





Oliver Williamson and His Impact on the Field of Strategic Management

Jackson Nickerson*

Olin Business School, Washington University in St. Louis, Campus Box 1133, One Brookings Drive, St. Louis, MO 63130-4899, United States

Abstract

In honor of Oliver Williamson's receipt of the 2009 Nobel Memorial Prize in Economic Sciences, this paper provides a set of perspectives on Williamson's impact on the field of strategic management. In addition to a few personal vignettes, the paper compiles citation statistics from the Strategic Management Journal over its entire history to report on the most frequently cited authors, most frequently cited papers, and dynamics of annual citations with respect to the most frequently cited authors. The paper also considers the breadth of topics to which Williamson's research contributes. The evidence suggests that Williamson's impact on strategic management research is not only profound but also continues to grow. Shifting to a prospective assessment, the paper explores the extent to which Williamson's research may impact future research in strategic management. To conclude the assessment, the paper turns to Williamson's PhD students who self-identify as strategic management scholars to understand his direct impact on a more personal dimension.

© 2010 New York University. Published by Elsevier Inc. All rights reserved.

Keywords: Transaction cost economics; Fundamental transformation; Organizational change

I want to thank the organizers of the conference honoring Oliver E. Williamson's receipt of the Nobel Memorial Prize in Economic Sciences for asking me to speak to you. They've given me the assignment of reflecting on Oliver Williamson's impact on the field of strategic management. In ways in which the organizers probably are unaware, I may be in a unique position to offer a commentary. Oliver was my dissertation chair. And, I was his research assistant for at least a semester. My dissertation and early research studies are largely empirical, based on applying Williamsonian transaction cost economics (TCE) to understand organizational performance, which provides me with great familiarity of TCE as it applies to strategic management. My more recent research is theoretical and pushes TCE to understand a variety of innovation, leadership, organizational structure, and problem finding and problem solving issues in the context of strategic management. On a more personal note, I went through Berkeley's MBA program with Oliver's daughter Tamara and my wife Cici even shared an apartment with her. But none of these reasons are why I like to think that I may be a unique person to comment on Oliver Williamson's contribution to strategic management.

My uniqueness comes from the fact that 20 years ago Professor Williamson taught an MBA course on strategy at the University of California at Berkeley. In fact, it is the only strategy course that Professor Williamson ever taught to MBA students. The course was co-taught with Professor David Teece. For those of you who know David you will recall that he is gregarious and outgoing, which offers a teaching approach that MBA students find interesting and stimulating. If memory serves, David taught for most of the first 2 days of the course. On the third day, a day I will never forget, Professor Williamson took the podium to deliver a lecture on vertical integration.

With a somewhat dry and not so loud voice, Professor Williamson stood before his students and began his lecture. Somewhat uncharacteristically for the class of second-year MBA students, there was silence in the classroom. Students sat up straight, focused on Professor Williamson, and strained to grasp every word. Indeed, attention was so focused that it would be fair to say that one could hear a pin drop. During Williamson's lecture he discussed ideas such as large numbers competition. He introduced the fundamental transformation. As he continued he spoke of ex post small numbers bargaining, governance costs, and markets and hierarchies. Asset specificity, frequency, and uncertainty were all invoked. And, the students were absolutely quiet for the entire class.

Many of my friends in the class knew I had just applied to the Business and Public Policy PhD program at Berkeley's Haas

^{*} Tel.: +1 314 935 637.

School of Business, which caused many of them to glance over at me during Professor Williamson's lecture, looking for my reaction to his comments. One of my very good friends was sitting next to me in the class. As soon as Williamson concluded his lecture and dismissed the class, he leaned over to me. As if speaking for the entire class he pleaded, "Jackson, I know what Professor Williamson just said must be really important, but, to be candid, I didn't understand a damn thing he said." My unique qualification for commenting on Williamson's contribution to strategic management comes from being the only person from his one and only MBA strategy course to go on to earn a PhD in strategy.

