For North, belief systems reflect the collective learning in specific environments and cultures. The interaction between an environment and a belief system dictates the form of institutional evolution. Only certain institutions, which offer incentive for specialization and division of labor and also are capable of capturing the gains from the trade, entail efficient property rights and the rule of law.

C. A comparison

1. Difference

Major concerns. North is primarily interested in a theory of government that explains stagnant economic growth and the inherent instability of all states in history. He is attempting to build a universal theory that can be used to explain historical transitions and to predict future evolution. Commons focuses on how emerging conflicts of interest are worked out. He does not attempt to build a predictable general theory. Rather, he wants to explain the most fundamental features of the process of government evolution.

Negative or positive government. North treats government as "the man-made disturbance sources," while Commons tends to assert that government is merely an

effective instrument for whomever can control it. Nevertheless, in some of his work Commons sees a potentially positive role for government, such as carrying civilization forward and transforming conflicts into mutuality.

The key actors. For North, the central figure is the ruler, who tries to maximize his wealth under various constraints. Therefore, the neoclassical optimizing logic dominates North's theory. Commons conceives government more broadly. It is usually dominated by an interest group, or a coalition of interest groups who have reached a compromise. Conflict has been important through history, and an independent judicial branch has emerged to handle this function in recent times.

Structure. North and Commons develop their theories differently. North starts from a wealth-maximizing ruler who faces various constraints, and from the bargaining processes emerge various outcomes, such as property rights. North wants to explain change and stability. Commons bases his theory on competition and compromise among interest groups, whose relative bargaining power changes as a result of "exogenous" forces (such as population growth) and the internal dynamics of social evolution.

Major concepts. The major concepts used to build the theories are quite different. For Commons, these are sovereignty, collective action, conflict of interest, industrial government, the investigative method, the Supreme Court, moral power, and the due process of law. For North, the concepts are the ruler, competitive and transaction-costs constraints, bargaining, property rights, efficiency and inefficiency, and inherent instability.

2. Similarity

Laissez-faire. Both Commons and North treat government as an important and

necessary actor in the economic system. Both recognize that a working market system is specified and guided by numerous institutions, such as the legal system, political rules, and private organizations. Laissez-faire is naive propaganda that serves the status quo.

Bargaining processes. North's theory gives a primary role to the bargaining processes among a ruler, his agents, and his constituents. It is these processes, together with constraints of transaction costs, that give rise to the forms of institutions as well as the degree of state instability. Commons's theory is built upon the conflict of interest. To resolve these conflicts, government is inevitably involved in various bargaining processes, which are the main way to work things out.

Political-economic nexus. North and Commons realize that the economy is not self-sufficient but instead interacts with other institutions in a broader system. North claims that political rules, including legal rules, usually predominate over economic rules, although all are mutually influential. Commons sees the economy as part of the whole system. There is no pure economic outcome. Economic activities are inevitably influenced by power, legal rules, custom, human will, and so on.

Social control. Commons argues that it is inevitable for government to exercise social control. He believes moral power is the most effective way for government to further its goals. Similarly, North observes that, in history, many resources have been invested in education, which is mainly designed to justify who holds power. Therefore, North claims that further analysis of governmental behavior requires exploration of the theory of ideology.

III. Theory of Social Control

A. Commons's theory of social control

Although Commons does not use the terms "ideology" and "informal constraints," one of the most important aspects of his theory is how individuals are influenced by social norms and collective ideas. Furthermore, since he asserts that individual behavior is formed by collective action, he is more concerned about how habits and custom affect collective rules than about pure individual choices.

Mainly derived from his view on habitual assumptions and custom, Commons's theory of social control can be seen as a series of questions. What are habitual assumptions? How do they form? What are the complicated assumptions behind them? What is the relationship between habitual assumptions and custom? How do they exercise control over individuals? How does custom evolve? What is the relationship between custom and the legal system? How do a judge's habitual assumptions affect his decision making?

In Commons's world, every individual holds a superior or inferior position within a going concern. "If he has had experience with many concerns or with only one concern, he has acquired ways of looking at things when making his decision, choosing his alternatives, and dealing with others in his transactions. These ways of looking at things we name his habitual assumptions" (1934, p. 997). Habitual assumptions arise from similarity of interests, similarity of transactions in which people engage, and three basic resources: (1) technological assumptions, which relate to people's production and exchange behavior, (2) proprietary assumptions, which focus on how people acquire their interests, and (3) ethical assumptions, which arise from the current customary procedure in resolving conflicts of interest. Therefore, habitual assumptions are a complicated social process equivalent, Commons asserted, to Marx's "class consciousness" and Veblen's "instinct."

Habit formation is a long social procedure; individuals "start as babies, then continue as infants, then enter occupations, and are learning to fit themselves to custom" (1934, p. 701). Indeed, habitual assumptions are individuals' opinions, which eventually must fit into collective opinions, or custom. There are two ways that customs exercise control over individuals. First, they set up the standards for measurement and reasonableness. Second, through collective sanctions, individuals are required to conform their behavior to that of others. The effectiveness of the compulsion of customs is determined by (1) the precision and publicity of standards of transaction, (2) the degree of organization for enforcing the sanction, and (3) the kind of sanction used to support the custom including moral, economic, and physical sanctions (1934, pp. 708-9).

Moral sanctions are relatively weaker than economic and physical sanctions in terms of the degree of power used to enforce rights and duties. But moral suasion can be powerful. Since society is full of heretics, rebels, hypocrites, and criminals, the hierarchy does not work automatically. "All of the governments must have moral power, whose most familiar name is propaganda. The most dictatorial sovereigns are today the best-organized propagandists. The American government is highly propagandist, mainly through political parties and newspapers" (1950, p. 76).

Habitual assumptions and customs do not merely influence individual decision making; they also affect the formation of collective rules. Initially, custom serves as a guide for the courts or an arbitrator in settling disputes and conflicts of interest. As further guides develop, such as precedents, statutes, by-laws, and a constitution, all are affected by custom. For Anglo-American jurisprudence, the most significant feature is the common law. Commons is referring not to the technical common law but the method. "Custom becomes common law by the common-law method of deciding disputes, thereby sanctioning what are deemed habitually to be good customs in the act of condemning or not enforcing what are deemed to be bad customs or obsolete customs. Hence, common law is the unwritten law of custom -- unwritten because it is found in precedents and habitual assumptions" (1934, p. 707).

Moreover, in Anglo-American jurisprudence, habitual assumptions and custom have a more powerful way to influence the legal system -- by affecting judges' decisions. According to Commons, these decisions are more important than the laws, and the Supreme Court's interpretation of the Constitution is more crucial than what is written in the document. Therefore, "it is more important to know who the men are on the Supreme Court bench than to know what the law is. The Constitution is not what it says it is -- it is what the Court says it is" (1934, p. 697).

The Supreme Court has a special way of thinking, which Commons calls "the process of reasoning and valuing." It consists of six steps.

- (1) "Institution" of what is relatively important in promoting justice and general utility. These we name habitual assumptions.
- (2) Selection of facts by the process of exclusion and inclusion, which is the process of analogy, guided by these assumptions.
- (3) Weighting the facts mentally in accordance with these assumptions of their relative importance.
- (4) Classification of the facts in accord with this selection and weighting.
- (5) Logical deduction from the habitual assumptions which guide the selection, weighting, and

classification.

(6) The whole is guided by Geny's "practical common sense," which, however, is only another name for the habitual assumptions with which we started (Commons 1934, p. 717).

All these steps are crucially decided by the judge's habitual assumptions.

The habitual assumptions are by no means fixed. Commons argues that they will change when old assumptions are viewed in a new light, or a new type of conflict or dispute emerges, or economic and political conditions change.

B. North's theory of social control

North (1981) argues that the self-interested behavior of neoclassical theory would make the system nonviable. The rational calculation assumption cannot explain two universal observations: (1) Individuals obey the rules even when costs outweigh the benefit, and (2) large group action works even when free-rider problems potentially exist (1981, pp. 45-6). Therefore, we need a broader theory to explain people's behavior.

North defines ideology as "intellectual efforts to rationalize the behavioral pattern of individuals and groups" (1981, p. 48). He stresses three aspects. (1) For individuals, ideology is an economizing device used to come to terms with the environment and provides a "world view" to simplify decision making. (2) Ideology is inevitably involved in judgments about fairness. (3) Ideological perspective will be revised by individuals under certain situations (1981, pp. 49-50).

North claims that the way orthodox economists theorize about individual decision making is an insufficient explanation of human behavior because it ignores the importance of ideology. Individual choices are affected by changes in relative prices as well as by "the ethical and moral judgments that are an integral part of an individual's

ideological makeup" (1981, p. 50). Indeed, there is an interaction between individual perceptions of the terms of exchange and ideology. Therefore, ideologies are not fixed. North uses four cases to show that changes in relative prices can cause personal ideological perspectives to change: (1) a new system which denies the individual's or group's previous property rights; (2) a decline in the terms of exchange of a factor or product previously regarded as a just ratio; (3) a decline in the relative income position of a certain group; and (4) a reduction in information costs so that individuals perceive that better terms of exchange exist somewhere (1981, pp. 50-1).

North asserts that a successful ideology must have several characteristics. First, it must consistently explain past and present property rights and terms of exchange. Thus "history is rewritten every generation... and ... competitive explanations tend to have a heavy ideological cast" (1981, p. 52). Second, it must be flexible enough to capture the loyalty of both the new and old groups. Third, a successful ideology must overcome the free-rider problem. To inspire and energize groups to transcend a simple, hedonic, self-interested calculation of benefit and cost is the basic aim of any successful ideology. That is why a regime always invests huge resources in education to legitimize the system.

North claims that both the interest group and the public choice theory cannot explain people's voting and political behaviors. His most significant example is the independent judiciary. Judges' decisions over a wide range of policies are not mainly affected by interest groups but reflect, instead, their own beliefs concerning the "public good." Therefore, "a positive theory is essential to an analysis of the role of the independent judiciary in affecting resource allocation" (1981, p. 57).

Inspired by Joseph Schumpeter, who claimed that a theory of ideology can be

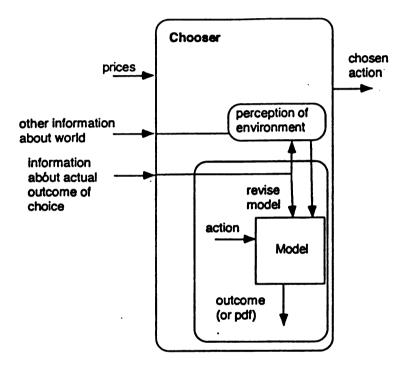
testable, North (1990) focuses on developing the argument that informal constraints are the crucial factors to explain (1) the formation and evolution of culture filters and (2) change and continuity in history. North does not construct many testable hypotheses, but his intention is to combine his informal constraints with existing theories, including game theory, a transactional cost framework, and constrained maximizing behavior (1990, pp. 42-3).

Another way North seeks to develop his theory of ideology is to construct shared mental models (SMMs). "Individuals with common cultural backgrounds and experiences will share reasonably congruent mental models, ideologies, and institutions" (Denzau & North 1994, p. 4). Indeed, "ideologies are the shared framework of mental models that groups of individual possess that provide both an interpretation of the environment and a prescription as to how that environment should be structured" (ibid.). The construction of the SMMs is based on theory in cognitive science, but North further stresses social aspects. An example of North's SMM is given in Figure 1.

The model allows for considerable uncertainty. If the individual learns directly from the external environment without any indirect learning from ideology or culture, then the learning process will be very slow. If the individual uses ideology to help form mental models, then the process will speed up. The SMM also can facilitate communication between different individuals. "If a SMM is available, the concepts embodied in the structure of mental models that several people have can be made more similar" (Denzau and North 1994, p. 20). Since a concept discovered by an individual is likely to persist in his/her mental model, "the presence of learning creates path dependence in ideas and ideologies and then in institutions." Thus, "systems of mental models exhibit path-dependence such that history matters" (Denzau and North 1994, p. 27).



External Environment



Source: North 1994c, p. 16.

C. A comparison

1. Difference

Purpose and interests. Commons is consistently concerned about how habitual assumptions and custom affect both individual and collective actions. A theory of social control is one of his major interests. North's interest in a theory of ideology stems from

his acknowledgment of the limitation of rational choice theory, which he employed in his earlier work. Therefore, he sets out to explain altruistic behavior and free-rider problems. Moreover, North claims "we must seriously consider the development of alternatives to applying substantive rationality in situations where it performs poorly" (Denzau and North 1994, p. 6).

Major concepts. Commons's theory is built upon ideas mostly developed by himself, such as habitual assumption, collective opinions, ethical assumption, standard of reasonableness, collective sanction, and economic and moral power. North draws more on existing concepts: free-rider problems, relative prices, terms of trade, interest groups, public choice, cognitive ability, uncertainty, incomplete information, path dependence, and so on. His intent was to relate his theory of ideology to other contemporary theories. Commons's concepts reflect his originality as well as his own time.

Structure. North's early attempts to build a theory of ideology focus on general principles, such as the most important aspects of ideology, the causes of change, and the features of a successful ideology. Later (North 1990, 1994c), the emphasis shifts to building an individual perception model to analyze the dynamics among uncertain environment, ideologies and ideas, and mental constructs. Commons's theory is grounded in the origin of habitual assumptions and their relationship to and effect on individuals and judicial decisions. While North concentrates on the shared mental model, Commons is concerned with decision making in the legal system.

2. Similarity

Positive theory. North wants to build a positive theory of ideology with a logical structure and testable hypotheses. His SMM is an outcome of this attempt. Commons's

theory has a looser structure and never tries to model an economic issue, but the desire to construct a positive theory is obvious.

