

Marketing's forthcoming Age of imagination

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Abstract Imagination is essential to marketing scholarship and practice. However, it is neither well understood nor sufficiently used. This paper encourages giving more attention to imagination by highlighting issues meriting further understanding. Readers are encouraged to ask questions such as: Why is imagination important? What job does it perform? Are people inherently imaginative? What forces enhance and dampen imagination? What do you have when you have an imaginative thought? Some initial observations regarding these and related issues are provided to stimulate the reader's thinking.

Keywords Imagination · Academia · Practice · Knowledge · Thinking · Ideas · Theory development

Overview

The paper is for readers concerned with expanding the frontiers of knowledge and practice. The discussion begins with a treatment of imagination's centrality to the discipline and a definition of imagination. It is argued that imagination is a basic human capacity displayed in everyday life. However, the relative absence of theory construction among academics and relative lack of bold, deep thinking among practitioners suggests a neglect of imagination in marketing. These activities occur, of course, but not to the degree warranted by the challenges and opportunities facing the discipline.

The discussion then turns to imagination's prevalence in everyday life. I argue that the *capacity* to be imaginative is substantial and universal; it is not a magical gift limited to some few people. Several everyday occurrences of imagination are identified that are not normally treated as instances of imagination. However, while everyone has significant imaginative abilities individual differences exist in how, where, how often and with what success they are displayed. Accordingly, various factors interacting with native imaginative capacities to produce individual differences in imagination are noted.

Imagination is a special instance of thought. It is a process of thinking about something that is missing. Like all thought, its dynamics are shaped by the subject it is about. However, it is helpful to examine imaginative processes beyond its subject matter focus. This raises a fundamental and so far unanswered question: What do we have when we have a thought, leaving aside what the thought is about? The discussion of this question focuses on two dimensions of imagination captured by the deep metaphors of transformation and container.

Throughout this paper certain criticisms of current practice in academia and business appear. These are not universally applicable, of course. Nevertheless, they arguably represent central tendencies regarding imagination in marketing. This would seem to contradict the paper's upbeat title, which suggests the field can enter a new age of imagination. However, regardless of one's views about imagination in marketing today, the field has an opportunity to enter a more imaginative period. There are at least four reasons for this.

1. We live in a time when many exciting advances are occurring in the human sciences and in the worlds of technology and artificial intelligence. These advances expand the idea set available to our imaginations.
2. The opportunity to encounter and explore these advances, deliberately and serendipitously, is unparalleled in human

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history. Never has so much information been so readily available to feed the imaginative processes of so many people.

3. The marketing field may be unique among business disciplines in the number of portals available that open onto a treasure trove of developments in the human sciences and technology.
4. There is a burgeoning of specializations within the field and in the outlets for sharing ideas thus further stimulating insight development.

To fully exploit these opportunities, it is necessary to address several issues or roadblocks to a productive and rapid entry into this new age. The positions expressed regarding these issues are intended to stimulate the reader's thinking; they are departure points for further reflection. Some readers will be familiar with several topics raised and their supporting literatures. The focus here is on their relevance to imagination, something not typically found in their other treatments.

Imagination's job: filling empty spaces

Generating new ideas is the heart of any discipline. Imagination keeps that heart beating. Without imagination, ideas that challenge existing assumptions, knowledge and practices are less likely to arise. Without such ideas, provocative questions are less forthcoming. Without such questions fewer path-breaking answers emerge in the form of new theories, practices and innovative goods and services.

Important information is often missing when most needed. This reflects "The Know All – Know Little" paradox of wisdom: wisdom requires extensive knowledge of available facts, while recognizing that these facts are typically dwarfed by the vast, empty space of what is unknown (Mick, Bateman, and Lutz 2008). Moreover, missing information is sometimes inherently unknowable or unobtainable (Rescher 2009; Yanofsky 2013). This produces the challenge of filling vacant spaces in knowledge by imagining what their contents could be. Imagination's job is to fill vacant spaces by supplying insights that missing facts would presumably provide. Put differently, a blank space is bait, a mystery, for a hungry mind (Von Stumm et al. 2011). It spawns questions leading to conjectures about competing ways of solving the mystery of what belongs in that space (Leslie 2014). Eventually, one solution or story is favored over others and put forth as a theory. This is how fields advance. Their blank spaces become populated with constructs and their connections and outcomes.

Imagination, then, is the process of generating missing ideas by drawing upon and then going beyond what is known. It provides proxies for the thoughts that might be available had we unequivocally clear information relevant to the empty spaces. By drawing inferences from limited available

information, we create an image or impression of what we would know about, say, customer motivation, if we could fully read customers' minds. In this sense, imagination is the ever-famous "best educated guess." It is the connective tissue between data and meaning.