That memorable class was approximately 20 years ago. A lot has changed in the strategy field in 20 years. TCE has gone from a theory that some scholars knew was important to the field of strategy but perhaps didn't know how important it was. Today, most strategy scholars will acknowledge TCE is now a cornerstone of the field. Indeed, If you look at strategy texts today, every single one of them has a substantial section on transaction cost economics, which was typically was not discussed or not discussed at length in strategy texts 20 years ago. At Olin, where I am a professor of organization and strategy, in every one of our strategy courses you will find many references to TCE, which is perhaps a cornerstone of most the material we teach. Today, any PhD level curriculum on strategy would be more than deficient if it did not invest substantially in teaching transaction cost economics. An informal polling of strategy PhD programs around the country found that every single one of them has at least a section if not an entire class on transaction cost economics, which was not the state of affairs in strategy 20 years ago. Much has changed between then and now.

Like many other papers in this special issue, my objective is to provide some type assessment of Williamson's intellectual impact. To do so, I follow at least in part an empirical strategy used by several other authors. My primary data source is citations to Williamson's work. In my case, however, the citations are drawn from a representative journal from within the strategy field. Considering that the objective is to assess Williamson's impact, it is necessary to provide a comparative assessment, which considers his contributions in the context of others' contributions. To provide more texture to Williamson's impact in strategic management, I will offer several alternative comparative assessments, which I hope will be sufficiently descriptive of the depth and breadth of his contributions to strategic management. Also, while looking backward in time is an important vantage point from which to assess impact, it is important to provide at least some forward-looking and prospective assessment to anticipate Williamson's expected impact in the future. I therefore offer a few indicators of expected impact. Finally, Williamson's impact on strategic management is not simply a compilation of citations to his research. He also had a more human impact on the field, which can be found in those who studied directly under him. I therefore spoke to many his PhD students who went on to contribute to the field of strategic management and asked them comment on how Oliver Williamson in his dissertation advisory capacity impacted them. Their comments are shared below.

For those who don't identify themselves with the field strategic management, what is it and how is it defined? As with any field, debate about the boundaries of the field is common. In my view, strategic management is a field that studies both the creation and capture, or some may say the distribution, of value. Others may argue that the motivating question of the field is the discovery of sustainable competitive advantage. But this latter definition is narrow in the sense that actors can create as well as capture much value without necessarily generating a sustainable competitive advantage. Some strategic management scholars focus on firm or organizational performance, whether performance is defined as economic, financial, or survival, while others measure performance of a more narrow unit-of-analysis like transactions. Ultimately, scholars study the mechanisms that might lead to superior performance. I will use this definition moving forward. With the definition of the field of strategic management proffered, you will find overlap with several of the other papers in the volume. For instance, the fields of economics, international business, marketing, and organization naturally relate to strategic management. To the extent that this manuscript preempts assessments done by other authors within this special issue, I offer my apology.

A comparative assessment of Williamson's contribution to strategic management should begin with data to identify the phenomena. To generate a useful data set, we collected the bibliographies of every paper published in the Strategic Management Journal, which is widely recognized as the leading field journal for strategic management. The journal was launched in 1980. A total of 1,742 papers were published in the journal prior to and including November 2009. Aggregating all bibliographies presented a few challenges. Incorrect spellings, incorrectly referenced works, and so forth, were identified and corrected wherever possible for consistency. Once the data was clean several analyses were undertaken.

The first analysis of the database explored the ranking of authors by citation counts irrespective of the publication being cited. Focusing on cited authors provides a useful comparison because it provides an overall impact to the field that does not depend on any one article or book. For instance, some authors like Jay Barney have scores of publications whereas Michael Porter has comparatively few publications. The aggregation of all citations to each author therefore provides a blunt measure of overall impact across the field. Later the impact of individual publications will be assessed.

