INTERACTION BETWEEN THEORY AND OBSERVATION IN WESLEY C. MITCHELL'S METHODOLOGY

"The curve on which Mitchell's own work was to move can, I believe, be readily interpreted as the intersection of two surfaces: one which represents these environmental conditions and another which represents the propensities of his own mind. A man of his ability was bound to be dissatisfied with the state of things he beheld, a man of his type of ability was bound to look for the remedy in the ocean of social facts of which economists seemed to him to absorb but a few miserable inlets."
Schumpeter (1950, p. 141)

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Abstract

The methodological development of Wesley Clair Mitchell (1874–1948), a central figure in American original institutionalism, is characterized by empirical observation and measurement, grounded in pragmatist philosophical foundations. Mitchell proposed an approach to economic theory based on the systematic interaction between theory and evidence. This paper contextualizes the pluralism of early twentieth-century American economic academia and seeks to situate Mitchell through an examination of his intellectual background. It aims to show how Mitchell combined institutionalism and empirical research to analyses concrete economic phenomena and how, far from being a mere "measurer without theory", he contributed to a pragmatist and original institutional conception of economic science, in which theory and data mutually inform one another. Mitchell's institutional roots are particularly evident in his studies on business cycles. Finally, the article concludes by pointing out his fundamental contribution to the consolidation of macroeconomics as a distinct field of study.

Keywords: Original Institutional Economics; economic methodology; history of economic thought.
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1 Introduction

The work of Wesley Clair Mitchell (1874–1948) has been under methodological scrutiny over the past thirty years. From the position of a mere triumvir (perhaps the least eminent and certainly the least known) in the pantheon of the founders of Original Institutionalism, Mitchell has been rediscovered not only as the important economist he was in his own time, but also as a *theoretical* economist, correcting a longstanding view according to which he had not developed a theory of his own. His methodology required that theory be systematically informed by facts, a stance anecdotally illustrated by his refusal to offer practical advice during the Great Depression, arguing, when questioned by a student in his "Current Types of Economic Theory" course, that he had not yet done "sufficient research to know the answers" (Ginzberg, 1997, p. 371)[1].

Mitchell's methodology developed within the pluralist context of early twentieth-century American economic academia. As will be detailed, his intellectual background at Chicago, under the influence of pragmatist philosopher John Dewey and institutionalist economist Thorstein Veblen, led him to reject the deductive reasoning and psychological hedonism that characterized the neoclassical school of his time. The core argument of this paper is that Mitchell did not view empirical work as an end in itself, but rather as the fundamental mean for developing an economic theory grounded in the observation of concrete phenomena. What distinguishes Mitchell is his conception that theories and data must interact in the process of theoretical construction: theory provides the hypotheses to be examined through empirical work, and empirical results corroborate, correct, or reject old hypotheses and point to new ones. This vision of economic research and theoretical construction is opposed to the hypothetico-deductive view in which data are secondary and employed only at the stage of theory validation.

Mitchell viewed deductive formalism as an obstacle to the investigation of the real problems of the economy. Inspired by Dewey's methodology (Hirsch, 1988), Mitchell believed that theory should emerge from experience, observation, and measurement. This pragmatist attitude is clearly expressed in his own words: "In science and in industry, I have

[1] Mitchell's methodology has been the subject of important studies (e.g., Ginzberg, 1997; Epstein, 1999; Kato, 2021; Cruz-e-Silva & Almeida, 2022; Kappes & Milan, 2023). However, this paper is distinguished by its focus on the systematic interaction between theory and observation in his methodology. We seek to show that, contrary to assessments that label him a naïve empiricist, Mitchell developed a pragmatist and institutional scientific conception, a question that remains relevant in view of the discussions on the "Measurement Without Theory" controversy (Fucidji & Neris Jr., 2026).

said, we do not wait for catastrophes to force new ways upon us. We do not rely upon the propelling power of great emotion. We rely, and with success, upon quantitative analysis to point the way; and we advance because we are constantly improving and applying such analysis" (Mitchell, 1919, p. 230). The emphasis on concrete observation reinforces his refusal to adhere to theoretical models detached from the everyday practice of the economy.

Contrary to the conception of the economy as an abstract system governed by universal laws, Mitchell viewed the economy as a social and historical construction, marked by institutions and processes in ongoing transformation. This perspective requires that the methods of economic science be attentive to change, variety, and the complexity of the real world. The main objective of this article is, therefore, to qualify Mitchell's approach, showing that his methodology, far from being a naïve empiricism or "measurement without theory", is grounded in the systematic interaction between theory and observation. We argue that, for Mitchell, economics is less a set of mathematically deducible relations than a dynamic field of observation and analysis, his empirical work being "always analytical, never aridly descriptive" (Friedman, 1952, p. 238). Such a methodological stance was fundamental to the construction of macroeconomics as a scientific field, as we shall see.

The article is structured in six sections, in addition to this introduction. In section 2, we present the context in which Mitchell is situated, marked by the pluralism of the American academia and rejection of orthodox methodology. In section 3, we recover Mitchell's criticisms of the economic theory of his time and illustrate the influence of Dewey's pragmatist philosophy and Veblen's original institutional economics on the young Mitchell, as well as the influence of his doctoral supervisor in providing a "research problem". In section 4, we trace the evolution of Mitchell's methodological approach. In section 5, we qualify Mitchell's empiricism, highlighting the roles of theory and observation in the study of economic problems and outlining the argument regarding Mitchell's theoretical contribution. Next, in section 6, we present the principal research of Mitchell's career (on business cycles) as the expression of his methodological orientation. The final section, by way of conclusion, presents some considerations on the "measurement without theory" controversy and the relevance of Mitchell's approach to contemporary economics.

