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An Introduction to Corporate Accounting Standards: Detecting Paton's and Littleton's Influences

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ABSTRACT: The aim of this article is to trace the principal ideas in Paton and Littleton's influential 1940 monograph to their previous and contemporaneous writings, and thus to uncover the ideas' origins in the literature.

Keywords: Paton; Littleton; origins.

INTRODUCTION

In 1940, the American Accounting Association (AAA) published its famous and influential Monograph No. 3, *An Introduction to Corporate Accounting Standards,* by William A. Paton and A. C. Littleton. The 142-page monograph represented largely an explication and defense of historical cost accounting, and it has been widely believed to have significantly influenced both accounting practice and education (Ijiri 1980, 620; Storey 1991, 17; AAA Committee on Concepts and Standards for External Financial Reports 1977, 9; Previts and Robinson 1994, 313). Sterling (1970, 289) affirms that the monograph "has been accurately described as the 'accountants theoretical bible.'"

Bedford and Ziegler (1975, 439) have written that the monograph "was a collaboration between men who began with very different premises." Coauthors Paton and Littleton came from disparate ideological backgrounds—Paton having argued for the importance of current cost accounting since early in his career, and Littleton always having sided with historical cost accounting. Paton (1980, 630; emphasis in original) has subsequently written, "I have always been a *value* man."

It is interesting to attempt to understand how these two major figures in accounting academe, with such diverse views on the cost basis for accounting, could have successfully coauthored this important monograph. Even their approach toward theory was different. Always the inductive thinker, Littleton (1947, 12) wrote, "When we deal in theory we do not seek to prescribe. We just try to analyze—that is understand—and to persuade. Theory therefore consists of explanations, definitions, reasons, justifications, persuasions, and only sometimes of suppositions." Yet Paton, as his long-time friend Howard C. Greer (1965) attested, was very much a deductive thinker, an uncompromising advocate of the accounting practices he thought were right and sound. An interesting question is: to what degree did Paton and Littleton individually shape the contents of the monograph?

The AAA Committee on Concepts and Standards for External Financial Reports (1977, 29) has written about the Paton and Littleton monograph (as it has often been called), "Much of the writing is Paton's but all the ideas are not. Yet most of Paton's ideas find expression in the monograph." It would be opportune to test the veracity of these statements. No one has yet examined this important monograph in depth in order to trace its positions and guidance to the separate thinking and writing of the two coauthors. It is the purpose of this article to undertake to identify the principal ideas in the monograph that apparently emanated, respectively, from Paton and from Littleton. That the monograph contained only two citational footnotes (on pages 85 and 102), does not make it easy for readers to identify the sources of the ideas.[1]

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As a great many, perhaps most, of the quotations reproduced in this article are extracts from sentences, I have avoided supplying ellipsis dots (. . .) before and after them in order not to burden the paper with scores of these markings. Page numbers are always given so that the reader can become apprised of the context for each quotation.

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[1] By citational, I refer to footnotes that cite other works, as opposed to purely textual footnotes.

This article, therefore, undertakes to make a contribution toward characterizing the intellectual heritage of our field, by demonstrating, to the extent practicable, the historical origins of the views expressed in one of our most important and influential theory monographs.

A close student of Paton's career (Lawrence 1972, 180) has counseled, "[t]o determine exactly how much of the monograph was written by Paton and how much by Littleton is almost impossible." One cannot know which of the coauthors "wrote" which sections or even sentences (apart from Chapter VII, which Paton has said he wrote in its entirety), but I do think it is viable to draw arguable connections between the principal ideas in the monograph and the coauthors' earlier and contemporaneous writings and thinking, especially as Paton and Littleton "began with very different premises," as Bedford and Ziegler (1975, 439) have written. By going through the monograph section by section (that is, topic by topic), I endeavor to attribute the principal ideas in each to the previous and contemporary published writings and avowed views of the two coauthors. I leave it to the reader to determine whether I have succeeded in this quest.

Paton was professor of accounting at the University of Michigan, and Littleton was professor of accounting at the University of Illinois (today known as the University of Illinois at Urbana–Champaign). They were probably the two premier U.S. accounting theorists from the 1930s through the 1950s. At the time of the publication of the monograph in 1940, Paton was 50 years old and Littleton was 53, in the prime of their careers. They both were active in the American Accounting Association (AAA) and were both serving on the American Institute of Accountants' (AIA) Committee on Accounting Procedure. Paton had been a president of the predecessor body of the AAA and had been the founding editor of its quarterly journal, *The Accounting Review*. Littleton was shortly to become editor of the *Review* as well as AAA president. They had both written extensively in the accounting literature, almost always without coauthors.[2]

THE MONOGRAPH: INTRODUCTORY COMMENTS

The Paton and Littleton monograph owes its origin to the AAA executive committee's five-page "A Tentative Statement of Accounting Principles Affecting Corporate Reports," which was published in 1936. The 1936 statement constituted a staunch advocacy of historical cost accounting. Its "fundamental axiom" was: "Accounting is thus not essentially a process of valuation, but the allocation of historical costs and revenues to the current and succeeding fiscal periods" (AAA Executive Committee 1936, 188).

The principal authors of the 1936 statement were Eric L. Kohler (leader of the draftsmen), Paton, Littleton, and Howard Greer, all officers of the Association. Littleton (1958, 251, footnote omitted) wrote that both the statement and the follow-on monograph "were in considerable measure inspired by the decision in the [American Institute of Accountants] to associate certification with generally accepted accounting principles." Littleton's reference was to the correspondence between George O. May's blue-ribbon Institute committee and the New York Stock Exchange, which led to the recommendation in 1934 that henceforth the auditor's report should affirm that the financial statements "fairly present, in accordance with accepted principles of accounting" (Form of Certificate 1934). The AAA committee's aim was to provide a concise statement of just what those principles were.

An initial observation can be made about the title of the monograph and about the order in which the coauthors were listed. In 1936, when Paton and Littleton initially planned to prepare a paper elaborating on the AAA's statement of principles, Paton's preferred title was "Cost and Value in Relation to Income Measurement" (Zeff 1966, 53), yet Littleton's was "Principles Which Emerge from the Business Concept of Income," which themselves suggested very different conceptions of the project. To Paton (1936), the relation between cost and value was central to accounting, while, to Littleton, "the primary function of accounting was a record-keeping and disclosure function, and secondarily, if at all, a valuation function" (Bedford and Ziegler 1975, 439). But this 1936 plan for a joint paper was abandoned. What followed was recounted by Zeff (1966, 53):

> In January, 1938, Littleton was charged by the executive committee to draft a revision of the "Tentative Statement"; thirteen months later he finished a much longer paper than had been expected by all, including himself. Since, for some time, the executive committee had intended to expand and explain the "Tentative Statement"—as shown by Paton and Littleton's earlier attempt at co-authorship—it was decided that a monograph should be prepared for this purpose. At Littleton's suggestion, Paton agreed to assist in reworking the paper. In fact, Paton rewrote the paper extensively, completing the first draft in a month. During the next several months, members of the executive committee exchanged criticisms of the draft with the co-authors, and by December of that year—only ten months after the co-authorship was formed—the final draft was ready.

[2] As regards Paton, his only coauthor prior to 1940 was on a textbook, *Accounting Principles,* in 1916, 1917, and 1918 editions, with Russell A. Stevenson (Paton and Stevenson 1916, 1917, 1918). Paton coauthored two editions of his *Essentials of Accounting,* published in 1958 with Robert L. Dixon (Paton and Dixon 1958) and as the third author with Dixon and Samuel R. Hepworth in 1966 (Dixon, Hepworth, and Paton 1966), but I have not relied upon either of these books in this article.

Paton (1980, 629) offered his own recollection of the inception of the monograph, which was substantially the same as what is stated above. Henry Rand Hatfield sent Littleton extensive comments on five chapters of his preliminary draft and said he found it to be poor. He wrote that Paton had found Littleton's draft to be "so unsatisfactory. . .that he undertook to revise it. But that was a very difficult task. The result was such that the [Executive] Committee was unwilling to sponsor it, merely agreeing to publish it not as a Committee report but as the product of Paton and Littleton as individuals" (Zeff 2000b, 161). The Association published the monograph in February 1940, and it was distributed as a dividend to the members of the Association and of the Institute, which assured it of a wide exposure among both academics and practitioners. It has been subsequently reprinted numerous times and is still available for purchase from the Association.

While the AAA's 1936 statement referred to principles, the monograph, very likely motivated by Littleton, addressed standards, a term that was almost unseen in comparison with the widespread use of principles at the time. In response to a question about why the title of the monograph cited standards instead of principles, Littleton (1941a, 331, emphasis added; also see Littleton 1941b) wrote as follows about this terminological issue: "A rule tells how some action is to be taken. Principles touch more closely the question of why the rules are what they are.. . .But rules and principles do not solve the problem of concisely stating accounting ideas. I think we need standards as well because a standard is expected to provide a basis for comparing the relative *desirability* of several lines of action."[3] In Littleton (1938b, 99, 104), a similar argument in favor of the use of "standards" may be found.

The coauthorship was signed by Paton and Littleton in that order, not by Littleton and Paton. In the accounting literature, it has been customary for coauthors' names to appear in alphabetical order except when signaling a greater contribution by one of the coauthors down the alphabetical line. Bedford and Ziegler (1975, 440) expressed the view in their biographical article on Littleton that "the stronger impact [on the contents of the monograph] appears to have been Paton's."

As indicated above, the 1936 statement was a paean to historical cost accounting, partly because Paton was outnumbered three to one on the executive committee by arch historical costers Kohler, Littleton, and Greer, but mostly because, by the 1930s, Paton himself—for a variety of practical reasons, including the increasing legal significance of historical costs for taxation and dividend purposes, as well as the much-criticized, arbitrary asset value write-ups during the 1920s—had concluded that current costs and general price-level adjustments should be relegated to supplementary presentations and thus not obscure the historical costs in company financial statements (Zeff 1979, 107–111). And, as stated by Howard Greer in his foreword, the monograph "is presented as a personal expression from the authors," and, starting with the 1936 statement, they have "elaborated and expanded the basic concepts believed to be essential to a sound fundamental structure of corporate accounting" (Greer 1940, vii). Some years later, Littleton (1958, 248) confirmed that the monograph was "essentially an elaboration, by the authors, of the ideology compactly embodied" in the 1936 statement. Paton and Littleton (1940, ix) wrote as follows in their preface to the monograph:[4]

> We have attempted to weave together the fundamental ideas of accounting rather than to state standards as such. The intention has been to build a framework within which a subsequent statement of corporate accounting standards could be erected. Accounting theory is here conceived to be a coherent, coordinated, consistent body of doctrine which may be compactly expressed in the form of standards if desired.

The monograph was therefore to be an "introduction" to corporate accounting standards, not an expression of the standards themselves. Paton and Littleton made it clear that the views expressed were those of the coauthors and not of the AAA's executive committee.

This article will be organized according to the seven chapters of the monograph. An attempt will be made, section by section, to trace the principal ideas to the writings and views of Paton and of Littleton, respectively.

CHAPTER I: STANDARDS

This six-page chapter dealt with some preliminary issues of scope and definition. In a section headed "Separation of Investment and Management" (P&L 1940, 1–2),[5] Paton and Littleton argued that "the corporation's most important accounting responsibility" was not to "one or more owner-operators for each enterprise, but rather to one or more groups or classes of detached investors, present and prospective, for each business unit" (P&L 1940, 2). The users of the financial statements were therefore the absentee owners.

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[3] On pages 4–6 of their monograph, as will be seen, Paton and Littleton undertook a defense of the use of the term "standards."

[4] Littleton (1938c, 239) wrote that "if accounting principles cannot be consistent, they cannot be brought into a single coördinated body of theory," which evokes the wording at the end of the quoted passage.

[5] P&L 1940 is short for the Paton and Littleton (1940) monograph.