Table 1 lists the top 15 authors cited by papers published in the Strategic Management Journal. Michael Porter received the highest number of bibliographic references with a total of 1,160. His top position makes sense because some would argue his books on strategy and competitive advantage helped to define the field in the 1980s. Oliver Williamson ranks second on this list with total bibliographic references of 757. At first glance, Williamson's second place rank is somewhat surprising. Williamson is a self-described economist with very few publica-

¹ I thank James Yen, a Ph.D. student at the Olin Business School, Washington University in St. Louis, for assistance in assembling and analyzing the data.

Table 1
Top 15 cited authors in Strategic Management Journal (1980–November 2009).

	Author	Citations
1	Porter	1,160
2	Williamson	757
3	Barney	733
4	Teece	702
5	Rumelt	686
6	Hambrick	610
7	Kogut	574
8	Miller	525
9	Mintzberg	516
10	Pfeffer	417
11	Jenson	391
12	March	368
13	Wernerfelt	342
14	Gulati	330
15	Eisenhardt	322

tions in the Strategic Management Journal or any other strategic management related journal. Nor do any of his books focus on strategy. Nonetheless, Williamson's citation count ranks second overall.

The remainder of the top five cited authors includes Jay Barney, David Teece, and Richard Rumelt, all of whom are well known in strategic management and historically self-identify as strategic management scholars. After the first five authors, the number of citations fall off rapidly.

This first analysis, which is displayed in Table 1, documents that Williamson indeed has impacted the field of strategic management at least as measured by bibliographic metrics from papers published in the Strategic Management Journal. The corresponding rankings, however, raise several other questions. For instance, given that Williamson graduated with a PhD in the 1960s, it could be the case that his insights were import early in the development of the strategic management field but that his current impact is diminishing.

To explore the question, we returned to the database and plotted out the annual number of citations for each of the top five

cited authors. Fig. 1 presents the number of bibliographic citations for each author in each year from 1980 through November of 2009. Please note that 2009 is an incomplete year with one issue of the journal not included in the data.

Several interested trends are identifiable in the figure. Of the top five cited authors, three were cited in the first year of the journal's publication, 1980, and every year thereafter. Michael Porter's contribution to the field was acknowledged in the first year of the journal's publication. Citations to his work grew rapidly (as did the number of issues and papers within each issue of the journal) during the first decade of the Strategic Management Journal's publication as can be observed by his highest number of citations occurring in 1991. While the number of citations varies each year, the overall trend suggests that the number of citations to Michael Porter has remained approximately constant or has been on the decline since 1991. Like those of Michael Porter, citations to Dick Rumelt's research also grew rapidly from 1980 and achieved a peek in 1988. Also like those of Michael Porter, citations to Dick Rumelt's research appears to be holding steady or declining over the past decade with the exception of a peek in 2003.

Although first receiving citations in the Strategic Management Journal in different years, David Teece and Jay Barney have received similar citation patterns. These "later entrants" both received an increasing rate of citations in the late 1980s as well as through the 1990s. Citations for David Teece peeked in 2002 whereas citations for Jay Barney peeked in 2003. Interpreting the trend in citations after these peeks is difficult; that is, both trends display high variance and appear to be increasing except for the most recent year of data, which shows a dip.

Citations to Oliver Williamson's research offer a different pattern compared to the other four authors. One could argue that while citations to Williamson began with the start of the journal, he got a slow start compared to that of Porter and Rumelt. Citations to Williamson's research didn't grow much until around 1986. Not only did annual citation increase in 1986 with a substantial increase in 1991 but also one could make the case that citations to Williamson's research continue to grow, on aver-

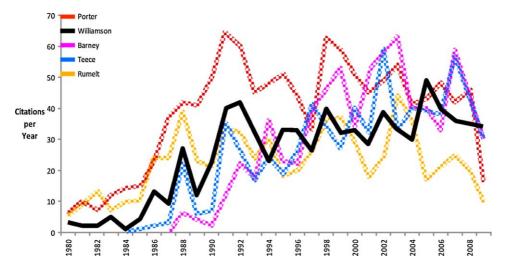


Fig. 1. Top five cited authors by year Strategic Management Journal (1980-November 2009).