2 The American Academia in the Early Twentieth Century

The academic environment in which Mitchell developed his methodological vision was markedly pluralist. As observed by Rutherford (2011, p. 237), Columbia University

became the "leading center for institutional economics between the wars" and hosted a large concentration of institutionally inclined economists, such as J. M. Clark (1884–1963), Frederick Cecil Mills (1892–1964), and Mitchell himself. This concentration of thinkers reinforces the idea that Mitchell's critique of the mainstream was not an isolated stance but part of a robust movement that sought to reform economic science in the United States.

Mitchell's mode of thinking and his methodological stance are deeply aligned with the reformist tradition of original institutionalism. This tradition rejected both laissez-faire and socialism, espoused by American academia[2]. By focusing on empirical observation of business economy to guide economic evolution (what Mitchell called "Intelligence and the Guidance of Economic Evolution"), Mitchell shows precisely this same pragmatist and applied commitment, rejecting deductive abstraction in favor of a research program oriented towards action and social control.

Beyond internalist and externalist explanations of the history of economic theory, Breslau (2003) proposes an analysis grounded in Pierre Bourdieu's field theory, in which economic science has always been a battlefield for scientific authority. Breslau shows how economics, as an object, is susceptible to definition and redefinition by those who theorize about it. It is in this context that he discusses Mitchell's and Irving Fisher's role in shaping macroeconomic theory in the early twentieth century United States.

Analyzing the formation of the field of economics in the United States in the late nineteenth century, Breslau (2003, pp. 390–395) shows how the academic discipline emerged from a space of struggle for scientific authority, based on different social origins of economists, and their different strategies of legitimation of economic science. The author begins by recounting the "crisis of authority" of the traditional elites (Haskell, *apud* Breslau, 2003, p. 390), in a context of intense economic and social transformations arising from accelerated industrialization, urbanization, and mass immigration. In turn, these elites promoted the creation of universities (such as Johns Hopkins and Chicago) and scientific associations (such as the American Social Science Association, ASSA), seeking to replace religious moral authority with one grounded in "scientific universality" (Breslau, 2003). During this period, there were two established currents of economic science in the United

[2] This perspective finds an echo in Neris Junior and Jeronimo's (2025) analysis of the intersections between John Rogers Commons (1862–1945) and John Maynard Keynes (1883–1946). According to the authors, their shared mode of thinking is defined by: "exposing their perceptions of reality, identifying the insufficiency of the theories and policies of their time and, finally, proposing practical solutions to reform the system" (p. 1).

States, competing with each other for new sources of recognition through existing channels of communication (departments, journals, and professional associations).

On one side, there was a majority group that adapted classical political economy (originating from Smith, Ricardo, Malthus, and Mill) to the American context, composed of economists who used this theory to justify the capitalist order by arguing that wages, profits, and rents were determined by natural laws. In this context, Breslau (2003, p. 391) states that "classical political economy provided an ideal method for translating the moral questions of the day into naturalistic terms".

The economists of the second group were less associated with economic power and were, for the most part, descendants of Protestant clergymen who had studied at German universities. Thus, the main influence on this group was the German Historical School, characterized by its critique of unregulated capitalism, its defense of social reforms, and state intervention (Breslau, 2003). They argued that the economy should be studied from a historical perspective and that the focus of this study should fall on institutions and social conflicts.

Moreover, economic science was seen as a set of relations among classes: workers, capitalists, and landowners. This implied that economic discourses were profoundly linked to moral and political debates. For the "classicists", the economy was a natural system that rewarded the apt and punished the inept. For the "historicists", the economy needed regulation to redress social injustices. Thus, the economy, as an object, was not seen as possessing an autonomous logic, independent of social groups and of the "general social discourse" (Breslau, 2003, p. 394). In the 1880s, American economic science was a field that reproduced the conflicts between the industrial and liberal bourgeoisie, on one side, and the reformists of religious inspiration, on the other. According to Breslau (2003, p. 392), economic science was a field with a low degree of autonomy, expressed in the fact that these factions were based on diffuse cultural capital derived from their different origins.

From the 1890s onwards, a new social group began enrolling in economics programs in the United States. This was a generation of young economists, predominantly male though including a small number of women, whose social capital derived not from their connection to the traditional elites but from scientific competence (Breslau, 2003, p. 395).

The hegemony of neoclassical economists was obstructed by a "desire for differentiation" in their theories and approaches, and a "dedication to creative scientific

progress" (Coats, 1992, p. 387). In Mitchell's case, creative progress involved forging "links with scholars in cognate disciplines" and embracing pluralism, preferring the "Lectures on Types of Economic Theory" over grand syntheses (Coats, 1992, p. 388). As a further legacy of the European academia, Coats points out the absence of a "narrow or authoritarian" academic or scientific elite capable of "inhibiting intellectual exploration and inventiveness". In this context, several American economists despised neoclassical theory, considering it "unduly abstract, static, and incapable of fruitful application to contemporary problems" that preoccupied these economists (Coats, 1992, p. 388). However, there was no approach dominant enough to replace it, which denotes the plurality of the American academia in this period, marked by the absence of groups or institutions capable of imposing themselves.

Among these economists was Mitchell, who enrolled at the University of Chicago in 1892. From the standpoint of the economics academia, Mitchell represented the consolidation of a scientific conception, treating the discipline as empirical, grounded in quantitative methods, but with a commitment to understanding institutions and concrete dynamics. Mitchell, as Coats highlights, embodied the new identity of the economist as an empirical scientist, interested in measurements and behavioral patterns, rather than as a "moral philosopher". However, this does not imply ethical neutrality: "He was intensely committed to empirical research, but he never lost sight of the relevance of economic investigation for human welfare" (Coats, 1992, p. 402).

Mitchell, however, represented the strand that transformed the "desire for differentiation" into "dedication to creative scientific progress". Mitchell's progress resided precisely in the creation of a "realistic" methodology based on observation and interdisciplinarity, the opposite of the neoclassical economic theory of his time. In this regard, Mitchell argued that the methodology of economics was at a moment of profound transformation. The abandonment of hedonism and the adoption of the functional psychology (*e.g.* Dewey, William James and Harvey Carr) would lead to a new science. For Mitchell, this new economic science would undergo an essential change in character: "[…] it will cease to be a system of pecuniary logic, a mechanical study of static equilibria under non-existent conditions, and become a science of human behavior" (Mitchell, 1914, p. 47).