The terms "creative" and "imaginative" are often used interchangeably. However, creativity is best viewed as the pragmatic branch of imagination. It emphasizes two constructs: originality and appropriateness (Sasser, Koslow, and Kilgour 2013; West, Caruana, and Leelapanyalert 2013). Originality reflects the degree to which a blank space is filled in with a solution that departs from accepted practice or standards while appropriateness relates to how on-strategy or goal oriented the solution is (Dennett 2013). When imaginative thinking is not judged to be creative the divergence is more likely to involve the criterion of appropriateness. Novelty that isn't workable is wishful thinking, not creative thinking. In this sense creativity is an important off-ramp on the highway of imagination. The need for creative problem solving is often why one enters the highway but it is hardly the entire highway.

Imagination in daily life

Imagination is so pervasive and natural it often goes unnoticed as an everyday occurrence. Its quiet daily operations hide the fact that everyone has substantial imaginative capacity (Runco 2014). It is not something limited to only a few. This capacity is displayed in many ways not usually acknowledged as imagination at work. A few examples will reinforce the idea that people are well endowed with imaginative abilities. This issue is also addressed later when discussing the "imagination lament."

Fantasy thoughts

Imagining the impossible, improbable, and unknowable are daily occurrences. Who doesn't daydream? Most readers will acknowledge having thoughts like the following: a bridge collapsing while driving across it; being the U.S. President; pitching in the World Series; and winning a huge lottery. We often wonder about things that cannot be answered such as "What did George Washington have for breakfast the day he crossed the Delaware River?" We don't require buying a lottery ticket, watching a World Series baseball game, or an interest in history to imagine such things.

Discovering the minds of others

Imaginative capacities evolved because of their survival value (Boyd 2009). Imagination enables us to simulate future

events, anticipate others' actions, and make contingency plans. This sets the stage for a requirement of social organization: empathy. In fact, a milestone in human development occurs when a child is able to imagine that others have minds of their own (Barton-Cohen 1995; Evans and Lee 2013; Gallagher 2005; Gordon 1995).

Entering what Eric Kandel (2012) calls “the private theatre of another’s mind” is a remarkable feat of imagination. The task of much market research is to enter the private theatre of the customer’s mind in order to influence the theatrical productions occurring there, such as imagined consumption experiences. It is not easy for managers and researchers to set aside what occurs in the private theatres of their own minds when trying to understand and engineer what happens in customers’ minds. The ideas they create to fill in blank spaces in their knowledge are often projected onto the customer, rightly or wrongly.

The convergence of manager and researcher thinking with customer thinking is an example of co-creation or collective imagination in which different stakeholders tacitly and/or explicitly help each other fill vacant spaces about market phenomena, such as brand meaning and relevance (Coulson 2001; Zaltman et al. 2015).

Mental simulations

The capacity to enter a simulated world and experience it as real, while simultaneously knowing it is not, is a tribute to imaginative capacities (Boyd 2009). Sports medicine demonstrates the power of personal, deliberately engineered fictions to affect behavior (Beilock 2010, 2015). For instance, done properly, imagining ski jumping, pole vaulting, or performing a gymnastic routine, can activate and train relevant physiological systems and improve performance. Similarly, customers often create consumption visions (Phillips et al. 1995). These arise when past experiences and those desired in the future fuse to create product use fantasies.

The entertainment world requires imagining improbable events. Being engrossed in a Harry Potter or a Stephen King novel, a science fiction film, or a TV series, such as *The House of Cards*, is a common occurrence. As with improbable thoughts, it is easy to suspend disbelief and imagine as real a situation we know is false. We may become so emotionally involved that we experience tears of joy or sadness, laughter or fear, chills, startle responses, and elevated heart rates.

The examples above involve experiences we imagine as real while knowing they are not. In other instances we are unaware of just how imaginative our minds are being. Three examples illustrate this and remind us that imagination has a dark as well as a bright side.

Memory as imagination

Studies of memory suggest that we don’t recall so much as we re-imagine. Considerable overlap exists in brain areas responsible for imagination and memory tasks requiring details of past events. Recall involves filling in blank spaces.

“When we recall an event, we re-experience it, so that the neural activity is not identical to the one that produced the remembered event. Rather, the experience is that of the original mixed with an awareness of the current situation. This experience of remembering ‘overwrites’ the memory.” (Schacter, Addis, and Buckner 2008)

For instance, false memories about a consumption experience may be common (Rajagopal and Montgomery 2011). LaTour and Carbone (2014) asked Pizza Hut customers in the UK to record things regarding a just concluded dining experience that they would remember the following week. A week later, some important memories of the dining experience had faded. More significantly, negative experiences (long lines, dirty tables) were “remembered” that had not occurred.

Affective forecasting

False memories are just one way imagination plays tricks and may alter judgment. Sometimes imagination is simply not up to the task of filling blank spaces accurately. Studies of affective forecasting – the prediction of one’s future emotional feelings – show that people are often poor at imagining how they will feel about future events (Gilbert 2007; Eastwick et al. 2008). It is easier to imagine the occurrence of a future event than to imagine accurately our emotional response to it. This is important since managers often ask customers to imagine their likely emotional responses to a new brand or product and customers may readily imagine and confidently describe their anticipated feelings. However, these predictions are often exaggerated or outright wrong. The ease of imagining a hypothetical product concept or feature when described now provides customers with a false sense of confidence that they can accurately imagine their future and largely unconscious emotional reactions to it.

