COMMENTARY



Advancing theory in marketing: insights from conversations in other disciplines

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Received: 25 September 2019 / Accepted: 30 March 2020 / Published online: 2 May 2020 © Academy of Marketing Science 2020

Abstract

Over the years, marketing scholars have voiced concerns regarding the dearth of indigenous theory development in marketing, reliance on theories developed in other disciplines, and the downward trend in conceptual articles published in marketing journals. Advancing marketing theory encompasses developing organic marketing theories, refining and extending theories developed in other disciplines used to explain and predict marketing phenomena, evaluating theories currently in vogue in the field and discarding flawed theories, and developing overarching theories that in addition to explaining marketing phenomena also explain a broader range of phenomena that transcend disciplinary boundaries. Along the lines of the demonstrated potential of theories developed in other disciplines to shed light into marketing phenomena, the potential of organic marketing theories to shed light into phenomena that are the focus of research in other disciplines also merit exploration. Against this backdrop, drawing on theory insights from marketing literature and other disciplines, this commentary focuses on issues relating to development of new theories, extensions and revisions of theories in vogue, and discarding of flawed theories.

Keywords Marketing theory · Theory critique · Revision and extension · Mid-range theory

Introduction

The call for papers for the special issue of the AMS Review on advancing conceptual and theoretical articles in marketing draws attention to certain issues and concerns shared by a number of marketing educators regarding the current state of the field and its future

outlook (Vargo 2019). They include the marginalization of theory and philosophy of science in doctoral education in marketing, a downward trend in the number of conceptual articles published in scholarly journals in marketing, a dearth of organic marketing theories, and reliance on theories developed in other disciplines to explain and predict marketing



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phenomena (Clark et al. 2014; Frazier 2011; Houston 2016; Yadav 2010)^{1,2}. Given that fundamental issues relating to theory and theory development transcend disciplinary boundaries, among the topics highlighted in the call for papers for the special issue is insights from other disciplines that would benefit advancing theory in marketing (Vargo 2019). Recent articles by Vargo and Lusch (2017) on the development of a general theory of value co-creation partially informed by theories outside of marketing, and Hunt (2018) on advancing marketing strategy in the marketing discipline and beyond serve to highlight the inherent bidirectional nature of knowledge flow. Against this backdrop, this commentary focuses on the following issues in the context of advancement of theory in marketing.

1. *Insights from other disciplines that study similar phenomena*. Similar phenomena are often the focus of study in a number of disciplines (e.g. the behavior of plants competing for sunshine and water in plant sciences,

- and the behavior of firms competing for heart share, mind share and wallet share of consumers in marketing). Against this backdrop, an objective of this commentary is to explore how insights from other disciplines that study phenomena similar to those that are the focus of study in marketing can contribute to advancement of theory in marketing.
- d. Advancing new theories and revisions and extensions of organic and received theories. Developing new theories that explain and predict marketing phenomena constitutes an important avenue for contributing to the advancement of theory in marketing. However, other avenues for contributing to advancing theory in marketing such as proposing revisions of current theories, extensions of current theories, and equivalent theories also merit exploration. The above issues are a second major focus of the commentary. Relatedly, a cursory review of literature suggests that certain theories which are either advanced or viewed as new theories are more in the vein of revisions and extensions of existing theories.
- 3. Critically evaluating theories in vogue and drawing attention to shortcomings, if any. Advancing theory in marketing, broadly construed, encompasses developing new theories, refining and extending current theories that hold promise, and discarding theories that are flawed. A third objective of the commentary is to draw attention to the need for a greater emphasis (than is currently the case in the discipline) on critical evaluation of theories that are currently in vogue and discarding flawed theories.
- 4. Greater receptivity to research reporting null effects and replications. Dissemination of research findings that do not lend empirical support for the theoretical predictions can be an impetus for revisiting and revising the theory. Dissemination of inconclusive research findings (e.g. replication research studies that do not corroborate the research findings reported in prior research) can also be an impetus for revisiting and revising the theory. A fourth objective of the commentary is to highlight the need for greater receptivity of journals to publishing research that report null effects and replication research in marketing.

The commentary complements extant marketing literature on the above issues with insights gleaned from conversations in other disciplines. In order to provide a context and perspective, Table 1 provides a brief overview of the following theory related issues.

- *Impactful organic marketing theory*: Theory of product innovation and diffusion (Bass 1969).
- Overturned organic marketing theory: General theory of marketing (Bartels 1968).
- Research, critique, debate and discussion on received theory: Research studies that build on, and articles that