It is also worth noting that Mitchell valued historical approaches, in contrast with the abstraction-laden theories of his time (even the historical ones). In analyzing the work of Werner Sombart (1863–1941), for example, he acknowledged the German sociologist's capacity to analyze capitalism as a historical phenomenon but did not refrain from criticizing

the methodological rigidity contained in the author's works (Mitchell, 1929 p. 304; see also his assessment of Veblen, in a letter to Clark, cf. below). Mitchell emphasized that the pursuit of economic knowledge requires a complementary perspective, demonstrating that theory and history are not substitutes but codependent. According to Mitchell (1929, p. 323): "[…] [Sombart's work] perhaps renders a wider service by helping all of us to see how much of a theorist an economic historian needs to be, and how limited is the theoretical understanding of an economist who neglects history".

Morgan and Rutherford (1998, p. 6) note that "Mitchell's quantitative approach was quite explicitly modeled on what he thought of as the nearest approach to the methods of the natural scientist that it was possible to achieve in economics". In the words of Moore (1978, p. 279), Mitchell treated the business cycle as "a unit of observation to be studied", a recurrent and measurable phenomenon, and not an isolated event. Given this regularity and observability, the cycle also becomes amenable to theoretical elaboration.

Mitchell led the development of national accounting and economic statistics, which became fundamental tools for the discipline, and was considered the most influential economist of a period marked by the process of economics defining itself and its social roles (Morgan & Rutherford, 1998, p. 4). Mitchell possessed a determination to maintain a "scientific fact-finding" approach (Morgan & Rutherford, 1998, p. 22), seeking to confer objectivity on economic analysis, separating, whenever possible, scientific research from policy formulation. These credentials originated in his training, in which the role of pragmatism and original institutional economics stands out.

3 Background and Influences

Unlike the traditional elite that dominated academic economics in the nineteenth-century United States, Mitchell came from a middle-class family. His father was a physician of country roots. Mitchell belonged to the first freshman class at the University of Chicago in 1892, and seven years later was among the first PhDs[3] in economics in the same university (Breslau, 2003, p. 399). This training exposed him to a critical and interdisciplinary tradition

[3] His dissertation on the greenbacks (the unbacked currency that circulated during the Civil War) and their relationship to the gold standard was supervised by Laughlin, as a study of the operation of the quantity theory of money (dear to his supervisor). Mitchell's empirical findings (a nearly stable relationship between the risk premium of greenbacks over gold and the performance of the Union army) led him to new research on price theory and, ultimately, to research on business cycles. Dorfman (1949, v. 3, pp. 456–459) narrates this transformation, from a quantitativist training (Laughlin) to the conception that price theory is not "natural" but rather as an aspect of a pecuniary economy (Veblen), to an economic theory (the business cycle) that must be grounded in empirical research.

that united economics, sociology, and psychology. He was a student of James Laurence Laughlin (1850–1933), a defender of the gold standard and dogmatically (neo)classical, which led Mitchell to distance himself, considering him "rigid", "dogmatic", and "doctrinaire" (Breslau, 2003, p. 400).

The classics were the object of permanent scrutiny by Mitchell, whose extensive knowledge of the history of economic thought was widely recognized and formed the basis of his courses at Columbia University, materialized in the two volumes of *Types of Economic Theory* (1967-1969), edited and organized by Joseph Dorfman. In reviewing Adam Smith's *Wealth of Nations*, Mitchell (1936, p. 451) noted that the argument of the work was that "nations prosper more when they leave the guidance of their economic evolution to individuals than when governments attempt to guide". However, this view, according to him, had limitations: "the assumption that the individual is a better judge of his own interests […] was found to be subject to many exceptions" (Mitchell, 1936, p. 453). One reason is that the social organization of economic life had become far more complex since Smith's work, which led governmental intervention to extend in directions that, at the time of its writing, Smith could not have anticipated. Furthermore, Mitchell emphasized the role of human irrationality in explaining the failure of laissez-faire as conceived by Smith. According to Mitchell (1936, p. 456), "the most disconcerting discovery [of economic theory] was that man is a less rational animal than [it] supposed".

Mitchell (1914, pp. 2–3) emphasized that the economic science of his time had distanced itself from psychology and argued for integration between them: "It may even be that economists will find themselves not merely borrowing from but also contributing to psychology". He criticized the field of economic science that ignored psychology and social context. In his words,

> "Economic theory is said to rest upon the simple facts of preference or choice, and the psychological explanation of these preferences or choices is said to be a matter of indifference to our science […] [But] human nature is in large measure a social product, and among the social activities that shape it the most fundamental is the particular set of activities with which economists deal" (Mitchell, 1914, pp. 2–3).

In "Facts and Values in Economics", Mitchell (1944) contended that there was a tendency among economists to confuse untested hypotheses with validated theories, due to their reliance on abstract assumptions. In this sense, they tended to assume preferences in human behavior: "the theorist does not himself ascertain men's preferences by empirical inquiry; he merely supposes them to have been ascertained" (Mitchell, 1944, pp. 214–215).

This quotation hints that one of Mitchell's concerns lay in the possibility that economic analysis might confine itself to a "closed" vision, arising from the observation of a particular context (or worse, from *a priori* assumptions), when, in fact, the best way to proceed, from a methodological standpoint, should be a systematic review of human behavior in light of changing reality. We might say, paraphrasing an aphorism attributed to Keynes, "when the facts change, what is considered theoretically adequate must also change". For this reason, human behavior should be at the center of economic investigation. He viewed the advances in psychology with enthusiasm, to the point of affirming: "it is because [psychologists] are developing a sounder type of functional psychology that we may hope […] that economics will cease to be a system of pecuniary logic […] and become a science of human behavior" (Mitchell, 1914, p. 47).