Assumption making

Assumptions are conditions believed to be true without substantial evidence. They are mental cinder blocks generated by our imagination to serve as a foundation for making decisions (Barabba 2011; Mitroff and Linstone 1993; Mitroff and

Silvers 2010). Assumptions are a kind of reading between the lines and usually operate unconsciously (Leonard and Swap 2005). Without them, we could never get on with the business of making explicit decisions. For instance managers make many assumptions about what customers or other stakeholders are like. These hypothesized or imagined attributes may or may not be correct though they are seldom surfaced or tested.

The challenge assumptions pose lies in the automatic, unconscious ways they arise, are accepted as true, and invisibly influence conscious thought. They are a good example of how imagination can operate below awareness. These tacit beliefs form a protective cocoon sealing off key territories of thought from critical examination.

A common assumption in marketing is that customer thought is primarily conscious and can be readily articulated. This assumption underlies the “think-feel-do” decision-making model (Micu and Plummer 2010). “Think” in this model refers to explicit thought. While sometimes appropriate, this model is more often an inappropriate working assumption. It favors confirmatory research over exploratory research; that is, it favors research designed to prove a point rather than explore an idea.

A simple “so what” question can help surface hidden assumptions and catch confirmatory research masquerading as exploratory research: “What will we do differently as a result of the proposed research?” Or, “How much smarter will we be about customers as a result of the proposed research?” If the answer is “not much” the research investment should be questioned. A version of this question for academic research is, “How much thinking on the part of how many people might change based on the possible results?” If the answer isn’t “a lot” to either part of the question, the potential impact of the research should be challenged.

When asking such questions, it is useful to imagine “good news” and “bad news” results and attach probabilities and consequences to each outcome. Imagining bad news, e.g. that a planned action or cherished research hypothesis might be wrong, involves challenging so-called gut feelings, which are another product of imagination. These challenges are difficult since gut feelings originate in the unconscious mind where they are difficult to detect and when they do surface it is usually with a sense of certainty that they are right and thus not worth challenging. A slightly different question is, “If an hypothesis or a decision proved to be wrong, how would I explain that? What information do I have or need to provide an explanation?”

Mind time

Imagination may play tricks in the timing of events. For instance, we automatically project conscious thoughts

occurring in the present backward in time and imagine they preceded and thus caused our actions (Burton 2008; Libet 2004; Wegner 2002). This illusion is called the backward projection of conscious thought. In market research direct questioning of customers about past behavior can produce misleading information. When customers focus on a past action, but lack a current memory of its cause, they imagine one they believe would have been present and report it as driving their decision-making. For example, when directly questioned shortly after a purchase, customers of a men’s body care product cited price as driving their brand choice. Little mention was made of a desire for social approval. However, deeper probing revealed that the desire for social approval was the dominant, if subterranean, decision driver while price was largely irrelevant. Price was conveniently available to respondents during the initial direct questioning, and was incorrectly projected backward in time as the imagined cause of their purchase decision.

A variation of backward projection involves hindsight bias. For instance, managers reviewing research findings may say with sincerity, “I could have told you that,” even though experiments at Harvard’s Mind of the Market Lab and elsewhere show they could not (Barabba and Zaltman 1999; Zaltman 2003). There is a post hoc re-weighting of factors that makes it seem as if certain results would have been anticipated had we thought about them. We project new learning backward in time by assuming we knew it then or had thought it all along.

The backward projection in time of current, conscious thought also underlies the “*think – feel – do*” model of customer decision-making mentioned above. Post choice rationalizations, the “think” part, are perceived as predated actual choice. In this model, customers are assumed to have specific conscious thoughts that give rise to feelings that, in turn, dictate actions. The more common phenomenon, however, is one in which largely unconscious feelings give rise to actions followed, in turn, by conscious thoughts accounting for those actions. This is known as the “*feel – do – think*” model (Micu and Plummer 2010). Antonio Damasio sums this up nicely: “We are not thinking machines that feel; rather we are feeling machines that think” (Damasio 2010).

Other examples of imagination in daily life include placebo effects, gossip, religious beliefs, visual and other sensory illusions, the use of metaphor and figurative language, vision, lying, humor, and, well, you name it. Everyone imagines. It is a basic survival mechanism. People constantly extrapolate from available information to fill blank spaces with new thoughts. These dynamics are shaped by personal histories and biases, the willingness to absorb uncertainty and make leaps of faith. Even immediate physical settings shape imagination (Lobel 2014).

Imagination's mysteries

Imagination's cognitive and social dynamics are not fully understood (Dennett 2013; Finke et al. 1992; Frankland 2015; Frankland and Greene 2015; Johnson 2010; Root-Bernstein 1989; Runco 2014; Stein 2007; Sternberg and Davidson 1995; Ward, Smith, and Vaid 1997). As one cognitive neuroscientist notes:

“One of the big mysteries of human cognition is how the brain takes ideas and puts them together in new ways to form new thoughts” (Frankland 2015).