Individualism versus collectivism. Both men recognize that ideology is an effective way to exercise social control on both individual and collective action. North is mainly interested in individual decision making, but his arguments about cultural filter and SMMs indicate that he sees the importance of collective action as well. For Commons, individuals are continuously interacting with collective action; that is, he always blends individualism and collectivism.

Culture and social norms. In contrast to the self-contained economy of orthodox doctrine, both Commons and North recognize the importance of customs, ideology, and culture in shaping people's behavior. Both agree that a society will not be viable if individuals merely follow the cost-benefit calculation. Both see the need for developing a theory of social control.

Ideology and judicial decisions. For Commons, decision makings by judges is heavily influenced by their habitual assumptions and custom. North finds that the independent judiciary is not affected by interest groups but by their own beliefs. Both urge development of a positive theory of the independent judiciary.

IV. Theory of Property Rights

A. Commons's theory of property rights

Commons seeks to answer a series of questions: What is property? What is its origin? How has property evolved in American history? How do a number of complicated factors, such as value, power, negotiational psychology, and human will, affect the determination of property? What is the relationship between property rights and transactions? What are the further attributes of property rights?

For Commons, property rights originate from scarcity. Because of limited resources, conflicts between man and man, rather than man and nature, are ubiquitous. Therefore, property rights reflect the evolution of conflict resolution among individuals and/or groups. Two major sources of conflicts are critical: the competition to control government in order to further personal interests and collective actions by individuals against changes in property rights that may damage their well-being (Samuels 1994, pp. 182-3).

Commons believes property is property, not because government will protect it, but because it has been protected by government. That is, property is not absolute, and specific property is not always property, even in a system of private property. Indeed, the term has different meanings at different places and times. Commons identified three major changes in the meaning of property throughout American history. In the agricultural period, property meant physical materials, such as houses, cattle, and land. This corporeal property does not involve expectation and futurity. In the business period, borrowing and lending created debts and assets, called incorporeal property. These goods are not visible but gradually have come to be protected by government. In the period of prosperous capitalism, intangible goods have become universal; examples are goodwill, trademarks, and patents. Incorporeal and intangible properties could not be considered property until the courts recognized the difference between "use value" and "exchange value."

For Commons, use value involves a relationship between man and nature. This

physical value, fixed and absolute, is embodied in a good. Exchange value is determined through complicated transactions between man and man and inevitably involves human will, negotiational psychology, and bargaining power.

Commons identifies three kinds of transactions: bargaining, managerial, and rationing. Each class corresponds to a different set of power relationships among participants and also involves various psychological characteristics. In bargaining transactions, the parties have the same status, but there are differences in power and transactional psychology, which mainly means persuasion and coercion. In managerial transactions, an inferior party faces a superior one, and the negotiational psychology involves command and obedience. In rationing transactions, an inferior party faces the collective superior, which is the state. Negotiation takes the form of argument, pleading, or eloquence (Commons 1931, pp. 652-5).

Since the state is a tool for people who can control it, its policies affect property rights. Moreover, the sovereign power may deprive citizens of property without due process of law. Therefore, bargaining inevitably faces the "taking problem", that is, how, if at all, does the state compensate those whose well-being is adversely affected by limitations on their property rights? The taking problem is embodied in the Supreme Court's interpretation of "eminent domain" versus "police power."⁵¹ In American history, such bargaining gradually formed the restrictions on government behavior: It is not lawful to take people's property without due process of law.

Commons claims that property is relative and continually evolving. Therefore, the

⁵¹ Eminent domain is the power of government to take private property for a public purpose in exchange for just compensation. In contrast, police power takes private property for a public purpose without compensation. See Samuels and Mercuro 1992, pp. 267-70.

meaning of property and the outcome of bargaining must be explored case by case. What he stresses is the dual nature of rights as well as the dual attributes of governmental policies. When one party has rights, there is always another party who does not have them. Furthermore, since both government regulation and deregulation affect certain property, they are functional equivalents. What inflects this duality one way or the other is human will and bargaining power.

B. North's theory of property rights

North's theory of property rights is based on transaction costs. Property rights and transaction costs are mutually influencing. Well-specified property rights will reduce transaction costs, while various measurement and enforcement costs will dictate the forms of property rights. North's major concerns are: What causes property rights to emerge? What role do they play in important historical transitions? Why do inefficient property rights ubiquitously exist? How does the state, under the constraints of transaction costs, set property rights in order to pursue its goals?

North (1981) developed an explanation for the emergence of exclusive property rights and for the first economic revolution during the prehistoric period. In earliest society, most resources were held in common, since the cost of setting exclusive property rights was higher than the benefits. When the population expansion associated with improved technology gradually drew down the resource base, a strong incentive emerged for a group to develop exclusive rights to its territory. This led to specialization and the division of labor, which in turn resulted in greater knowledge about resources. The transition from the hunting to the agricultural period thus can be explained by the shift from common to exclusive property rights; the latter reward the owners by providing "a direct incentive to improve efficiency and productivity, or, in more fundamental terms, to acquire more knowledge and new techniques" (North and Thomas 1977, pp. 240-1).

This explanation of the first economic revolution is a naive model that does not specify any political and social structure, but North recognizes the influence of politics and culture on the formation of property rights. He defines these as "the rights individuals appropriate over their own labor and services they possess," and this appropriation is a function of legal rules, organizational forms, enforcement, and norms of behavior (North 1990, p. 33). He claims that "political rules in place lead to economic rules, though the causality runs both ways" (1990, p. 48). Political rules specify and enforce the property rights; thus, an efficient political structure can lead to efficient property rights.

Efficient property rights are not the general case, however. Inefficient property structures have existed universally through history, and North attributes them primarily to the state. On the one hand, the ruler specifies property rights, such as the measure and weight system, to reduce transaction costs; on the other hand, the ruler sets up property rights to maximize his revenue. Yet, the ruler may not prefer an efficient property rights system due to its high enforcement cost. Moreover, owing to high monitoring and measurement costs, a more competitive property structure often lowers the ruler's revenue. Therefore, the ruler may prefer to trade his power to agents in order to maximize his interest, regardless of the efficiency of property rights.

C. A comparison

1. Difference

Discourse analysis. North recognizes that property rights will differ according to

circumstances, but he does not delineate the evolving meaning of property.⁵² Commons devotes much effort to the different meanings of property in American history, since it reflects change of experience and ideology as well as changes in power structure. For him, the recognition of property is a long and complex process, reflecting both new forms of transaction and the outcome of collective bargaining.

Structure. Commons develops his theory around the origin of property, its evolving meaning, transaction and property rights, taking, and due process of law. North's structure is very different, consisting mainly of three parts: the emergence of exclusive property rights, how political rules affect the specification of property rights, and why inefficient property rights are pervasive.

Main concepts. The originality of Commons's thinking is reflected in the concepts he uses: scarcity, conflicts, negotiational psychology, human will, types of property, use and exchange value, taking, eminent domain, police power, and due process of law. North's theory is conceptually related to contemporary work on transaction, measurement, monitoring, and enforcement costs; common and exclusive property rights; cost-benefit analysis; and incentive structures.

Taking problems. Both men deal with the bargaining relationship between the state and its constituents, but only Commons stresses the taking issue. He recognizes that different perceptions of public purpose as well as private property will dictate not only the identification of a taking problem but also whether compensation is necessary. His discussion is a good example of his favored analytical methods: discourse analysis and

⁵² Although North does not explicitly develop discourse analysis, his theory of ideology implies it. He sees the change in the meaning of property as partly a matter of change in experience and partly a matter of change in ideology, which is the basis for understanding and evaluating change. Therefore, discourse

case studies.

2. Similarity

Determinants of property rights. Both Commons and North assert that property rights are a function of many complicated factors, such as political rules, legal decisions, and norms of behavior. Both disagree with the naive neoclassical assumption that property rights are given, perfectly specified, and independent from the political-legal nexus.

The origin of property rights. According to both theories, property rights emerge from the conflict of interests. For Commons, ubiquitous scarcity causes conflicts, and thus property is an outcome of the bargaining process. Similarly, North claims that property rights result from on-going tensions between the desires of the ruler and the interest parties seeking to reduce transaction costs.

Dynamic transactions. Commons claims that property cannot be defined "except by defining all the activities These activities are three types of transactions" (1934, p. 75). These, in turn, involve complicated social relationships, negotiational psychology, and bargaining strategies. Coincidentally, North's transaction- cost approach associated with bargaining contains a similar feature. For him, economic exchange has an enormous variety of forms, among which the three most important are personalized exchange, impersonal exchange, and impersonal exchange with third-party enforcement. All these involve complex contracting behavior related to ideology, opportunism, cheating, and shirking (North 1990, pp. 34-5).

V. Theory of Institutional Change

A. Commons's theory of institutional change

Although Commons seldom uses the term "theory of institutional change," it is implied in many parts of his work (Biddle 1990b, n. 2). Commons has several concerns: Is social evolution artificial selection or natural selection? How does the interaction between individuals and going concerns govern the change in institutions? How can conflicts of interest be resolved so that the system is workable? How do legal decisions select "good"⁵³ customs and make new rules? Is social evolution deliberative or nondeliberative? What exogenous factors affect the evolution of institutions?

In Commons's age, there was a debate between Social Darwinists, who advocated laissez-faire, and those who insisted that social evolution could and should be guided by human intelligence (Biddle 1990b, p. 21). Commons objected to Darwinism idea of natural selection because it led to "a false analogy between society and organism, and the assumption of a 'blind' process of variation and selection" (Biddle 1990, p. 20). Commons saw the need for a distinction between natural selection and artificial selection, or purposeless and purposeful selection. "The human will does not override 'natural laws,' either of physical nature, animal nature, or human nature. It makes use of them in accomplishing its purpose" (Commons 1950, p. 193). Indeed, Commons's theory of institutional change is built upon a belief in the purposeful, volitional nature of human activity (Biddle 1990b, p. 19).⁵⁴

⁵³ "Good" is presumptive; that is, judges select customs, which they presume are good. Indeed, judges' subjective perception is affected by their habitual assumptions, customs, and ideologies.

⁵⁴ Commons's idea about institutional change resemble those of interventionists and those of the social Darwinist. (Biddle 1990b, p. 21).

Commons's evolutionary theory starts from the interaction among individuals, going concerns, and working rules. People participate in various going concerns and are influenced by the collective patterns of social behavior embodied in working rules and customs, but these are altered and created by individuals through their artificial selection. "Like other theories of social evolution of his day, Commons's was based on the ideas of variation and selection: variation in individual and social behaviors, and a process of selection that led to the disappearance of some behaviors and the persistence of others" (Biddle 1990b, p. 20). In the evolution of going concerns (organized institutions), "purposeful choice enters at two levels. First, individuals within going concerns respond to new situations by creating new activities within their fields of opportunity. Then officials of the collective, faced with a variety of responses to a new situation, alter the working rules to spread and perpetuate the response which best serves the collective purpose" (Biddle 1990b, p. 24).

Another crucial dimension of Commons's theory of institutional change is implied in the argument of how to resolve conflicts. Indeed, Commons differs from others in the OIE camp, because his primary concern is not the advance of scientific knowledge or technological progress in general; rather he focuses on the resolution of conflicts of interests (Rutherford 1994b, p. 101). Commons's bargaining, managerial, and rationing transactions (see chapter 6 for further analysis) reflect the differential legal status and power relationships of participants. Negotiation sometimes is routine, but if a transaction involves limited factors (scarcity), conflicts of interest will emerge. In resolving them, participants' strategies and psychological factors come into play, but the most important influence is judicial decisions – a major mechanism for working out disputes in the Anglo-American system.

Both organized institutions and unorganized institutions (mainly custom) evolve through the decisions of courts in general and of the Supreme Court in particular, as these decisions re-interpret existing laws and create new rules. The judges' selective interpretation of working rules occurs primarily through the process of common-law decision making. The court selects reasonable customs to be followed in the future, as opposed to customs that now contradict what it deems to be the American public purpose of equal opportunity in earning a living. "The evolution of custom is the artificial selection by the judiciary of those customs which shall survive. This can readily be tested by investigating historically the decisions of courts for the past three hundred years in selecting between the good and bad customs relevant to the negotiability of debts, with the purpose of making them as nearly equivalent as possible to metallic money" (Commons 1950, p. 193).

Thus a significant feature of institutional evolution is deliberative design, but Commons does not neglect the nondeliberative processes. One component in his argument is pivotal individuals, such as a judge or a manager, who practice collective will through their private wills. Their behaviors are directed decisively by their habits and values (custom), which are mainly the outcome of nondeliberative evolution. Therefore, "Commons's total model thus includes both non-deliberative custom and habit and deliberative legal choices" (Samuels 1996, p. 7).

The interaction among individuals, going concerns, and collective bargaining to resolve conflicts of interests is mainly endogenous. Yet, Commons's theory also includes exogenous factors, such as the pressure of population and technological change, which eventually will affect the scarcity and futurity of human activities, and so will affect institutions change (Biddle 1990b, p. 24).

B. North's theory of institutional change

How to account for institutional change is a key issue for North. He has several concerns: What are the different roles of institutions and organizations in accounting for the evolution of institutional structure? How are knowledge and skills accumulated so that they become the foundation of institutional change? What are the sources of institutional changes? How do mental constructs and ideologies affect people's subjective perception about relative price changes? Is institutional change dramatic or incremental? How do we account for the inherent nature of institutional change -- path dependence?⁵⁵

The first step of North's theory of institutional change is to separate organizations from institutions. North sees economic organizations as purposive entities designed by their creators to maximize wealth, income, or other objectives within their opportunity set, which is restricted by the institutional structure of society (North 1990, p. 73). Thus organizations are the agents of institutional change and thereby shape its direction.