Mitchell's critique was, therefore, of a fundamentally theoretical nature: he rejected the model of the utilitarian *homo economicus*, arguing that its premises of rationality derived from a flawed psychology and were inconsistent with the facts of economic society (Kato, 2021, p. 23). For Mitchell, economic behavior was not guided by an abstract hedonistic calculus, but rather by an "economic rationality" dictated by the standardization of human thought and behavior through internalized norms and cumulatively evolving institutions. He argued that economic theory should be based on a model of an active human being (whose understanding is transformed with the development of institutions), which was a point of convergence with the thought of John R. Commons (Kato, 2021, pp. 35-36). This theoretical demand for a more realistic and evolutionary behavioral model established the foundation for his empirical program.

The intellectual environment of Chicago, where Mitchell associated with Thorstein B. Veblen (1857–1929) and John Dewey (1859–1952), was decisive in his framing of mind. He assimilated in his writings both institutionalism and philosophical pragmatism. His interest in philosophy is evident in a letter addressed to John Maurice Clark (Mitchell, 1929, *apud* Collier, 2024), in which he recounts the impact of his contact with Dewey: "John Dewey was giving courses under all sorts of titles and each one of them dealt with the same problem — how we think. I was fascinated by his view of the place that logic occupies in human behavior". The pragmatist influences shaped Mitchell's methodology through his interest in seeing theory as an interpretation of facts and, therefore, an investigative practice, open to empirical revision and inseparable from concrete human problems.

From Veblen, Mitchell inherited the critique of the neoclassical economic theory of his time and the use of concepts for the development of his methodological approach. Schumpeter (1950, p. 140) observes this point: "Veblen was much more to the taste of a mind that was nonconformist by nature, of a quick intelligence that resented dogma and stuffiness more than anything else". Mitchell, however, saw Veblen's "dazzling performances" as insufficient for building a scientific alternative, as he reports in his letter to Clark:

> "Of course Veblen fitted perfectly into this set of notions […] But if anything were needed to convince me that the standard procedure of orthodox economics could meet no scientific tests, it was that Veblen got nothing more certain by his dazzling performances with another set of premises" (Mitchell, 1929 *apud* Collier, 2024).

Rutherford (1999, p. 234) argues that Mitchell viewed quantification as a tool for analyzing patterns of behavior generated by institutions, in a manner opposed to what he observed in Veblen, who, according to him, "neglected the patient verification of his conclusions" (Mitchell, *apud* Rutherford, 1987, p. 66). The hypotheses employed by Mitchell were formulated on the basis of dialogue with the data, from the detailed examination of processes, taking institutionalist theory as a starting point. As Burns (1949, pp. 50–51) would later state regarding the research method at the NBER: "This process of constructing an analytical framework, seeking observations, processing them, reformulating the framework, seeking new observations, and so on, is the time-honored and continuous method of science and, if this process is persistently followed in economics, the results will be cumulative and a body of scientific knowledge will gradually take shape".

4 Evolution of the Methodological Approach

Mitchell advocated economic science centered on the factual description of how economic institutions work. By prioritizing systematic measurement and the description of institutions in operation, he reformulated the role of the economist, transforming it into that of a social scientist engaged in interpreting economic life as it is, rather than as it should be according to the neoclassical models of his time (Hirsch, 1976; p. 206; Rutherford, 2011, pp. 42ff). Milton Friedman (1952, p. 238) emphasizes that Mitchell's empirical work was "always analytical, never aridly descriptive" and was directed towards "construction of a better theory", given his dissatisfaction with extant theory. Elsewhere, Friedman (1952, p. 239) notes that Mitchell, although he had made use of it, considered such theory "too narrow" to address the elements of his investigative concern: the dynamics of economic change.

Mitchell reflected on the relationship between economic science and practical action, highlighting the discipline's methodological caution: "Current economics […] is a more cautious creature. When asked for practical advice it reveals an inferiority complex" (Mitchell, 1936, p. 450). This led him to move towards what Hirsch (1976) called the "*a posteriori* method". The published version of Mitchell's dissertation, *A History of the Greenbacks* (1903), already exhibited this method, which consisted of the analysis of budgetary data and historical series to study the effects of currency issue during the Civil War (Hirsch, 1976, p. 196; Breslau, 2003, p. 400).

Schumpeter (1950, p. 147) emphasizes that Mitchell analyzed the relations that link prices in a system of responses over time, "which naturally led him to the study of business cycles as a first step toward a general theory of the monetary economy". In *Greenbacks*, it was already possible to note the difference in methodology employed by Mitchell relative to neoclassical economics, whose methodological principle was, in general, deductive. Mitchell applied the *a posteriori* method in his studies on the greenbacks, proceeding from a simple theory to dynamic analysis. In "Greenbacks and the Cost of the Civil War" (1897), Mitchell combined economic history and statistics to measure institutional impacts and attempted to formulate objective metrics for observable social phenomena. This is clear, for example, in the passage where he explains the confusion between nominal and real values: "[T]he use of a paper dollar which had a value considerably less than that of a gold dollar artificially increased the nominal amount of all sums expressed in terms of it, in the same way that the use of a foot shorter than twelve inches would nominally increase the length of every article measured by it" (Mitchell, 1897, p. 127).

Furthermore, in a clear departure from the methodological procedures he had learned, Mitchell distanced himself from the quantity theory of money by adopting an independent position. In "Real Issues in the Quantity Theory Controversy" (1904), he criticized the superficiality of the monetary debate of the time: "How does the quantity of money exert its effect on prices? […] These were the questions […] that deserved careful attention" (Hirsch, 1988, p. 6). His focus shifted to the differences in price adjustments during inflationary processes, analyzing, for example, sectoral variations.