age, and have done so over the entire 29 years of the Strategic Management Journal. Indeed, in 2009, for which we do not have complete data for the year, Williamson received the largest number of bibliographic references compared to the other top cited authors. A case could be made that the number citations to Williamson is at least holding its own and may be increasing over the past 10 years. Oliver Williamson is fond of giving his students the advice of undertaking research in a modest, slow, molecular, definitive way. In viewing the pattern of annual bibliographic citations, it is difficult not to reflect on his advice and think that there is a correlation between his advice and the pattern of his citations.

Both rankings and trends suggest another potential perspective for comparison. Until this point in the assessment, the analyses have looked at aggregate citations across all publications. Returning to the data, we reanalyzed the rankings based on specific publications instead of on authors ant the aggregation of their citations. By exploring the extent to which published contributions are single papers, multiple papers, or books provides some insight into the breadth of intellectual contribution to the field.

Table 2 lists the top 15 publications cited in the Strategic Management Journal as of November 2009. As with Table 1, Michael Porter received the highest number of citations with his book *Competitive Strategy* (1980), receiving a total of 417. Jay Barney and Berger Wernerfelt are second and third, respectively, with their journal articles on the resource-based view of the firm, a very popular topic over the past decade. Williamson's classic, *Markets and Hierarchies* (1975), ranks fourth with Dick Rumelt and Jay Barney tied for fifth. Of the top fifteen publications cited, Jay Barney, Michael Porter, and Oliver Williamson and

Table 2
Top 15 cited publications in Strategic Management Journal (1980–November 2009).

	Author and publication	Citations
1	Porter (1980) Competitive strategy	417
2	Barney (1991) Firm resources and sustained	283
2	competitive advantage	225
3	Wernerfelt (1984) A resource-based view of the firm	235
4	Williamson (1975) Markets and hierarchies	234
5	Rumelt (1974) Strategy, structure, and economic performance	199
5	Barney (1986) Strategic factor markets	199
7	Dierickx and Karel (1989) Asset stock	196
	accumulation	
8	Nelson and Winter (1982) An evolutionary theory of economic change	195
9	Pfeffer and Salancik (1978) The external control of organizations	194
10	Porter (1985) Competitive advantage	188
11	Williamson (1985) The economic institutions of capitalism	185
12	Cyert and March (1963) The behavioral theory of the firm	172
13	Cohen and Levinthal (1990) Absorptive capacity	152
14	Thompson (1967) Organizations in action	150
15	Teece, Pisano, and Shuen (1997) Dynamic capability and strategic management	150

are the only authors with two publications in the top 15. Eight of the top fifteen publications, including those of Porter and Williamson, are books, which are surely recognizable to those in the field of strategic management. Indeed, the books listed are well recognized as foundations of the field. Note that each of these books provide a breadth of contribution beyond that of a single paper and that Williamson has two of the top eight books cited, which on the surface suggests substantial breadth of contribution.

It may be instructive to explore in more detail the breadth of Williamson's contribution. As you might imagine, it is difficult to adequately summarize breadth over so many publications. Developing legitimate categories, computing frequencies, and the like can provide some insight. But with many different topics within strategy it is unlikely that readers will be able to visually appreciate such a frequency distribution. Because this paper is exploratory, we adopt an unusual method to try to assess the breadth of Williamson's impact.

For those of you who are Internet savvy, perhaps you have heard of the website Wordle. Wordle offers a visual representation of the relative frequency of different words or categories. Recently, an increasing number of those seeking employment create Wordle charts and include them with resumes as a means to express the depth and breadth of their expertise. The Wordle procedure works by taking documents, memoranda, or other writing samples and pasting them into the Wordle engine (available on the Internet at Wordle.com). Wordle then creates a frequency distribution of the words used (omitting such words as articles). It then constructs a picture arraying frequently words in a somewhat random pattern but with the font size of the words correlated with their frequency. The software draws on only the top 150 most cited words (a selectable feature). In essence, the software creates a "word cloud" that visually represents a frequency distribution.