In order to reach their goals, organizations invest in the kinds of skills and knowledge that will pay off; in that way, they play a major role in how the stock of knowledge evolves and is used (North 1990, p. 74). The entrepreneurs of organizations also devote resources to changing the institutional constraints. Indeed, these maximizing-

⁵⁵ North (1995) offers five propositions about institutional change. (1) The continuous interaction between institutions and organizations in the economic setting of scarcity, and hence competition, is the key to institutional change. (2) Competition forces organizations to continually invest in skills and knowledge to survive. The kinds of skills and knowledge individuals and their organizations acquire will shape evolving perceptions about opportunities, and hence choices, that will incrementally alter institutions. (3) The institutional framework provides the incentives that dictate the kinds of skills and knowledge perceived to have the maximum payoff. (4) Perceptions are derived from the mental constructs of the players. (5) The economies of scope, complementaries, and network externalities of an institutional matrix make institutional

behavior organizations direct institutional change in three ways: "(1) the resultant derived demand for investment in knowledge of all kinds; (2) the ongoing interaction between organized economic activity, the stock of knowledge, and the institutional framework; and (3) incremental alteration of the informal constraints as a by-product of maximizing activities of organizations" (1990, p. 78).

Although the agent is the individual entrepreneur, the main sources of change are relative prices or preferences. "Relative price changes alter the incentives of individuals in human interaction, and the only other source of such change is a change in tastes" (North 1990, p. 84). For North, changes in relative prices include: "changes in the ratio of factor prices (i.e., changes in the ratio of land to labor, labor to capital, or capital to land), changes in information, and changes in technology (including significantly and importantly, military technology)" (ibid.). Although some of changes are exogenous, such as population and military technology, most are endogenous which reflects the ongoing maximizing behaviors of entrepreneurs that in consequence induce institutional change (ibid).

Yet, a major institutional change cannot be attributed solely to alterations in relative prices because those "are filtered through preexisting mental constructs that shape our understanding of those price changes. Clearly ideas, and the way they take hold, play a role here" (1990, p. 85). Therefore, in order to understand of institutional change, it is necessary to understand what forms ideas and ideologies (1990, p. 86).

Another main argument is that institutional change is incremental.

Incremental change means that the parties to exchange recontract to capture some of the potential

gains from trade (at least for one of the exchange parties). Such recontracting can range from a very simple kind to what Skocpol calls political revolutions, in which a restructuring of political institutions resolves a gridlock crisis. The key to continuous incremental changes is institutional contexts that make possible new bargains and compromises between the players (North 1990, p. 89).

The important point is that the changes are an aggregation of literally thousands of specific small alterations in agreements between players, which in total make for fundamental institutional change (ibid.). Another factor that makes institutional changes undramatic is the existence of informal constraints of the system. For North, even a wholesale change in the formal rules may happen, at the same time there will be many informal constraints "that have great survival tenacity because they still resolve basic exchange problems among the participants, be they social, political, or economic" (North 1990, p. 91).

Furthermore, path dependence, another important argument of North's theory, is crucial in answering two questions in economic history: "Why would the relatively inefficient economies persist? What prevents them from adopting the institutions of the more efficient economies?" (1990, p. 93). First, North now objects to the orthodox argument that existing institutions are efficient because economic path is guided by ideology. The subjective models of individuals are modified by extremely imperfect feedback due to incomplete markets, fragmentary information, and high transaction costs. Therefore, ideology will shape the path and existing systems are pervasively inefficient (1990, p. 96). Second, the difficulty deciphering a complex environment can account for the persistently poor performance. North asserts that "in a dynamic world characterized by institutional increasing returns, the imperfect and fumbling efforts of the actors reflect

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the difficulties of deciphering a complex environment with the available mental constructs – ideas, theories, and ideologies" (1990, p. 96).

Path dependence means that "history matters. We cannot understand today's choice without tracing the incremental evolution of institutions" (North 1990, p. 100). A further implication is that "if the process by which we arrive at today's institutions is relevant and constraints future choices, then not only does history matter but persistent poor performance and long-run divergent patterns of development stem from a common source" (1990, p. 93).

For North, an example to account for the path dependence of institutional change is the evolution of the common law. "Common law is precedent based – it provides continuity and essential predictability that are crucial to reducing uncertainty among contracting parties" (1990, pp. 96-7). Yet, "judicial decisions reflect the subjective processing of information in the context of the historical construction of the legal framework" (ibid.). Because the judicial decision makers must operate on the basis of incomplete information and their subjective perception of how the world ought to be, North objects to the argument that the existing common law is efficient.

C. A comparison

1. Difference

Different questions. Although both Commons and North have a theory of institutional change, their main interests are different. Commons is concerned with workability, that is, how to resolve conflicts of interest. North wants to know why relatively inefficient economies persist and why they do not adopt the institutions of more efficient economies.

Organizations as agents. A main feature of North's theory of institutional change is that he separates organizations from institutions and treats the former as change agents. For Commons, going concerns are more or less a part of institutions, although he also asserts that the pivotal individuals in going concerns can play a role in directing changes.

Pivotal individuals. Although collective action is the main force for Commons, he stresses the importance of pivotal individuals. A significant example is judges. For North, although he adheres to methodological individualism, it seems that individuals play a lesser role. For example, people are heavily influenced by collective action (ideologies), but his theory is not clear about how they affect collective action.⁵⁶

Different terminology. Both men use different terms to develop their theories. Commons created most of his terms, such as going concerns and working rules. North uses many notions found in contemporary economic theory. For example, his incremental change reflects the idea of marginal change, and his path dependence of institutional change is derived from the lock-in effect of technological changes. Since Commons and North use these terms in a similar context (see chapter 4), however, they are not that far apart.

2. Similarity

Artificial selection and organic evolution. Both men stress the selective and volitional nature of human behavior through which purposeful individuals, ongoing organizations, and existing institutions (rules and customs) are mutually interacting. That

⁵⁶ In North's theory, it is not clear how individuals form and change ideologies. Although North claims that "ideologies are intellectual efforts to rationalize the behavior pattern of individuals and groups" (1981, p. 48), he does not describe how intellectuals influence ideologies. He does note: "I do not propose to analyze the reward system that produces what I call the intellectual entrepreneurs of ideology; however, entrepreneurs spring up whenever there develop contrasting views of the world around us as a result of differential experiences" (1981, p. 51).

is, both institutionalists approach the economy as an organic systemic evolutionary whole rather than a static machine (Samuels 198?, p. 108).

Ideology dictates perception. Commons emphasizes habit and custom in directing individual behavior. Similarly North stresses that individual perceptions are filtered through mental constructs that are shaped by cultural factors and ideology. Moreover, both agree that pure relative price changes are not sufficient to account for institutional change, since people's subjective perceptions act as a filter to decipher the complicated environment.

The importance of legal decisions. Both Commons and North emphasize the importance of the common law method in directing institutional change, and they agree that a judge's perception of reasonable value (public good) plays a significant role in shaping his or her judgments (Rutherford 1994, p. 88). Both treat the common law as the best example of institutional evolution and urge the need for a theory of legal decision making.

Deliberative and nondeliberative institutional change. Both men see institutional change as a blend of design and evolution. Commons stresses deliberate legal decisions, but he also gives a place to nondeliberative custom and habit. North claims that institutional change is deliberate because that is the dominant way by which societies and economies have evolved (1990, p. 101), he asserts that the extent and direction of institutional change is affected in unintended ways by entrepreneurs in the pursuit of their own objectives (1990, p. 84). Overall, both men differ from the Austrian camp of NIE, with its heavy emphasis on evolutionary and spontaneous processes of institutional development (Rutherford 1994b, p. 83). **Continuity and change**. Commons and North believe that history matters, and institutions change continuously. According to Rutherford (1994, p. 106), Commons thought that "the mutuality of market exchange was not a result only of the invisible hand, but a historic product of collective action in actually creating mutuality of interests out of conflict of interests." North does not neglect revolutionary events in history either, but a continuous pattern of institutional changes is embodies in his argument about path dependence.

VI. Conclusion

I have compared Commons and North in terms of their theories of the state, property rights, social control, and institutional change. Although each has distinctive features, there are many commonalties. First, in their theories of the state, both assert that laissez-faire is naive propaganda; bargaining processes are important, and government is inevitably involved in them; the economy is not self-sufficient, but mutually interacts with other institutions in a broader system; and ideologies and power are the most useful instruments through which government exercises social control.

Second, with regard to social control, both men agree that a positive theory of ideology is needed; ideology is an effective way to exercise social control on both individual and collective action; and a positive theory of the independent judiciary is crucial to account for social control.

Third, in their theories of property rights, both Commons and North assert that: property rights are a function of many complicated factors; property rights emerge from the conflict of interests; and property cannot be defined except by defining all complex

contracting behavior.

Fourth, with respect to institutional change, both men stress the selective and volitional nature of human behavior; the role of habit and custom in guiding individual behavior; the importance of the common law method in directing institutional changes; and a blend of design and evolution in institutional change. They also agree that history matters and that institutions change continuously.

In sum, both these variants of institutional economics share many characteristics that can be the basis for further communication. Indeed, because the theories of Commons and North each have strengths and weaknesses, their integration could be fruitful.

Chapter 6: Transactions, Transaction Costs, and the Main Analytical Processes in the Institutional Economics of Commons and North

I. Introduction

The analytical process, or theoretical logic, is the thread that connects major concepts and theories in a system of thought. All systems have this framework, but their authors put more stress on dynamic relationships, such as cause and effect, among system components. The analytical process is very revealing about an economist's view of the discipline, and a comparison of this dimension is a good way to show the differences and similarities between economists who investigate the same topic.

Commons and North both emphasize the importance of institutions, and both assert that economic behavior must be explored under a broad system, such as within a political economic context. Both use the concepts of scarcity, efficiency, expectation, and transaction in developing their theories of the state, social control, property rights, and institutional change. But how do they connect all these, and what is the theoretical logic behind their systems of thought?

The institutional economics of Commons is constructed from two main analytical processes. The first focus on transactions. Commons views a transaction as the smallest and ultimate unit of analysis and the meeting place for all economic, psychological, and ethical forces. The second process centers on the legal-economic nexus. He asserts that since economic activities inevitably interact with legal and political power, institutional economics must take into account political-legal factors. However, these two analytical domains are closely related and in most cases overlap.

Since 1978, North's institutional economics has had three phases: (1) the use of transaction costs as a major analytical tool; (2) exploration of how political economy operates; and (3) development of a cognitive approach, based on his theory of ideology, to explain human behavior as well as institutional change (North 1997, pp. 8-11).⁵⁷ These phases are not mutually inconsistent and are penetrated by his transaction cost/property rights perspective. Indeed, North's logical structure is very clear: through the concept of transaction costs, political economy and ideological influences are interdependent. Therefore, I will consider the transaction cost process as North's main theoretical logic.

North's transaction costs and Commons's transactions are similar enough in spirit to be comparable. Such a comparison also illustrates other important perspectives of their thought, such as Commons's legal-economic nexus and North's political and ideological perspectives. Hence, this chapter concentrates on transactions and transaction costs. In particular, how are these defined by Commons and North? How do they construct their theories about them? How do these relate to their major concepts and theories?

II. Transactions and the Main Analytical Process of Commons

A. Commons's transactions

Commons's transactions are not the exchange of commodities in the physical sense of delivery. Instead, they are "the alienation and acquisition, between individuals, of the rights of future ownership of physical things, as determined by the collective working rules of society" (1934, p. 58). The Commons definition of transaction is derived from the

⁵⁷ "In that study (1981) I began to explore the transaction cost underlying different forms of economic organization in history and also to explore the way ideologies altered free riding to influence political and economic decision making" (North 1997, p. 8).

double meaning of commodity. The proprietary meaning, which concerns the courts, relates to the acquisition and alienation of ownership. The technological meaning, as used by economists, refers to the production, transportation, and physical delivery of the thing owned (1950, p. 44). For Commons, the ownership aspect has become dominant because it has been "working itself into economics by decisions of the courts in enforcing contracts" (ibid.). Commons asserts that an exchange is the mechanical and labor process that physically delivers the object under command of the owner, while a transaction "is the negotiations and agreement which transfer ownerships under the 'operation of law'" (1950, p. 45).

As noted earlier, Commons distinguishes three kinds of transactions: bargaining, managerial, and rationing. Each represents a type of human interaction in transferring property, and all are closely related.

1. Definitions

Bargaining transactions. Bargaining transactions transfer ownership of corporeal property or incorporeal and intangible property, such as bonds and stocks in corporations. These transactions involve a minimum of five persons. There are the best two buyers, who offer the highest prices, and the best two sellers, who offer to accept the lowest prices. These participants are legally treated as equal in deciding disputes by the ruling authority (1934, p. 59). The fifth party is a judge ready to issue commands to the buyers or sellers if any dispute arises in a negotiation. That is, the fifth party to every transaction is the state, or the legal system.

Managerial transactions. Managerial transactions are transfers between superiors and inferiors in the production of wealth, such as the dealings between a foreman and a laborer and a master and servant. Thus, in a managerial transaction, one person is a legal superior, and the other is a legal inferior; the former gives orders, and the latter must obey. Any cases that take place within a firm, or between branches of a firm, would belong to this category (Harter 1962, p. 224).