Hirsch (1988, p. 2) emphasizes that these were the guiding questions of his investigations and the consequent *a posteriori* discovery that were responsible for Mitchell's theoretical development. Initially supervised by Laughlin to confirm the commodity-money

theory, Mitchell ended up developing a broader investigation into the effects of inflation, gradually distancing himself from the quantity theory of money.

Mitchell's methodological orientation was consolidated in his works on business cycles, particularly in *Business Cycles* (1913) and *Measuring Business Cycles* (Burns & Mitchell, 1946). In these works, he sought to build a body of empirical knowledge without resorting to simplifying behavioral hypotheses (Moore, 1978), in a systematic "grand design" for the theory and measurement of cycles (Epstein, 1999, p. 525). Schumpeter (1950, p. 147) considered the 1913 volume both "his masterpiece" and "the code that embodied the law of all the work that was to follow".

Although his PhD dissertation retained ties to traditional deductive models, Mitchell gradually turned to institutional analysis as the central axis of his investigation (McCann & Kapuria-Foreman, 2022). As he himself explained in a letter to John Maurice Clark: "*Business cycles* arose as a problem in the course of the studies I began with Laughlin […] The result was the big California monograph [whose title, before *Business Cycles*, was *The System of Price* and, significantly, *The Money Economy*]. I thought of it as an introduction to economic theory" (Mitchell, 1929 *apud* Collier, 2024).

Mitchell did not reject theory, but rejected its use when disconnected from real-world problems. For Cruz-e-Silva and Almeida (2022, p. 661), "he looked, therefore, for an economic analysis free from theoretical preconceptions, as he considered facts to be much more important than theories". It was, thus, an alternative epistemological project that placed economics closer to the historical sciences than to pure logic. This methodological approach evokes what Morgan and Rutherford (1998, p. 8) draw attention to: the prevailing conception of science in the interwar period was very different from the one that would prevail after 1945. It was rigorous, but in a different sense from logico-mathematical rigor: it was equitable (requiring that all positions in dispute be assessed), objective (based on concrete data and problems and on values such as integrity and academic discipline), and it did not claim normative neutrality; on the contrary, it made explicit its value position on the moral and social questions in the economic debate.

The analysis of business cycles was, for Mitchell, a long-term task, requiring patience, statistical rigor, and the accumulation of evidence. Arthur Burns (1952), his student and collaborator, attested to his conviction that the progress of economic science depended on robust empirical foundations and comparable historical series. As Mitchell stated to Clark: "There is a great deal in the way business technique works out that I should never think of

if I were not constantly going back to observation" (Mitchell, 1929 *apud* Collier, 2024). Mitchell avoided premature generalizations, as he was concerned with accumulating robust evidence for any assertion (Hirsch, 1976, p. 205). In criticizing approaches such as Sombart's, for example, Mitchell observed the following about him: "Like a sociologist dipping into history he often bases a congenial generalization upon scanty evidence" (Mitchell, 1914, p. 36).

In reflecting retrospectively on his first empirical study, Mitchell wrote: "That was my first 'Investigation' — I went about it in the way that seemed obvious, following available materials as far as possible and reporting what I found to be the 'facts'" (Mitchell, 1929 *apud* Collier, 2024). Mitchell thus reveals his concern with the evidence available for conducting an accurate analysis. In this sense, the availability of a reliable source of information on the business cycle and its variables was fundamental. This guided Mitchell's career as founder and research director of the National Bureau of Economic Research for a quarter of a century. The difficulties of data collection, measurement, and analysis proved so challenging that they consumed his working energies. Economists associated with national accounting (Kuznets and Leontief) and price theory (Friedman) owe much to the research program developed by Mitchell. It does not follow from this, however, that Mitchell was a "pure" inductivist, as we turn to argue in the following two sections.

5 Original Institutionalism and Empirical Research

The Veblenian influence on Mitchell's work is reflected in his appreciation of the "instinct of workmanship" as a moderating principle of human behavior, but also in the distinction he continued to emphasize throughout his life between "making goods" and "making money" (Schumpeter, 1950, p. 140). Mitchell cites Veblen's definition of this instinct: "Efficient use of the means at hand and adequate management of the resources available for the purposes of life is itself an end of endeavor" (Veblen *apud* Mitchell, 1914, p. 24). In "The Backward Art of Spending Money", Mitchell (1912) employs the Veblenian perspective in highlighting how the pursuit of social distinction corrupts the efficiency of domestic consumption:

> "Nassau Senior long ago pointed out the important role played by the desire for distinction in guiding conduct; and more recently Thorstein Veblen has developed the theme with much subtlety in his satirical *Theory of the Leisure Class*. We are all prone to draw invidious comparisons between ourselves and our neighbors. […] In the Money Economy of today, where so much of our attention is devoted to business, these comparisons turn with corresponding frequency upon our pecuniary standing" (Mitchell, 1912, p. 278).

Whereas Veblen adopts this distinction to criticize the irrationality of conspicuous consumption and the pecuniary logic of capitalism, Mitchell uses it to explain the structural inefficiency of household consumption within the pecuniary economy. He argues that households are pressured to spend not for utility, but to "provide material for a self-satisfactory comparison with others on the basis of pecuniary competence" (Mitchell, 1912, p. 278), which leads them to neglect basic economic principles. Mitchell adopts this distinction as a methodological principle to isolate the "business economy" as an autonomous system amenable to quantitative analysis.

In this piece, Mitchell (1912), in analyzing consumption, follows his characteristic method: (i) identifying concrete patterns (such as the disparity between productive and domestic efficiency), (ii) drawing on history (the colonial legacy of household production), and (iii) proposing generalizations based on institutional factors (households as a rigid unit of consumption).