To create a word cloud, we compiled all of the key words chosen by authors to categorize their contributions in the Strategic Management Journal. As with most journals, every article lists a set of key words, up to six. We selected for inclusion only those articles that cited Williamson. To clean the data, we reviewed all key words and made a few adjustments to those key words identical in meaning but using different words or phrases. We also made adjustments by inserting hyphens for compound phrases (e.g., transaction cost economics) to insure certain words remained together (Wordle typically operates on single words). Wordle offers a few additional choices about how to construct the shape of a word cloud, which offer no analytical purpose. The shape of an oval word cloud was selected for the chart.

The Wordle word cloud is displayed in Fig. 2. Please look at it for a few moments to take in the breadth of key word topics that Oliver Williamson research contributed to. The most obvious both visually and in expectation is transaction cost economics. But that key word topic is only the beginning. Corporate strategy, strategic alliances, knowledge management, vertical integration, strategic alliances, diversification, capabilities, agency theory, networks and strategy, multinational firms, entrepreneurship, technology, and many more strategic management topics are informed by transaction economics. Also notice



Fig. 2. Wordle "Word Cloud" of key words from Strategic Management Journal papers (1980-November 2009) citing Williamson.

that there are studies on specific research domains like automobiles and biotechnology. Some of the other topics touched upon include divestiture, governance, evolution, discussions of synergy, shareholder wealth, mergers and acquisitions. It seems reasonable to assert that nearly all of the topics listed are related to the theory of the firm. Because the firm is one of the central actors in strategy, the theory of the firm is a necessary foundation for strategic management. Williamson has many numerous contributions to the theory of the firm, which helps explain why Williamson's research also appears to be a foundation of strategic management research.

Thus far, the analyses have been retrospective. Another way to look at the Williamson's intellectual contribution to the field of strategic management is to be prospective. Although somewhat self-serving, one way to develop an expectation about Williamson's future contribution is to review the contents of a recent book entitled the Economic Institutions of Strategy (Nickerson and Silverman 2009). Co-edited by Brian Silverman and me (yes, we first asked Oliver's permission to play off his 1985 book title Economic Institutions of Capitalism and he assented to our request), we reached out to a large number of scholars to assemble original contributions. The purposes of the contributions were two-fold. First, we asked the contributors to get the reader up-to-date in terms of a literature review and what was happening in research associated with their particular assigned domain. Second, we asked them to focus 30-50% of the article on identifying unanswered questions: questions that if one could answer them would provide a lot of value to academics and managers a like.

We held a conference to push all of the authors to not only to identify research questions but also to explore the feasibility of addressing the questions from a data collection as well as methodological perspectives. Most of these questions had an institutional perspective and most of those perspectives were related to transaction cost economics. I'm happy to report that the authors took seriously the primary objectives of the volume

and did identify many new research questions. Indeed, 30–50% of every chapter identifies important unanswered research questions for which it is feasible to conduct valuable research. By luck, the *Economic Institutions of Strategy* was published in October of 2009, with a foreword by Oliver Williamson.

The contents of the book, listed in Table 3, provide one potential vantage point from which to project Williamson's future impact because practically all of the chapters draw on his work. To illustrate the breadth of his potential future impact, consider that the chapters cover technology transfer, the organization of research and development, entrepreneurship, the problem solving perspective, inter-firm contracts and performance, alliances and performance, franchising and performance, internal organization, acquisitions and mergers, the scale and scope of the firm, diversification, intellectual property and strategy, foreign direct investment, responses to institutional variation, integrated political strategy, contracting in government, and organizational

Table 3 Chapters in economic institutions of strategy.