Rationing transactions. Cases that involve a collective superior and inferior individuals are rationing transactions, that is, the rationing of wealth or purchasing power to subordinates without their participation in bargaining. "In the process of arriving at a decision, the superior may be subjected to pressures of the inferiors in arguments and pleadings. Yet the ultimate decision remains in the hands of the superior" (Harter 1962, pp. 224-5). Examples are the laying down of working rules by a superior and the making of a company budget for the following year by its managerial board.

The emergence of these three types of transactions reflects their historical background. Commons states that managerial transactions are the most ancient, and the bargaining transactions are most recent. Rationing transactions have an ancient origin but gained importance with the rise of corporations and unions (1950, p. 44).

These three kinds of transactions are interdependent and variable. Commons observes that rationing transactions are discoverable in all collective action, such as making up a budget, and the execution of rationing is carried out by means of managerial transactions. Furthermore, many modern large corporations intend to eliminate bargaining transactions by enlarging the scope of managerial and rationing transactions (1950, p. 57). For Commons, there may be various degrees and combinations of the three, and all may be in operation at the same time. "The problem is not the total elimination of any one kind, but the balance among the three in the processes of economic activity" (1950, p.

Strategic and routine transactions. Commons also makes an important distinction between strategic and routine transactions. If a transaction is repeated, and the individual can draw on habitual experience, then it is a routine transaction. If a transaction differs from those in the past, and the individual sees either an important opportunity to advance a purpose, or an obstacle to achieving a purpose, then the transaction is strategic (Biddle 1990a, p. 5).

Since a strategic transaction arises from the lack of limiting factors, it always accompanies a conflict or dispute. Whereas a routine transaction ends when its negotiation is complete, a strategic transaction often is the start of a long process to resolve the dispute. Eventually, a strategic transaction may have an affect upon existing working rules as well as the form of future transactions.

Negotiational psychology. A key concept of Commons's transactional theory is Negotiational psychology. Since the human being is volitional, and thus institutional economics is volitional economics that "requires a volitional psychology to accompany it. This is the psychology of transactions, which we may properly name transactional or negotiational psychology" (1934, p. 90).

Because there is more than one participant in a transaction, each tries to use strength of personality and social resource to influence the opponent's decision making.

The psychology of transactions is the social psychology of negotiations and the transfers of ownership. Each participant in the transaction is endeavoring to influence the other towards performance, forbearance, or avoidance. Each modifies the behavior of the other in greater or less degree. Thus each endeavors to change the dimensions of the economic values to be transferred. This is the psychology of business, of custom, of legislatures, of courts, of trade associations, of trade unions (1934, p. 91).

Obviously, negotiational psychology is complicated and influenced by various factors, such as participants' personalities and the present circumstances. Negotiational psychology "offers inducements and sanctions to transfers of ownership of economic quantities at variable valuations in terms of money, according to the variable personalities engaged in the negotiation, and to the present circumstances of scarcity, efficiency, futurity, working rules, and limiting factors" 1934, pp. 91-2). An understanding of this psychology requires a scientific investigation to resolve "it into the smallest number of general principles, or similarities of cause, effect, or purpose" (1934, p. 91).

In Common's theory, each transaction type corresponds to a different set of negotiational psychology, which is predetermined by participants' legal status and social resources. In a bargaining transaction, the participants are legally equal, and the form of negotiational psychology is persuasion or coercion. In a managerial transaction, status "rests on the legal right of the owner to issue commands to laborers and on the correlative duty of obedience by the laborers to the commands of owners" (1950, p. 54); therefore, the negotiational psychology is command and obedience. Finally, in rationing transactions, arguments and pleadings are the form of negotiational psychology.

Figure 2 summarizes the major elements in Commons's transaction. In terms of the sequence, Commons divides each transaction into three stages: negotiation period, commitments for future action, and execution of the commitments. The negotiations are closed when the agreement on intentions is reached. Next, the commitment or contract imposes the future obligations of performance and payment upon the parties. Finally, the execution of the commitments closes the transaction (1950, p. 53).

	SCOPE O	F TRANSACTIONS		
TIME SEQUENCE	KINDS OF TRANSSACTIONS (STATUS OF PARTICIPANTS)			KINDS OF ECONOMICS
	Bargaining (Legal equals)	Managerial (Legal superior & inferior)	Rationing (Legal superior & inferior)	
1. Negotiational Psychology (inducements, intentions, purpose)	Persuasion or Coercion	Command and Obedience	Command and Obedience	Qualitative (not measured)
2. Commitments for future action (agreement, contracts, obligations, rules	Debts of Performance and payment	Production of Wealth	Distribution of Wealth	Qualitative (not measured)
3. Execution of the commitments (administration,	Prices and Quantities	Input and Output	Budgets Taxes Price-fixing	Qualitative (measured)

Figure 2: Scope of Commons's Transactions

Source: Commons 1950, p. 57.

2. Transactions and collective action:

Although individuals are the main actors, Commons asserts that a transaction necessarily involves collective action. Economic science investigates how individuals earn a living and gain wealth by transfers of ownership. Because the individual is confronted with possible discriminations, the bargaining power of others, and sovereignty, it is necessary to explore the collective action in a transaction.

A transaction involves four key issues: competition, equal opportunity, bargaining

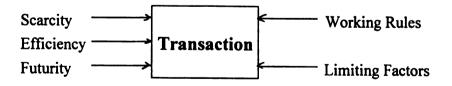
power, and due process of law.⁵⁸ These issues illustrate the complex relationship between transactions and other aspects of collective action.

Transactions and circumstance. The personalities of the participants directly affect the negotiational psychology in a transaction. Of equal importance are the similarities and differences of circumstance in which personalities are placed. Indeed, circumstances set the general framework for a transaction.

First is scarcity or abundance of alternatives. This is inseparable from efficiency, or the capacity to bring events to happen. In all cases negotiations are directed toward future time – the universal principle of futurity. Working rules are always explicitly or tacitly taken into account, since they are the expectations of what the participants can, must, or may do, as controlled, liberated, or expanded by collective action. Next, in each transaction there is always a limiting factor whose control by the sagacious negotiator, salesman, manager, manual laborer, or politician, at the strategic moment, will determine the outcome of complementary factors in the immediate or remote future (1934, p. 91).

The general framework for a transaction is shown in Figure 3.

Figure 3: The General Circumstances for a Transaction



⁵⁸ Due process of law is related to "whether the trial court, the executive, or legislature, unjustifiably deprived any one of the participants of his liberty or property" (Commons 1950, pp. 51-2).

Transactions and the state. The state plays a crucial role in a transaction. First, it is not the individual but the state that transfers ownership by operation of the law as interpreted by the courts.⁵⁹ Second, it is necessary to have a coercive party when disputes arise. Therefore, "Eventually there is a future Supreme Court to which appeal may be made on any alleged act of injustice by the trial court, or by the legislature or executive which has given directions to the trial court" (1950, p. 43).

Transactions and social control. Commons argues that habitual assumptions and customs guide routine transactions, which are the most common form of daily transfers. Custom and habit are also crucial in strategic transactions, which involve conflict of interest owing to the universal principle of scarcity. Since the parties in a transaction depend on each other for reciprocal alienation of ownership, it is necessary to build a body of rules to resolve conflicts into a workable mutuality and orderly expectation of property. Indeed, these working rules are mainly built upon custom and habitual assumptions.

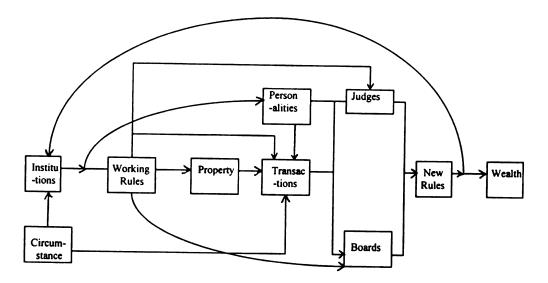
B. Commons's main analytical process

It is challenging to delineate Commons's main analytical process because he treats a political economy as a whole, and the different factors mutually interact. Figure 4 is an attempt to simplify his complicated logic. I identify one major thread and two subbranches of collective action.

Along the main thread, both organized (going concerns and the state) and unorganized (custom) institutions set the structure of a society. Institutions operate through various working rules, which include rules, regulations, and laws of collective

⁵⁹ In medieval times, it was the "market overt" that transferred ownership in a transaction (Commons 1934,

Figure 4: Commons's Main Analytical Process



Note: Circumstance includes scarcity, efficiency, futurity, limiting factors, and customs.

action. The working rules determine what is property, who has a right or duty, and the structure of property rights by which people exercise transfer, production, and distribution of wealth. The basic unit of all these activities is a transaction.

As described above, the system of property rights and circumstances scarcity, efficiency, futurity, custom, and limiting factors pave the general ground for a transaction. The participants' personalities -- which reflect their motivations, volition, and negotiational psychology -- and social resources are also crucial factors. If the transaction

is a routine transfer, people will draw on past experience and the existing working rules. The transaction terminates upon competition. If the transaction involves any kind of limiting factors, then conflicts or disputes are likely to arise. Conflicts must be resolved, or the system may become nonviable. Therefore, the procedure moves to conflict resolution, which Commons terms collective bargaining.

In the Anglo-American system, there are two major forms of collective bargaining. The first is through the courts, and the judges are the critical players. In addition to precedent and existing law, judges' decisions are heavily influenced by their habitual assumptions and personality which dictate what they deem reasonable and in the public interest. The second way of resolving conflict is through industrial government if the parties involved are corporations and labor unions. In this situation, different interest groups will form a board or a committee through which the negotiations and compromise will proceed.

Both ways of resolving conflicts are a form of collective action through which the rights to property may be redistributed, the meaning of property may be redefined, and new working rules may be created. On the one hand, these changes are a basis for production and distribution of wealth in the future; on the other hand, they affect existing institutions; thus, the system continuously evolves.

III. Transaction Costs and the Main Analytical Process of North

A. North's transaction costs

Transaction costs lie at the center of North's system of thought. Indeed, his "theory of institutions is constructed from a theory of human behavior combined with a theory of the costs of transacting" (North 1990, p. 27). Ronald Coase "provided a critical link that began to structure the evolving framework" (North 1997, p. 7), but North's application of transaction costs differs from that of Coase. "Whereas Coase was concerned with the transaction costs that determined the existence of firms, I was concerned with the transaction costs that determined overall economic performance" (ibid.).

1. Transactions and exchange

Although North mixes the terms "transaction" and "exchange", he does not mean the exchange of orthodox economics, which refers to the transfer of a commodity between individuals. In North's theory, a transaction often involves transfer of the ownership of a commodity or service, which in turn relates to legal rights. "The transfer involves a bundle of rights over a physical asset in exchange for a sum of money. The rights are both legal rights defining what one can do with the property and rights over the physical attributes of the property" (1990, pp. 61-6). Furthermore, North's transaction not only is related to individuals but also, in most cases, involves collective action, such as the behavior of groups.

North claims that three levels of exchange illustrate the relationship between rights and constraints in a transaction: "first at the level of a single straightforward exchange, second in the more complex relationship involved in the production process, and finally for the economy as a whole" (1990, p. 61). The three levels can be further developed into three types of exchange: personal, impersonal, and impersonal with third-party enforcement. Each type corresponds to the degree of complexity in an exchange and requires assurance of security from various institutions.

Personalized exchange involves small-scale production and local trade. Because the

transaction costs are low, the economies or collections of trading partners tend to be small. Typical of this kind of exchange is repeat dealing, cultural homogeneity, and a lack of third-party enforcement.

Impersonal exchange, arises from more complex circumstances. The early development of long-distance and cross-cultural trade and the fairs of medieval Europe are examples. In these transactions, "the parties are constrained by kinship ties, bonding, exchanging hostages, or merchant codes of conduct" (1990, pp. 34-5). Historically, the role of the state in this type of transactions was at best ambiguous, "because the state was as often an increasing source of insecurity and higher transaction costs as it was protector and enforcer of property rights" (1990, p. 35).

Impersonal exchange with third-party enforcement involves complex contracting behavior and is the critical underpinning of successful modern economies. It requires a set of rules as well as a variety of effective informal constraints. A coercive third party is essential because "one cannot have the productivity of a modern high income society with political anarchy" (ibid.).

North's transaction or exchange shows the complicated interaction among individuals, groups, and the state. It is also a place where purchasing power, strategies, social norms, ideologies, and legal sovereignty meet. However, although a transaction can reflect the complicated political-economic nexus, North does not use it as the basis for his analytical process. Instead, he uses transaction costs as a foundation and to connect his theory with existing programs.

2. Transaction costs

North sees two sources for transaction costs. First, they are associated with

transformation costs and are part of the costs of production. In traditional theory, production costs only consist of the resource inputs of capital, labor, land and the entrepreneurship involved in transforming the physical attributes of goods or services. North asserts that production also includes the cost of transacting, such as defining, protecting, and enforcing the property rights to goods. Second, transaction costs also arise from human economic interactions, such as information costs, agency costs, and the costs of shirking and opportunism (1981, p. 203).

Formally, North defines transaction costs as the costs of measuring and enforcing agreements, that is, "the resources necessary to measure both the legal and physical attributes being exchanged, the costs of policing and enforcing the agreement, and an uncertainty discount reflecting the degree of imperfection in the measurement and enforcement of the terms of the exchange" (1990, p. 62). The costs of measurement are significant because commodities, services, and the performance of individuals have numerous attributes, and the information needed to ascertain the level of all these attributes is costly. Enforcement costs are also heavy, because contracts and rules are imperfectly specified and implemented. The relationship between a master and a slave illustrates the complexity of an enforcement problem; indeed, many such problems relate to the relationship between the principal and agent (1990, pp. 32-3).