¹ The Flora and Fauna of the Knowledge Ecosystem. The inter-dependency between the *flora* (plants of a particular region or time) and *fauna* (the animals of a given region or time) in a natural ecosystem is instructive in regard to the marginalization of philosophy of science and theory in doctoral education in marketing pointed out by Houston (2016). In a natural ecosystem, if the flora on which the fauna feed were to disappear, the fauna will either perish or migrate to some other place with an abundance of the flora. In the context of the marketing knowledge ecosystem, the books and journals articles used in doctoral level seminars are akin to the flora, and the students enrolled in the seminars are akin to the fauna. In the aftermath of marginalization of philosophy of science and theory in the curriculum of doctoral programs in marketing, one can envision the following scenario. On their own volition, some among the next generation of marketing scholars (the current generation of doctoral students) may devote the requisite time and effort to become knowledgeable about relevant issues, and make important contributions to advancing theory in marketing. However, others who come of age (graduate and begin their academic careers) without much exposure to books and articles focusing on issues relating to philosophy of science and theory development may be less predisposed to contribute to advancing theory in marketing. Even under the scenario of leading scholarly journals in the marketing discipline being receptive to and encouraging authors to submit conceptual and theory development focused articles, they are likely to face a dearth of submission of manuscripts with the potential to contribute to advancing theory in marketing. ² More than a decade ago (on March 7, 2008), the institution at which the author is a faculty member had invited Dr. Yvonna Lincoln (University Distinguished Professor Emeritus at Texas A&M University; a worldrenowned scholar and author or numerous books and journal articles on qualitative research methods) to share her ongoing research in their Research Seminar Series. Following her talk, the author and one of his colleagues had an informal meeting with Dr. Lincoln. During course of the conversation, we shared our concern about the decline of conceptual and theory focused articles in leading journals in the marketing discipline, and the discontinuance of doctoral seminars on Philosophy of Science and Marketing Theory in a number of doctoral programs in marketing. She used the fauna and flora analogy (dependence of the fauna on abundance of flora, in order to flourish) to enlighten us on the likely long-term impact of doctoral curriculum in a field of study and the training of doctoral students on the future of an academic discipline. The author gratefully acknowledges Dr. Lincoln as the source of inspiration for the contents of Footnote # 1, and takes full responsibility for any errors.

Table 1 Impactful organic theory, sidelined organic theory, influential received theory and extension of received theory in marketing: illustrative theories

Theory Overview

Impactful Organic Marketing Theory: Theory of Product and Innovation Diffusion (Bass 1969)

The Bass Model is a mathematical theory of product and innovation diffusion. The model distinguishes between innovators (early adopters of a new product) and imitators (later purchasers who purchase primarily due to the influence of innovators who like the new product). The model assumes that the word-of-mouth influence of satisfied customers is the primary driver of sales of a new product. According to the Bass Model principle, the portion of the potential market that adopts a product at time "t" given that they have not yet adopted is a linear function of previous adopters. The three parameters (coefficients) that define the Bass Model for a specific product are (1) M — the potential market (the ultimate number of adopters), (2) p — the coefficient of innovation, and (3) q — the coefficient of imitation. (Bass' Basement Research Institute website)

http://www.bassbasement.org/BassModel/Default.aspx

Sidelined Organic Marketing Theory: General Theory of Marketing (Bartels 1968)

In the annals of marketing, there have been numerous calls for a general theory of marketing, as well as responses to the calls. Bartels (1968) proposed a general theory of marketing comprised of seven component sub-theories. The theory of (1) social initiative, (2) economic separations, (3) market roles, expectations, and interactions, (4) flows and systems, (5) behavior constraints, (6) social change and marketing evolution, and (7) social control of marketing.

Influential Received Theory: Theory of Disruptive Innovation

Disruption in an industry refers to the adoption of the product offerings of new entrants (competitors) into an industry by mainstream customers in volume. The theory posits that disruption occurs in an industry due to the following competitive behaviors by incumbent firms and new entrants.

Incumbent firms focus on sustaining innovations (continuously improving their products for their most demanding and more profitable market segments, and even exceeding the functionality requirements of these segments), but fail to respond vigorously to footholds made by new entrants. Sensing an opportunity, new entrants initially target segments that incumbent firms overlook or pay less attention to with products that deliver more-suitable functionality requirements at a lower price, and subsequently move upmarket by delivering functionalities that meet the requirements of mainstream customers (see: Bower and Christensen 1995; Christensen and Bower 1996; Christensen 1997).

Revision and Extension of Theory of Disruptive Innovation^{1,2}

The revised theory posits that disruption occurs in an industry due to the following competitive behaviors by incumbent firms and new entrants.

Incumbent firms devote a disproportionate amount of resources to serving their most profitable and demanding customers with ever-improving products and even exceeding their performance requirements, but in the process, devote scant resources to certain market segments and overlook certain market types. New entrants establish a low-end foothold in the industry by serving the low-end segments with good-enough products, and/or a new-market foothold by innovating to convert non-consumers into consumers -- creating a market where none existed, and subsequently move upmarket by delivering functionalities that meet the requirements of mainstream customers (see: Christensen et al. 2015).

Remarks

The Bass (1969) new-product diffusion model has been the focus of a large number of empirical studies in various empirical settings -- products (e.g. goods and services, durables and non-durables, consumer products and industrial products), markets (country markets and market types – B2B and B2C markets), and industries.

Extensions and alternative theoretical formulations of the model have been proposed and tested. However, it has been pointed out that certain representations of the Bass Model (Bass 1969) using different symbols may seem to be different equations, but are equivalent, and can be obtained from the Bass Model principle through algebraic manipulation (Bass' Basement Research Institute).