Trying to understand this mystery is somewhat like having a large pile of jigsaw puzzle pieces to assemble, no guiding picture on the box they arrived in, and not knowing if all requisite pieces are present or if some are extraneous. At the same time, many treatments of imagination exist that shed light on the mystery. They range from neurological studies to the impact of social environments to constructive “how to’s.” These treatments reveal imagination to be a complex, multi-layered process containing an as yet unanswered question concerning what we have when we have a thought.

A complex multi-layered process

Imagination has many layers each of which is a fusion of culture, history, social context, cognitive dynamics, and personal idiosyncrasy (Ashton 2015; Currey 2015; Czikszenmihalyi 1988; Gardner 2011; Harari 2015; Kandel 2012; Miller 2002; Root-Bernstein 1989; Tomasello 2009). Csikszenmihalyi suggests that the locus of imagination lies at the juncture of three interacting systems which may vary in their vibrancy: (1) a field, such as medicine, art, and technology involving institutions and judges; (2) a domain or discipline within a field and its paradigms, such as marketing or sociology; and (3) the person.

“... each of the three systems – person, field, and domain – affects the others and is affected by them in turn. One might say that the three systems represent three ‘moments’ of the same creative process.” (Czikszenmihalyi 1988, p. 329)

Each “moment” or layer has many important elements some of which are affected by the other so-called “moments,” something to keep in mind in the discussion of doctoral training later in this paper. Consider just the “person” dimension noted by Czikszenmihalyi. Different personal histories provide different kinds of expertise, ideas, work habits, and frames. For example, childhood experiences shape critical character traits associated with imaginative problem solving such as dedication to achieving a mission, passion for an activity, and the ability to absorb technical and social setbacks (Duckworth et al. 2007; Kumar

2008; Tough 2012). Personal history also involves the larger intellectual climate of one's time. Living in a vibrant intellectual period helps greatly, though its impact may be subtle and not always grasped by those affected (Kandel 2011; Miller 2002; Root-Bernstein 1989; Zaltman 2000). Personal physiological traits may even come into play (Mather 2009; Zeki 1999). For example, regarding sight, myopia may partially account for the unique work of impressionist painters. Cataracts may have influenced Claude Monet. Macular degeneration may account for the style found in some of Edgar Degas' work. Astigmatism may explain some unique qualities found in work by El Greco. While imagination is more than curiosity, like curiosity, there is much we can do to enrich (or impoverish) our efforts to be imaginative as discussed later.

Given the multi-layered nature of imagination and its many unknowns, it is not surprising that its measurement is challenging. Creativity tests, for instance, appear to display test-retest consistency and the results of different tests are moderately correlated. However, according to Howard Gardner, they appear to lack validity (Gardner 2011). They do not predict the achievements of people considered highly imaginative by the standards of their communities. And those standards are subject to the vagaries of time. For example, Degas' statue of *The Little Dancer* was first greeted with derision and only later judged a masterpiece. Conventional creativity tests often involve problem-solving tasks that have little bearing on real life or for which there is a single correct answer. Imagine a Steinbeck, Beethoven, Wyeth, Pollock, Beard, or the Beatles, being told, as they began an opus, that there was only one correct outcome.

Beyond aboutness

Most attention given to imagination addresses creative problem solving and hence what it is we are trying to imagine or be creative *about*. For instance, we often utter or hear statements like these: “I've an idea,” “It occurs to me that...,” “Let's think about it more,” “I believe...,” “It seems...,” “Clearly...,” “I wonder if...,” “It feels like...,” “No, it isn't...” Such utterances announce the experience of having a thought about something. Moreover, we intuitively grasp a lot about the specific thoughts being experienced. For instance, a thought may be readily described as important or trivial, simple or complicated, expressed easily or with difficulty, comforting or worrisome, possessing wisdom and validity or not, and clear or vague. These qualities relate primarily to a thought's content, its “*aboutness*.” A thought may be about many things such as physical

sensations, emotions, beliefs, problems and their solutions, and the myriad things we consciously do or realize we fail to do.

There is, however, a substantial, generally ignored gorilla in the center of imagination's sometimes foggy, misty landscape. This gorilla takes form in the following question:

What do we actually *have* when we have a novel thought, leaving aside its aboutness?

There is no clear answer to this question (Kagan, personal communication, 2015). The mechanics of generating new thoughts are simply not well understood:

“How the brain flexibly composes complex, structured meanings out of simpler ones is a matter of long-standing debate.” (Frankland and Greene 2015, p. 11732)

The absence of an answer and the challenges in finding one is a compelling reason to explore the question (Schwartz 2008). Understanding what a thought actually is relates to an important marketing goal: changing customers' minds and behaviors. Changing customers' minds, e.g. encouraging brand switching, involves creating a vacant space in their minds, even if briefly, as an existing idea is discarded in order to refill the vacated space with a new thought. Imagination is, after all, an engine that produces a new thought, regardless of what it is about.