Since high measurement and enforcement costs hamper complicated exchange in a modern society, it is necessary to set up effective institutions, as well as to establish other informal constraints. "Warranties, guarantees, trademark, the resources devoted to sorting and grading, time and motion studies, the bonding of agents, arbitration, mediation, and of course the entire system of judicial process all reflect the ubiquity of measurement and enforcement" (1990, p. 31).

B. North's main analytical process

In order to explore the role of transaction costs in North's institutional economics, we must understand how they interact with his main concepts -- institutions, organizations, the state, and ideology --, and what role transaction costs play in his analytical processes.

1. Transaction costs and collective action

Transaction costs and institutions. North argues that the costs of transacting reflect the overall complexity of institutions, including various mixes of formal and informal constraints. Efficient institutions will lower transaction costs, but inefficient ones, such as rules that regulate entry and require complicated procedures, will raise them, because they increase information costs and make property rights less secure.

Transaction costs and organizations. North asserts that a theory of organization must be incorporated into the transaction constraints arising from compliance costs; the existence and evolution of political and economic organizations are heavily affected by transaction costs. He believes that less efficient forms of economic organization, which have relatively high transaction costs, will be replaced by more efficient forms under the ubiquitous condition of scarcity and thus competition (1981, p. 33). For example, North argues that a market system is costly because of the high measurement costs, enforcement costs, and associated external costs.⁶⁰ A hierarchical organization also has these costs and

⁶⁰ "A market-price system is costly because it is costly first to measure the dimensions of the good and service or service transacted and then to enforce the terms of exchange. And there is a third cost involved as well: that associated with the external effects that arise because measurement was imperfect. In contrast, hierarchical forms of organization substitute the directives of a central authority: a contractual arrangement restricts the options of the parties to exchange wherein one party gives up control of decisions to the other party. The costs of this organizational form are the costs of measuring the performance of agents; the

clearly has both production-cost and transaction-cost advantages (1981, p. 39).

Furthermore, organizations also can affect transaction costs. In order to pursue their goals, political and economic organizations entail "1. the establishment of a set of constraints on behavior in the form of rules and regulations; 2. a set of procedures designed to detect deviations from and enforce compliance with the rules and regulations; and 3. the articulation of a set of moral and ethical behavioral norms to reduce enforcement costs" (1981, p. 18). That is, all organizations will seek to lower the internal cost of achieving their goals in the short run and to change both formal and informal constraints in the long run.

Transaction costs and the state. There is a mutual interaction between the state and transaction costs. The state, the third party in an exchange, can lower the costs of transacting by setting up an impersonal body of law and enforcement. At the same time, transaction costs influence the forms of institution that the state establishes. For example, the ruler will set up a system of property rights to maximize his wealth, but the form of that system is decisively affected by transaction costs. The ruler may choose an inefficient property right instead of an efficient one, because an "efficient property right may lead to higher income in the state but lower tax revenues for the ruler because of the transaction costs (monitoring, metering, and collecting such taxes) as compared to those of a more inefficient set of property rights" (1981, p. 28).

Transaction costs and ideology. In a modern complex society, perfect specification and enforcement of rules are impossible, although cheating, shirking, and

inefficiencies associated with imperfect measurement; and the costs of enforcement. Because the resource costs of compliance are different from those involved in the markert-price system, they lead to different results" (North 1981, p. 34).

opportunism are increasing. The enactment of penalties and compensation for damages not only requires a body of law, judicial process, and enforcement, but also depends heavily on moral and ethical codes of behavior, that is, ideology. North thus asserts that, due to high measurement and enforcement costs, if there is "absence of ideological convictions to constrain individual maximizing, the viability of economic organization is threatened" (1981, p. 44).

2. The dynamics of North's analytical process

A simplified version of North's analytical processes is shown in Figure 5. I distinguish one major axis and three subbranches, all of which are dynamically connected.

North's logic starts from both formal and informal institutions, which embody the measurement, enforcement, and information costs of a system. The degree of transaction costs dictates the form of property rights. For example, in earlier society, exclusive property rights had hardly emerged owing to a high transacting costs. An efficient property right system produces an incentive structure that leads to specialization and the division of labor. But the ability to capture the gains from trade depends on individual decision making. Typically, people individuals seek to maximize their wealth, but their behavior also is deeply affected by their learning processes. Information costs play a key role in this, as does ideology.

Increased production and trade induce new technology and the accumulation of capital stocks, which will lead to economic growth. Eventually, the accumulated wealth joins population, technology, and other collective factors to affect the evolution of institutions.

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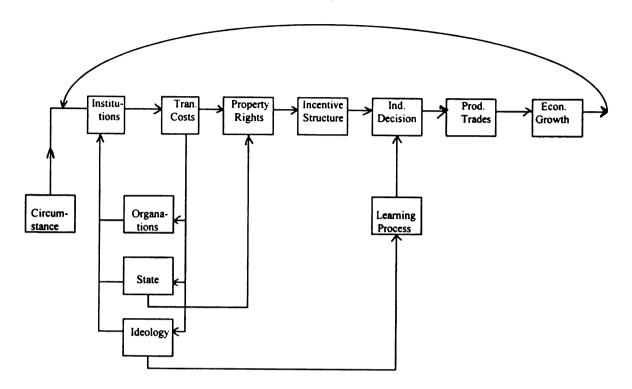


Figure 5: North's Main Analytical Process

Note: Circumstance includes populations, technology, and cultural factors.

Institutions, transaction costs, property rights, individual decisions, and economic growth are the main building blocks of North's system. Among them, transaction costs play a decisive role since they dynamically connect institutions and economic growth and to a large degree determine the performance of an economy. Their crucial role also is apparent in the three subbranches of North's analytical process.

The first branch explains how transaction costs dictate the form of organizations, which in turn alters institutions. The efficiency of an organization is decided by its measurement, monitoring, and enforcement costs. Only an organization with an advantage in transaction costs can survive severe competition. In order to achieve their goals, various political and economic organizations will seek to change the rules, which in turn will alter both formal and informal institutions. In North's theory, organizations thus are the agents of institutional change.

The second branch is related to transaction costs and the state. In order to collect tax revenue, the ruler, the major form of the state in North's theory, must set up various rules and property rights. Due to the costs of measurement, monitoring, and enforcement, a ruler will seldom set up an efficient system, because an efficient system would not maximize his tax revenue. Instead, the ruler usually chooses a body of relatively inefficient institutions, such as the guild system in early modern Europe, which will determine the costs of transaction.

The third branch regards ideology and transaction costs. Owing to pervasive cheating, opportunism, and imperfectly specified rules, ideology plays a role in lowering transaction costs. The enormous investment in education to instill good behavior in people shows the importance of ideology. Indeed, ideology is a major aspect of informal institutions. A successful ideology not only directly lowers measurement and enforcement costs but it also offers a shared mental model through which individuals perceive the fairness of the existing system and economize the information processing that is a crucial part of their decision making.

Figure 5 shows that all three subbranches are dynamically connected with the main axis, so that the whole process is continuous. The diagram inevitably neglects or simplifies some complicated details in North's theory. For example, even if a society can increase output and trade, it may not reach prosperity, because a precondition for economic growth is an efficient political structure.

IV. A Comparison of the Main Analytical Processes of Commons and North

1. Difference

Commons and North have distinctive analytical processes. First, they seek different goals. Since North's ultimate interest is to explain economic growth, a main thread of his logic is how to build a series of relations between institutions and economic growth. Commons is concerned more with workability than increasing output, so the key issues in his system are how to account for the complexity of human behavior and how to resolve conflicts.

Second, Commons put transactions at the center of his process, whereas North focuses on transaction costs, although their concepts of transactions are similar. Because he stresses transactions, Commons emphasizes the bargaining process, in which psychological factors and legal power are the critical factors. Given his focus on transaction costs, North emphasizes the critical nature of information and takes advantage of existing micro-economic theories.

Third, each accounts differently for institutional change. North separates organizations from institutions and treats the former as change agents, although institutions (through transaction costs) also affect the form of organizations. Commons does not envision a principal-agent relationship; instead, he views organizations (going concerns) as a part of institutions. He believes the change in institutions is due to collective bargaining. The legal process and industrial government are the two major forms of collective bargaining through which conflicts will be resolved and new rules will be set; institutions evolve continuously.

Fourth, psychological analysis and the legal process are the foremost features of Commons's theory. He distinguishes different negotiational psychology according to three kinds of transaction. Because transactional psychology is so important, individuals' personalities, motivations, and volition matter. In North's system, there is no psychological factor.⁶¹ The judicial system is less significant to North. Although he stresses the importance of the third party in resolving disputes, his legal theory has not been developed.

2. Similarity

A similar structure in the analytical processes and theory of transactions of Commons and North can be seen by comparing Figure 4 and Figure 5. I find that the first half of Figure 5 (North's process before incentive structure) shares the spirit of Figure 4 (Commons's process). That is, both men use institutions, rules, property rights, transactions, the state, and ideology to construct their institutional economics. This similarity is more significant if Commons and North are reviewed in contrast to other pairings, such as Veblen and North or Commons and Williamson.

A second similarity is that both regard the invisible hand as unrealistic and believe that the political-economic nexus matters. Both seek to explain the real world rather than strive for purely formal elegance. Therefore, in their systems, property rights are not well specified, and transactions are complicated and costly. The state is critical in making

⁶¹. North never explicitly develops an argument regarding psychological issues. His theory of ideology, which centers on subjective perception and cognitive behavior, may indirectly imply some psychological behavior, such as altruism, but it lacks a detailed content.

rules, policing enforcement, and resolving conflicts. Culture and custom shape general rules and affect individual decision making.

Third, both men stress the workability of a system, although economic growth is North's main concern. That is, they believe the economic system is not given but is artificial, and an economy is not static but is continuously evolving. Both demonstrate the interaction among institutions and exogenous factors, such as a population decline.

Fourth, the key players in their systems are a blend of individuals and collective action. For Commons, individuals are constrained and liberated by collective action; they also can change formal and informal rules, especially such pivotal individuals as judges and managers. For North, economic activities are based on individual decisions, these are constrained by rules and behavior codes. Individuals' perceptions depend on their learning processes, which are decisively affected by ideology.

Fifth, transactions are more than physical exchange. Both men assert that, in a complicated modern society, a transaction involves transfer of ownership and, thus, the state and legal system. North's three kinds of transaction (exchange) – personal, impersonal, and impersonal with third party – are not incompatible with Commons's bargaining, managerial, and rationing transactions. For example, in medieval times, most transactions were North's impersonal exchange without the state but were restricted by collective action, such as the overt market, as in Commons's managerial and rationing exchange.

V. Conclusion

Although the analytical processes of Commons and North contain different

features, I believe they share a common spirit that enables their followers to learn from each other. For example, it would not be difficult for the Commons system to absorb North's concept of transaction costs, which would facilitate communication between Commons's theory and more current work. Also, North's system could absorb the negotiational psychology and legal decision making of Commons which would make North's system more realistic and robust. In terms of analytical processes, each camp could be enriched by integrating some strengths in the other system.

Chapter 7: The Historical Explanation of the Great Transformation to Capitalism in Commons and North

I. Introduction

Although the preceding chapters have dealt with the various aspects of Commons's and North's institutional theories, the practical and empirical work of these men is at least as important as their theory. Indeed, "Commons derived his theoretical insights from his practical, historical and empirical studies, particularly in the field of labour relations and in various areas of social reform" (Samuels 1987a, p. 506). Commons was a principal architect of the Progressive program in Wisconsin under Governor LaFollette and was an advisor to both state and federal government throughout his career. He helped draft landmark legislation in many fields, served on various federal and state commissions and boards, and was a leader in many academic and reform organizations (See chapter 2 and Samuels 1987, p. 506).

North wants to understand what makes economies work badly or work well, and he deems economic history the best field for his inquiry. In the early stage, North's cliometric approach used orthodox theory to reappraise economic history. More recently, his concern has shifted to institutional theory, but his ultimate interest is still economic history; this makes him different from many orthodox economists, whose main focus is beautiful formalism. Unlike Commons, North has not been extensively involved in practical activities but his historical works are very broad and significant.

Therefore, in addition to the preceding theoretical comparisons, it is necessary to exam practical and empirical studies of the two men. Both have researched historical topics. North's economic history ranges from the very beginning to the present, while Commons's Legal Foundations of Capitalism (1924) starts with feudalism and ends with the 1930s.

Commons's views the rise of capitalism in three ascending stages: the transformation of land, or rent bargaining; the transformation of business, or price bargaining; and the transformation of labor, or wage bargaining. In *Structure and Change in Economic History* (1981), North divides his ideas into periods: first economic revolution, the ancient world, feudalism, early modern Europe, the Industrial Revolution, second economic revolution and the American economy.

Although wage bargaining is a very important stage in Commons's explanation of capitalism, he devotes much attention to analyzing the proper meaning of labor and the relationship between labor unions and corporations, which has no correspondence in North's work. Therefore, I will not give much space to Commons's wage bargaining. Likewise, even though the concepts of a first and second economic revolution are among North's outstanding contributions, I will not discuss these topics, since there is nothing comparable in Commons. In sum, the focus will be on the great land transformation and the great business transformation. I shall restate the historical accounts that Commons and North give for those two periods and compare them along five dimensions.

II. The Decline of Feudalism

A. Commons's story

Commons begins by analyzing the term "property." "The primitive notion of property as the exclusive holding of things for one own use and enjoyment" (1924, p. 215). In the early days, property was "not only dominion over things, but was actually dominion over a part or the whole of human behaviors" (ibid.). Property was not separated from sovereignty, as William the Conqueror was both landlord and King. This political-economic character was extended to other social classes; a freeman was both an owner and a lord.