Bass (1969) was named by INFORMS (Institute for Management Science) as one of the Ten Most Influential Papers published in the 50-year history of its flagship journal, *Management Science*.

In a critique of Bartels' (1968) general theory of marketing, Hunt (1971) Hunt evaluates the seven component sub-theories based on whether the theoretical structure (a) contains a systematically related set of statements, (b) contains lawlike generalizations, and (c) yields empirically testable hypotheses. Hunt concludes that the seven component sub-theories are not theories, and therefore, collectively the seven components is neither a "theory" nor a "general theory of marketing."

From the foundational publications (Bower and Christensen 1995; Christensen and Bower 1996; Christensen 1997) to relatively recent publications (Christensen, McDonald, Altman and Palmer 2018; Kawamoto and Spers 2019), debate and discussion on the theory of disruptive innovation in scholarly journals, business magazines, the business press, and the popular press spans one quarter of a century.

The body of literature on the theory includes critiques of the theory (King and Baatartogtokh 2015; Lepore 2014), critique of critique of the theory (Raynor 2014 – critique of Lepore 2014), and enhancements and revisions of the theory (Christensen et al. 2015).

Research, Reviews, Synthesis, Critiques and Commentaries in Marketing Literature

Daneels (2004) and Hopp et al. (2018) provide a review, synthesis and critique of research on the theory of disruptive innovation.

A 2006 print issue and a 2018 virtual issue of the Journal of Product Innovation Management are devoted to the topic. Editorial essays by Daneels (2006) and Hopp et al. (2018) provide an overview of the articles in these issues.



Table 1 (continued)

Theory Overview

Extension of Received Theory: Theory of Multimarket Competition

The theory of multimarket competition, originally advanced in the industrial organization economics literature, focuses on competitive situations in which the same firms compete against each other in multiple markets.

The theory posits that firms compete less intensively against competitors they encounter in more number of markets for their product offering(s) than against competitors they encounter in fewer number of markets.

The theory advances *deterrence* (the ability of firms to hurt their competitors and the opportunity to hurt due to asymmetries in their competitive positions across products and/or markets), and *familiarity* (the recognition by competing firms of their interdependence) as the rationale.

Remarks

In the marketing literature, Jayachandran et al. (1999) present an extension of the theory of multimarket competition. Specifically, they model the relative dominance of the multimarket competitors in their spheres of influence, resource similarity/dissimilarity between multimarket competitors, seller concentration, and organization structure as moderators of the relationship between the degree of multimarket contact and intensity of competition. For example, they posit that the attenuating effect of multimarket contact on the intensity of competition between firms will be greater under conditions of high resource similarity between multimarket competitors compared to under conditions of low resource similarity.

provide synthesis, critiques and commentaries on the theory of disruptive innovation (Christensen 1997) in marketing literature.

• Extension of received theory: Extension of the theory of multimarket competition (from industrial organization economics) in marketing literature.

Advancing theory in marketing: Theoretical insights from other disciplines investigating similar phenomena

Marketing literature on similarities between competition in the biological and business spheres dates to the 1930s. In an article published in the very first volume of the Journal of Marketing, Alderson (1937) noted that the question of 'What is competition?' can be answered tentatively with a very general definition derived from biological parallels. He defined competition as "the set of relations existing between organisms because of the fact that they are seeking interdependent objectives within the scarcity boundaries of a common environment" (see: Point # 1, Table 1, Hunt 2018, p. 21). Henderson (1983), the late founder of the Boston Consulting Group, espoused a similar view in an article titled, "The Anatomy of Competition." He noted that certain principles of competition are universal, whether applied to biological or business competition. Hunt (Table 1, p. 21) lists 13 points adapted from a discussion on competition in Alderson as constituting the 'materials,' or a starting point, for a marketing theory of competition.

Certain similarities between the competitive behaviors of firms and the competitive behaviors of plants, and competition for resources among firms and among plants is instructive in this regard (Varadarajan 2018). Competitive behaviors conducive to a firm outperforming its competitors is the focus of a large body of literature in strategic marketing and strategic management. Likewise, competitive behaviors conducive to plants outgrowing surrounding plants is the focus of research in plant sciences. Table 2 provides a perspective on the similarities between (1) root proliferation strategy as a competitive behavior by plants, and product proliferation strategy as a competitive behavior by firms, and (2) competition for resources between plants and competition for resources between firms. Supply preemption is a concept that transcends both competition for resources between plants (Craine and Dybzinski 2013) and competition for resources between firms (Kerin et al. 1992; Varadarajan et al. 2008). Notwithstanding the similarities, as summarized in the last column of the table, certain caveats should be borne in mind. Furthermore, as highlighted in a footnote to the table (Footnote # 2), the observations about competition for resources between firms summarized in the second column are not based on literature on competition for resources among firms. Rather, they are adaptations of Craine and Dybzinski's (2013) observations about competition for resources among plants. Nevertheless, they are suggestive of similarities in the competition for resources among firms in the business sphere and plants in the biological sphere. More importantly, they serve to draw attention to the question of whether any of the organic marketing theories currently in vogue can shed light into similar phenomena in other disciplines.