Tech transfer	A. Agrawal
Organization of R&D	B. Cassiman/A. Gambardella
Entrepreneurship	N. Foss/N. Stieglitz
Problem solving perspective	M. Leiblein/J. Macher
Inter-firm contracts and performance	L. Webber/K. Mayer/R. Wu
Alliances and performance	J. Oxley
Franchising and performance	S. Michael/J. Bercovitz
Internal organizational	N. Argyres
Acquisitions	J. Reurer
Scale and scope of the firm	T. Zenger/J. Huang
Diversification	P. Klein/L. Lien
Intellectual property and strategy	R. Ziedonis
Foreign direct Investment	M. Ramos/M. Shaver
Responses to institutional variation	W. Henisz
Integrated political strategy	J. De Figueiredo
Contracting with government	S. Saussier/E. Brousseau
Organizational change	J. Nickerson/B. Silverman

change. While these chapters do not span the entire space of Williamson's potential future impact in strategic management they nonetheless are suggestive that his research will continue to have an important impact on the field of strategic management. The co-editors are very excited about the book and we hope people will find it useful for advancing the economic institutions of strategy.

This new book offers a springboard to reflect on Oliver Williamson's impact on his students who identify themselves as strategic management scholars. Many of Oliver's students contributed to the *Economic Institutions of Strategy*. I sent emails to those who had Professor Williamson either as the chair of the dissertation or on their dissertation committee who identify themselves as strategy scholars. I asked them to send me one sentence, a brief sentence, about Oliver's impact on them and their research. Below I provide their responses in alphabetical order.

Ollie has great history with all of his students. When you think you are just about finished with your dissertation, it goes on for about another year. You'll see a few comments suggesting that the dissertation under Ollie was a painful experience for many if not all of us; but, all of us will in retrospect acknowledge and recognize that he drove us to much higher levels of quality and much higher intellectual standards. We all appreciate Oliver's tutelage. In the following quotes I think you will find a remarkable consistency the intellectual experiences and the personal impact Williamson has had on his students.

Nick Argyres is at the Olin Business School, Washington University in St. Louis. Nick's response to my question was, "I was attracted to Ollie by the power of his ideas, but came away even more impressed with the integrity with which he approaches research which he described as intellectual honesty, thoroughness, rigor of argument and life in general."

Janet Bercovitz, who is at the University of Illinois, said "I have been inspired (or indoctrinated) by Ollie's driving question, 'What's going on here?' He taught us not to just accept the conventional wisdom, but to look for the puzzle, drill into the details, test the logic, and work towards complete (and reality-based) understanding." And her additional comment was "No matter how painful that process might be!"

Lyda Bigelow, who is at the University of Utah's Eccles School of Business, said that "Although Oliver's speaking and writing style features lengthy, technical, Latin-infused sentences, he could be parsimonious in warning doctoral students not to undertake more in a project than they (or anyone) could theoretically or empirically deliver; as in, 'Your project is ambitious.' I continue to remind myself of this in ongoing work and have invoked it in my own doctoral students, though I doubt my delivery is as effective as Oliver's."

John de Figueiredo, who recently moved from UCLA to Duke University, said "As chair of my dissertation committee, Oliver focused my efforts on the institutions of strategy, encouraged me to explore the untapped field of non-market strategy, guided me to pursue a microanalytic approach, and relentlessly demanded excellence—changing my life forever."

Peter Klein, who is at the University of Missouri, commented "What impresses me the most about Oliver and attracted me to

him as a student is not only the substance of his teaching but the spirit of his inquiry: intellectually curious, open-minded, willing to challenge orthodoxy, courageous enough to pursue truth regardless of consequence."

Jeff Macher, at the McDonough School of Business at Georgetown University, commented that "Oliver Williamson pushed me to examine governance structures instead of production functions, consider feasible alternatives instead of hypothetical ideals, and select comparative approaches instead of illustrious examples—all of which pervades my research to this day."