The coauthors then discussed the "Public Aspects of Corporate Administration" (P&L 1940, 2–3), reflecting the public interest in corporate affairs. "Great corporations," they said, "are quasi-public institutions, mechanisms for social cooperation in the conduct of large-scale business enterprise" (P&L 1940, 2), following which they cited corporations' "duty to a public consisting of investors," wage earners, customers, and government. In his Dickinson Lecture at the Harvard Business School delivered two months after the publication of the monograph, Paton (1940b, 3–4) referred to "the growing conception of the organized business enterprise, particularly the corporation, as a semipublic institution—an institution in which immediate management, stockholders, creditors, employees, customers, and government have a stake." Paton thus expressed an almost identical view as that espoused in the monograph. They then wrote that the obligation of the corporation was "to furnish dependable and relevant information" (P&L 1940, 3). Littleton (1938c, 235) had written that the single function of accounting was "to supply dependable, relevant information about a business enterprise"—almost the same wording.

In "Position of the Professional Accountant" (P&L 1940, 3–4), the coauthors said that "In the light of present-day trends it is to be hoped that the position of the accountant can be strengthened. Public accountants must assume their full share of responsibility for the preparation of accurate and informative reports on the operations of business. The alternative is rigid governmental control and prescription" (P&L 1940, 4). This latter injunction sounds like Paton, ever the advocate, who always fretted about a government takeover of business. Yet Littleton (1938b, 104) had written eloquently that "[t]he public accountant owes a clear duty of professional skill and judgment to his client; but he also has an obligation to the public, the legion of present and prospective absentee investors: an obligation of judicial disinterestedness, of independent views, of strong convictions on fair play." Their monograph was published in the wake of the McKesson & Robbins auditing scandal in late 1938, followed by hearings held by the Securities and Exchange Commission, which soured the reputation of public accountants. An editorial in *The Journal of Accountancy* (The McKesson & Robbins Case 1939) said that "the wave of publicity" provoked by the scandal had "shocked the accountancy profession into breathlessness."

Paton and Littleton (P&L 1940, 4–6) then devoted a two-page section, "Character of Accounting Standards," to a defense of the use of term "standards" instead of "principles" in the monograph. They say they will use the term "principles" sparingly and that "the idea of useful standards is emphasized" (P&L 1940, 4). Where they wrote in their monograph that "standards should serve as guideposts to the best in accounting reports" (P&L 1940, 6), Littleton (1938b, 99) had earlier written that standards "serve as guideposts to truth, honesty, and fair dealing in accounting reports"—almost the same wording. Tellingly, the title of this chapter is "Standards" even though this subject was not taken up until the end of the chapter. Judging from the three articles on standards published by Littleton, cited above (Littleton 1938b, 99, 104; 1941a, 331; 1941b), one may infer that this section was his doing. As Buckner (1975, 170) observed, their discussion in this section "echoed earlier statements by Littleton." It was Littleton, much more than Paton, who dwelled on the terms of discourse.

CHAPTER II: CONCEPTS

This 17-page chapter outlined the broad terminology they selected, rooted in the ideological parameters for the monograph. It is the chapter on which Littleton placed his strongest stamp. Bedford and Ziegler (1975, 439) have aptly written, "Paton brought the economic point of view to the joint effort while Littleton provided an historical and philosophical background." Chapter II was the philosophical part of their monograph.

At the outset of the chapter, the coauthors wrote, "[t]he basic concepts, or assumptions, here summarized constitute a suitable foundation for the discussion of accounting standards which follows" (P&L 1940, 7). The six basic concepts, or assumptions, were: the business entity, continuity of activity, measured consideration, costs attach, effort and accomplishment, and verifiable, objective evidence—each discussed in its own section.

In the section entitled "The Business Entity" (P&L 1940, 8–9), the coauthors made it clear that they viewed the accounting entity as being a separate abstraction from the owners of the enterprise: "it has become almost axiomatic that the business accounts and statements are those of the entity rather than those of the proprietor, partners, investors, or other parties or groups concerned" (P&L 1940, 8). In the section headed "Continuity of Activity" (P&L 1940, 9–11), they amplified: "Since the concepts of business entity and continuity predicate an enterprise or institutional point of view, accounting theory is likewise oriented first to the enterprise as a productive economic unit and only secondly to the investor as a legal claimant to assets" (P&L 1940, 11). Although this was Littleton's measured and stately style of writing, it was Paton (1922a) who was well known for his pioneering advocacy of the "entity theory," which, for him, implied both a separation of the enterprise from its shareholders and that net income was the return to both creditors and shareholders. As will be seen below, the coauthors indeed displayed interest charges as a distribution of net income. In his 1939–1940 Dickinson Lecture, Paton (1940b, 2) reaffirmed his allegiance to the entity theory. By contrast, the proprietary theory implies that the enterprise is co-extensive with the proprietors and that net income is the return to the proprietors. Littleton (1933, 203), while then declining to take sides between the proprietary and entity theories, conceded that the entity theory was "well presented in the corporate form of enterprise," and, as noted above, the corporation was the coauthors' focus in the monograph. Littleton (1939a, 63) referred to "the outmoded concept of income as any and all increases in proprietorship." In his *Structure of Accounting Theory,* Littleton (1953, 20–22) placed emphasis on "enterprise income."

It is interesting to note that the first two of Paton's (1922b) 11 "assumptions of the accountant" were the business entity and the continuity of this entity (going concern). The remaining assumptions set forth in the headings of Chapter II were apparently derived from Littleton.

In a passage also written in Littleton's manner, the coauthors subscribed to the "clean surplus" view of the treatment of "all special and nonrecurring losses and gains" (P&L 1940, 10). In their individual writings, both had sided with the "clean surplus" approach (Paton 1938a, 106; Littleton 1939a, 63; 1938b, 102–103; 1940). Littleton was particularly concerned that the omission of extraordinary items from the income statement would lead to a leveling of income. The AAA Executive Committee's (1936, paragraphs 9, 11, 13, and 17) principles statement had also adopted the "clean surplus" view.

The coauthors contended that "Liquidation is not the normal expectation; continuity is. The 'going concern' or continuity concept has an important bearing on periodic reports" (P&L 1940, 9). Both Paton (1922a, 478–480) and Littleton (1938a, 20) had previously underscored the centrality of the "going concern" concept. It is here, too, where Paton and Littleton marked the transition from the balance-sheet to the income-statement focus in accounting reckonings. They wrote, "Earning power—not cost price, not replacement price, not sale or liquidation price—is the significant basis of enterprise value. The income statement, therefore, is the most important accounting report" (P&L 1940, 10). Littleton (1937a, 15; emphasis in original) had written,

> Profit, being the focal center of business enterprise, is likewise the focal center of account-keeping.. . .[This fundamental thought] had however drifted into relative obscurity in much of the accounting literature through the tendency of both balance-sheet audits for credit purposes and judicial consideration of the dividend problems of limited liability corporations, to stress the balance sheet almost to the exclusion of the income statement. . . .our period of apostasy should come to a reaffirmation of fundamental truth. Income *is* primary.

For his part, Paton (1940b, 5) cited convenor George O. May at an early meeting in 1939 of the AIA's Committee on Accounting Procedure (with both Littleton and Paton present) who "proposed as a sort of guiding 'golden text' the following statement: 'A fair determination of income for successive accounting periods is the most important single purpose of the general accounting reports of a corporation.' This statement, which was adopted by the committee, is in line with the shift in emphasis which is the most important development in accounting in recent years." This shift in emphasis, he said, represented a move away from the point of view of the commercial creditor and instead toward the needs of the investor. Ijiri (1980, 626) has observed that, because of the income-statement orientation, "[a]ssets and liabilities play only a secondary role in the monograph."[6]

Paton and Littleton next took up "Measured Consideration" (P&L 1940, 11–13), averring that "[t]he basic subject matter of accounting is. . .the measured consideration involved in exchange activities" (P&L 1940, 11–12). They added, remarkably at variance from Paton's professed view (e.g., Paton 1936), that "[t]he term 'measured consideration' is more appropriate than the word 'value' to indicate the type of information which makes up the subject matter of accounting. It is confusing to say that accounting records 'values'" (P&L 1940, 12). Littleton (1929, 153) had earlier written, "[a]ccounting is a record function, not a valuation function. . .for values are too momentary and too subjective to be clothed in figures." Littleton (1928, 287) emphasized that value "can never be the starting point of a calculation of profit." The coauthors then wrote, "[t]he consideration or price-aggregate of an exchange may express the mutual valuation of the buyer and seller as of the moment of exchange and, in this limited sense and as of that moment, a record of such price-aggregate may be viewed as a record of value" (P&L 1940, 12). This was pure Littleton, whose earlier writings referred variously to "money outlays," "money prices," "bargained prices," and "two price streams" (Littleton 1936a, 1937a, 1938a, 1938c). "Bargained prices" was used frequently in the monograph. The term "price-aggregate" may be traced to Littleton (1938c, 237); it was more generic than "cost," because it could apply as well to the price of revenue. The coauthors said that recorded price-aggregates were "the best means available for representing varied transactions in homogeneous terms" (P&L 1940, 12). Littleton, in his earlier writings (Littleton 1936a, 11–12, 15; 1937a, 17; 1937b, 58), frequently seized on the term "homogeneous" in relation to the accounting data.

The coauthors also cautioned that neither money nor price was significant. Instead: "'Service' is the significant element behind the accounts, that is, service-potentialities, which, when exchanged, bring still other service-potentialities into the enterprise" (P&L 1940, 13). The term "service-potentiality" may be traced to Littleton (1936a, 11). He also referred to

[6] Other writers, of course, noted the shift during the 1930s toward the income-statement focus. Gilman (1939, iii) wrote that the justification for his book "is to be found in the history of the past half-dozen years which have witnessed a shift in accounting emphasis from the balance sheet to the profit and loss viewpoint."

"service-inputs" and "service-outputs" (Littleton 1937a, 17) and to "service acquired" and "service rendered" (Littleton 1939a, 59). The coauthors thus drew, wittingly or not, on John B. Canning's (1929, 188–189) pioneering emphasis on the future service potential of assets in his book, *The Economics of Accountancy,* which both coauthors had read (Zeff 2000a, 26; Littleton 1937a, ftn 7). At the end of their monograph, the coauthors appended a 12-page annotated bibliography of works published from 1929 to 1939, yet Canning's book was not included.

The next two sections of the chapter were headed "Costs Attach" and "Effort and Accomplishment" (P&L 1940, 13–18), containing discussion, including the famous "matching cost and revenue," which can be traced to a pair of mentions of "matched costs and revenues" and another three mentions of "matching," respectively, in Littleton (1938a, 19–20; 1939a, 60).[7] The lively metaphors introduced in these two sections were faithful to expressions that Littleton had previously used in journal articles in the 1930s. In his manner of writing, Littleton had a penchant for metaphors. In these sections, the coauthors averred that costs have an *affinity* and *attach* to each other, thus exhibiting a *power of cohesion,* constituting *cost accumulations in suspense, as it were, awaiting their destiny,* which was "to give materials and other components additional utility" (P&L 1940, 13–14; emphasis added). Littleton (1929, 151) had written, "Like goods purchased, the goods manufactured are, as it were, in suspense awaiting final disposition"—almost the same wording. The coauthors added: "all costs incurred should be viewed as ultimately *clinging* to definite items of goods sold or service rendered" (P&L 1940, 15; emphasis added). In Littleton (1939a, 57–58, 60), multiple references were made to cost (effort) being matched with revenue (accomplishment),[8] and some years earlier Littleton (1935, 270) had introduced the "clinging" metaphor, which he said he had borrowed from the practitioner Maurice E. Peloubet.

Thompson (1991, 90) has written of the monograph that "[s]ome justification for its success can be found in the richness of its imagery and in its obvious appeal as an abstruse theoretical justification of extant accounting practices to those with a vested interest in the maintenance of those practices." The monograph, he said, "employed imagery which captured the imaginations of accounting thinkers, providing useful metaphors for thinking about accounting concepts" (Thompson 1991, 80). The AAA's Committee on Concepts and Standards for External Financial Reports (1977, 9–10) said that the monograph's "vivid metaphors employed in the inductive exercise (e.g., 'matching,' 'attaching,' 'costs are assembled. . .as if they had a power of cohesion') conferred a greater respectability on practices that could be so colorfully and attractively characterized."