Commons argued that the two sources of property were royal prerogative and common law. In the 11th century, some local customs and jurisdictions had already formed, but real common law did not get exist then. The prerogative was the main origin of property. Also, two kinds of economic privilege were granted by the principal: grants of land and grants of exclusive markets and corporate franchises, which eventually transformed into the control of taxes and currency. Each grant carried a promise of sovereign powers and immunity in exchange for loyalty and service to the king, but subjects only had promises rather than the rights to property. The terms of grants could be changed arbitrarily. The barons endeavored collectively to convert these promises into rights, as reflected in Magna Carta, and battled increasingly for fixed and regular terms. Their struggle was not successful, and the royal prerogative reached its peak in the reigns of Henry VIII and Elizabeth.

Meanwhile, the common law grew gradually. Its seeds – local assemblies of freemen -- were planted before 1066. After the Conquest, the free tenants still had certain customary rights, such as contract rights, inherited from pre-Conquest times. As local Lords became more powerful, new conflict emerged. In the reign of Henry II, Commons observes, the king began to send out circuit judges, who assembled juries to help them justice in determine both custom and rights. The manorial courts consequently faced challenges from the king's common law courts. The competition between king and nobles finally led to the wars of the barons in the 15th century. The King eventually triumphed ; he created his own special courts, such as the Star Chamber and the Court of Requests, and prohibited the nobility from maintaining armed bands of retainers.

Commons argued that the economic focus in this period was rent bargaining, involving both economic rent and taxation. At the beginning of this period, there were not differentiated, since the king and barons were both landlord and sovereign. But with the emergence of money, governmental rent was extracted from economic rent. The differentiation of rent and tax was a process that transferred the use value of commodity to exchange value. Eventually, this transformation indirectly facilitated restrictions on baronial armies and courts.

Having taken over the army, the king had to extract revenue from his main sources -- the chief tenants. New rent bargaining emerged between the king and tenants, who sought fixed and regular money payments rather than arbitrary confiscation. Since Parliament was controlled by the landlords, bargaining shifted away from isolated individuals to collective actions, and the "great contract" was a major battle between king and Parliament. The King's arbitrary rents were not abolished by Parliament until the Restoration in 1660, which completed the great transformation in rent bargains that began with Magna Carta in 1215.

B. North's story

North also has explored the rise and decline of feudalism. In addition to population change and warfare, he cites changes in the economic-political structure as a major factor in the decline of feudalism.

Population growth in the 12th century caused generally diminishing returns and scarcity. The price of labor dropped while the price of land rose, and this relative price change led to exclusive use of private land and overexploitation of the manorial common fields. The response was to restrict access, which in combination with other factors led to the development of an extensive body of land law. The plague in the 14th century so reduce the population that land was again abundant and the laborer scarce. The severe competition among landlords in attracting laborers increased the liberal terms for tenants. Certain rights were conceded, and certain servile obligations were no longer exacted. Not only freemen but also villeins came under the king's justice, which finally resulted in the manorial courts losing most of their jurisdiction.

Warfare, North argues, also gradually resulted in a drastic change. "Between 1200 and 1500 the many political units of western Europe went through numerous conflicts, alliances, and combinations as the local manor gave way to the emerging nation-state" (North 1981, p. 138). The growth of the state and decreasing revenues, owing to population decline in the 14th and 15th centuries, forced the king to adjust his attitude regarding finance. Most states faced a crisis if not bankruptcy. The king had to grant privileges to his vassals and protect their trade and commerce prerogative. Eventually, what the king had to concede in exchange for tax revenue was determined by his bargaining strength vis-a-vis his constituents.

III. Business in Early Modern Europe

A. Commons's story

After the great transformation in agriculture, Commons turns his attention to the

business transformation. "The gilds were the spots where capitalism had its origin" (1924, p. 226). The guilds were a "collective lordship" of barons who could create virtual governments, with assemblies, legislatures, courts, and executives, and with power to impose fines and imprisonment.

Yet their prerogative grew, guilds increasingly had to defend themselves against challenges from social custom and interest groups. Thus, Commons claims that the guilds were a defensive stage of capitalism, and conflicts reached such a point that, in 1599, the common law courts deprived guilds of their right to a closedshop. In 1602, in the case of monopolies, Elizabeth revoked the most unpopular patents. Gradually, the courts built a common law of price bargaining and capitalism entered into its offensive stage.

Commons asserts that another severe battle was the hundred-year struggle over the Act of Settlement. Large numbers of farmers and businessmen struggled collectively and in 1616 overthrew the king and established a government, although the king was later restored. The outcome was Act of Settlement in 1700. In the meantime, the common law of business was incorporated into the common law of agriculture, and the courts became independent of the king.

Commons argues that so long as the monarch was above the common law, a hospitable environment for business was impossible. For example, business expectations require stable system of property rights, and royal arbitrariness created uncertainty. Although the battle to curb monarchical prerogative began with Magna Carta, the process was slow. The battle between Parliament and the king successively reduced the monarch's power over franchises and currency. Moreover, the King could not increase tax without the consent of Parliament. The Act of Settlement abolished the King's prerogative courts, such as the Star Chamber, and a positive environment for business activities could gradually be built.

B. North's story

North examines such issues as why some countries escaped the crisis in the 17th century and the real impetus behind the Industrial Revolution. His exploration is closely related to the structural changes in institutions. Similar to Commons, North stresses the important role of guilds. In the middle period of feudalism, towns gradually emerged, and they established their own body of law and their own commercial courts. Guilds became the pervasive organizations to serve merchants and "provided an earlier set of rules with private policing for the protection of the property of their members" (1981, p. 133). They were a voluntary private association at the beginning but became an inseparable part of the state.

While the medieval world suffered through the second economic cycle,⁶² the major Western countries faced the Malthusian crisis. A few, such as France and Spain, eventually succumbed to it, but England and the Netherlands fared well. North argues that the key to success or failure was whether the property rights system adjusted sufficiently to create enough incentives to support productive and inventive activities. An effective property rights system depended on the interactions among the crown, guilds, and Parliament.

In France, where the economy was highly regionalized and under heavy financial pressure, the crown was forced to levy taxes on every region. As the guilds had already f

⁶² North's first cycle of the medieval world, characterized by population growth, famine, pestilence, and economic contraction, was between the twelfth century to 1475. The second cycle, an expansion followed by a contraction, was from 1475 to the seventeenth century (North 1981, p. 147).

organized to defend their interests and regulate members' activities, the crown could use them to garner stable revenues in exchange for granting them prerogatives. In order to monitor and manage the system, however, the crown had to create a huge bureaucracy. Accordingly, the incentive for stimulating invention and innovation was quite low. Ultimately, the crown sacrificed market efficiency to its fiscal needs.

In England, the British monarch was no less greedy, but the property system was different. From the time of the Tudors, the crown had been selling grants and privileges. The crown was not popular with the nobility and clergy, as the monarchy had been progressively consolidating its power and increasing its revenue. Therefore, "the Tudors relied for their support on the rising merchant class and the House of Commons where, along with the landed gentry, this class was well-represented" (1981, p. 155). Parliament thus was cultivated out of expediency, but nevertheless it later restricted the king's access to new sources of taxation.

North maintains that the struggle over the power to tax was a long process, beginning in the 15th century

A tripartite struggle over the extent of the tax developed between the crown, the merchants exporting the wool, and Parliament, where the wool growers were well-represented. The outcome of this struggle was a compromise with something for everyone. The crown received the revenues from the tax, but Parliament won the right to set the level of the tax, and the merchants achieved a monopoly of the trade. The wool monopoly eventually disappeared, and the wool tax became a minor source of government revenues; but Parliament's exclusive right to tax endured (North 1981, p. 155).

Accordingly, the reason for England's success in the Malthusian crisis was that Parliament controlled property rights.

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North then moves to the Industrial Revolution. He asserts that the stereotypical view of a radical break with the past must be reconsidered. It was the evolutionary culmination of a series of events, and the real revolution did not occur until the last half of the 19th century, which was much later than the conventional dating the Second Economic Revolution, the wedding of science and technology. Indeed, North stresses the importance of scientific knowledge rather than technology. "It is only in the last one hundred years that advances in basic knowledge are necessary to continued technological change" (1981 p. 164). The main reason for the late emergence of basic knowledge was the failure to develop a property rights system that encouraged innovation. In 1624, the establishment of the statute of monopolies in England was a starting point,

but a systematic set of incentives to encourage technological change and raise the private rate of return on innovation closer to the social rate of return was established only with the patent system.... More important than patent law per se is the development and enforcement of a body of impersonal law protecting and enforcing contracts in which property rights are specified (1981, p. 165).

In addition to the importance of common law, North also emphasizes the critical influence of evolving organizations and a new ideology. The changes in organization resulted in improved monitoring and supervision of workers, specialization, better measurement of input contributions, and technological changes. Ideology specified a new discipline for the revolution.

The measurement costs of constraining behavior in the absence of effective ideological constraints would be so high as to make the new organizational forms non-viable. Both the political and the economic changes described above created impersonal factor and product markets and broke down old ideological loyalties. Factory discipline had to be supplemented by investment in legitimating the new organizational forms. The Industrial Revolution was characterized by sustained efforts to develop new social and ethical norms (1981, p. 170).

IV. Comparing the Stories of Commons and North

The preceding descriptions truncate North's framework more than Commons's, but these brief accounts still review two diverse "melodies." Indeed, the stories arise from different motivations, are constructed from various historical elements, use different set variables, employed different analytical processes, and take diverse historical approaches. Superficially, they seem unrelated. In many aspects, however, arguments not only do not conflict but also appear complementary. I will support this statement by examining five aspects: the questions asked, key historical events, explanatory variables, analytical processes, and historical approach.

A. The questions

Commons believes in evolutionism and holism. He is interested in the general foundation of institutions and is concerned about change and collective action. Therefore, Commons asks a number of questions. What are the evolving stages of capitalism? What causes changes in legal foundations in different stages? How do legal, political, and economic power interact in the transformation to capitalism? How does the commonwealth build an agricultural legal foundation? How does modern business society build its property rights? What is the consequence of a change from individual bargaining to collective actions? What is the institutional effect of the emergence of money? What affects the definition of a legal term, such as "property" and "labor"? How do the common law courts form through consecutive struggles?

North enthusiastically exploits neoclassical theory to explain economic performance through time, but he does not restrain himself to that framework. He raises such questions as the following. What kind of political-economic structure accounts for economic performance through time? What are the evolving processes through which transaction costs, property rights, and economic performance interact? How do the state and ideology affect structure and change in economic history? What caused the rise and decline of feudalism (and/or modern Western economies)? Why did some economies in the 17th century survive a Malthusian crisis and others did not? How should we reconsider the Industrial Revolution? Does innovating technology lead to changes in organizations, or vice versa?

The questions asked by reflect their distinct versions of Western economic history. While Commons is interested in the legal foundations of the economy, North is concerned with economic performance under political constraints. Their methodological differences aside, these views are not incompatible.

B. Historical events

As Commons tells the story, key historical events are the Norman Conquest; Magna Carta; the reigns of Henry II and Elizabeth I; stable money; the Restoration in 1966; guild franchises; loss of guild privileges; the monopoly statutes; the Act of settlement; the revolution in 1616; the rise of Protestantism and commerce; the victory of Parliament in 1640 and 1689; and the American constitution in 1787.

For North, the important historical events are famine; plague; warfare; land law; the battle between the crown and manorial courts; guilds; international trade; military technological change; the tripartite battle over wool rights; settlement of the new world; and frontier settlement movement.

The two men examine similar historical periods but choose different historical events. Commons emphasizes power struggles and legal change, while North stresses economic and environmental factors. Yet, just North does not ignore power-legal issues, Commons does not neglect economic background. North investigates land law, crown courts, patent law, and monopolies. Commons explores how stable money induces the shift from use value to exchange value and how taxes change the idea of property.

It is interesting that observation is that historical events are prominent in Commons's interpretation, while North's main actors are concepts or variables. For example, Commons uses the Norman Conquest a watershed in the development of the common law; the loss of guild privileges as the trigger for capitalism's offensive stage; and the Act of Settlement as decisive in consolidating the common law of business and agriculture. From North's perspective, the more important factors are such general concepts as market expansion, the change in relative prices, transaction costs, incentives, population, and warfare. Commons's story is constructed out of numerous detailed historical cases, while North's narrative is full of ideas closely connected to his theoretical models. As noted previously, this reflects their methodological preferences, but the two methods are not necessarily conflicting. I will analyze this point in the section on historical approach.

C. Explanatory variables and main theories

Although Commons's story is not mainly constructed from abstract variables, his historical interpretations are implicitly dominated by his theoretical concepts. In fact, it is

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impossible to appreciate his story without understanding his key concepts. As discussed earlier, these are: going concerns, working rules, collective actions, bargaining, transactions, political power, moral power, negotiational psychology, custom, property, liberty, values, government, courts, expectation, futurity, uncertainty, and scarcity.

The key variables for North are: resource allocation, scarcity, efficiency, relative price changes, rates of return, expectations, information, transaction costs, property rights, population, technology, scientific knowledge, warfare, economic growth, international trade, institutions, organization, state, common law, ideology, path dependence, mental constructs, and learning process.

The sets of variables differ, but the components are similar in many respects -transactions, property rights, institutions, organizations/going concerns, the state, customs, and ideology. They both consider scarcity, futurity, expectation, uncertainty and information as important factors in constructing economic history. In chapter 4, I showed that most of these variables have similar content, or are not incompatible.

Commons and North also, more or less, derive their stories from their main theories about government, social control, and property rights. As I showed in chapter 6, these theories have many commonalties, and each can be enriched by absorbing the theoretical strengths of the other.