Withold Henisz, at Wharton, reflected that "Ollie's actions as an advisor embodied and defined true scholarship: the self-less relentless demand for excellence from oneself and others in explaining practically relevant but empirically verifiable causal relationships irrespective of disciplinary boundaries, prevailing conventional wisdom or the receptiveness of audience."

Kyle Mayer, at the University of Southern California's Marshall School of Business, reported that "Oliver inspired me to always question assumptions and what is considered conventional wisdom while looking broadly across disciplines for ideas and theories to advance research in the social sciences."

Joanne Oxley, at University of Toronto's Rotman School of Management, recalled "I always try to keep in mind one of Ollie's favorite admonitions—to follow Péguy's prescription to progress with research in a 'modest, slow, molecular, definitive way' (I've managed the slow part, but not sure about the rest)—I think the strategy field would be better off if more people heeded Ollie in this regard!"

Bennet Zelner, at Duke University's Fuqua School of Management, stated that "Although I learned much about institutional economics from Ollie, his most important influence on my research came from his dogged insistence (which I have tried to internalize) on explicating mechanisms linking assumptions to outcomes in one's conceptual models, whether of the 'formal' or 'pre-formal' variety. To echo Joanne, I think that the strategy field would be better off if more people heeded Ollie in this regard."

I looked across these statements and I asked "What do they all have in common?" First, notice that I had asked them all for one "brief" sentence. Their lack of brevity alone is a sufficient indicator of being indoctrinated by Ollie. More relevant is that everyone describes an advisor who was selfless and committed to the highest ideals of intellectual inquiry. As an illustration, if you go back to the MBA course that Ollie taught (for which I still have my final paper from the class) you would find that Professor Williamson had read the entire paper along with everyone else's papers. I have page after page of comments by Oliver Williamson in an MBA class, asking me questions about governance, the fundamental transformation, and whether or not the solution that we offer is feasible? Consider his willingness to read and comment on MBA papers where today it is more than common for teaching assistants to provide comments in such classes.

His reading and commenting on everything handed to him by students was not limited to this one MBA class. I still possess, as I think most of his PhD students, a large stack of poorly formulated and awkwardly written attempts at papers and an even larger stack of worse papers. Every one of these drafts and papers, no matter how bad, would be read within a few days by professor Williamson and returned with comments throughout. His dedication to advancing his students' thinking through Socratic questioning is legend.

His students frequently would joke—in a panic-stricken kind of way-about the comments he would write on these manuscripts. Indeed, the typically story is if you are a first year graduate student, you would get a paper back and quickly contact more senior PhD students and ask, "What does this comment mean?" in part because Williamson's comments are brief but deep. In the second year, students would do the same thing but they would understand at least some of the comments by then. By the third year, at least some students would understand the majority but not all of Williamson's comments. And usually by the fourth or fifth year, because it would take a while to graduate, they understood "almost" all of the comments. Joking about the meaning of Williamson's comments aside, every PhD student admits to owing Oliver Williamson for the intellectual roots he planted within them. We owe him for the way in which we look at the world, the way in which we look at problems, and how we think critically about formulating those problems as well as solving them.

For me personally, when I give paper presentations, I'm sometimes introduced as an economist and, occasionally, a sociologist. And, on one occasion, I was introduced as a psychologist. (I don't know where that came from.) In response, I almost immediately say that neither an economist, a sociologist, nor a psychologist am I. It is because of Oliver Williamson that I claim I am a phenomenologist. I study phenomena, and I bring to bear whatever intellectual perspective or perspectives are needed to understand them. While Oliver may claim to be an economist and just won a rather prestigious award under that identity, I would claim that at his core he is phenomenologist.

I am in full agreement with the corpus of comments my fellow Williamson students made. Frankly, I couldn't have said anything better. That said, I would mention that Oliver taught me an additional value that has shaped my career. He taught me to be persistent. That in order to advance our understanding and make progress on a topic, persistence is needed. Persistence in certain ways is the most important of his lessons for me. Persistence is one of the attributes that define his career.