One of the tangible and lasting contributions of the monograph to the accounting literature and to accounting debates has been "matching cost with revenue," which has since become the common currency of discussions about the accrual process in accounting (Zimmerman and Bloom 2016).

In the section entitled "Verifiable, Objective Evidence" (P&L 1940, 18–21), the coauthors established this term as the *sine qua non* for the dependability of the accounts. One can find these same words in Littleton (1938a, 18): "objective evidence," "verifiable events," and "verifiable facts." In Littleton (1938c, 237; 1939a, 58; 1939b, 231), "objective, verifiable facts" was mentioned in the first article, "verifiable, objective evidence" was mentioned twice in the second, and "objectively determined, verifiable facts" appears in the third. Bedford and Ziegler (1975, 440) affirm that "the concept of verifiable, objective evidence clearly reflects the thinking of Littleton." In their monograph, Paton and Littleton counseled that "[t]he most desirable evidence is that which is completely objective and wholly without any taint of the uncorroborated personal opinions of an interested party" (P&L 1940, 20). Littleton (1939b, 231; emphasis added) had used almost the same wording: "We learn that objectively determined facts are more likely to approach the truth than *uncorroborated personal opinion*." Yet there were exceptions to the use of objective evidence. They conceded that periodic depreciation could not be subject to a completely objective determination. But a strict reading of "verifiable, objective evidence" would rule out departures in the accounts from historical cost, such as replacement cost. Further exceptions, as we shall see later (in Chapter IV, which is more associated with Paton), were the recording of accretion on standing timber tracts and of the discovery value for oil and gas properties.

It is of interest that, when reflecting back years after the monograph was published, Littleton (1958, 250) noted with favor three of the concepts set forth in Chapter II: costs attach, effort and accomplishment, and verifiable, objective evidence. In a footnote, he added that these three might more closely be described as the better choice among alternatives, which implied that they were central to his system of thought.

Ijiri (1980, 622–623) attests to the singular importance of "verifiable, objective evidence" in the scheme of assumptions set forth in the chapter:

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[7] In his 1939–1940 Dickinson Lecture in Accounting, which was delivered in April 1940, Paton (1940b, 11, 12) for the first time used the phrases, "matching costs and revenue" and "matchings of revenues and costs."

[8] It is of interest that Stephen Gilman included a seven-page chapter, "Matching Costs and Periodic Income," in his *Accounting Concepts of Profit* (Gilman 1939, 125–131), where the term "matching" was frequently invoked. He had read Littleton (1938a), which he cited twice elsewhere in his book (Gilman 1939, 252, 253). He wrote, "[r]epeatedly accountants and accounting writers have referred to such matching as a desirable, even if often unattainable, ideal" (Gilman 1939, 560). Littleton (1938a) did not regard matching as unattainable but as quite attainable.

> Although verifiable, objective evidence is discussed as the last of the six basic assumptions of accounting, it seems to rank first among the six in terms of significance in guiding the contents of the monograph. The other five assumptions seem to be provided to support this key sixth assumption.

Ijiri (1980, 624) added, "Justification for the historical cost principle comes in large part from the need for verifiable, objective evidence."

At the close of the chapter, in a section entitled "Assumptions" (P&L 1940, 21–23), the coauthors drew attention to the assumption made in accounting of a stable measuring unit, adding "In periods of major price movements this assumption is clearly invalid for certain purposes, as has been pointed out by various writers in recent years. Undoubtedly interpretive accounting faces a challenge at this point" (P&L 1940, 23). To Littleton, as will be seen, "interpretation" meant disclosures that were supplementary to the financial statements. This issue of accounting for price movements came up again on pages 62–63 and 139–141. These last three pages appeared in Chapter VII on "Interpretation," which was written by Paton (1980, 629). The allusion to "various writers in recent years" was, in the main, to a series of articles written by Henry W. Sweeney from 1927 to 1935, mostly published in *The Accounting Review* (Zeff 1976), and Sweeney's (1936) *Stabilized Accounting,* which Littleton (1936b) had reviewed.[9]

CHAPTER III: COST

In this 22-page chapter, in which issues were raised about how to account for cost, Paton became considerably more engaged, as he did in all of the subsequent chapters as well. One can trace many of the views on sound treatment of particular accounting practices in this and subsequent chapters much more readily to Paton's thinking and previous writings than to Littleton's. Paton had written a treatise on theory and six textbooks up to 1941—plus two textbooks in the 1950s—and his textbooks, as well as his articles, were replete with his criticisms of unsound accounting practices and with proposals for reform. Yet Littleton's sole textbook during his long career was a slim, 64-page introductory book published in 1919 (Littleton 1919). Therefore, when divining Littleton's views, one must rely on his many journal articles, all but a few of which were written at a lofty philosophical level—as well as on his major theory treatise, *Structure of Accounting Theory* (Littleton 1953) and his treatise jointly written with his disciple, Vernon K. Zimmerman, *Accounting Theory: Continuity and Change* (Littleton and Zimmerman 1962), but both of these were published more than a dozen years after his monograph with Paton. In Littleton's writings—unlike Paton's—one finds very few opinions on the soundness of particular accounting practices.

The first section of the chapter, "Costs as Price-Aggregates" (P&L 1940, 25–27), carries forward some of the ideas in Chapter II on price-aggregates. The coauthors said that "Costs are the fundamental data of accounting" and that "'cost' is substantially the equivalent of 'price-aggregate' (unit price times quantity) or 'bargained price'" (P&L 1940, 25; footnote omitted). This is still Littleton speaking, although this assertion is very close to a statement made by Paton in his 1939–1940 Dickinson Lecture: "'Costs' rather than 'assets' is the significant term in present-day accounting" (Paton 1940b, 7).

Under the next heading of "Complexities of Cost Determination" (P&L 1940, 27–29), Paton began coming to the fore. The discussion favored the use of "implied cash cost" when accounting for property received other than for cash, including by donation, and also was about establishing the recorded basis of assets, such as important oil pools, "which have an immediate economic significance far in excess of the actual outlay required for their acquisition" (P&L 1940, 28). They suggested, "[i]n extreme situations of this type it may be necessary to establish formally a new point of departure on the basis of implied cash cost—the amount of money which would unquestionably be necessary to acquire the resource in its established commercial status—in lieu of an actual bargained-price" (P&L 1940, 28–29). This latter view may be traced to several lines in Paton's textbook, *Essentials of Accounting* (Paton 1938a, 519). Also, the coauthors' brief mention on page 28 of managing a "fresh start" during reorganization, where it was necessary to estimate the fair value of the assets, had been treated in the same textbook on pages 686 to 690. These were all concessions involving the estimation of value when price-aggregates, and therefore objective evidence, were not available.

One subtle difference between the sections written by Littleton and those written by Paton is that the former were usually written in descriptive terms (with heavy use of the verb "to be"), while the latter were often couched in more prescriptive terms, sometimes even in "ought" terms. Littleton was mostly an inductive thinker, while Paton was a deductive, normative thinker, and their language often reflected these focal differences. Moreover, Paton's advocacy was often marked by proactive adverbs and double negatives, for example: "the costs…are clearly charges" (P&L 1940, 31) and "for many cases this is not unreasonable" (P&L 1940, 29).

At the outset of the next section, entitled "Cost when Payment is Deferred" (P&L 1940, 29–30), Paton inserted his long-standing peeve that purchase discounts were not realized earnings; instead, the price at which purchases should be shown was

[9] Yet neither Sweeney's articles nor his book were included in the coauthors' lengthy annotated bibliography at the end of the monograph.

the *net cash price* (P&L 1940, 29). In his *Essentials of Accounting* (Paton 1938a), this point was discussed at length on pages 267 to 274 as well as in Paton (1920a, 343–346; 1922a, 410–415; 1934, 126–127; 1940b, 6–7). Paton's view on this issue was reprised in Chapter IV under the heading, "Cost Savings versus Revenue" (P&L 1940, 63–64).

Another long-standing Patonian peeve was showing the cost of an asset, which was acquired by issuing an obligation, at the latter's face or maturity amount when there was an implied discount equal to imputed interest (P&L 1940, 29–30). Instead, "the cash cost is measured by the amount of money which would have been raised had the security been issued for cash" (P&L 1940, 30). Paton (1922a, 415–423; 1928b, 271–273) had earlier declared himself on this issue, which was repeated in his 1939–1940 Dickinson Lecture in Accounting (Paton 1940b, 7–8). The coauthors raised essentially this same issue in another guise, under the heading of "The Cost Standard for Equities" (P&L 1940, 37–38), again Paton's handiwork. The section restated the view that "the face value, or nominal amount, of the liability is not always a fair representation of immediate cash 'cost' or bargained price-aggregate" (P&L 1940, 37), as with accounts payable, which can be settled at a discounted amount for prompt payment. Paton (1938a, 267–270) argued that accounts payable that can be settled by taking a discount for prompt payment should be shown at the net cash price. Yet divining management intent does not represent objective evidence.

The use of "Equities" in the title of this last section, which dealt solely with liabilities, owed its origin to Paton's (1922a) *Accounting Theory*, where he coined the term "equities" to encompass the entire right side of the balance sheet. Only once did Littleton (1933, 201) use the term "equities" in this sense, but only when interpreting nineteenth-century German accounting theory.

Under the next heading of "Assignable and Unassignable Costs" (P&L 1940, 30–33), the coauthors stated that all costs necessary to place a tangible asset in a position to serve its particular function were to be included in the cost of the property (P&L 1940, 31), which was aligned with Paton (1938a, 258, 521), but which was treated more elaborately in the monograph. The coauthors also recommended showing organization costs—that is, the costs of launching the enterprise—as part of the asset total (P&L 1940, 32), a view also espoused by Paton (1938a, 543–544; 1940b, 7). Curiously, they wrote, "[s]imilarly interest paid or accrued during construction and other proper carrying charges are asset components, even when not readily allocable to specific units of physical property" (P&L 1940, 32). Yet Paton (1941, 415) regarded such interest capitalization as being "based upon the proprietary point of view." Paton was a partisan of the entity point of view, and Littleton seemed to support it as well, as stated earlier in this article. Paton (1922a, 303–306) was sympathetic to the capitalization of interest during construction for public utilities and railways, where the investor is entitled to a fair return on a fair value. But, he added, "certain practices can be justified in the field of regulated enterprise which are quite unreasonable in the accounting for ordinary private business in the competitive field" (Paton 1922a, 305).

The inclusion of a section of three pages (P&L 1940, 34–37), "Hypothetical Costs," on the rather dated proposal to record putative interest cost, including an estimated return on capital, is odd, because the issue originally surfaced in the literature in the late 1910s at the time of the founding of the National Association of Cost Accountants and lasted into the 1920s (Scovell 1924; Zeff 1984, 448–450).[10] It was an old controversy that had largely died out by the 1930s. Paton had discussed and dismissed these proposals in his *Accounting Theory* (Paton 1922a, 271–272, 279–282; also 1920c), and he was surely the one who drafted this section of the monograph. In response to "the advocacy of the inclusion in operating costs of an estimated interest charge on all capital employed in the business" (P&L 1940, 34), the coauthors argued that the function of accounting is the reporting of actually incurred costs, not assumed or hypothetical costs.

A further peeve of Paton's was discussed under the heading, "Bond Discount and Premium" (P&L 1940, 38–40). As far back as his *Principles of Accounting* textbook with Russell A. Stevenson (Paton and Stevenson 1916, 126), Paton had argued that bond discount was to be shown as a contra to the face or maturity amount of the related liability, not as a deferred charge among the assets. The latter practice was commonly seen in companies' financial statements until the end of the 1960s, following which the Accounting Principles Board's (1971) *Opinion No. 21* pronounced that bond discount should be deducted from the related liability. Yet in 1940, when the monograph was published, the instruction book for the Securities and Exchange Commission's Form 10-K required that bond discount be classified as a deferred charge. In this section, certainly written by Paton, the practice of showing bond discount as an asset was thoroughly discredited. The AAA Executive Committee's (1936, paragraph 6) statement also advocated contra-liability treatment of the discount, doubtless inserted by Paton, who then defended it in an article (Paton 1937).