There are many reasons for the absence of clarity about what we have when we have a thought. Trying to understand the dimensions of thought beyond time, space, and causality bring us into the private and usually invisible world of personal history, values, beliefs, knowledge, work habits, feelings of worth, and belonging (Pinker 2007). It requires embracing concepts having multiple meanings and uses such as mind, culture, neuronal activity, conceptual blending, reconstructive memory, and consciousness. The complexity of such concepts can be daunting even when considered in isolation.

Understanding what we have when we have a thought, leaving its aboutness aside, is especially challenging because the phenomena involved in producing a thought never occur in isolation of one another. No one element essential to imagining new thoughts is ever experienced while holding constant the enhancing and inhibiting effects exerted upon it by all other elements. We sometimes pretend that it is possible to hold issues constant by using research designs and statistical procedures that “silo” key elements. This sin of isolation, i.e., attempting

to isolate key elements of having thought, is limiting because a thought only occurs when its elements are bound together as a system; they never occur alone (Kagan 2016). This, I believe, is *the* major challenge when studying how imagination works.

Academia's neglect of theory

Given the importance of imagination we would expect academics and practitioners to favor its development and expression. Blank spaces, after all, are bait for hungry minds (Von Stumm et al. 2011). However, instead of being lured in by the mysteries and challenges theory building presents, it seems to be pushed to the periphery of attention. Evidence of its neglect can be found in the state of theory building in academia and of bold, deep thinking among practitioners.

Theory construction

The role of theory construction in marketing is analogous to the role of space probes like the Hubble telescope in cosmology that simultaneously address existing questions and raise new ones. The attention given to theory construction – marketing's space probes – is one barometer of imagination's health in academia. While thoughtful, provocative discussions of this topic exist their numbers are not commensurate with its importance (MacInnis 2011; Price 2014; Yadav 2010). A few observations about theory building are shared here starting with what is meant by theory construction.

A theory is an imagined story. It is a theory builder's best guess answer to the question, “What might we know – how would we fill a blank space – if we had appropriate empirical data?” A blank space poses a mystery that triggers competing explanations, one of which is ultimately favored. This produces a system of multiple, causally related constructs tentatively believed to explain its target phenomenon. Stated differently, a theory is a mental model – an imagined pattern of constructs – that tells a plausible but yet to be validated story about a real world process or event. A theory exists only in the theory builder's imagination and, potentially, in the phenomenon being described or explained.

Theories are conceptualized in many ways (MacInnis 2011). For instance, they may accrete over time as many scholars build on one another's work and establish a body of thought whose components vary in how well they are substantiated. Consumer culture theory is an example of a rich body of ideas contributed by many people and having varying degrees of empirical support (Arnould and Thompson 2005). Or, they may be crystalized in a single effort as illustrated by the classic Howard-Sheth theory of buyer behavior (Howard and

Sheth 1969). Here, too, there may be varying degrees of substantiation across a theory's components.

Theory testing, the assessment of a theory's truth status, is important in theory development. The testing process may provide the missing empirical data needed to justify or refute a theory. It may modify the original theory by (1) uncovering evidence of missing constructs, (2) detecting previously unspecified connections among existing constructs, (3) identifying certain constructs as unnecessary, or (4) providing new insights about how constructs operate among themselves. The very process of testing a theory involves imagination as all methods make assumptions and every method is a compromise with reality.

These potential contributions of theory testing to further conceptualizing may not be well realized. A review of publications in *The Journal of Consumer Research* finds that conceptual approaches to consumer behavior are few in number and declining (Rapp and Hill 2015). This is partly attributed to the high incidence of experimentally oriented research and the use of student populations rather than theory driven populations. This may inhibit the "creation of the most robust and accurate understanding of theoretical developments and/or advancements" (Rapp and Hill 2015, p. 25). The study notes that the use of multiple methods is increasing, which is normally a good thing. However, the number of methods is almost invariably limited to two and those tend to be used at different stages of research rather than for the purpose of achieving convergent validity in any one stage.

Doctoral training and imagination

The observations above were made with full time academics in mind. Consider a few questions involving doctoral students. First, "How much time in a doctoral program (say, the pre-dissertation stage) is devoted to explicit learning about theory construction?" Second, "Is this time proportional to the role of new ideas in advancing a field?" The answer for the first question appears to be "not much" and for the second question, at least in recent years, a clear "no."

All doctoral programs require coursework in research methods. This is clearly important for theory testing. Few programs, however, possibly less than one-third, may offer formal coursework in theory construction and related philosophy of science issues (Yadav 2010). Moreover, instruction in research methods often addresses theory construction only tangentially. The focus is usually on data capture covering issues of sampling, research design, and analytic techniques. These are important, of course. However, capturing data is not the same as capturing ideas, which is the primary purpose of having data in the first place (Zaltman 2014).

If instruction in conceptualizing ideas was a central feature of doctoral training, we'd expect to see many theoretically

oriented published papers as scholars pursue their post doctoral careers. This is not what we see.