D. Analytical processes

In the stories of Commons and North, there is a close mapping between their main analytical processes, analyzed in chapter 6, and their historical explanations. In Commons the main logic is that environmental changes (scarcity, futurity, custom) cause conflict to arise in various transactions (bargaining, managing, and rationing transactions), so that barons, farmers, and businessmen seek to resolve these conflicts through collective bargaining (common law courts, parliament); eventually, the new working rules are set (incorporeal goods became property, economic rent was separated from taxation), and institutions continuously evolve. Indeed, this is the outlined in Figure 4.

For North, the analytical logic is that cultural and other historical factors (belief systems and warfare) decide the institutions, which in turn decide the transaction costs. The ruler will set up property rights based on transaction costs (cost of levying taxes). Only effective property rights (as in the British and Dutch cases) create an incentive structure that induces production and trade. Eventually, economic growth and other exogenous factors (population and warfare) cause institutions to evolve continuously. This is the picture sketched by Figure 5.

Therefore, the commonalties analyzed in Chapter 6 can be applied to the historical explanations given by Commons and North. Those explanations can be further compared by examining such subprocesses as property rights and the political-economic nexus. These subprocesses also have causes, and evolve as a number of events and variables interact.

Property rights. Both Commons and North view property rights as a crucial factor in the transformation to capitalism. Indeed, their stories can be seen as revolving around them. I consider three dimensions: (1) the source of property rights, (2) the evolution of property rights, and (3) the effect of property rights on social performance. Commons's works focuses on the first two, while North concentrates on the last two.

Commons is one of the few economists who practices rhetorical analysis He typically starts by searching for the original definition of some key word such as "property" or "labor." He argues that the meaning of a word always reflects the conventional value, contemporary social interests, and potential power competition. The meaning of a word is by no means fixed; it reflects the shift in bargaining power among different interests. The search for the meaning of a word reveals the history of that bargaining power. In examining the great transformation to capitalism, Commons starts with a survey of the legal definition of property and finds two sources of the modern notion -- royal prerogative and common law. Next, he finds that property and sovereignty are one, that is, dominion over things and persons. Thus, his discourse analysis shifts to the notions of ownership and lordship, and then to the scope of the "sole and despotic dominion," prerogative, promises and rights, and so forth.

In combination with his discourse analysis, Commons continuously focuses on how property institutions change and evolve. In rent bargaining, he traces the battles from the Conquest to the establishment of the Commonwealth: the conflict between the king and his subjects, and the fight between the king's common law courts and the manorial courts. In the period of price bargaining, the power struggles were between the guilds and the king and among the king, farmers, and businessmen. All these battles affected the degree of change or continuity in the existing property institution.

As discourse analysis is not a research tool for North, he devotes little space to the meaning of "property," although his theory of ideology also implies that the political and economic changes will cause that meaning to change. Like Commons, however, North probes the evolution of property rights. For example, he examines the disintegration of feudalism due to famine, plague, and warfare; the establishment of a new set of property rights dependent on the bargaining strength of monarchs and constituent groups; the

sticky relationship between the guilds and property rights in the business transformation period; the effect of rising land values on property rights as scarce resources were used more efficiently; and how warfare affects the king's revenue and finally results in property rights being shared between the private sector and the state.

Undoubtedly, Commons recognizes the decisive role of property rights in explaining the performance of a society both across time and across countries, but he does not develop this thread in his historical explanation. North is very interested in this topic. For example: in explaining why England and the Netherlands escaped the Malthusian crisis in the 17th century but France and Spain did not, North points to their system of property rights, in particular, whether it could create enough incentives to raise the rate of innovation and investment.

Legal foundation. From another viewpoint, both Commons and North tell stories about change and continuity in the political-economic nexus. Because that nexus is complicated and not easy to analyze, for simplicity, I will concentrate on the legal system, specifically, it origin, evolution, and effects. As I will show below, Commons focused on the first two stages, while North's is mostly concerned with the last.

Commons devoted much effort to tracing the theory of law.⁶³ Personally, he preferred the Coke, Blackstone, and Carter tradition, which asserts that law was founded in the customs of people. He argued that early English law emerged from the country assemblies of freeman meeting before the Norman Conquest. At that time, three institutions already had been established -- legislation, courts, and executives -- , but no

⁶³ As illustrated in Commons's history of wage bargaining (1924, p. 298).

written records were kept. Later on, the influence of common law grew gradually and became one of most important institutions in capitalism.

Commons also was much interested in the evolution of the legal system. For instance, he analyzed how the struggles between the manorial courts and fostered the king's common law courts; how the wars of the nobles in 15th century hastened the demise of manorial courts but facilitated the birth of the king's prerogative courts. A special feature of Commons's legal analysis is that he was not solely interested in exploring the evolution of laws, but also emphasized the organization of the courts and the will of judges. The Supreme Court had a crucial role in his interpretation of American institutions, and ideology and the volition of judges deeply influenced the evolving pattern of laws.

Unlike Commons, North scarcely explores the origins of the legal system, but he does probe the evolution of law and courts in some places. For example, he traced out the establishment of patent law and other complementary commercial laws. He also analyzes the evolving attitude of the Supreme Court and the judiciary (1981, p. 198). The most interesting part of North's legal analysis, however, is the influence of the judiciary. For example, "trade mark, copy right, trade secret, and patent law are all designed to provide some degree of exclusive rights to the inventor and innovator" (North 1981, pp. 164-5). He insists that technological change was speeded up partly by the Statute of Monopolies in 1624 and the establishment of the patent system later on. These developments raised the private rate of return closer to the social rate, making the second economic revolution possible.

Although North accentuates the influence of the judiciary, his view of legal foundations concentrates on the economic side. He claims that creating enough incentives for innovators and facilitating free trade without the interference of monopoly are the major functions of a legal system. Therefore, the judiciary is not as important as the economic or political elements in North's analytical framework. The legal side becomes a subbranch of property rights, not a general foundation of capitalism in North's story. It plays a passive rather than an active role.

In Commons's interpretation, the judiciary is fundamental. Laws not only provide an incentive for commercial innovation but also enable political bargaining and economic activities to take place. Therefore, the legal side is more basic than the political and the economic side in Commons's framework.

In both these subprocesses – property rights and legal foundation -- North's analysis differs from that of Commons. Commons is more interested in exploring the origin and evolution of property rights, while North focuses on their evolution and effect. Whereas Commons stresses the origin and evolution of the legal system, North concentrates on its effect. Overall, I find that their perspectives are by no means in conflict.

E. Historical approach.

North was an early advocate of the New Economic History, which stresses the theoretical structure of historical interpretation and asserts that historical explanation must be the basis of testable hypotheses. He rejected the traditional historical explanation and preferred to apply neoclassical economic theories and quantitative methods to the

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reconstruction of economic history. In his early works, statistical data and econometrics were common.

North gradually found that the framework of the New Economic History was deficient in explaining historical evolution and economic performance through time. After the 1970s, he abandoned cliometrics. North noted two flaws in neoclassical theory:

Neo-classical economic theory has two major shortcomings for the economic historian. One, it was not designed to explain long-run economic change; and two, even within the context of the question it was designed to answer, it provides quite limited answers since it is immediately relevant to a world of perfect market-- that is, perfect in the sense of zero transaction cost: the cost of specifying the enforcing property rights. Yet we have come to realize that devising and enforcing a set of rules of the game is hardly ever costless and the nature of these costs is at the very root of all economic systems' problems (North 1973, p. 2).

In addition, he found that "neoclassical economics applied to economic development or economic history may account very well for the performance of an economy at a moment of time or, with comparative statistics, contrasts in the performance of an economy over time; but it does not and cannot explain the dynamic of change. The major source of changes in an economy over time is structural change" (1981, p. 57).

North eventually created a new framework, well known as the new institutional economics. Institutions are no longer fixed; societies are not necessarily efficient; the state and ideology have active roles; and human mentality is a complicated factor. All these dimensions challenge his earlier framework influenced by neoclassicism.

Commons's historical approach is influenced by the German Historical School. He sees history as both the reality of change and the ongoing process of becoming (Biddle and Samuels 1994). His major method of interpreting history is the case study. Therefore, his story is mainly constructed with massive detailed historical events instead of a few abstract variables. Yet, Commons does not completely reject generalized theoretical interpretation, which is North's major approach. Commons's case study method is closely related to his holism. According to Biddle and Samuels (1994, pp. xvii-xviii),

individual cases (parts) are examined in search of general themes or shared principles that characterize the system or class of cases from which they arise (the whole), with a belief that a study of general themes or shared principles and their interrelationships will bring a clearer understanding of each individual case. At a deep level, Commons believed that objects and processes of interest (such as transactions or going concerns) existed and could be perceived as both wholes made up of integrated parts and as parts interacting with one another within larger wholes (Biddle and Samuels 1994, pp. xvii-xviii).

North may not be a disciple of holism, but his later generalized institutional theory goes far beyond a broad, ideological generalization (Biddle and Samuels 1996, p. 3). Therefore, Commons's case study method by no means conflicts with North's generalized theoretical method.

Another feature of Commons's historical explanation is that he stresses "continuity" both in the reality of change and in the ongoing process of becoming. His history is constructed of a continuously transient status quo and substantial changes. Coincidentally, the later North also stresses the importance of continuity in economic history. In *Institutions, Institutional Change and Economic Performance* (1990, p. 3), North wrote: "I then outline a theory of institutional change not only to provide a framework for economic (and other) history, but also to explain how the past influences the present and future, the way incremental institutional change affects the choice set at a moment of time, and the nature of path dependence." Path dependence is a creative idea of North's later work. Increasing returns of institutions and imperfect markets with significant costs are two characteristics of path dependence. Although this concept comes originally from ideas about technology, North insists that both social and economic evolution exhibit the characteristics of path dependence. "Path dependence means that history matters. We cannot understand today's choice without tracing the incremental evolution of institutions" (North 1990, p. 100). Obviously, this concept is consistent with Commons's idea about continuous change.

V. Conclusion

This chapter has compared features of Commons's and North's historical interpretation. First, base on a common topic, the great transformation of capitalism, I find that they raise different questions, which reflects their distinct visions of Western economic history. Nevertheless, Commons's interest in legal foundations complements North's exploration of economic performance through time.

Second, the two men examine similar historical periods but choose different events. Their selection of materials is complementary since Commons emphasizes power struggles and legal change, while North stresses economic and environmental events.

Third, Commons and North tell stories that use the theories derived from their respective systems. As I shown in chapter 5, these theories share many features and each can be enriched by absorbing the strengths of the other.

Fourth, in terms of their main analytical processes, North and Commons differ. With regard to property rights, Commons stresses their origin and evolutio, while North focuses on their evolution and effects. As to legal foundations, Commons again focuses on origin and evolution, but North again emphasizes the effects. Overall, their perspectives by no means conflict.

Fifth, Commons and North adopt different approaches in reappraising economic history. Nevertheless, Commons's case study is compatible with North's general modeling, and the argument of both men's regarding change and continuity are compatible.

Overall, this comparison of the historical interpretations of Commons and North in five different aspects reveals that, in many ways, their empirical works can be view as complementary.

CHAPTER 8: Integrating the Institutional Economics of Commons and North

I. Introduction

Institutional theories are diverse and multifaceted. Each school has its own perspective and preferred tools, and none claims that its version of institutional economics is complete and mature. Commons viewed his work as a supplement to the orthodox system and believed that institutional economics "cannot separate itself from the marvelous discoveries and insight of the classical and psychological economists" (Commons 1931, p. 648). North does not consider his institutional theory complete and has shown an appreciation for two others: the work of James Buchanan and others on rent seeking and Mancur Olson's distributive coalitions framework (North 1984). Indeed, he intends to integrate them into a general model.

Altogether, the approaches of Commons and North are largely complementary, but we are still far from incorporating a convincing theory of institutions into the body of economic theory. Although NIE represents some advances, institutionalism has limitations, such as no overall analytical framework for the pluralist state. A general model of modern political economic organization has yet to be formulated (North 1984, p. 40).

II. Toward a Synthesis of the Institutional Economics of Commons and North

An integration of these variants of institutional economics could occur on several levels: the grand picture, analytical processes, and specific theories, and specific concepts. The attempt would be a challenge and would require detailed work. Here, I sketch a

starting point and then note some possible directions for further work.

A. The grand picture of institutional economics

The central issue for Commons is workability. He is concerned with how conflicts of interests can be resolved so that (1) workers and consumers can gain reasonable rights, (2) capitalists can pursue their goals, and (3) the economic system can be viable. His institutional economics is constructed from theories of government, social control, property rights, discourse analysis, institutional change, and so on.

North's central issue is growth and stability. What causes persistent economic growth? Why do many inefficient systems continue to exist? His institutional system is built on theories of the state, ideology, property rights, institutional change, cognitive behavior, and so on.

An integrated system would concern both workability and growth. That is, the accumulation and distribution of wealth are no less important than the reasonable opportunity to work and pursue interests. In addition to theories of government, social controls, property rights, and institutional change, the new system would have theories of legal decision making, discourse analysis, psychological analysis, growth in the stock of knowledge, and cognitive behavior.

The integrated system would use both general modeling and case study methods; modern positive economic tools, such as logical structure and testable hypothesis; and rhetorical analysis. Although structural issues could be important feature, so would such practical concerns as problem solving, current policies, social reforms and historical interpretation. The major players in the new system would be institutional individuals, rather than the conventional self-interested maximizer, because people's subjective perceptions are heavily affected by the whole circumstance in which custom, ideology, and cultural factors operate. The basic unit of analysis could be a transaction, a dynamic process in which economic resources, psychology, property rights, working rules, government, and power mutually interact.