The two sections, "The Bargained-Price of Capital Stock" and "Classification of Equities" (P&L 1940, 40–43), dealt with various accounting questions attending the issuance of preferred and common stock. They appear to have been drawn largely from portions of Paton's *Essentials of Accounting* (Paton 1938a, Chapters 33–36).

"Contractual Interest Charges" (P&L 1940, 43–45), the last section in Chapter III, was where the coauthors made the point, originally seen in Paton (1922a, 264–270), that interest charges "are not operating costs but represent a distribution of

[10] See Paton's (1925) unfavorable review of Scovell's book, *Interest as a Cost*.

income, somewhat akin to dividends" (P&L 1940, 43–44). Paton's view of the entity theory, which he called the "point of view of the enterprise as an operating entity" (Paton 1938a, 102), was that the income statement should show a net income that represents the return to all capital suppliers. Hence, interest, as the return to credit-suppliers, should be shown as a distribution of net income. No other accounting theorist but Paton maintained this position.

In sum, virtually all of Chapter III was heavily influenced by views associated with Paton.

CHAPTER IV: REVENUE

This 19-page chapter, like its predecessor, also shows Paton's fingerprints. The writing style is very much Paton's—that of an advocate who is sure of his ground—and many of the ideas are ones that could be found in his earlier writings. In the first section, "Nature of Revenue" (P&L 1940, 47–48), we see two references to price-aggregate and one to matching, which may mean that Littleton had a hand in its drafting. But the section concludes with a declarative statement of Paton's unique position that "[t]he figure of income. . .expresses the amount of resources which may be drawn upon (if in disposable form) to meet interest charges, income taxes, and dividend appropriations. . ." (P&L 1940, 48). Not only did Paton (1922a, 179–181, 264–270; 1938a, 101–104, 758) advocate drawing the line before interest charges, he regarded income taxes too as a distribution of income—another position on which he was entirely alone, at least in the United States.

Under the heading, "Earning versus Realization" (P&L 1940, 48–49), the coauthors contrasted the *earning* of revenue with the *realization* of revenue, defining both terms, and concluding that, as a basis for revenue recognition, "realization is in general more important than the process of earning" (P&L 1940, 49). One supposes that earning and realization were meant to be rough equivalents of Littleton's effort and accomplishment, his favored terms discussed in Chapter II. Earning and realization have had a longer post-monograph life in the literature than have effort and accomplishment, and the former terms are used today when discussing the criteria for revenue recognition. Realization, but not the term "earning," may be found in Paton (1938a, 307), yet Paton (1922a, Chapter XIX) had earlier discussed the earning *process* at length. He finally came round to use of the term "earned" revenue in his Dickinson Lecture (Paton 1940b, 5). Realization and earning also appeared in Littleton's (1936a, 10–11; 1937a, 20–21; 1938a, 20–21) earlier writings.

The next section, "Production Basis of Measurement" (P&L 1940, 50–52), includes reference to the "percentage of completion" method of estimating the revenue to be recognized in proportion to progress in incurring the construction cost of long-term projects. The coauthors suggest that an alternative solution to the recognition of revenue for a construction job "is to use the job or project rather than the interval of time as the unit in terms of which revenues and costs are assembled" (P&L 1940, 51). This was precisely the suggestion made by Paton in his 1940 Dickinson Lecture (Paton 1940b, 5): "shifting from the period of time to the project or job in reckoning income. Here would seem to be a case where we should not insist on a determination of income every time the earth completes its journey around the sun." Paton (1922a, 458–464; 1939) had also favorably discussed "percentage of completion." No references to this method can be found in Littleton's earlier writings.

"Accretion" (P&L 1940, 52–53), the next heading, was included in the monograph because, one supposes, that Paton (1940b, 5), in his 1939–1940 Dickinson Lecture, said he favored the recognition of revenue "for natural increase or accretion." The coauthors wrote, beginning with a characteristic Patonian double-negative when adopting a borderline position, "[t]here is no serious objection to the reporting of careful estimates of accretion provided that the addition to assets is handled in such manner as not to obscure recorded costs and that the resulting credit is clearly labeled and excluded from realized income" (P&L 1940, 52–53). The coauthors said they were thinking of a tract of growing timber. This accounting for accretion was featured in Paton (1924, 618–623; 1938a, 519; 1941, 394–395), and it was accorded extensive treatment in Paton (1952, 457–462). This was yet another Paton novelty, and it surely departed from Littleton's argument for objectivity.

The next section, a long one entitled "Sale Basis" (P&L 1940, 53–57), established the moment of sale as the occasion for recognizing revenue for most concerns in the tangible goods trade, and dealt as well with estimated uncollectibles, collection costs, and sales discounts. The coauthors rebutted the argument that obtaining a receivable is "scarcely more suitable as a gauge of revenue than salable goods on hand," because, it was sometimes alleged, the amount in the receivables account could not be used to make actual payments (P&L 1940, 56). The entire section was written in Paton's style, and the issues taken up were ones on which Paton had already exposited in one place or another (e.g., Paton 1938a, 81). The argument was made in the section that estimated uncollectibles and collection costs were to be shown as a contra-revenue, although a pair of footnotes counseled that this did not preclude the alternative treatment of showing them as an expense. Paton's expressed preference for treating estimated uncollectibles as a contra-revenue, a position that few others had avowed, first appeared in an early article (Paton, 1920a, 340–341) and was repeated in his *Accounting Theory* (Paton 1922a, 406–407) and in his textbooks (Paton 1924, 358; 1938a, 412–413). In Paton (1938a, 418–419), he discussed the accounting treatment of collection costs and seemed torn between showing them as an expense or a contra-revenue. The section concluded with the advice that sales that allow a discount for prompt payment were best recorded at the net amount, not at gross. Paton (1938a, 334–336) had adopted this very position in *Essentials of Accounting*.

The coauthors' next section, "Cash Basis" (P&L 1940, 57–59), treated the advisability of using "the cash basis of measuring revenue for sales of goods on the installment plan" (P&L 1940, 58). Like almost all of the sections in this chapter, it was written in Paton's unmistakable hand (for example: "becomes imperative if downright misstatement is to be avoided" [P&L 1940, 57]). They wrote, "if the revenue associated with a particular sale is spread over two or more periods of reckoning it is clear that the costs associated with such sale should be similarly spread" (P&L 1940, 59). The coauthors recommended a scheme of journal entries with receivables "set up in memorandum self-balancing form" so that the "revenues on a cash basis" would be appropriately matched with the "the assembled costs of product sold and delivered on contract [transferred] to a special account" (P&L 1940, 58). The year prior to publication of their monograph, Paton (1939) had published an article in which he illustrated just such a set of journal entries. The same set of journal entries appeared in Paton's (1938a, 601–605) *Essentials of Accounting* and later in his *Corporation Accounts and Statements* (Paton 1955, 283–285).[11] Although Littleton (1939a, 58) supported recognizing "revenue from instalment sales in proportion to collections," he did not recommend journal entries to account for such revenues and related costs as Paton had. This was surely a section written by Paton.

The next section, "Non-Operating Revenues" (P&L 1940, 60–61), is disappointing in a monograph intended to provide guidance on sound accounting. It is an inconclusive discussion of whether to show gains resulting from the disposition of fixed assets in income or in earned surplus. In this section, the coauthors revisited their support on page 10 for the "clean surplus" treatment of "all special and nonrecurring losses and gains" yet appeared to vouchsafe an exception. On the one hand, said the coauthors, if the capital gain was not primarily a reflection of general price-level movements, "it seems clear that [it] constitutes genuine business income and may reasonably (as well as legally) furnish a basis for dividends" (P&L 1940, 61). On the other hand, in the very next paragraph they stated that, because the gain "has been accruing over a number of years [and] is evidently not earned—in full—in the period in which realized," there was "support for the theory that all or part of such a gain constitutes an adjustment of past profits as reflected in the earned surplus statement" (P&L 1940, 61). This reads like a compromise brokered by Paton and Littleton, or a concession to some commentators on one of their drafts. Neither coauthor would likely want to take credit for this indecisive section.

The next section, "Appreciation" (P&L 1940, 62–63), dealing with the possible upward valuation of non-monetary assets, could well have been proposed by either coauthor. Paton, as is well known, favored recording appreciation in the accounts, with the credit made to net income, as far back as his doctoral dissertation in 1917 (Zeff 1979, 95). But in *Accounting* (Paton 1924, 367) he no longer supported crediting appreciation to net income and by the 1930s he had come round to the view that appreciation should be presented in a way so as not to obscure historical costs in the financial statements, that is, be relegated to supplementary disclosures (Zeff 1979, 107–111). Although Littleton was always an undeviating historical coster, some ten years previously his graduate students at the University of Illinois prepared under his direction a survey on how to account for appreciation. The results of the survey were reported, interspersed with comments from leading members of the American Association of University Instructors in Accounting (predecessor of the AAA), in what was perhaps the longest article ever published in *The Accounting Review* ("A Symposium on Appreciation" 1930). If the coauthors had dithered in their previous section on "Non-Operating Revenues," in the section on "Appreciation" they professed a categorical conclusion: appreciation does not give rise to recognizable income.[12] Written in Paton's declarative style, the arguments against this conclusion were rebutted one by one (P&L 1940, 62):

> Appreciation, in general, does not reflect or measure the progress of operating activity; appreciation is not the result of any transaction or any act of conversion; appreciation makes available no additional liquid resources which may be used to meet obligations or make disbursements to investors; appreciation has little or no legal standing as income.

The last two points in this rebuttal, appreciation not providing liquid resources and having little or no legal standing as income, were made by Paton (1924, 367) in *Accounting*.

The coauthors then made "the additional point that the appraiser's estimate of value, particularly for complex aggregates of industrial plant, is often a figure of very doubtful validity" (P&L 1940, 62). Their only grudging concession that appreciation could be classed as income was for marketable securities: "Even if the enterprise is definitely engaged in security speculation and appreciation or 'declination' might be said to reflect the activity of the enterprise, it is clear that the increase or decrease in the market value of holdings is preferably described as unrealized income or loss" (P&L 1940, 63). For other kinds of enterprise holding marketable securities, "it is preferable to adhere strictly to cost, for income-sheet purposes, accompanied by parenthetic showing of market values in the balance sheet" (P&L 1940, 63).

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[11] Paton's *Corporation Accounts and Statements* (Paton 1955) and *Asset Accounting* (Paton 1952), cited below, were both published "with the assistance of William A. Paton, Jr.," Paton's son. The son, Andy Paton, has advised that his only involvement with the books was that he read the proofs (per a telephone conversation with William A. Paton, Jr., August 28, 2015). Therefore, citations to the two books are to the senior Paton only.

[12] It is interesting to observe that a young Paton, writing with Russell Stevenson in 1917, argued equally categorically that appreciation *should* be included in income (Paton and Stevenson 1917, 213–219).

There is an aside in this section, giving a foretaste of what is to come in Chapter VII, entitled "Interpretation" and written by Paton. The coauthors raised the specter of inflation: "to the extent that appreciation reflects a change in the general price level it can be urged that no true income is involved at any stage" (P&L 1940, 62–63). In such an environment, they counseled that "business income as ascertained by matching sales of product and applicable dollar costs often cannot be fully interpreted, without reference to the change in the value of money, as representing an increase of purchasing power" (P&L 1940, 63).

In "Cost Saving versus Income" (P&L 1940, 63–64), the final section in the Revenue chapter, the coauthors, principally Paton, repeated the injunction in the earlier section, "Cost when Payment is Deferred" (P&L 1940, 29–30), in the chapter on Cost, that purchase discounts—as well as "bargain" purchases—do not constitute revenue.