"Relatively few purely conceptual papers emphasize new constructs or theories. Perhaps new constructs and theories are more likely to appear in empirical than in purely conceptual papers. However, I fear that our discipline lacks a sufficient emphasis on developing new constructs and theories. Empirical papers that emphasize new relationships seem to study "effects" (e.g., relationships between variables). Even if they include moderators that identify contingencies for the effects or mediators that specify the process by which effects are observed, they often stop short of using these observations to build novel theory." (MacInnis 2011, pp 151–152.)

The answer to a third question is another indicator of the value placed on theory development: "How prominent is theory development at the dissertation stage?" Doctoral dissertations offer young scholars an opportunity to explicitly engage in theory building. But exactly how much of a contribution do dissertations typically make to original theory building? This is an empirical question for others to address. If the low and declining incidence of published conceptual papers is a surrogate measure for the incidence of theory building at the dissertation stage (the launch pad for many published papers) there is reason to be concerned. It is suggested here that if original theory development doesn't occur at or before the dissertation stage with its intense mentoring opportunities and relative freedom from other demands of faculty life it is unlikely to occur later in a scholar's career. It appears this is exactly what normally happens.

The matter of attention given to theory development in doctoral programs underscores the importance of context or environment, one of the "moments" of creativity noted earlier. Both faculty and students might ask themselves the following question: To what extent do the values, attitudes, structure and content of your doctoral program encourage theory building and equip students with the tools needed for that undertaking? Does your program more closely resemble the experience of an Outward Bound program or (as I think more likely) a U.S. Marine boot camp?

It is important to note in conjunction with a doctoral program's culture, that imagination and its off-ramp of creativity have been studied extensively in conjunction with intelligence. Definitional and operational issues regarding both constructs make conclusions difficult to draw. However, conclusions that are offered suggest at best modest associations (see for example, Batey and Furnham 2008; Leslie 2016; and Plucker et al. 2015). It cannot be said with confidence that differences in one or another types of intelligence account for meaningful differences among doctoral students in their

theory building capacities. Those differences will be accounted for largely by their training and other aspects of doctoral program environments that nurture or discourage this special and very important form of storytelling. Faculty might consider the following, admittedly oversimplified proposition: it is not who one recruits as doctoral students that matters so much as what one does with them. As one writer observes:

“(T)he scientific literature on curiosity, while it disagrees on many things, agrees on this: a person’s curiosity is more state than trait. That is, our curiosity is highly responsive to the situation or environment we’re in. It follows that we can arrange our lives to stoke our curiosity or quash it.” (Leslie 2014, p. xix)

Practitioner aversion to bold thinking

Avoiding the shadows

A long-running series of in-depth interviews by the author with executive thought leaders contain evidence that imagination is often avoided in their firms.¹ Executives frequently comment on their colleagues’ expectations that research will answer questions directly. They expect answers to be self-evident based on what is immediately perceived in data. These expectations, in turn, allow imaginations to take long naps. On some occasions, of course, data does provide self-evident answers. An example would be learning the short-term impact of an end-of-aisle product display on sales in a specific retail environment. Such data can quickly and quite precisely inform a decision about using this tactic. However, an inverse relationship often exists between the importance and complexity of a question on the one hand and the ability of research to provide self-evident answers on the other hand (Barabba and Mitroff 2014). Consider an automotive company executive’s observation:

“[Market research] guys are afraid of shadows. They avoid gray areas. Data have to be black and white. If it is only suggestive, they won’t touch it.”

The shadows referred to are areas requiring the light of imagination. A senior insights executive from a global leader

¹ Many organizations have facilitated the arrangement of these interviews. Participants include both academics and practicing executives many of whom were engaged in executive education programs at HBS. Several clients of the research firm Olson Zaltman Associates have provided interviewees. Other firms have independently provided access to managers at different organizational levels and from different functions. Executives from a wide range of industries and global locations continue to participate.

in consumer-packaged goods offered a similar observation about research providers:

“Their creativity often lies in their ingenuity and elegance [in] answering questions whose answers are largely known in advance.”

Two other senior executives from leading consumer durable goods companies have described the state of imaginative thinking in their marketing operations in these ways:

“A problem has to become really ugly before [brand teams] will question how they are thinking [about it] and how they are using their [market] research.”

“I don’t know of a single new product success that didn’t involve a big leap [of faith] about customers. The problem here is people aren’t prone to leaping. For too many people here, research is a tutorial about right answers, not a source of creative input for developing [customer] resonant “Aha’s!”

While not all interviewees share these sentiments, most do. It should be noted as one reviewer points out that the subordinates of these and other senior executives expressing similar views often feel they are imaginative and that it is those in senior positions to whom they report who are the major barriers to bold thinking in their firm. In the author’s experience such complaints from subordinates indeed have merit. Often, too, the viewing lens for what constitutes bold thinking or imaginative judgment differ between management levels and such differences are neither acknowledged nor understood.