¹ In a 2006 article, Christensen (2006) characterized the development of the theory of disruptive innovation as an iterative and ongoing process

² "The key to his power as a thinker and a theoretician is that most of us look for evidence that confirms our beliefs, and Clay did just the opposite. He welcomed evidence that disconfirmed things that he believed. To that end, he hung a distinctive sign outside his office door: "Anomalies Wanted." [van Bever on the late Clayton Christensen, quoted in Smith 2020]

Table 2 Some similarities between the competitive behaviors of trees and firms

Competitive Behavior of Trees: Root Proliferation Strategy

Observation: Trees have "way more" roots than they need to capture nutrients from soil.

Question: What purpose do the extra roots of a tree serve (i.e. what purpose do roots in excess of what a plant needs to capture nutrients from soil serve)?

Theory (Explanation): A tree's overabundant roots act as weapons to prevent other trees from growing.

Elaboration: Creating roots takes energy, and optimally every tree would have just enough roots to capture the nutrients and water it needs. However, rather than to help them grow successfully, trees create excess roots in order to cause other trees to grow less successfully (Bhanoo 2011).

Dybzinski et al. (2011) note that trees having "way more" roots than they need to capture nutrients from soil highlights the underappreciated idea that the most competitive strategy is not necessarily the one that would be the "best" for a tree, but rather that which creates conditions in which all others are worse

Competition for Resources between Plants (Craine and Competition for Resources between Firms^{2,3} Dybzinski 2013, p. 834).

between plants should take into account the:

- (a) forms of resources available,
- (b) mechanistic role the resource plays in the plant's physiology,
- (c) temporal variability in its supply understanding how competition occurs when resources are supplied evenly or heterogeneously in time, and
- (d) spatial variation in supplies being clear about the scale of this variation and how it relates to plant size.

Competitive Behavior of Firms: Product Line Proliferation Strategy

Observation: Dominant firms in certain industries (i.e. market share leaders) tend to make and sell their products in more number of forms, flavors, sizes, etc., than needed to effectively and efficiently serve the needs and wants of their customers.

Question: What explains dominant firms in certain industries pursuing a strategy of product line proliferation?

Why do dominant firms in certain industries (i.e. market share leaders) make and sell their product offerings in more number of forms, flavors, sizes, etc., than needed to effectively and efficiently serve the needs and wants of their customers?

Theory (Explanation): Rather than to enhance its own performance, a dominant firm in an industry pursues a product line proliferation strategy to prevent its competitors from becoming more successful, and to prevent new competitors from emerging.

Elaboration: A firm's marketing strategy encompasses both actions undertaken to enhance its own performance, and actions undertaken to hurt the performance of its competitors. Pursuit of a strategy of product line proliferation entails considerable managerial time and effort, and financial resources. Therefore, optimally, a firm would make its product offering in just enough forms, flavors, sizes, etc. to maximize its profitability. However, rather than solely focusing on maximizing its profitability, the dominant firm in an industry introduces its highly successful new product offerings (product offerings that are market share leaders) in more number of forms, flavors, sizes, etc., than needed in order to hurt the performance of its present competitors and deter the entry of new competitors. In effect, more so than to enhance its own performance, the dominant firm in an industry pursues a strategy of product line proliferation to preempt potential entry points into the product-market, and thereby hurt the performance of its present competitors and deter entry into the market by new competitors.

A robust set of theories about competition for resources A robust set of theories about competition for resources between firms should take into account the:

- (a) forms of resources available.
- (b) mechanistic role of the resource on firm performance,
- (c) temporal variability in its supply understanding how competition occurs when resources are supplied evenly or heterogeneously in time, and
- (d) spatial variation in supplies being clear about the scale of this variation and how it relates to firm size.

Remarks

Behavior of firms: Decisions by humans orchestrating the behavior of firms

Although the competitive behavior of trees (root proliferation strategy) and firms (product proliferation strategy) are indicative of certain similarities, there are also differences. The root proliferation strategy may be ingrained in trees, and product proliferation strategy in firms (i.e. in decision-makers / humans orchestrating the behaviors of firms) However unlike trees only the dominant firms in an industry may have the ability to pursue a strategy of product line proliferation.

Extant literature on theory of multi-market competition is also suggestive of differences in the competitive behaviors of trees and firms. The intensity of competition between firms that compete with each other in multiple product-markets is often lower due to asymmetries in their competitive positions in different product-markets (Jayachandran et al. 1999).

Remarks

In reference to competition for resources among plants, Craine and Dybzinski (2013) discuss supply pre-emption theory and supply pre-emption hypotheses. Although the terms, "supply pre-emption theory," and "supply pre-emption hypotheses" are not explicitly used, they are implicit in literature on first mover advantage. For instance, Kerin, Varadarajan and Peterson (1992) and Varadarajan et al. (2008) discuss supply preemption in reference to competition for both tangible resources (e.g. preemption of most attractive locations in the physical space) and intangible resources (e.g. preemption of the most attractive positions in the product positioning space).