CHAPTER V: INCOME

At 32 pages, this was the longest of the seven chapters. The writing style throughout the chapter is Paton's. In the initial section, "Homogeneity of Costs in Relation to Revenue" (P&L 1940, 67–69), the reader again sees Paton's hand. In very much the same vein, he had written "the homogeneity [or equal ranking] of all classes of legitimate costs in their relation to the activities of the enterprise must be recognized" (Paton 1939, 27). Also, Paton never liked the term "gross profit," and in this section the coauthors wrote, "[t]here can be no net income until all costs are covered, and a showing of profit (even if qualified by the term 'gross') before all applicable charges are deducted is likely to be misleading" (P&L 1940, 67). Correspondingly, in a 1934 article, when commenting unfavorably on use of the term "gross profit," Paton (1934, 124) wrote, "[t]he accountant believes, supposedly, that all necessary costs of operation are on precisely the same level so far as economic validity and influence upon prices are concerned; and he should accordingly not be guilty of presentations of data which convey quite a different impression." His point was that the cost of sales should not be accorded greater prominence than other costs. In *Essentials of Accounting* (Paton 1938a, 756), he wrote in a subpart headed "'Gross Profit' in Income Sheet" that "[t]here is in general no warrant for the view that certain types of costs have priority or right of way over other charges, or are more surely recoverable than other charges." Also see Paton (1938d, 198–199). In view of the assertion in the first sentence of this section that "all costs are homogeneous and rank abreast" in essential relation to revenues (P&L 1940, 67), these sentiments echo Paton's earlier writings. Yet, as noted above (in Chapter II), the term "homogeneous" in relation to costs was one that Littleton (1936a, 11, 12, 15; 1937a, 17; 1937b, 58; 1938a, 19) also invoked frequently in his earlier writings.

Much of the coauthors' discussion in the early sections of this chapter has remarkable parallels with Paton's 1939–1940 Dickinson Lecture. With respect to "gross profit," he argued that it "is a relic of the early history of mercantile concerns, and it is high time that it be relegated to the limbo of outworn procedures" (Paton 1940b, 9). In this first section of the chapter, on homogeneity, the coauthors wrote, when arguing for the equal ranking of costs in relation to revenue, "[t]he problem of allocation here is somewhat akin to that represented by the old story of the straw and the camel's back. Is the last straw to be held responsible for the result (unfortunate in the classic example) or is the outcome to be considered the effect of the entire load?" (P&L 1940, 69). In his Dickinson Lecture given in April 1940, Paton (1940b, 10) recited the exact same metaphor, where he answered the question, "I have always suspected that the other straws had some influence on the result."

In this section, the coauthors argued that depreciation was not "an optional, take-it-or-leave-it, type of cost. . . [but is] a genuine, out-of-pocket cost" (P&L 1940, 67–68). Paton (1934, 125; repeated in Paton 1940b, 9) wrote in the same vein, "Depreciation is an out-of-pocket cost."

The next section, "Matching Cost and Revenue" (P&L 1940, 69–72), is a somewhat rambling discussion of the proper definitions of revenue and cost, and that the matching of revenues and costs should be based on "satisfactory bases of association" for which "the essential test is reasonableness" and not by reference to "observable physical connections" (P&L 1940, 71). In his Dickinson Lecture, Paton (1940b, 10) wrote in almost the same wording, "the accountant should not be unduly influenced by apparent physical connections—'what the eye can see and the hand follow'.. . .The problem is one of reasonable economic association rather than physical incidence." Much of the discussion revolved around arraying the costs of direct labor and material, overhead costs, and non-manufacturing costs in relation to revenue, which other authors have sometimes referred to as "product" and "period" costs.

There then followed a section on "Deferred Charges" (P&L 1940, 72–74), which took up the issue of how to determine whether costs were properly "chargeable to immediate revenues" or were to be "accumulated for application to future revenues" (P&L 1940, 72). The section dealt mainly with the expensing or capitalizing of service costs, with this advice: "all costs prudently incurred which can reasonably be associated with future production are subject to deferment" (P&L 1940, 74). In his Dickinson Lecture, Paton (1940b, 11) similarly defended the "reasonableness, under some circumstances, of postponing the application of a portion of advertising and other selling charges, and of office and administration costs, to the revenues of a period subsequent to that in which such costs are incurred." Again, Paton seems to have been the source of this counsel.

The next section was on "Joint Costs" (P&L 1940, 74–76), which dealt mainly with the apportionment of joint or common plant costs to products. The coauthors recommended that such costs "be assigned to two or more products in proportion to the current market values of such products" (P&L 1940, 76). In his *Essentials of Accounting* (Paton 1938a, 509) and *Advanced Accounting* (Paton 1941, 166), Paton made the very same recommendation.

Under the heading of "Short-Term Assignment" (P&L 1940, 76–77), the coauthors discouraged short-term reckonings of net income: "[t]he difficulties of measuring net income soundly even on an annual basis are so great as to raise a serious question as to the desirability of encouraging the development of monthly or quarterly income statements" (P&L 1940, 77). In his Dickinson Lecture, Paton (1940b, 12) made the very same point: "Many concerns have adopted the practice of preparing semiannual or quarterly income reports, and occasionally an organization has gone as far as the issuing of monthly reckonings. I should like to sound a warning note in this connection. In view of the difficulties in the way of making satisfactory annual statements, there is a question as to the propriety of interim matchings of revenues and costs." Paton (1938b, 29) had earlier written, "I am becoming more and more skeptical of the usefulness of those monthly, quarterly, and other short-term income reports." The coauthors proposed a remedy for the inevitable arbitrariness of short-term apportionment of costs: "supplement the annual statement by cumulative and average reports covering longer periods" (P&L 1940, 77). In his 1939–1940 Dickinson Lecture, Paton (1940b, 16) said, "[a]s some of us have been recommending for a long time, accountants should make more use of comparative, cumulative, average income statements, as a means of throwing the single-period statement into proper perspective." In this section as well, Paton's thinking seems to have shaped the coauthors' guidance.

The remainder of the chapter, some 20 pages, dealt with "the major questions of income measurement associated with the treatment of inventories and fixed assets" (P&L 1940, 74), including "last-in, first-out" and "cost or market, whichever is lower" for inventories and the apportioning of depreciation, all of which were vexed topics. In the "Inventories" (P&L 1940, 77–81) section, the coauthors criticized the "last-in, first-out" method, which had been approved by Congress for income tax purposes only in 1938/1939, with the requirement that, once elected by the taxpayer-company, the method must also be used in the company's financial reports sent to shareholders or used for credit purposes. While conceding that the income-stabilizing effect of the method for tax purposes was valuable to business management, the coauthors maintained that it should not be followed, because "artificially smoothed or averaged incomes should not be reported as the actual earnings of particular twelve-month periods" (P&L 1940, 79). In *Essentials,* Paton (1938a, 484) wrote that the "essential weakness" of the method was that "it tends to bring about, artificially, an appearance of stability in a fluctuating business. This is the very antithesis of sound accounting." In his Dickinson Lecture, Paton (1940b, 14–16) again took a jaundiced view of the use of the "last-in, first-out" method, at length, because of its smoothing potential and for other reasons. In the May 1940 issue of *The Journal of Accountancy,* Paton (1940a) raised serious questions about the "last-in, first-out" inventory method, expanding on his earlier criticisms. Littleton (1941b, 14) also disliked the method: "I think any procedure which smooths [sic] out the effect of transactions and states the inventory figure in the balance-sheet markedly below the [historical] cost of the investment in that asset is an undesirable adjunct to accounting calculations." So, both Paton and Littleton were of a mind on "last-in, first-out."

The coauthors also deemed the use of "cost or market, whichever is lower" as unacceptable because "the use of hypothetical costs rather than recorded costs in computing cost of sales results in a distortion of such figure and of the operating net" (P&L 1940, 81). In his *Essentials of Accounting,* Paton (1938a, 485) averred that "cost or market, whichever is lower" is "an unscientific, illogical approach to inventory valuation." Also see his criticisms in Paton (1938d, 201–206). In 1947, Paton, who was then a member of the AIA's Committee on Accounting Procedure, dissented from *Accounting Research Bulletin No. 29* "Inventory Pricing," because of the favorable view it took on "cost or market, whichever is lower" (AIA Committee on Accounting Procedure 1947a, 8–9). Littleton (1929, 154) also disapproved of "cost or market, whichever is lower," which he regarded as being in the same class as valuing plant assets at "appraised reproduction cost less accrued depreciation." Littleton (1939a, 61) also inveighed against "cost or market, whichever is lower" because it did not represent objective evidence "that actual shrinkage had occurred."

One of the issues taken up under the heading of "Plant Costs" (P&L 1940, 81–84) was "the so-called 'retirement policy,' strongly supported in railway and public utility circles, [which] is not in accord with sound standards of accounting" (P&L 1940, 82). The coauthors likened this method to the famous "one-hoss shay," which operated with uniform efficiency during all of its life and then, suddenly, breaks down. By this method, all of the cost of the plant, net of salvage value, was charged to operations in full at the time the asset was eliminated from service. Paton (1941, 303–309) was one of the few textbook authors who would even bother discussing this method of accounting for plant costs, and he did so at length in *Advanced Accounting,* making the same reference to the "one-hoss shay" and also not sanctioning use of the method except in rare circumstances. The rest of the section discussed the issues bearing on the estimate of service life and the factors to consider when deciding whether to capitalize or expense repair and maintenance charges.

In the next section, "Apportioning Depreciation" (P&L 1940, 84–88), the reader finds the first of only two citational footnotes in the monograph, this one in praise of a study on public-utility depreciation by Perry Mason (1937), who had obtained his doctorate under Paton's supervision two years before. In this section, the coauthors briefly discussed the compound-interest method of apportionment in order not to ignore "the relation of rate of return and remaining investment" (P&L 1940, 85). Yet they dismissed the method because it was "unduly complex and cannot be expected to yield as reasonable results as the straight-line treatment" (P&L 1940, 85). Paton, in *Principles of Accounting* (Paton and Stevenson 1918, 517–520), *Essentials of Accounting* (Paton 1938a, 534–535), *Advanced Accounting* (Paton 1941, 290–291), and *Asset Accounting* (Paton 1952, 272–275), may have been among the few textbook authors who allotted space to the compound-interest method of depreciation.

In opposition to the tendency to engage in income smoothing, the coauthors wrote, "[t]he doctrine that the amount of periodic depreciation should be related to income is not acceptable, especially if it is employed to make the 'fat years pay for the lean'" (P&L 1940, 85). Paton (1932a, 261) employed this same figure of speech, "fat years pay for the lean," when criticizing accounting devices, such as an opportunistic interpretation of the output method of recording depreciation, which deliberately promote the artificial stability of profits. In his Dickinson Lecture, Paton (1940b, 12) referred derisively to the "'fat-year, lean-year' depreciation doctrine." One can even trace the discussion of this point to early Paton (Paton and Stevenson 1918, 509–511).

The coauthors said that, "[i]f depreciation has been accrued in full and the property is still functioning, the amount of the past overstatement—carefully estimated—should be charged to the depreciation allowance and credited to income" (P&L 1940, 86–87). In Paton's (1941, 269) *Advanced Accounting,* there was a curious difference of view: he would charge the allowance account but credit surplus, not income. This difference perhaps betrayed a disagreement between the coauthors. They then devoted a long paragraph to the doctrine in railway and public utility circles that unusual losses from the premature retirement of equipment should be added to the cost of the superseding equipment, or be set up as a special deferred charge (P&L 1940, 87–88). In this way, the losses could be recovered through charges to customers in subsequent years. The coauthors concluded, "[t]his doctrine is not in accord with satisfactory accounting standards" (P&L 1940, 87). On this particular practice of capitalizing losses upon premature retirement, Paton (1941, 319) wrote that it "is subject to serious limitation even in fields where rates are regulated." Paton characteristically took up matters relating to accounting regulation in the railway and public utility fields at some length in his books (Paton and Stevenson 1918; Paton 1922a, 1924, 1941) and in two of his articles (Paton 1932b, 1944). One can also find only brief such references in Littleton (1934a, 70; 1936a, 14; 1953, 16) and in Littleton and Zimmerman (1962, 159–161).