Thus, while in Veblen institutionalism was a project critical of the economic system of his time, in Mitchell this theoretical approach provided an empirical research program in which data are used to map the behavior of the "business economy". What one observes is Mitchell taking Veblen's institutionalism as his starting point but making his own theoretical elaborations in terms of efficiency in the households and firm spheres. It is not enough to assert consumer efficiency: one must investigate how and why spending decisions are made; the concept of conspicuous consumption is mobilized to understand its effects on household expenditure.

Mitchell's theoretical elaboration on efficiency differs fundamentally from the neoclassical approach by embedding it in the context of institutional relations and conflicts of interest. For original institutionalism, efficiency and productive effort cannot be treated as a variable given by a state of static equilibrium or by purely individual optimization. As Mitchell (1935, p. 652) states in his analysis of Commons's work, the modern business system must be capable of providing the "organized cooperation indispensable to efficiency". This efficiency, therefore, is a category that requires the development of a "scheme of collective control" (Mitchell, 1935, p. 652) to manage conflicting interests and the interdependence among individuals.

Moreover, "effort" appears in Mitchell as the active dimension of this institutionalized efficiency. It is the expression of the agent who, in a passage Mitchell quotes approvingly from Commons, "forms plans and strives to carry them out" (Commons, *apud*

Mitchell, 1935, p. 639). This effort is not the physical or psychological expenditure typical of neoclassical economics, but a creative movement oriented by expectations, habits, and collectively shaped purposes. Together, "effort" and "efficiency" thus describe the link between individual initiative and the forms of social control that make productive cooperation possible: the core of the institutionalist pragmatism advocated by Mitchell.

This emphasis on institutionally situated action also helps to understand Mitchell's place in the empirical institutionalism of the 1930s. Rutherford and Desroches (2008) describe the lines of research of the institutionalists during that decade. One of these lines is Mitchell and Burns's work, which focused on business cycles and disaggregated data, opposing the simplistic generalizations of neoclassical economics. Mitchell, according to the authors, viewed cycles as a "complex multicausal phenomenon" and, therefore, fit within this institutionalist tradition (Rutherford & Desroches, 2008, p. 5).

Returning to the letter addressed to Clark, Mitchell states that "There seemed to be one way of making real progress, slow, very slow, but tolerably sure. That was the way of natural science […] by the patient processes of observation and test" (Mitchell, 1929 *apud* Collier, 2024). This methodological commitment led him to prefer problems that could be addressed with some inductive approach, relegating abstraction to a secondary role: "The abstract must be used at every turn, as a handmaid to help hew the wood and draw the water" (Mitchell, 1929 *apud* Collier, 2024).

Although Mitchell adopted a methodological strategy distinct from Veblen's and John R. Commons's, his empirical approach to business cycles, profits, finance, and business behavior was consonant with the central concerns of institutionalism. When he analyses Commons's work, Mitchell reveals his concern with the direction of the institutional theory developed by Commons and how it might contribute to the study of cycles:

> "Ownership, in the economically important sense of value owned, varies with prices as well as with quantities of materials; producers do not always succeed in selling; there are transfers of legal control without transfer of physical objects. Hence institutional economics must improve upon the organization of orthodox economics. It must incorporate the theory of money and credit in its discussion of value. It must make the theory of business cycles an integral part of its account of modern processes, trying to show how difficulties in selling at remunerative prices prevent men from producing as large a national dividend as technology and natural resources make possible. So also, institutional economics must supplement the concept of corporeal property by the concepts of incorporeal property or negotiable debts, and intangible property or 'the right to fix prices by withholding from others what they need but do not own'" (Mitchell, 1935, p. 644).

Such considerations prove particularly relevant for a more "concrete" theory of business cycles, as they involve the understanding of institutions, legal structures, and power relations. Mitchell's appreciation for in-depth theoretical discussion, including that of other institutionalist authors, reinforces our claim about his methodological approach, which involves the interaction between facts and theory (his remarks on theory as a "handmaid" seems, therefore, immaterial).

Moreover, Mitchell conceived of scientific work as a civic activity, directed at public enlightenment and social improvement, even while refusing to adopt explicitly normative positions. In "Facts and Values in Economics", Mitchell (1944, p. 219) advocates an interdisciplinary economics that integrates psychology, sociology, and history, and further defends the scientific humility of the economist: "Our ultimate aim, if I may express a final value judgment, should be to contribute all that in us lies toward realizing in practice the highest social values we are able to conceive". The scientist, in this framework, acts as an engaged interpreter of reality, not as a social engineer equipped with ideal models. In the words of Coats (1992, p. 406), "The early institutional economists were not value-neutral technicians, nor detached academics; they were deeply engaged with the moral and political questions of their time", which reinforces our point about the "reformist mode of thinking" (cf. Neris Junior & Jeronimo, 2025) shared by original institutional economists.

Thus, the question arises: how did Mitchell conceive of economic theory and can he himself be considered a theorist? Our answer is a tentative and qualified "yes", grounded in the premise that his conception of theory was centered on the systematic interaction between established theory and empirical observation. Contrary to what the criticism that Mitchell was a mere "Kepler" or a "measurer without theory" (Koopmans, 1947) suggests, Friedman (1952, p. 240) correctly states that Mitchell is not anti-theoretical. The tentative character of our answer is due to the difficulty of isolating his theoretical contributions from the mass of empirical information, in volumes such as Mitchell (1913) and Mitchell (1927). For Mitchell, theory is not an end in itself, but an indispensable guide to scientific work. He starts from an established theory, Veblenian institutionalism, as his "vision" or initial hypothesis. From this base, he selects the variables, develops analytical tools, and from the empirical material, returns to reformulate, correct, refine, or reject the original theory. In this process, he makes genuine and original contributions to the development of the original institutionalist *corpus* of economic theory.