An adaptation and extension of a discussion on the topic in Varadarajan (2018)

² An adaptation of Craine and Dybzinski's (2013, p. 834) observations concerning competition for resources between plants, to competition for resources between firms. In reference to competition for resources between plants, Craine and Dybinski refer to the "plant's physiology" and "plant size." In reference to competition between firms for resources, the terms, "firm performance" and "firm size," are used in place of "plant's physiology" and "plant size," respectively

³ Physiology is "the study of all the physical and chemical processes that take place in organisms in order for them to perform all the functions and activities associated with living." (https://biologydictionary.net/physiology/)

Refining and extending organic theories and received theories

"Theories are nets to catch what we call 'the world': to rationalize, to explain, and to master it. We endeavor to make the mesh finer and finer." (Popper 1959, p. 59).

Popper's characterization of theory development as an endeavor analogous to making the mesh of a net finer and finer speaks to the importance of refinements and extensions of theories that are currently in vogue. In this vein, Table 1 provides summaries of the original version of theory of the disruptive innovation (Bower and Christensen 1995) and a follow-up revision of the theory (Christensen et al. 2015). Table 1 also provides a summary of an extension of a received theory (the theory of multimarket competition from the field of industrial organization economics) in marketing literature (Jayachandran et al. 1999).

Literature on the resource-based view (RBV), capabilities-based view (CBV), and dynamic capabilities-based view (DCBV) of the firm (RBV: Barney 1991; Kozlenkova et al. 2014. CBV: Amit and Schoemaker1993; Day 1994. DCBV: Eisenhardt and Martin 2000; Teece et al. 1997) also provides insights into the revisions and extensions of a theory. Relatedly, the body of literature also serves to highlight instances of characterization of theory extensions as new theories. In order to provide a context and perspective, the gist of the resource-based, capabilities-based, and dynamic capabilities-based views of the firm are presented first.

Resource-based view Heterogeneity in the resource positions of competing firms explains heterogeneity in their market positions (performance). By effectively leveraging its advantageous resource position in resources that are valuable, rare, inimitable and non-substitutable (VRIN resources) to formulate and implement value creating strategies, a firm achieves and sustains a competitive advantage in the marketplace, and thereby, superior performance (Barney 1991).

Capabilities-based view Assets and capabilities are distinct types of firm resources. A firm, by leveraging its capabilities (the capacity to deploy its assets to achieve a desired end, usually in combination, using organizational processes) to deploy its idiosyncratic assets (stocks of available

factors controlled by the firm) achieves and sustains a competitive advantage in the marketplace, and thereby, superior performance (Amit and Schoemaker 1993)³.

Dynamic capabilities-based view In addition to the possession of idiosyncratic assets and static capabilities, dynamic capabilities (the ability to integrate, build and reconfigure competencies in response to a changing environment) are also crucial for a firm to achieve and sustain a competitive advantage in the marketplace, and thereby, superior performance (Teece et al. 1997).

Viewed from the perspective of logical progression, the capabilities-based view and the dynamic capabilities-based view are more in the vein of refinements and extensions of the resource-based view, rather than distinct and competing explanations of heterogeneity in firm performance. Likewise, the call for a synthesis of the resource-based and dynamic-capability views (Makadok 2001) is also in the vein of refinement of resource-based view. The resource-based theory (RBT), an attempt to address various concerns about the resource-based view raised in literature on the resource-based, capabilities-based and dynamic capabilities-based views of the firm, is also in the vein of refinement of the resource-based view. In the VRIO (valuable, rare, and imperfectly imitable resources, and organization) framework in the resource-based theory, "I" subsumes both the inimitable and non-substitutable resources in the VRIN framework, and "O" refers to organization of the firm to exploit the full competitive potential of its valuable, rare, and imperfectly imitable resources (Barney and Hesterly 2012). "O" in the VRIO framework overlaps with capabilities in the capabilities-based and dynamic capabilities-based views of the firm. However, Felin and Powell (2016) characterize the dynamic capabilities view of the firm as a distinct theory. They note (p. 78): "The theory of dynamic capabilities came about as an attempt to explain competitive advantage in volatile industries." This brings to fore the question of whether the focus of



³ In the resource advantage theory (RA theory), a firm's capabilities are viewed as a higher order resource (see: Hunt 2010; Hunt and Madhavaram 2012).

A major focus of theory development and empirical research in marketing, management and industrial organization economics is understanding, explaining and predicting organizational success versus failure (i.e. variance in organizational performance) at various levels (e.g. firm, business unit, product, brand and market). Hunt's numerous works on resource advantage theory of competition provide valuable insights into the question of what explains organizational success versus failure (variance in organizational performance) in for-profit and not-for-profit organizational contexts. In one of his articles (Hunt 2012), he explores the question of what explains the empirical success (or lack thereof) of theories.

theory development should be explaining and predicting a phenomenon at a high level of specificity (e.g. a theory that explains and predicts competitive advantage in volatile industries) or more overarching (i.e. a theory that explains and predicts competitive advantage transcending products, markets, industries and time horizons).