Firms often compensate for the absence of imaginative insight by collecting more data, which creates the illusion of having new ideas. But as Vincent Barabba, former knowledge development director for General Motors and Past President of the American Statistical Association points out, data and associated models do not themselves “say” anything, only managers and researchers do (Barabba 2011). Imagination resides in the observer, not in the collected facts. This is what provides job security in an age of smart machines.

Knowledge workers will also be increasingly sought and rewarded for their imaginations and ability to think outside the box. ... They’ll be valued for their skills in storytelling, for the personal stamp they put on their product, and for their embrace of the art of their work. (Davenport and Kirby 2016, p. 120.)

Marketing innovation and creative standards

Other indicators of insufficient imagination are apparent among practitioners and academicians. For instance, high

new product failure rates make suspect the quality and volume of imaginative thinking. A Nielsen study assessing the current state of marketing innovation reports that 85 % of innovations fail rather quickly, while only “20 % of launches produce 70 % of the sales, with a long, long tail of innovation duds that fail to recoup their costs” (Hall and Wengel 2015). Insufficient imagination could be the Achilles’ heel responsible for the “long, long tail of innovation duds.”

A Forester survey of senior managers from diverse industries found that only 11 % described their firms as meeting high creative standards, despite an awareness that fostering creativity is related to revenue growth, greater market share, and overall market leadership (Forester 2014). One sign of not meeting high creative standards is the imitation of so-called best practices found outside a firm without the adopting company asking why a practice works elsewhere and whether it would work well in their own environment. Firms with high creative standards use another firm’s best practice as a starting point for thinking about ways to improve upon it for internal use. Unfortunately, there is little evidence that this use of “best practice” occurs frequently.

Marketing scholars are not exempt from these same criticisms. Precisely when exciting, relevant advances are occurring in several marketing-related disciplines, many thought leaders suggest that scholars, along with practitioners, are choosing to learn more and more about matters of less and less consequence (Barabba 2011; Price 2014; Reibstein, Day, and Wind 2009; Yadav 2010). Experienced academics and aspiring doctoral students also avoid shadows, are reluctant to make imaginative leaps of faith, and favor ideas that can be readily measured even when they are not the most pertinent.

Favoring like mindedness

A barrier to imaginative thinking arises when like-minded people collaborate and inadvertently exclude diverse viewpoints. As one manager with experience across several industries observed,

“There is a certain xenophobia when choosing research [providers]. They have to fit a certain mold and that mold looks a lot like the one we use when evaluating new hires and existing staff. Are they likely to be too challenging to accepted ways of thinking here?”

Another manifestation is seen in the relatively infrequent collaboration between academics and practitioners. Academics and practitioners need to supplement each other’s thinking when imagination is required. Both communities have much in common including their sense of key problems demanding more imaginative thought (Marketing Science Institute 2016). Practitioner settings provide a rich laboratory, a kind of imaginarium, where both communities can, directly

and indirectly, collaborate to imagine new ways to approach significant problems. This requires sensitivity to the barriers to imagination each community may experience. A deeper understanding of what is involved in having an imaginative thought is required as well. Also required is a mutual respect for academic and practitioner differences. These differences can be enriching when used to expand one another’s thinking.

The Marketing Science Institute has demonstrated the value of bringing together the different viewing lenses practitioners and academics use to structure problems and evaluate data and the relevance and validity of solutions. Other organizations recognizing the value of bringing these viewpoints together include the Advertising Educational Foundation, the Wharton Customer Analytics Initiative, and a developing initiative by the American Marketing Association’s Academic Council.

Co-investigators of academically oriented research are understandably usually more overlapping than divergent in their viewpoints, research skills, and other expertise. Collaborating with others having similar thinking styles and research skills adds efficiency to a task and may even be more enjoyable. However, it is not clear it produces the richest thinking possible on a topic. New ideas may be more likely to arise when collaborators are more heterogeneous than homogeneous in skills and thinking orientations. The evidence for this is admittedly anecdotal, but does suggest the testable hypothesis that heterogeneous collaborations are more likely to produce more imaginative ideas.

Two key dimensions of thought

Ideas are not mysteriously hatched in some ether, nor do they travel telepathically among people. And while we lack a magic dye that can reveal the structure of thought and the experience of having one, there are two particularly interwoven dimensions. One is represented by the deep metaphor of transformation and the other by the deep metaphor of container (Zaltman and Zaltman 2008). The former concerns the cultural, social and cognitive processes involved in forging existing ideas into new ones. The latter concerns a thought’s state, including how it is approached, stored, and conveyed. These overlapping dimensions are addressed next.

Transformation

Transformation involves a change from one state (or “container”) to another. It is what concerns Frankland (2015) and Frankland and Green (2015) when they describe as a mystery how the brain develops complex, structured meanings out of simpler ones. This mystery is not without significant clues, however, and a few of its principal actors are discussed next.

Metaphors and conceptual blending

New ideas require the activation of “communities” of brain neurons or what researchers treat as constructs. When one neuronal community is activated it engages others thus creating patterns of thought (Feldman 2006; Thagard 2010). These patterns are variously called mental models, schemas, and frames, and are often represented as mind maps.