Resource allocation, consumption, production, trade, distribution of wealth, and economic growth would still occur through markets (demand and supply), but these could be seen as a function of the institutions that result from the interplay between institutions themselves and transaction costs, custom, ideology, government, and those who control the government (both pivotal individuals and organizations). Moreover, resource allocation and economic growth in turn affect the form of markets and the structure of institutions, which affects transaction costs, custom, property rights, ideology, power, and so on. Thus, the circular and multiple interactions are continuous.

B. Main analytical processes

In chapter 6, I found that the main analytical processes of Commons and North have a similar structure, that is, both stress the mutual interaction among institutions, working rules, and property rights. Each has distinctive features, such as Commons's transactions argument and conflict resolving mechanism, and North's transaction costs and their connection to other aspects of the structure. An integration of their processes would reveal the following picture.

Various formal and informal rules (organized or unorganized institutions) determine property rights as well as transaction costs, which include measurement and

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enforcement costs. There is also a mutual influence between property rights and transaction costs, which not only are a function of the structure of property rights but also, together with institutions and other factors, determine what is property, who has rights, and the structure of property rights.

A well-specified system of property rights offers an incentive structure that will encourage numerous individuals and (going concerns) to pursue interests, so that resource allocation, consumption, production, and various economic activities are able to proceed.

All these activities work through the basic unit of economic activity, a transaction. Transactions require an institutional structure with a system of property rights, various rules, government, and power. In a transaction, multiple participants (more than two), including the state, will be involved. The participants will use various strategies to bargain and negotiate. The outcome of the transaction will depend on the players' resources, including their physical resources, legal status, personalities (mainly will and psychology), and power.

If the transaction is routine, it will be completed as soon as an agreement is set and implemented. If the transaction is a limiting one, then it is likely that conflicts or disputes will emerge, partly because of a lack of clearly defined property and rights (high transaction costs). The government in general and the judicial system in particular are the instruments for resolving the conflicts. In the courts, the critical role lies with the judges, whose decisions are heavily affected by their habitual assumptions, personality, and beliefs about what constitute reasonable value.

In the process of resolving conflicts, a body of rules, definition of property, and system of rights is made (or remade) by the courts; thus resource allocation, production,

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trade, and other economic activities can proceed in an orderly fashion, which eventually will lead to economic growth. The newly made laws, the increase of wealth, and such other factors as population expansion and technological innovation will affect the existing transaction costs, property rights, functions of government, and who controls the power, so that this mutual interaction causes the institutional structure to evolve continuously.

This integrated picture contains several other elements. First, the mutual interaction between institutions and organizations determines the cost of transactions, which in turn partly influences the form of organizations (going concerns).⁶⁴ Organizations purposefully pursue their interests based on the existing structure, but they also seek to lower transaction costs and to alter the rules in order to gain influence over the structure of property rights. That is, organizations eventually will affect institutions. The mutual interaction among organizations, transaction costs, and institutions keeps the system going, and organizations, as North claims, are the agents of institutional change.

Second, the mutual interaction between government and institutions. The state tends to maximize interests for those who control it by setting the working rules and a system of property rights, but it faces constraints from transaction costs⁶⁵ as well as institutions. At the same time, the rules and rights set by the state affect the transaction costs, the competitions among various powers, and the institutional structure.

Third, there is mutual interaction among institutions, ideology and individuals. Institutions are partly a function of ideology (norms, customs, and culture) and use ideology to exercise social control. Ideology shapes shared mental constructs that affect

⁶⁴ For example, if transaction costs are very high, certain kinds of organizations, such as large mutinational corporations, will be not able to emerge.

⁶⁵ For example, owing to the high costs of monitoring and enforcement, medieval rulers used the guild

people's subjective perception, so that the institutional structure is seen as viable despite high transaction costs. Yet, ideologies are shaped by humans, especially those pivotal individuals and organizations that control power (a part of institutional structure), and successful ideologies affect the existing system, so that property rights, rules, government, and power structure will change.

C. Transaction and transaction costs

As analyzed in chapter 6, Commons and North have a concept of transaction that shares many features. For example, a transaction is more complicated than a pure commodity exchange, and a transaction inevitably involves many participants and a third party (North's term) -- the state in general and the court in particular. With respect to this latter concept, however, Commons and North develop their arguments in different directions. Commons believes the dynamic process of transactions shows the mutual interaction among circumstances, property rights, working rules, power, and psychological factors. North uses transaction costs to build the mutual relationship among the state, organizations, ideology, laws, and property rights.

Their ideas are complementary, and the integrated concept of transaction would have the following components.

Type. The types of transaction in modern society are bargaining, managerial, and rationing transactions. Each type involves different participants with different legal status. In a bargaining transaction, the participants are legal equals. In the other two types, one side is legal inferiors, and the other side is a legal superior. The difference between a managerial and a rationing transaction is that the latter makes rules which do not allow

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the legal inferior to bargain.

Another classification separates routine and strategic transactions. The former refers to numerous daily repeated economic transfers. If a transaction occurs in a new circumstance, then it belongs to the strategic category.

Participants. There are multiple (more than two) participants in each type of transaction. In a bargaining transaction, there are at least five participants: a real buyer, a potential buyer, a real seller, a potential seller, and an arbitrator. In the other two types, multiple legal inferiors face a legal superior.

Behavior pattern. Each transaction, especially the strategic kind, inevitably involves negotiation and bargaining. Therefore, information, expectation, and strategies are crucial. In addition, owing to uncertainty, psychological factors play a decisive role. Corresponding to the differing legal status of participants, the psychological factors underlying each type of transaction are: persuasion and/or coercion (bargaining transactions); command and obedience (managerial transactions); and argument and pleading (rationing transactions).

Operational background. A transaction must proceed under an institutional structure in which the definition of property, various rights, the working rules, government, power, and ideology are the key factors. Also, the abundance or scarcity of resources and future expectations are important.

Transaction costs. Every transaction includes "the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreement" (North 1990, p. 27). If these costs are too high, then the transaction is difficult to process. Owing to significant transaction costs, it is impossible to have

perfectly specified working rules to govern all transactions. Hence, many conflicts or disputes arise.

Mutual interaction. On a transaction, many forces meet and mutually interact through the participants. The interaction was described in the section on main analytical processes. Here, three points are relevant. First, participants will use their physical and mental resources, including psychology and power, to affect the outcome. Second, the outcome will be worked out by collective bargaining through the courts, where, again, many forces are involved. Third, the outcome will affect the existing structure of property rights, working rules, transaction costs, ideology, government, and power to control government.

III. Suggestions for Further Synthesis

In addition to the preceding attempt, there are other ways to integrate both sides. Below, some suggestions are offered regarding different possibilities.

A. The Commons system absorbs North's ideas

1. Structural theoretical framework.

Commons does not deny the importance of structural theory or the effectiveness of scientific method, but his work has been broadly criticized for its lack of solidity. A stronger structural framework would make further development of his theories easier. The reinterpretion and development of Commons's work from the modern economic perspective is an important goal for his followers. Although North's work is also use descriptive style, it has a solid structure and many insights that are worth considering by the Commons camp.

2. Integrating North's transaction costs.

Commons's theory stresses workability but does not pay much attention to issues of production and growth. The addition of North's concept of transaction costs would enable it to cover not only institutional factors, such as the process of collective bargaining, but also such traditional theoretical concerns as resource allocation and production. It is easy to connect North's transaction costs to the quantitative structure of modern economic theory. They also offer another way, mainly through quantitative measurement, to illustrate the mutual interaction between various sectors in an economy, which would give the Commons system a more orthodox theoretical flavor.

3. Theory of government.

North's competitive constraints include bargaining, which easily can be related to contemporary decision theory, such as game theory. Commons also deals with bargaining, and his ideas could be further developed to connect with modern frameworks. Also, in exploring the causes of ubiquitous state instability, North's inherently inefficient institutions are associated with several external factors -- population, technology, and information; these ideas may offer insights to the Commons camp.

4. Theory of social control.

Commons sees human beings as far more than simple self-calculating animals, but he does not deal with the free-rider problem; North sees it as an inevitable issue in a theory of social control. Furthermore, lately North has built a theory of cognitive behavior to explain how people use information and revise their subjective perceptions through shared mental constructs. Commons's followers may take advantage of this contribution to expand and refine Commons's theory of social control.

5. Theory of property rights.

North's analysis of the different incentive structures embodied property rights proposes an insightful explanation of institutional transitions in prehistory. North's transaction costs, which mainly refer to monitoring, measurement, and enforcement, also are a powerful explanation of how property rights are worked out in a state. Commons's complicated view of transactions might be further developed along this line.

6. Theory of institutional change.

Since Commons does not separate institutions and organizations (going concerns), the latter only implicitly have a role in institutional change. His concept can be enhanced by North's treatment of organizations as agents of institutional change.

7. Modern economic concepts.

North uses many modern concepts to develop his theories: free riders, principal and agent, game theory, uncertainty, incomplete information, interest groups, path dependence, transaction costs, and so forth. In updating the work of Commons, it would be helpful to incorporate these notions.

B. The North system absorbs Commons's ideas

Although North's system is still developing and continually attracts followers, it has weaknesses. It could be made more persuasive by incorporating some of Commons's ideas.

1. Case study method.

Criticized for his lack of attention to the details of real institutions, North may benefit from Commons's practical focus and case study method. The Commons theory centers on working things out, and Commons (1950, p. 145) claims that "the economist's formal theories are elaborated from the participants' tacit theories."⁶⁶ For Commons, in order to resolve practical issues, it is necessary to investigate each case.

2. Legal analysis.

Although North sees the need for a theory of judicial decisions, he does not develop one. Moreover, he is not satisfied with neoclassical legal economics, such as Posner's work. Perhaps North could learn from Commons's legal analysis, in particular his ideas concerning judicial decision making, the Supreme Court, the common law method, the taking problem, and due process.

3. Heterogeneous individuals and human will.

North moves beyond the substantial rationality of neoclassical economics, but the human beings in his model are always passive and homogeneous; they cannot change circumstances and lack will. Both North and Commons assert that individual behaviors are formed and guided by ideology, but Commons regards volition as one of the most significant characteristics of the human being.⁶⁷ Indeed, because of human will, Commons's individuals are pivotal and heterogeneous.⁶⁸

4. Psychological analysis.

A unique feature of Commons's institutional economics is psychology, which differs with the legal status of parties to a transaction and reflects subtle interactions among them. It would not be difficult for North's system to absorb this concept, which

⁶⁶ Commons's participants were mainly farmers, laborers, consumers, bankers, lawyers, and businessmen (Commons 1950, p. 145).

⁶⁷ Commons (1950, p. 180) claims that "economics is a science of will." He also believes that "no method of investigation, however scientific, can have the answers to the puzzles of human progress. Ultimately progress rests with the human will" (1950, p. 114).

⁶⁸ The power of the human will can be seen in the decision making of the Supreme Court. Especially when the minority opinion wins over the majority, it is the judges' will that changes the situation. The importance of human will also can be seen in various transactions in which human volition is as important as economic

would make it more robust.

5. Theory of government.

There are a number of ideas on government that North could borrow from Commons. (1) Government is a useful tool and can play a positive role in the real world. (2) Power is an important instrument for social control. (3) Industrial government is an effective institution for resolving conflicts of interest in the modern world.

6. Theory of social control.

Commons may offer several insights to North concerning ideology. First, judicial decision making is deeply affected by habitual assumptions as well as by volition. Second, collective sanctions, such as moral sanctions, are effective in forcing private opinion to conform with collective opinion. Third, the common-law method of making law by deciding disputes offers insights into legal system changes.

7. Theory of property rights.

Commons's theory of property may be useful to North in several respects. First, property is not given and automatically protected by government; it is an artificial construct and an outcome of power. Second, discourse analysis can show the complicated conflict of interest behind the evolution of the meaning of property. Third, the dual nature of public policies should prompt economists, including North, to reevaluate the traditional dichotomy of regulation versus deregulation and rights versus exposure.

IV. Epilogue

Commons died in 1945, but his theory has continued to be advocated and

developed by his followers. Among them, the most important are Warren J. Samuels, A. Allen Schmid, and Daniel W. Bromley. To facilitate greater communication among institutionalists, the work of the younger generation of in both needs to be examined.

North is still developing his system, but his theories must be scrutinized from a broader perspective than his own works. Some of his concepts are based on other NIE work or borrow from other contemporary economists. Indeed, North's institutional economics was "originated by Steven Cheung and elaborated, modified, and developed at the University of Washington, most notably by Yoram Barzel but also by Keith Leffler, Masanori Hashimoto, and [myself]" (North 1990, pp. 27-8, n. 1). To make further comparisons between institutional theories of Commons and North, it thus is necessary to study the work of others in the NIE camp.

North (1984) has shown the difficulty in communication between the two camps is the status of Commons's theory among new institutionalists. North appreciates three institutional approaches: Buchanan and others on rent seeking, Mancur Olson's distributive coalitions framework, and his own transactions cost approach to institution, but he does not regard Commons's theory as effective institutional economics.

Breaking down this communication barrier is a great challenge for those who hope to see institutional economics develop a broad and diverse foundation. Attempts have been made by Biddle and Samuels (1996), Rutherford (1994b, 1995), and Groenewegen et. al. (1995). Indeed, among others this research joins that effort.

Overall, communication between the two sides will require much effort, and a great deal remains to be done. For example, reinterpreting the theory of Commons in terms of modern theoretical framework is meaningful work waiting to be tackled.

According to North, "we are just beginning the serious study of institutions. The promise is here. We may never have definite answers to all our questions. But we can do better" (North 1990, p. 140).

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