In this regard, the four qualities that Wilson (1998, p. 198) enumerates as qualities that scientists look for in theory generally, and mathematical models in particular, are instructive.

- (1). *Parsimony*: Fewer the units and processes used to account for the phenomenon, the better.
- (2). *Generality*: Greater the range of phenomena covered by a model, greater the likelihood of it being true.
- (3). Consilience: Units and processes of a discipline that conform with solidly verified knowledge in other disciplines have proven to be consistently superior in theory and practice in comparison to units and processes that do not conform.
- (4). Predictiveness: Theories that are precise in the prediction they make across many phenomena and whose predictions are easiest to test by observation and experiment endure.

Three of the four criteria enumerated by Wilson (generality, consilience and predictiveness) allude to theories that explain a broader range of phenomena as desirable qualities in a theory. A pertinent issue in this regard is the potential of organic marketing theories to shed light into phenomena that are the focus of research in other disciplines.

Potential of organic marketing theories to explain and predict non-marketing phenomena

A review of the first few pages of a Google search on scholarly articles on the theory of planned behavior (TPB) (Ajzen 1991) shows that in addition to in marketing, TPB has been employed as a theoretical lens for understanding human behavior in myriad contexts. They include the adoption of hygienic practices by health care workers in hospitals, adoption of information systems technology in organizations, entrepreneurial intentions, leisure behavior, moral/immoral behavior (software piracy), participation in physical activities, proenvironmental behavior, tourism travel behavior, use of public transportation, use of social networking sites, use of instant messaging services, and weight reduction related behavior.

Interestingly, in a recent article, Fisher (2015) characterizes the ontogenetic growth model (West and Enquist 1997; West and Enquist 2001) as a general theory at an even higher level – a theory that could explain diverse phenomena such as sleep, cancer, longevity, and life and death. The ontogenetic growth model describes the way animals metabolize food and transport nutrition by networks to the cells. It predicts the growth curve for any organism, as well as explains why organisms stop growing. The theory holds that the number of capillaries scales nonlinearly with the size of the organism. When the number of cells doubles, the number of capillaries rises by only 75%. As people (and other creatures) grow larger, the delivery system fails to keep up with the growth in cells, and growth eventually stops (see Fisher). In the context of businesses, rate of firm growth and limits to firm size are analogous to the rate of growth of organisms and limits to the size of organisms, respectively. A pertinent question in this regard is whether any of the characteristics of firms are analogous to cells and capillaries in living systems.

Discarding flawed theories

"This year's Laureates opened the door on an unknown world where matter can assume strange states. ... In the early 1970s, Michael Kosterlitz and David Thouless overturned the then current theory that superconductivity or suprafluidity could not occur in thin layers. They demonstrated that superconductivity could occur at low temperatures and also explained the mechanism, phase transition, that makes superconductivity disappear at higher temperatures." (The Royal Swedish Academy of Sciences 2016).

The above excerpt from a press release by the Royal Swedish Academy of Sciences lists *overturning a current theory* as one of the major contributions of the winners of the 2016 Nobel Prize in Physics. It serves to highlight the importance of critical evaluation of current theories in a discipline, in addition to the development of new theories, and revisions, refinements and extensions of current theories. Drawing attention to the importance of critical scrutiny of theories in vogue and discarding flawed theories, Wilson (1998) notes that scientific theories are constructed specifically to be blown apart if proved wrong, and if so destined, the sooner the better. The following excerpt relating to the theory of group selection advanced by Wilson (2012), and the critique of the theory of group selection and defense of theory of



kin selection by Dawkins (2012) and Pinker (2012) among others is instructive in this regard.

"But he has continued to butt heads with other scholars, recently with the biologist and science writer Richard Dawkins, who panned Dr. Wilson's 2012 book, "The Social Conquest of Earth," in the British magazine Prospect. In the book, Dr. Wilson challenged the idea of kin selection—the long-held theory that individuals display altruistic, self-sacrificing behavior toward their relatives, with the aim of perpetuating their own genes. He put forth a theory of group selection, a kind of natural selection that acts on all members of a group rather than just related members and ultimately evolves the fitness of the entire group.

Dr. Wilson hopes that his next book, "The Meaning of Human Existence," coming out this fall, will be just as inflammatory. After all, he says, science proceeds only when people are "willing to stick their necks out." He says, "There's nothing more satisfying than the slaughter of an old theory, provided you can replace it"" (Wolfe 2014).

In the marketing discipline, a number of scholars have emphasized the importance of organic theory development (Frazier 2011; Rust 2005). However, with few exceptions [e.g. see summary of Hunt's 1971 critique of Bartels' 1968 general theory of marketing in Table 1], literature in the vein of critical evaluation of theories currently in vogue and discarding those found to be flawed is sparse. Greater emphasis (than is currently the case) on critical evaluation of theories that are currently in vogue and discarding flawed theories can contribute to advancement of theory in the marketing discipline.