Under the heading of "Significance of Depreciation Charge" (P&L 1940, 88–89), the coauthors wrote (similar to pages 67–68 earlier in the chapter), "[t]he view persists that depreciation is a hypothetical, arbitrary item, in sharp contrast to the ordinary 'out-of-pocket' costs of operation" (P&L 1940, 88). In *Essentials of Accounting,* using identical wording, Paton (1938a, 539) wrote, "The view persists that the depreciation charge is a hypothetical, somewhat arbitrary item, in sharp contrast to the ordinary 'out-of-pocket' costs of operation." Is this not evidence of Paton's influence? Of course, the coauthors rejected that view. Also in this section, the coauthors counseled against confusing the booking of depreciation with the problem of replacement, a point that Paton (1938a, 541) had made in *Essentials,* and the coauthors, as well as Paton separately, said that plant cost, or depreciation, "is an extreme form [or example] of prepayment" (P&L 1940, 88–89; Paton 1938a, 540). Virtually the entirety of this section can be found in Paton (1938a, 539–542), with frequently the same phrasing.

In the section entitled "Land and Wasting Assets" (P&L 1940, 89–91), the coauthors' two sentences on whether taxes and other carrying charges are an element in the cost of acquired land were almost identical to two sentences in Paton's (1938a, 514) *Essentials* (P&L 1940, 89–90). The coauthors' advice on possibly revaluing land—curious for a tract that was avowedly a trumpet of historical cost—was: "even if the land account were revised from time to time in terms of estimated market value, it would be difficult to make a case for the inclusion of the amount of the unrealized gain or loss in the periodic income statement" (P&L 1940, 90). This advice varied from Paton's (1938a, 515) recommendation in *Essentials,* which was that a change in the valuation of land, based on unquestioned values that are greatly above or below the amount of book costs, should be reported as supplementary financial data. But in his *Advanced Accounting* (Paton 1941, 376–377), Paton adopted a line similar to that in the monograph, namely, that any write-up or write-down in the carrying amount of the land, if recorded, was to be a balance-sheet adjustment. In *Accounting,* Paton (1924, 367–369) had argued that the appreciation in land, if it were "unmistakable," should be credited to a Surplus from Land Appreciation account.

In regard to wasting assets, such as natural resources,[13] the coauthors made a point that few textbook authors, other than Paton, would have noticed: that, despite the fact that dividends can legally be paid out of net income before deducting depletion cost, the "common practice of reporting depletion as an adjustment of the net rather than as a direct charge to gross revenue is not satisfactory" (P&L 1940, 91). In his *Essentials* (Paton 1938a, 517), he made the very same point, concluding that the netting treatment is "without valid excuse." Most of the coauthors' discussion of the depletion of natural resources in the section closely parallels that in Paton (1938a, 516–518).

[13] The coauthors did not here repeat their suggestion on pages 28–29 that, in "extreme situations," when a dependable estimate of the value of natural resources far exceeds the actual outlay needed for their acquisition, "it may be necessary to establish formally a new point of departure on the basis of implied cash cost" (P&L 1940, 28–29).

In the next section, "Cost of Intangibles" (P&L 1940, 91–93), after the coauthors said that "[i]t has sometimes been urged that the costs of preliminary advertising campaigns and other expenditures directed toward the building up of future revenues should be capitalized as a form of goodwill," the reader was treated to a Patonian double-double-negative. The coauthors intoned: "[t]his doctrine is not intrinsically unsound but nevertheless hardly deserves support" (P&L 1940, 92). Paton (1938a, 545) posited the same type of capitalization but concluded only that it "is not considered to be practicable."

On the disposition of goodwill, the coauthors recommended that, because a company's "extraordinary earning power cannot be expected to persist indefinitely," the amount expended for goodwill "should be absorbed by revenue charges…within a period of a few years" (P&L 1940, 92–93), thus favoring amortization. Two years earlier, Paton (1938a, 545) had written that goodwill should be amortized for a period of not more than five years. In *Accounting* (Paton 1924, 267), Paton seemed to be sympathetic to amortization "within a few years." In regard to organization costs, the coauthors adopted a position identical to one espoused by Paton (1938a, 544). They said, "the general costs of organizing the business are not properly amortizable in the case of a continuing, vigorous enterprise, but should not be retained intact [i.e., should be written off] in the case of a languishing concern" (P&L 1940, 93).

In the final section in Chapter V, "Losses" (P&L 1940, 94–96), one of the matters taken up was, in a bond refunding operation, how should the bond issuer dispose of the unamortized bond-issue cost when the contract is terminated earlier than planned? To the suggestion that "the balance of the issue cost attaching to the security retired may be fused with the cost of emitting the new security and by this route absorbed in future revenue charges," the coauthors countered, "[t]his position is objectionable" (P&L 1940, 95). The coauthors concluded that "any balance of premium or discount remaining at the date when the contract is closed should be absorbed [as a gain or loss] at that point" (P&L 1940, 95). Paton (1938a, 738) wrote that, in a bond refunding, spreading the excess of the call price over the old issue's net book value during the life of the new issue "cannot be endorsed." As it happens, both Paton and Littleton were then serving on the AIA's Committee on Accounting Procedure, and in September 1939, the committee issued its *Accounting Research Bulletin No. 2,* "Unamortized Discount and Redemption Premium on Bonds Refunded" (AIA Committee on Accounting Procedure 1939a), in which, among other things, the committee did not take exception in certain cases to spreading the unamortized discount and bond redemption premium over the life of the new bonds. Paton dissented from this view, saying that only their immediate writing off should be approved. Littleton did not dissent (AIA Committee on Accounting Procedure 1939a, 24).[14]

Also in this section, the coauthors endorsed capitalizing the cost of dry holes in oil and gas exploration (P&L 1940, 94–95), which subsequently came to be known as "full costing." Paton (1941, 382) adopted the same position. This was a novel view at the time, because the alternative approach of immediately expensing such costs, which came to be known as "successful efforts costing," was said to be "the only method used [in the industry] prior to the late 1950s and early 1960s" (Wolk, Tearney, and Dodd 2001, 559), adding that, only during these latter years did full costing come into use. The balance of the section dealt with examples of capitalizing expenditures versus recognizing them as losses to be charged against income or earned surplus, most of which was treated by Paton (1941, 469–471, 584), often with the same wording, in *Advanced Accounting*.

CHAPTER VI: SURPLUS

This 21-page chapter contained eight sections. As with Chapters III through V, the style of writing was Paton's, yet not all of the ideas were. The initial section's title, "Complete Income Reporting" (P&L 1940, 98–102), signified the coauthors' position in favor of the "clean surplus," or "all-inclusive income statement," approach to recording non-recurring costs and revenues in the income statement. The coauthors identified a questionable trend in practice by which enterprises, preferring to focus their income statement on sustained earning power, justified their position by attaching to the income statement a separate statement of "surplus analysis," in which the non-recurring items were displayed as surplus adjustments. In making their argument, the coauthors divided asset changes into two classes: *asset utilization,* representing transactions entered into for their productive effect (related to income); and changes arising from transactions in *equity administration,* namely, for their financial effect (related to capital). Asset utilization was associated with the production of income, while equity administration was concerned with managing the enterprise's investments and sources of financing. The coauthors proceeded to argue that all of the results from asset utilization were to be reported in the income statement, and not divided between the income statement and a surplus analysis (P&L 1940, 100). In his *Essentials* Paton (1938a, 756) wrote, "[t]he policy of excluding 'extraordinary' losses and other adjustments from the main income report opens the door to serious misrepresentation and suppression of important information." His "Model Condensed Income Sheet" displayed "Special Net Deductions (non-operating losses

[14] May (1940, 129) gave the reason why Paton dissented to this pronouncement. Perhaps the reason why Littleton did not dissent is that, although serving on the committee, he was skeptical of the appeal to authority, for example an Institute committee, when deriving accounting principles (Littleton 1939b, 229–230).

assignable to the current period)" just above the "Total Net Income" line (Paton 1938a, 758). As noted above, Littleton (1938b, 102–103; 1940) also subscribed to the "clean surplus" approach.

Paton was a member of the AIA's Committee on Accounting Procedure in 1947, when it issued *Accounting Research Bulletin No. 32,* "Income and Earned Surplus," in which it supported the "current operating performance" notion of the income statement, under which extraordinary items were to be excluded from the determination of net income for the year. Paton dissented from that recommendation (AIA Committee on Accounting Procedure 1947b, 6–7).

The lineage of the terms *asset utilization* and *equity administration* in this section may go, in a small way, back to Paton's (1922a, Chapter V) *Accounting Theory,* where he conceived of three classes of transactions: property transactions, equity transactions, and property-equity transactions. A more likely influence was from Littleton (1938c, 240), who distinguished "administering the assets," which was income accounting, from "administering the equities," which was capital accounting. Moreover, Littleton and Zimmerman (1962, 164–165) contrasted two actions, "enterprise operation" and "enterprise finance." They said that "the former should appropriately be part of the periodic calculation of net profit, and the latter quite appropriately should be a matter of administrative decision." This was clearly Littleton's contribution, but Paton may have renamed the actions.

At the outset of this opening section, the coauthors returned to a theme developed earlier, namely, that "whereas the balance sheet was formerly regarded primarily as a statement of financial condition for credit purposes the present tendency is to view this statement as vitally linked to the processes of periodic income measurement" (P&L 1940, 99). Both Paton and Littleton would have been fully in accord with this view.

In the next section, "Form of Statement" (P&L 1940, 102–103), the reader finds the second of the two citational footnotes in the monograph, this one—like the first one—commending a published work by a Paton doctoral graduate, in this instance Mortimer B. Daniels (1939), who had received his degree in 1933. The coauthors outlined the contents and format of an income statement, saying that it was inescapable that it contain separate sections for recurring and non-recurring items (P&L 1940, 102), very much like the Paton (1938a, 758) model in *Essentials,* mentioned just above. They soft-pedaled Paton's long-standing classification of interest charges and income taxes as distributions of income, being content with saying that they "are not costs of producing the economic service which accounts for the revenue from sales" (P&L 1940, 102). On page 44 of the monograph, discussed above, Paton's treatment of interest charges and income taxes in the income statement was more explicitly brought out. Littleton never shared that view.

Later in the section, the coauthors claimed that "bookkeeping technic" was perhaps responsible for the relegation of non-recurring items to a surplus analysis schedule. In the end-of-period closing process, they contended, the use of one "Income" account may have been thought to be an inappropriate receptacle for both recurring and non-recurring items; hence, the latter were made surplus adjustments. To remedy this problem, they proposed a "loss and gain account" to handle the non-recurring items, thus making them eligible for inclusion in the income statement. In Paton's (1938a, 101) *Essentials,* one duly finds the observation that "Supplementary income accounts are also often used in recording special net gains and losses."

Interestingly, the term "clean surplus," in quotation marks, was cited in this section for the only time in the monograph (P&L 1940, 103). This represented a very early appearance—and perhaps the first appearance—of this term in the accounting literature.

The next section, "Sequence of Charges" (P&L 1940, 103–105), was an extension of the argument for including all special losses and gains in the income statement and not "by the backdoor route" (P&L 1940, 104). This latter term referred to any such charges and credits that circumvented the income statement and went straight to surplus or even to stated capital. The order in which such special losses and gains should be sequenced was as charges or credits first to gross revenue, then to net income, earned surplus, paid-in surplus, and, finally, to stated capital when all of the previous options were unavailing. This order was important to provide a line of defense for common stockholders in relation to both creditors and preferred stockholders, so that expiring costs were in general absorbed in the stream of gross revenue, thus affecting the interests of all capital suppliers proportionally, and not just the residual equity, especially upon the liquidation of the enterprise (P&L 1940, 104). As was noted above, Paton regarded the financial statements as reports to all capital suppliers.

"Surplus and Capital" (P&L 1940, 105–107), the next section, was a discussion of the sometimes very different meanings and uses of surplus, including especially earned surplus, and capital as between corporation law and finance on the one hand and business needs on the other. The coauthors made the important point that "paid-in or capital surplus may not be used as a source of earned surplus" (P&L 1940, 106) and that there should be "a clear-cut distinction" between earned surplus and paid-in capital (P&L 1940, 106). Both Paton (1924, 726–729; 1934, 118–120; 1938c) and Littleton (1932, 1934b, 1938a, 21–22) had previously discussed many of the issues taken up in this section, as did the 1936 AAA statement in paragraphs 14 to 20.