It is essential to note that Mitchell, like any person (except the most naïve inductivist), was aware that facts "do not speak for themselves" but are always, inescapably, "theory-laden". Thus, reclaiming Mitchell as a theorist must be qualified by the type and scope of his contribution. He qualifies as a theorist by developing and refining an already established theory, rather than by proposing an original theory *ex nihilo*. It is through this work of refinement that his theoretical legacy manifests itself. According to Friedman (1952, p. 240), one could affirm that Mitchell's principal contribution, in his lifelong research on business cycles, would be nothing less than a theory of economic change, bringing him close to Neo-Schumpeterian contributions (Kappes & Milan, 2023). As Hansen (1952, p. 302) states, Mitchell was trained "to study an economy in motion". Although empirical work is present in greater measure than theoretical work in Mitchell's writings, this does not imply that his theoretical contribution is less relevant.

6 Theory and Evidence in Business Cycle Research

Mitchell did not seek universal and timeless laws, but rather to understand cycles as phenomena of institutional evolution mediated by "processes of cumulative change", as is evident in the "Framework of Part III" of *Business Cycles*:

> "A theory of business cycles must therefore be a descriptive analysis of the cumulative changes by which one set of business conditions transforms itself into another set. The deepest-seated difficulty in the way of framing such a theory is that while business cycles recur decade after decade each new cycle presents points of novelty. Business history repeats itself, but always with a difference. This is part of what is implied by saying that the process of economic activity within which business cycles occur is a process of cumulative change" (Mitchell, 1913, p. 449).

His aversion to a general deductive theory of the cycle stems from the fact that "each cycle is unique and demands a unique explanation" (Morgan, 1990, p. 46). Each cycle is singular, since there are different causal factors operating upon it whose verification demands the use of quantitative and qualitative procedures, beginning with the initial selection of the facts to be examined[4]. In proposing this methodology, Mitchell revolutionized the study of economic fluctuations by introducing a systematic approach grounded in three fundamental pillars:

[4] An aversion to a general theory, however, does not mean theoretical agnosticism. Research always begins with pre-existing theories. Mitchell (1913, Part III) and Mitchell (1927, ch. II) are literature surveys examining the existing theories on business cycles. Marx, Rodbertus, the German historicists, Jevons, Moore, Juglar, Sombart, Hardy, Pigou, Schumpeter, Tugan-Baranovski, Hobson, Robertson, Hawtrey, Aftalion, and, of course, Veblen are well-known authors, alongside several lesser-known ones, whom Mitchell identifies as contributors to business cycle theories.

6.1 Treating crises as part of a systemic pattern

Before Mitchell, economists viewed depressions as isolated events caused by external factors such as wars or failed harvests. He, however, argued that crises were part of a recurrent cycle with predictable phases. Frederick C. Mills (1949, *apud* Collier, 2017), in the Columbia University memorial in honor of Mitchell, highlights the author's empirical inclination and emphasis on constant verification of reason against observation: "[Mitchell] developed and refined methods of quantitative analysis and stimulated a movement that has profoundly affected the character of economic research and the content of economic thought throughout the world".

Mitchell conceived of the business cycle as a unit of observation and study. In his seminal 1913 work, *Business Cycles*, he defined the typical phases: "revival, prosperity, crisis, depression, and revival again" (Moore, 1978, p. 279). As noted before (see the quotation in the previous page), for Mitchell, cycle theory should be essentially descriptive. This description should, however, be conducted by means of concepts and construction of observable variables, in which the institutional theory of his time played a significant role.

6.2 Use of time series to map relationships among variables

Mitchell organized empirical data (such as prices, wages, and production) in overlapping graphs, constructing a coherent narrative in which changes in one sector affect others. He reflected on this process in his letter to Clark (Mitchell, 1929, *apud* Collier, 2024): "Business cycles arose as a problem in the course of the studies […] It was the system of prices and its place in modern economic life that began to take shape".

His methodology sought to identify regular sequences among economic variables across the cycle. As Moore (1978, p. 281) observes, "He believed that by comparing the peaks and troughs in specific series with the peaks and troughs in the business cycle, it would be possible to obtain useful information about the sequences among the processes represented by the series". To systematize these analyses, Mitchell developed a "nine-point pattern", dividing each complete cycle into nine distinct stages (Moore, 1978, p. 283, who, however, does not specify this subdivision).

6.3 Business economy as an autonomous system

Inspired by Veblen, Mitchell viewed the modern economy as driven by profits and monetary calculation, not merely by material needs. The business economy as an autonomous system is the manifestation of the organized cooperation and collective control that Mitchell (1935) identified in the institutional system. Rather than mere individual optimization, the pursuit of profits reflects the need of business institutions to manage efficiency and effort within a complex system. This perspective allows the business economy to be treated as a system amenable to statistical measurement.

For Mitchell, profit was the central element of the economic system: "As the pursuit of money profits by business enterprises is the controlling factor […] the whole discussion must turn around the prospects of profits" (Mitchell, 1913, p. 283). Moore adds that Mitchell showed how profits determine the cycle: "He showed how costs rise relative to prices during an expansion of the business cycle, squeezing profit margins […] This was a main argument in Mitchell's 1913 volume" (Moore, 1978, p. 284).

Beyond his theoretical contributions, Mitchell helped to institutionalize economic statistics. In 1920, he founded the National Bureau of Economic Research (NBER), which to this day conducts statistical research and monitors economic activity in the United States. The creation of the NBER consolidated his ambition to transform economics into a public science, oriented towards production of knowledge relevant to society.

In the minutes of the Columbia University memorial, Frederick C. Mills (1949, *apud* Collier, 2017) emphasized Mitchell's central role in this process: "He was the moving spirit in the creation of the National Bureau of Economic Research […] shaping its methods and objectives". Moore reinforces that Mitchell created a lasting institution, with the mission of producing impartial scientific analyses: "By issuing its findings in the form of scientific reports, entirely divorced from recommendations on policy, it would help all thoughtful men […] to base their discussions on objective knowledge". For Moore, the NBER is "a living monument to [Mitchell's] creative energy" (Moore, 1978, p. 285).