The evidence provided in this paper provides much to support the claim that Oliver E. Williamson has had a profound impact on the field of strategic management. Furthermore, if you examine carefully the trajectory of citations to his research and look at the questions in strategic management yet to be answered, it is reasonable to conclude that Williamson will continue to have a profound and increasing impact on the field of strategic management for sometime to come. If you look at the group of strategic management PhD students he has produced, they've all done quite well professionally. Some who have graduated from other universities have pointed out that Williamson's cohort of Berkeley strategy PhD students is probably the most successful cohort of students for quite some time in the field. And, I anticipate that they will be active for many years into the future, which will further contribute to Williamson's legacy. If the list of stu-

dents is expanded from those who studied directly under him to those who studied Williamson's intellectual contributions from afar, then one must conclude that his future legacy in strategic management is secure.

I want to extend my appreciation to the organizers of the conference for giving me the opportunity to publicly honor Oliver E. Williamson on the occasion of his receiving the Nobel Memorial Prize in Economics. I congratulate Oliver and his charming and remarkable wife Delores as well as his entire family on this wonderful recognition of his research. Oliver has a wonderful family who I am sure is basking in a lifetime of success not just his most recent accomplishment.

Epilogue: (In response to Jackson Nickerson's address at the conference, Oliver Williamson offered the following reaction.)

I certainly thank Jackson for all of those kind words. Actually, at one of the first press conferences after the Nobel award was announced, the Dean of the [Haas School of] Business ... Richard Lyons, [who also is] a very generous guy [...,] made a lot of nice remarks. He described me as an excellent teacher, [or] words of that affect. I actually took exception to his [comments] in my remarks. ... I describe myself not as a good teacher but as a conscientious teacher and I enjoyed working with all of these [students]. It's been my privilege to have had a lot of excellent students and my feelings for them are reciprocated from Jackson's remarks. Thank you.

References

Barney, Jay B. (1991), "Firm Resources and Sustained Competitive Advantage," Journal of Management, 17 (1), 99–120.

Cohen, Wesley M. and Daniel A. Levinthal (1990), "Absorptive Capacity: A New Perspective on Learning and Innovation," *Administrative Science Quarterly*, 35 (1), 128–52.

Cyert, Richard M. and James G. March (1963), "A Behavioral Theory of the Firm," Prentice Hall: New Jersey.

Dierickx, Ingemar and Cool Karel (1989), "Asset Stock Accumulation and Sustainability of Competitive Advantage," *Management Science*, 35 (12), 1504–11.

Nelson, Richard R. and Sidney G. Winter (1982), "An Evolutionary Theory of Economic Change," Harvard University Press.

Nickerson, Jackson A. and Brian S. Silverman (2009), "Economic Institutions of Strategy," Bingley, England: Emerald Group Publishing.

Pfeffer, Jeffrey and Gerald R. Salancik (1978), "The External Control of Organizations: A Resource Dependence Perspective," New York: Harper & Row. Porter, Michael E. (1985), "Competitive Advantage," New York: Free Press.

Rumelt, Richard P. (1974), "Strategy, Structure, and Economic Performance," Boston: Harvard Business School Press.

Teece, David J., Pisano Gary and Shuen Amy (1997), "Dynamic Capabilities and Strategic Management," *Strategic Management Journal*, 18 (7), 509–33

Thompson, James D. (1967), "Organizations in Action. Social Science Bases of Administrative Theory," New York: McGraw-Hill Book Company.

Wernerfelt, Birger (1984), "A Resource-based View of the Firm," *Strategic Management Journal*, 5 (2), 171–80.

Williamson, Oliver E. (1975), "Markets and Hierarchies, Analysis and Antitrust Implications," New York: Macmillan.

— (1985), "The Economic Institutions of Capitalism: Firms, Markets, Relational contracting," New York: The Free Press.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.