Focusing on developing a general theory of marketing versus mid-range theories

Over 70 years ago, in a seminal article on sociological theories, Merton (1949, p.448) defined mid-range theories as "theories that lie between the minor but necessary working hypotheses that evolve in abundance during day-to-day research and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behaviour, social organization and social change." He noted that although midrange theories in vogue may not have been logically derived from a single all-embracing theory of social systems, once an all-embracing theory of social systems, once an all-embracing theory of social systems is developed, they may be consistent with it. He further noted that the field of sociology would advance if its major (but not exclusive) concern were developing theories of

the middle range, and would be retarded if the primary attention was focused on developing total sociological systems. Scholars have expressed similar points of view in other disciplines as well.

For instance, in the field of political science, issues related to universal versus middle range theories were the focus of four invited essays published in a 2006 Newsletter of the Comparative Politics section of the American Political Science Association (Bueno de Mesquita 2006; Bunce 2006; Shepsle 2006; Ziblatt 2006). In his essay, Ziblatt acknowledges that the history of social thought reflects the pursuit of both a single set of rules that might explain all human behavior, as well as the contrary idea that progress is most effectively achieved in incremental steps. However, he argues for less emphasis on the quest for a single grand synthesis of politics and more on a pluralism of middle-range theories that closely engage the real and diverse problems of politics.

Along the lines of the above conversations in the fields of sociology and political science, a number of considerations suggest that less emphasis on the quest for a general theory of marketing and more on middle-range theories that relate to diverse marketing problems may be a more appropriate path for advancement of theory in marketing. They include the breadth (diversity) of issues that are fundamental to the field, and the theoretical underpinnings of empirical research in the field (mid-range theories).

In a seminal article, Hunt (1983) enumerated the following as inter-related sets of fundamental explananda of marketing science. (1) The behaviors of buyers directed at consummating exchanges. (2) The behaviors of sellers directed at consummating exchanges. (3) The institutional framework directed at consummating and/or facilitating exchanges. (4) The consequences to society of behaviors of buyers and sellers, and the institutional framework directed at consummating and/or facilitating exchanges. Along similar lines, Day and Montgomery (1999) enumerated the following as issues as fundamental to marketing. (1) How do customers and consumers behave? (2) How do markets function and evolve? (3) How do firms relate to their markets? (4) What are the contributions of marketing to organizational performance and societal welfare?

Based on analysis of a data set of 987 theory uses and references to 322 distinct theories in articles published in the Journal of Marketing, Journal of Marketing Research and Journal of Consumer Research over a ten-year period (1993–2002), Merwe et al. (2007) identify13 pivotal theories in marketing. They conceptualize pivotal theories as theories that have been most influential and instrumental in the development of marketing theory and practice. Based on the criteria of intrinsic capital (most frequently used theories), they report that the 10 pivotal theories in marketing are agency theory, attribution theory, exchange theory, game theory, information theory, organization theory, prospect theory, resource theory,



transaction cost theory, and utility theory. Based on the criteria of *linkage capital* (theories with the most number of non-redundant links with other theories in the data set) they report that the 10 pivotal theories in marketing are adaptation-level theory, agency theory, attribution theory, economic theory, equity theory, exchange theory, game theory, organization theory, resource theory, and transaction cost theory. As may be noted, seven theories are pivotal in marketing with respect to both their intrinsic capital and linkage capital.

In a recent article, Vargo and Lusch (2017) note that the service-dominant logic can advance by moving toward development of a general theory of value co-creation by developing mid-range theoretical frameworks and concepts of service exchange, resource integration, value co-creation, value determination, and institutions/ecosystems. They envision the development of these mid-range theories to be partially informed by theories from outside of marketing. As might be noted, Vargo and Lusch use the term, "general theory" in a circumscribed context (i.e. general theory of value co-creation).

Greater receptivity to publishing research reporting null effects and advancement of theory in marketing

Dr. Barrett-Connor was a believer in the scientific method. The only reason to have a hypothesis was to try to disprove it," she used to say, according to Dr. Laughlin. "If you couldn't disprove it, you might be right — not guaranteed to be right, but you *might* be right." (Weintraub 2019. Dr. Laughlin on Dr. Barrett-Connor in Weintraub 2019).

"Birth order, according to conventional wisdom, molds personality. ... Birth order does not appear to influence personality in adults, according to several ambitious studies published in the past few years. This new wave of research relied on larger data sets and more robust statistical methods than earlier reports that claimed to find a relationship between birth order and personality. One reason it has taken so long to challenge the idea that birth order influences personality is that, before 2011, social scientists struggled to publish "null effects," ... The social science community has recently begun to embrace null effects, ..., after numerous studies failed to reproduce the results of classic experiments." (Guarino 2019)

From the standpoint of advancing theory in various behavioral and social sciences, a recent development is the receptivity of journals and the broader research community to publishing research reporting null effects (Bettis et al. 2016;

Guarino 2019). Reminiscing on biased publication practices (the low incidence of articles reporting null effects that are published in scholarly journals), van Witteloostuijn (2016) draws attention to Popper's (1959) view that scientific progress evolves on the back of the *falsification principle*. He notes that Popper's falsification principle requires a tradition of replication studies in combination with the publication of nonsignificant results (null results) and counter results (negative results), and systematic meta-analyses. However, van Witteloostuijn notes that in reality, there seems to be an obsessive focus on the *verification princi*ple (i.e. trying to prove that we are right by generating positives). In a related article, Meyer et al. (2017) report that of the 711 hypotheses tested in articles published in the 2016 volumes of the Journal of International Business Studies, Strategic Management Journal, and Organization Science, about 89% find empirical support for the theoretical predictions. They further note that but for a few exceptions, few studies reporting falsification outcomes are published in business journals⁴. In this regard, van Witteloostuijn suggests that the next generation of researchers should be taught to be not discouraged when their hypotheses are not confirmed. Instead, when confronted with evidence that does not corroborate a theory, they should be encouraged to work on developing a new theory that may fit with the data.