The next section, "Classification of Earned Surplus" (P&L 1940, 107–109), was an inconclusive discussion of various ways by which earned surplus could be classified. Two options were by sources (ordinary operating income versus extraordinary gains) or by "utilization or disposition." Yet earned surplus "cannot readily be identified in terms of particular assets or groups of assets. . .[and therefore] any classification of surplus in terms of the uses to which the expanded funds of the business are put is largely hypothetical" (P&L 1940, 107). They counseled that "it must not be forgotten that surplus is basically nothing more nor less than a part of the stockholders' equity in the total of the resources" (P&L 1940, 108). They discouraged the earmarking of surplus as special reserves if only because "reserve" is commonly thought to be an actual fund of cash (P&L 1940, 108). Implausibly, after what they had just written, the coauthors added that it "would be quite feasible in most cases to divide earned surplus into two main sections": "surplus invested in plant" and "surplus invested in working capital" (P&L 1940, 108). Finally, they particularly advised against appropriating (or reserving) surplus "under special titles designed to reflect the possibility of loss and the readiness of the corporation to face the contingency" (P&L 1940, 109). Paton (1938a, 709–710, 712; 1941, 591–593) took up many of the issues raised in the section, including providing for both "surplus invested in plant additions" and "surplus invested in working capital." Some of the points in these last two sections were touched upon in the AAA Executive Committee's (1936, paragraphs 16–18 and 20) principles statement.

"Corrections" (P&L 1940, 109–111) dealt with whether corrections of previous years' earnings should be taken through the income statement or as an immediate charge or credit to surplus. This was an issue on which the AAA Executive Committee's (1936, paragraph 13) statement had already taken a firm position: "it becomes important to encompass within a single [income] statement, not only the best possible measures for the year's results, but also the best possible measure of such corrections as seem necessary in the statements already made for prior periods." Hence, the monograph could hardly be seen to deviate from the 1936 statement, on which it was supposed to elaborate. The coauthors duly concluded in this section that the income statement "should show the total income (or loss) through the history of the enterprise to date, and if corrections are made directly to surplus account, with no indication thereof in any income statement, no such over-all picture of the earning record is afforded by the income statements issued. . . .the practice of making corrections outside the income statement must be rejected" (P&L 1940, 110).

The section began with two scenarios involving the discovery of a past overstatement, or understatement, of depreciation charges, leading to errors in previously reported figures for income. Paton's (1941, 269) recommendation on how to treat a fully depreciated plant that nevertheless continues in service is that the correction to be made "is to charge the allowance and credit surplus." This position was clearly at odds with the coauthors' recommendation that it be reflected in the income statement. One presumes that Littleton was one of the supporters of the corrections provision in the 1936 statement.

The next section, "Absorption of Deficits" (P&L 1940, 111–114), was chiefly the occasion for discussing the accounting treatment known as quasi-reorganization, by which a company with a debit balance in earned surplus absorbs the deficit first against any paid-in surplus and, failing that, against stated capital, with stockholder approval. Following a quasi-reorganization, there can be no credit balance in earned surplus. Paton (1924, 760–767; 1938a, 687–690) had previously written about accounting for a corporate reorganization, and both Paton and Littleton had served on the AIA's Committee on Accounting Procedure in September 1939, when it issued *Accounting Research Bulletin No. 3,* "Quasi-Reorganization or Corporate Readjustment—Amplification of Institute Rule No. 2 of 1934" (AIA Committee on Accounting Procedure 1939b) and thus were well informed on the procedure. Paton (1940b, 18) briefly touched on quasi-reorganizations in his Dickinson Lecture. The 1936 AAA statement, on page 191, briefly discussed the accounting for a "recapitalization," which was another name for a quasi-reorganization (AAA Executive Committee 1936, 191).

Evidently, Littleton prevailed upon Paton not to refer in the monograph to a quasi-reorganization as the occasion for recording appreciation in the accounts. Three months after their monograph was published, Paton (1940c, 9) showed his true colors on the point: "I agree that in the formal or quasi-reorganization, where the corporation by common consent is making a fresh start, substitution of the appraisal basis for cost, with full disclosure at the point of departure, may be justified." In this statement, Paton left open the possibility of an upward valuation.

"Capital Adjustments" (P&L 1940, 114–117), the final section in the chapter, was an opportunity for the coauthors to recommend against including in earned surplus any "gains" arising from the reissuance of the company's own shares (P&L 1940, 115). They also argued that reacquired shares (treasury stock) should be recorded in the capital section of the balance sheet, not as an asset (P&L 1940, 115). The latter was an option that George O. May's blue-ribbon Institute committee had permissively allowed in its recommended list of five "broad principles," which were approved by the Institute's Council in 1934 (Zeff and Moonitz 1984, Volume I, 85). Paton (1919, 328–335; 1934, 112–113; 1938a, 684–685) had for many years spoken out against the classification of reacquired shares as an asset.

In this section, the coauthors also delicately floated a suggestion that when a company's acquisition of its outstanding shares was at an aggregate price well above, or well below, the book value of its net assets, "it may be assumed that the market valuation of the enterprise as a whole" has changed (P&L 1940, 116). They added, "it need not be concluded that such market valuation, applied to a small portion of the capitalization, affords a compelling basis for revision of recorded resources" (P&L 1940, 116). The implication was that, if the acquisition were of more, or much more, than "a small portion of the capitalization," there might be a "compelling basis" for revision of the recorded amounts. Such a revision for a corporation would be parallel to a recommended treatment for partnerships when withdrawing partners receive an amount above or below their capital balances. That this suggestion originated with Paton is evidenced by his much more extensive treatment of it in *Advanced Accounting* (Paton 1941, 543–545) and especially in *Corporation Accounts and Statements* (Paton 1955, 190–204).

CHAPTER VII: INTERPRETATION

The first six chapters were jointly authored, but we know from Paton himself that this 25-page Chapter VII was solely his contribution. Forty years later (at age 91), he wrote, "the last section [Chapter VII], which I added as a supplement, with my co-author's consent, deals quite effectively with the meaning and limitations of recorded cost data, the significance of replacement cost, the impact of an unstable monetary unit, and other crucial points" (Paton 1980, 629–630). Therefore, in my rendering of the sections in this chapter, Paton will be cited as the author, although there is no indication anywhere in the monograph that he was the lone author of this chapter. Yet, in the context of Paton's many writings over the years, there can be no question that the views set forth in the chapter were his.

That Chapter VII was entitled "Interpretation" would have comforted Littleton, as it dealt extensively with replacement costs and general price-level accounting. He had recently written, "[i]t is outside of the province of accounting principles to deal with interpretation" (Littleton 1938c, 237).

In the lead-in to the first section, Paton set forth the theme of this final chapter (P&L 1940, 118–119):

> The function of accounting is not confined to bare recording; analysis for the purpose of understanding and control is involved throughout. . ..
>
> In recent years,. . .efforts have been made to develop lines of analysis of business data supplementary to and reaching beyond the limits of the interpretation inherent in the intrinsic framework of accounting. . ..
>
> All these developments have the common purpose of supplementing and perfecting accounting as a means of furnishing significant data and from this standpoint they deserve commendation rather than opposition.

The first of the 11 sections was "Cost Classification and Control" (P&L 1940, 119–121). It focused on cost analysis within the enterprise, and closed with the admonition that "the periodic income statement. . .is [to be] based upon actual costs rather than upon hypothetical charges," including standard costs (P&L 1940, 121). The coauthors had made this point previously, in the section on hypothetical costs in Chapter III and again on page 71.

"Revenue Imputation" (P&L 1940, 121–122) was the next section, which addressed a question that Paton said had attracted "persistent interest" by those in business administration: "How much revenue can be attributed to the particular productive effort or type of productive factor?" (P&L 1940, 121). Of course, he provided no footnote reference to the source. He concluded that, as "each type or kind of cost stands in substantially the same relation to total revenue as every other type or kind of cost" (P&L 1940, 121), the same applies to each type or kind of revenue in relation to total cost. Revenue imputation, he maintained, was a fruitless endeavor. Paton's statement gives added force to the view that he was a strong supporter of ensuring the homogeneity of costs in relation to revenue, discussed in the opening section in Chapter V.

"Cost versus Value" (P&L 1940, 122–126) was the first substantial section in the chapter. In the section, Paton faced head-on the issue, as regards plant assets, of "the inadequacy of recorded cost. . .as a continuous expression of market value" (P&L 1940, 123). He concluded as follows (P&L 1940, 123):

> Recorded costs are objectively determined data; estimated current values are largely matters of opinion and for some types of cost factors are conspicuously unreliable. Hence a shift from costs to estimated values would generally mean the presentation of less dependable income figures. Such a shift, moreover, would as a rule result in income reports less satisfactory from the legal point of view than reports prepared on the cost basis—a matter of importance in connection with income-tax determination, dividend policy, security retirements, and related questions.

This conclusion repeated, but in Paton's words only, the coauthors' arguments against treating appreciation as a source of income, on page 62 of their monograph.

Then Paton turned to whether the internal reporting of estimated values would be of particular use to operating management. He asked whether "a revaluation of unexpired items at the close of the period and inclusion in the statements of the effect of the write-up or write-down upon income and available resources. . .[would] be worth while from the standpoint of management" (P&L 1940, 124). After observing that "[a] complete periodic appraisal of all resources is an expensive matter and at best yields figures none too dependable," he concluded that "[a] reasonable position under the circumstances calls for a policy of regular adherence to the cost standard together with a supplementary showing of the implied effect of price movements on unexpired factors *if conditions are such as to make this clearly helpful*" (P&L 1940, 124–125; emphasis in original). He was sympathetic to "a parenthetic showing in the periodic balance sheet of the market value of securities owned, if dependably determined" (P&L 1940, 125). He added that "[a]ccounting should set no limits upon the supplying of pertinent information. By means of footnotes, text to accompany account titles, parenthetic figures, extra columns, and similar devices, significant estimates of current values and other collateral data may be shown in their relation to the primary figures" (P&L 1940, 126). If the effects implied by price movements were, he cautioned, actually included in the regular reports, "there would be every reason for isolating the effect as a special item rather than permitting undisclosed absorption in the regular operating data" (P&L 1940, 125). These views reflected Paton's change of position in the 1930s that replacement cost data should be shown in accompanying disclosures and not in the body of the financial reports to stockholders (Zeff 1979, 107–111).

"Cost-or-Market" (P&L 1940, 126–129), which the coauthors had briefly taken up on page 80 and found to be wanting, came in for further examination by Paton, who still found it wanting. He wrote, "It is possible to show losses in the income statement only when objectively tested, and to report inventories in the balance sheet at cost with a parenthetic showing of the amount of the estimated price change" (P&L 1940, 127). As to conservatism, he said, "it may well be noted that conservatism in stating the assets (for their debt-paying capacity) is not a principle to guide accounting calculations of net income, but a rule of caution in interpreting the results of accounting measurements made according to a coherent body of doctrine" (P&L 1940, 128). So much for the place of conservatism in the Patonian model, in which Littleton (1941a, 339) joined. Conservatism was not even listed in the index to the monograph.

The next section, "Plant Write-Downs" (P&L 1940, 129–130), began with a scenario in which "it has become apparent that the effective service life of a section of plant has been seriously curtailed by unexpected obsolescence or other special factor, and the accrual of depreciation to date is inadequate" (P&L 1940, 129). Paton's advice was that the amount of the loss corresponding to the write-down "should be clearly reported as such in the income statement" (P&L 1940, 129). In this section, the loss was not called a "correction," but it seems to be one nonetheless. It was not due to a reduction in the plant's replacement cost but resulted from a retroactive change in the estimate of its service life, which was precisely in line with one of the examples of a correction given by the coauthors in the first paragraph under "Corrections" (P&L 1940, 109). In that previous section, the coauthors, faithful to the 1936 AAA statement, said that the loss should be displayed in the income statement. But, as I pointed out in the discussion of that section, Paton (1941, 269), in a contemporaneous view, said that the gain owing to a changed estimate of service life should be taken to surplus. This difference between Paton's positions over the course of one year is confounding.