Mitchell also argued that governments and firms should use economic data for more rational planning, anticipating principles that would later become central to Keynesian macroeconomics. He recommended that governments collect systematic data on profits and costs: "The most desirable of all are statistics that portray the relative fluctuations of costs and profits" (Mitchell, 1913, p. 594). Moore (1978, p. 282) emphasizes that "The leading

indicators issued monthly by the Department of Commerce […] are direct descendants of the work that Mitchell and Burns did in 1937", describing its continuity as "one of the longest scientific experiments in the field of economics".

Finally, this interactive aspect of Mitchell's investigation earned lavish praise from his contemporaries, to the point that Schumpeter concluded his tribute to the economist by stating:

> "Here was a man who had the courage to say, unlike the rest of us, that he had not all the answers; who went about his task without either haste or rest; who did not care to march along with flags and brass bands; who was full of sympathy with mankind's fate, yet kept aloof from the market place; who taught us, by example and not by phrase, what a scholar should be" (Schumpeter, 1950, p. 155).

While the laudatory interpretation of the "man" and intellectual that Mitchell was is relevant and, to a certain extent, definitive, some considerations remain regarding the methodological legacy bequeathed to macroeconomic theory, as will be seen below.

7 The Methodological Legacy

In an article with the particularly intriguing title "Economics Invents the Economy", Breslau (2003) problematizes the ontological status of the economy as a peculiar type of object of study that oscillates between concrete materiality and statistical abstraction. According to him, the economy "seems as objective and concrete as any physical object we encounter" and, on the other hand, "under close scrutiny, this imposing object seems to dissolve into a myriad of transactions between buyers and sellers" (Breslau, 2003, p. 379). This duality manifests itself in everyday discourse ("the economy expanded", "the economy is ailing") and in macroeconomics textbooks that analyze its "performance".

Drawing on Breslau, Marcel Boumans (2021, p. 89) states that the very conception of the "economy" as a distinct and autonomous object emerges in the context of the construction of macroeconomic phenomena in the twentieth century, being a "surprisingly recent invention". He adds that this process of constructing the object occurs through three interlinked stages: abstraction, homogenization, and sedimentation. These processes can be described as follows: (i) abstraction: certain activities and observations are removed from their complexity and local contexts and reduced to a small set of characteristics such as data, concepts, or hypotheses; (ii) homogenization: the process by which phenomena are translated into a common numerical language, enabling comparisons and relationships among them; and (iii) sedimentation: the process in which these abstract and homogenized

objects become part of everyday experience, through their institutionalization in official statistics, providing the foundation for the formulation and justification of actions (Breslau, 2003, p. 381).

These stages transformed concrete economic practices into objects amenable to modelling and intervention. Boumans emphasizes that the emergence of macroeconomics, as an object of study, is intimately linked to the need of modeling and shaping phenomena, among them the business cycle. According to him, "policy in terms of shaping a phenomenon presupposes that the phenomenon in question exists and has a form that can be shaped", but this shaping "is not assumed as being realized directly in the form itself, but by operating the mechanism that generates this form" (Boumans, 2021, p. 87).

In this sense, the contribution of Mitchell and others such as Ragnar Frisch was central, as they sedimented the idea that the business cycle possesses a regular form, amenable to graphical representation and subject to public policy. This sedimentation is intrinsically linked to the reformist mode of thinking of institutionalism, in which empirical research fundamentally aims to provide foundations for practical solutions and to serve as a "guide of economic evolution" (Mitchell, 1936).

Not only does the business cycle become an object, but a central object for the development of modern macroeconomics. For example, Hoover (2023) revisits the famous "Measurement without Theory" controversy (waged between Tjalling Koopmans (1947), director of the Cowles Commission, and Rutledge Vining (1949, with reply and rejoinder), researcher at the NBER) to claim that it is central to understanding the methodological disputes that shaped contemporary macroeconomics.

Koopmans (1947) criticized Mitchell and his co-author Arthur Burns, labelling them as mere "Keplers" of economics, that is, "mere gatherers of facts and purveyors of shallow generalizations" (Hoover, 2023, p. 83), while he viewed the Cowles Commission as the guardian of true economic science, inspired by the Newtonian ideal of unified theories. However, Hoover corrects this analogy, showing that Kepler was not a mere data collector but someone who, with a creative leap, formulated an innovative hypothesis: that planets orbit the Sun in ellipses, integrating empirical data and theoretical inference.

As Hoover (2023, p. 83) emphasizes, "Koopmans simply misunderstands Kepler's achievement" and adds that this error reveals a deeper methodological problem, namely, the apriorist defense of theoretical models that shape the data rather than allowing the data to

challenge the theories. For Hoover, just as Kepler was an indispensable step for Newton, Mitchell's research was also a crucial stage for the development of empirical macroeconomics, by systematically integrating economic data with theoretical investigation.

Hoover underscores that Koopmans, by proposing that empirical analysis be conducted exclusively from prior theoretical models, ignored the importance of the process of discovery and critical revision of theories in light of the data. As Hoover (2023, p. 84) synthesizes, "Koopmans's version of the Cowles program […] is strongly apriorist. The empirical element is only measurement consistent with a presumed theoretical model".

Hoover's critique is especially pertinent for understanding the legacy of Mitchell, who sought to balance empirical observation and theoretical analysis in his studies on cycles. Considering this duality of "materiality" and "abstraction", one may say that he did not limit himself to "measuring without theory" but promoted a conception of institutional economics characterized by the systematic interaction between theoretical and empirical research. Although averse to excessive formalism, his project was committed to methodological rigor and the pursuit of objectivity, allowing evidence to guide and, when necessary, correct theories.

It is perhaps ironic that, in light of internal problems in the axiomatic general equilibrium approach, economics has been returned to placing greater emphasis on the psychology of decision-making and on empirical research (see Rizvi, 1997). A re-examination of Mitchell's approach to economic theory may thus prove relevant for economists concerned with real-world economic problems.

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