Understandably, while lack of empirical support for a theory can be an impetus for refinement of the theory, in a scenario of a flawed theory, the appropriate course of action would be to discard the theory. As Martin (2010, p. 66) notes: "Let's suppose you had a theory that heavenly objects revolve around the Earth. Increasingly, you find that this theory doesn't predict the movement of the stars and planets very well. Is it more rational to respond by questioning the theory that the universe revolves around the Earth, or to keep positing ever more complicated, convoluted, and improbable explanations for the discrepancy?"

Greater receptivity to publishing replication research and advancement of theory in marketing

"Science is intrinsically humble. Any scientific hypothesis must be tested repeatedly, by many different people, before it is believed. If the hypothesis does not meet the standards, then it is not considered to be scientific truth.

[&]quot;SMJ will publish and welcomes submissions of studies with nonresults. These type of studies demonstrate a lack of statistical support in a particular sample for specific hypotheses or research propositions" (Bettis et al. 2016, p. 261).



⁴ A recent editorial on the new editorial policies of the *Strategic Management Journal* (SMJ) states the following as one of its new editorial policies:

These high standards make it easy to have faith in scientifically proven facts — though the best scientists will admit that there is always a margin for error, however small." (Revkin 2011).

On the one hand, a cursory review of articles published in scholarly journals in marketing reveals a dearth of articles in the tradition of replications and extensions. On the other hand, as Revkin (2011) points out, in order for a scientific hypothesis to meet the standards of a scientific truth, it must be corroborated through repeated testing by many different researchers. In the aftermath of the emerging body of research on the replication research crisis in behavioral sciences (i.e. irreproducibility of findings reported in prior research studies; see Open Science Collaboration 2015), there seems to be greater receptivity to replication research in marketing and other business disciplines⁵.

Greater receptivity to publishing conceptual articles and advancement of theory in marketing

"François Englert and Peter W. Higgs are jointly awarded the Nobel Prize in Physics 2013 for the theory of how particles acquire mass. In 1964, they proposed the theory independently of each other (Englert together with his now deceased colleague Robert Brout). In 2012, their ideas were confirmed by the discovery of a so called Higgs particle at the CERN laboratory outside Geneva in Switzerland." (The Royal Swedish Academy of Sciences 2013)

The above excerpt from the press release by the Royal Swedish Academy of Sciences announcing the winners of the 2013 Nobel Prize in Physics has an important takeaway for advancing theory and research in marketing. For a theory proposed independently by François Englert and Peter Higgs in 1964, and confirmed by experiments conducted at the CERN laboratory in Switzerland in 2012, they received the 2013 Nobel Prize in Physics. Interestingly, in marketing, Bass first presented a brief, but complete mathematical derivation of the Bass Model (theory of product and innovation diffusion) from basic assumptions about market size and the behavior of innovators and imitators as a section in a 1963 conference Proceedings article (Bass 1963). Later, in a 1969 article (Bass 1969), he provided an in-depth discussion of the

[&]quot;SMJ will publish and welcomes submissions of replication studies" (Bettis et al. 2016, p. 261).



model and empirical evidence in support of the model (Bass' Basement Research Institute).

Issues of concern such as the decline in conceptual articles published in leading marketing journals, the dearth of organic theory development in marketing, the extensive importation of theories developed in basic disciplines into marketing, and barriers to publishing conceptual articles are inter-related⁶. For instance, all else being equal, in a research environment that is less conducive to publishing conceptual articles, empirical research based articles are more likely to draw on existing theories from basic disciplines to investigate substantive issues in marketing. Developing an organic marketing theory that sheds insights into a marketing phenomenon as well as research findings that lend support for the theoretical predictions in a journal length article can be a challenge. As the saying goes in physics, the experimental physicist most likely to win the Nobel Prize is the one who, following the advancement of a breakthrough theory by a theoretical physicist moves her/his bed to the lab.

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⁵ A recent editorial on the new editorial policies of the *Strategic Management Journal* (SMJ) states the following as one of its new editorial policies:

⁶ An example of a barrier to publishing conceptual articles are comments by reviewers to the following effect: "The conceptual model and propositions presented in the article, by themselves do not make a sufficient incremental contribution to advancing marketing knowledge. In order for the manuscript to make a sufficient incremental contribution to advancing marketing knowledge, the authors should also empirically test the model and research propositions and report and discuss their findings."

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