Paton counseled that there should be no arbitrary write-downs (P&L 1940, 130), and temporary idleness of plant "does not warrant a major write-down" (P&L 1940, 129).

The next five sections dealt with the issues arising when the current cost of plant diverges from its net carrying amount. "Revision of Plant Cost" (P&L 1940, 130–132), the first of these sections, discussed situations where operating management may misjudge the enterprise's earning power when recorded plant costs did not reflect the current or replacement cost. Paton intoned: "But it does not follow that management can become aware of the significance of current prices only through changing the accounts" (P&L 1940, 132). In this section, Paton juxtaposed accountants with industrial plant appraisers and cited their possibly conflicting interests (P&L 1940, 131).

This discussion continued into the next section, "Limitations of Estimated Replacement Cost" (P&L 1940, 132–134), where Paton repeated much of what he had said previously about the costliness of continuous appraisals and the tenuousness of the estimates. One point, however, stands out. He diminished the importance of a program of plant revision "by the fact that the depreciation charge is often a comparatively small part of the total periodic cost of revenue" (P&L 1940, 133). Later in the 1940s, during the postwar inflation, when Paton was alarmed at the gross overstatement of profits, and of the tax bill, for manufacturing companies, he changed his tune, arguing that depreciation is, after all, a large part of *net income,* and thus must be restated for changing costs (Zeff 1979, 127). After the stakes got higher, he changed his debating tactic.

In the section headed "Preservation of Cost Data" (P&L 1940, 134–136), Paton illustrated his "compromise procedure" (as he called it in Paton [1940b, 18]) for basing the depreciation allowance in the balance sheet on a higher or lower replacement cost, while not disturbing the recorded historical cost data, a kind of "supplementary" disclosure within the body of the balance sheet. In order not to obscure the originally recorded cost, "the gross increment or decrement [in the cost] should be isolated in a new account which can then be viewed as an adjunct of or offset to the account showing the actual cost" (P&L 1940, 134). The net write-up of plant would be credited to capital or surplus (but not earned surplus) (P&L 1940, 135). Both the replacement cost and the accrued depreciation applicable thereto would be shown in their own separate accounts immediately following the original historical cost and the accrued depreciation thereon.

The section entitled "Revision of Depreciation Charge" (P&L 1940, 136–137) discussed the effects in the income statement of the "compromise procedure." The depreciation charge "will then be the over-all accrual on the new basis introduced by the appraisal" (P&L 1940, 136). Then, in order to present a net income in accordance with the historical cost standard, an amount equivalent to the depreciation charge associated with the appraisal increment (or decrement) must be released from the capital and surplus account, as if it were "realized" (P&L 1940, 135–136). The resulting net income would be drawn as if the appraisal data had not been booked. The journal entries for this procedure were displayed in Paton (1941, 342–347).

The next section on "Plant Revision and Surplus" (P&L 1940, 137–139) discussed, in the case of a plant write-up, the possibility of earmarking earned surplus "in amounts appropriate to the expected higher replacement costs and to the process of absorbing plant cost in revenue charges" (P&L 1940, 137–138). The aim would be to place a corresponding limit on the amount of earned surplus available for dividends so as to be able to replace the plant, eventually, without the need for new financing.

In the next section, "Conversion of Recorded Cost to Common Dollars" (P&L 1940, 139–141), Paton elaborated on a point made by the authors back on page 23 by adapting Henry Sweeney's "stabilized accounting" to a supplementary disclosure format. In this section, Paton dubbed the price level-restated dollars as "common dollars,"[15] a new term to the literature. The section consisted of his argument for recognizing in some way the impact of the changing purchasing power of the dollar, but he did not propose a methodology for doing so, as he did in his textbooks (Paton 1938a, 810–818; 1941, Chapter XXXIII). He distinguished "the proposal to adjust recorded plant cost and the derived depreciation charges to a replacement-cost basis. . .from the proposal to convert recorded costs and the derived depreciation charges into common or equivalent dollars" (P&L 1940, 139–140). He advised that "[i]t would probably not be wise to attempt the construction and use of an elaborate system of supplementary accounts in which each item of recorded cost would be shown in converted form, by means of the application of weekly or monthly index numbers. At the most what is needed is a special report supplementing the usual periodic statements and designed to trace the main effects of general price movements upon the affairs of the enterprise" (P&L 1940, 141). Paton first evinced an interest in recognizing changes in the purchasing power of the monetary unit in the accounts in an obscure article (Paton 1918, 45–46). He elaborated on this proposal two years later in a more widely noticed article (Paton 1920b, 2–5). Sweeney's publication of *Stabilized Accounting* in 1936 revivified and heightened his resolve to advance this reform.

In one of his earliest published papers, Littleton (1924, 14), recalling the significant price inflation from 1917 to 1920, conceded that "[t]he fluctuating price level in recent years has directed attention to the fact that there are times when the customary values in the balance sheet no longer serve as effective guides to policy or action." Littleton (1938c, 237–238) contemplated the use of price-level index numbers as a part of "interpretation" when there were "violently fluctuating price levels." Yet in a book review of Sweeney's (1936) *Stabilized Accounting,* Littleton (1936b, 297) concluded that "its complexity [that is, of Sweeney's recommended restatement procedure] precludes either an immediate or a widespread incorporation of the new technic into business management and accounting practice." The 1936 AAA statement had said, "[a]n extreme change in the value of money might vitiate the usefulness of cost records but there seems to be no sound reason for repeated adjustments of asset values for the ordinary changes in price levels commonly experienced from one generation to another" (AAA Executive Committee 1936, 189).

In this section, Paton, in a personal confession, summed up the dilemma faced by the accountant when attempting to place the financial statements in a broad economic context (P&L 1940, 141):

> the accountant finds himself operating in a framework of contracts and legal institutions and he is inevitably coerced in considerable measure by this framework. He must first report contractual earnings, amount subject to income tax, amount available for dividends, accumulated surplus, and capital stock with due regard for impinging legal assumptions and requirements. At the same time the accountant must remember that he is being relied upon more and more to disclose in some way the essential economic developments and conditions attaching to the enterprise for the purpose of meeting the needs of investors and managers, and that he cannot afford to ignore completely any line of attack which promises to enable him to fulfill this broad function more adequately.

Paton borrowed this quotation almost *verbatim* from his *Essentials* (Paton 1938a, 813).

The final section in the monograph was headed "Statement Analysis" (P&L 1940, 142), in which Paton recommended the use of comparative statements, cumulative statements, statements of averages, "the so-called 'statement of funds,'" as well as "graphic statements, statements in percentage form, and discussion statements" (P&L 1940, 142), and the use of ratio analysis. These were mostly novel ideas in 1940, and he had given scope to all of them in his *Essentials of Accounting* (Paton 1938a, Chapter XXXVIII). Some years earlier, Paton (1928a, 252) had devoted an article to ratio analysis in which he referred favorably to "[accountants] experimenting with such supplementary devices as written explanations, comparative statements, graphs and charts, analyses such as statements of funds and their application, and ratios or percentages drawn primarily from income sheet and balance sheet figures." Littleton (1939a, 60) also supported interpretive disclosures such as significant ratios and percentages, and even extra columns "to reflect the effect of weighting by index numbers," but the "basing-point," as he called it, was to be cost.

[15] Paton did not name Sweeney in the section, and, as noted above, Sweeney's (1936) book, *Stabilized Accounting,* was not included in the coauthors' annotated bibliography at the end of the monograph.

CONCLUSIONS

The object of this study has been to come to understand the distinctive contributions of Paton and of Littleton to the views expressed in their monograph, by reference to their respective writings in articles and books. Emphasis has been placed primarily on views they expressed in their own writings published up to and including 1941, but reference has also been made to some of their subsequent writings where earlier writings in point were unavailing. Fortunately, both Paton and Littleton had written numerous articles in the 1920s and 1930s, and Paton had published a theory treatise in 1922 and five textbooks prior to 1940, plus one in 1941. Littleton's (1919) sole textbook, only 64 pages in length, was published in 1919. Also fortunately, all of their previous and contemporaneous articles and books, save for Paton's series of three early textbooks coauthored with Russell Stevenson (Paton and Stevenson 1916, 1917, 1918), were solely authored. Hence, one can mostly dismiss the issue of which of their previous or contemporaneous views expressed in a coauthored article or book were mainly Paton's or Littleton's and which were mainly those of a coauthor.

Based on the foregoing analysis, section by section, of the contents of the Paton and Littleton monograph, I conclude that Paton and Littleton were, by turns, responsible for Chapter I (Standards) and that Littleton was responsible for most or virtually all of Chapter II (Concepts), the two chapters totaling 23 pages. Paton was responsible for all but a few sections of Chapters III through V (Cost, Revenue, and Income, respectively), totaling 73 pages. Paton was responsible for most, but certainly not all, of the 21-page Chapter VI (Surplus). And Paton wrote the entirety of the 25-page Chapter VII (Interpretation). But a simple count of page totals does not capture the essence of their respective contributions. Littleton, who was a philosopher and historian, set the terms for the monograph: the fundamental ideas rooted in the historical cost model, which constituted the framework for the subsequent discussion of the particulars in the financial statements. Paton, trained as an economist and who subsequently described himself as a "value" man, was an analyst and critic of specific accounting measurements, classifications, and disclosures in financial reports, and was generous with his policy recommendations for improvement. It is therefore not surprising that Littleton was responsible for Chapter II, which charted the course for the chapters on cost, revenue, income, and surplus, and that Paton was the most responsible for the many sections on particular accounting practices in these latter four chapters plus the final chapter on Interpretation. At the base of the monograph was the AAA's 1936 statement of principles, of which Paton and Littleton were two of the four major coauthors, because the monograph was to be an elaboration and expansion on the statement.

While it has been commonplace to label Paton as a deductive thinker and Littleton as the inductivist, in reality the two approaches blended into each other. Paton was much affected in his thinking and policy recommendations by the changing political, regulatory, and economic environment of the 1920s to the 1950s (Zeff 1979)—and thus in some sense was also an inductivist—while Littleton, when drawing his ideology from the experiential world, at the same time sorted out what he liked from what he did not like, as would a deductivist.

Notwithstanding the mostly dominant position of Paton in terms of overall impact on the contents of the monograph, it was Littleton's Chapter II that infused the accounting literature for decades to come with "matching cost and revenue" and the *desiderata* of objectivity and verifiability in accounting determinations (Zimmerman and Bloom 2016; Sprouse 1971, 92; Chambers 1995, subsections 335, 641–643, 713–714; Previts and Merino 1998, 281; Herz 2016, 287). The monograph provided a conceptual explanation—some (e.g., Sterling 1970, 292–293) called it a rationalization—of the use of historical cost accounting, at a time when the Securities and Exchange Commission showed no tolerance for departures from historical cost accounting in financial-statement filings (Zeff 2007). Ijiri (1980, 627) has written: "[a]ccountants needed justification for the process they use, other than saying that things are as they are because they are so by convention. The monograph supplied this needed justification based on a theoretical framework of accounting without ever resorting to the notion of accounting conventions."

Why is this analysis of Paton's and Littleton's respective contributions to the monograph important to our intellectual heritage? Because their monograph has been so influential on published writings in the field, as well as on practice and education, an analysis of each author's contributions can provide insight into the evolution of ideas in the literature, enabling readers to trace the principal views expressed in the monograph to their origins in the authors' own writings.

LIMITATIONS OF THIS RESEARCH

My attempt to trace the principal ideas in the monograph to each of its coauthors' writings and thinking will inevitably be clouded by disagreements and compromises which the authors made when composing the manuscript. Paton (1980, 629) later wrote, "Of course, we were not in complete agreement at all points, and our monograph suffers from a bit of compromising here and there. But we had no very serious differences, and remained good friends when the manuscript was completed and published."

I take full responsibility for identifying the "principal ideas" in each of the many sections of the monograph. Other researchers might well make different selections and reach different conclusions.

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