The particular bundles of neurons that are co-activated in a given context matter a great deal. This is why metaphor is so central to imagination. Metaphors have generative power, i.e. the ability to change the very thoughts they are intended to clarify (Lakoff and Johnson 1999). As we’ll see later, calling something a virus rather than a beast will influence the specific bundles of constructs (or neural communities) that are activated when people think about combating crime.

“There is now very strong evidence that essentially all of our cultural, abstract, and theoretical concepts derive their meanings by mapping [through metaphor] (Feldman 2006, p. 199).

More distant metaphors, those further afield from the topic of interest, are believed to produce more novel ideas because they stretch thinking more (Biederman and Vessel 2006). Some evidence, however, suggests that the value of distant metaphors may lie more in their impact on the greater number of ideas generated rather than their novelty (Chan and Schunn 2014; Oswick and Grant 2015).

Different metaphors will activate somewhat different clusters of neurons. This, in turn, influences (1) what thoughts come together to produce a new thought, and conversely, (2) what potentially relevant thoughts are less likely to arise because their triggering metaphors are not used (Colston and Katz 2005; Feldman 2006; Gentner, Holyoak, and Kokinov 2001; Holyoak and Thagard 1995). Put differently, every metaphor carries an opportunity cost in the form of insights missed that the use of alternative metaphors might have highlighted. This is why metaphors are said to hide as well as reveal thoughts.

An illustration of how using one metaphor and not another can make a difference in what new thoughts are imagined will be helpful. In a study about crime, researchers asked two comparable sets of people to create a strategy for addressing the problem (Thibodeau and Boroditsky 2011). The creation of a strategy was the blank space their imaginations needed to fill. People in each set received a report containing the same set of crime statistics. The crime statistics constituted one frame used by everyone. However, these statistics were paired with a different frame, one for each set of study participants. For one group, crime was framed as a “beast,” and these individuals developed strategies featuring rigorous law enforcement and severe penalties

for offenders. Apparently, the “beast” frame primed or triggered feelings of personal threat and anger. The other equivalent group read the same statistics in a report where crime was framed as a “virus;” their strategies focused on fixing the root causes of crime, such as poverty, unemployment, and poor education. The virus metaphor-statistics blend apparently generated thoughts about crime prevention and sympathy. A partial explanation about how this occurs can be found in the extensive literature on priming. This literature describes how different stimuli such as different metaphors influence the activation of different neural clusters to produce different thoughts and behaviors (Bargh 2012, 2014; Cameron, Brown-Jannuzzi, and Payne 2012; Wheeler and DeMarree 2009).

The transformational process whereby new thoughts arise – blank spaces are filled – as different communities of neurons (or mental models) are co-activated and communicate with one another is called conceptual blending (Coulson 2001; Fauconnier and Turner 2002; Lakoff and Johnson 1999; Zaltman, Olson, and Forr 2015; Zaltman and Zaltman 2008). The neural activity that underlies conceptual blending is not fully understood as there are many neural processes involved. For example, it is believed that re-entrant mapping is part of conceptual blending (Edelman 1999; Edelman and Tononi 2000). This occurs when one mental model activates another through a shared construct. For instance, for some customer segments the mental models for a luxury watch and an indulgent dining setting share the construct, “I’m worth it.” When discussing their thoughts and feelings about a luxury watch people often thought about indulgent dining experiences because of this shared construct. By bringing these two mental models together in a print ad featuring a luxury watch in an indulgent dining setting the “I’m worth it” construct for watches was reinforced. It was also learned that a prominent construct in the elegant, indulgent dining model, “the display of sophistication,” became prominent in the luxury watch model as a result of the ad. The “display of sophistication” was imported into the luxury watch model as a new or at least more salient thought.

Imagination involves many other neural activities beyond those involving metaphor, conceptual blending and re-entrant mapping (Chavez-Eakle 2007; Kounios and Beeman 2009; Jung-Beeman et al. 2004; Vartanian and Goel 2005; Zeki 1993, 1999). While a discussion of these activities and the brain structures involved is beyond the scope of this paper, one comment is in order: a thought is more than an activation of neurons. The mind does not reduce to the physical brain (Kagan 2006, 2016; Graziano 2013).

There are other well-studied dynamics that actively collaborate with metaphor, mental models and conceptual blending to shape the experience of having a thought. These include attention, awareness, the making of meaning and memory that are discussed next.

Attention and awareness

When a stimulus recruits a sufficient number of brain cells a tipping point is reached in which disproportionately more focus on the stimulus occurs; more attention is given. The resulting increase in attention allows us to develop meanings about the stimulus involved. This key transformation in information processing usually starts below awareness. The intensity of attention may reach a level of consciousness in which we become aware of being focused on the stimulus (Dijksterhuis and Nordgren 2006; Graziano 2013). So, while attention contributes to the formation of meaning about a stimulus, awareness helps us deliberately examine and refine that meaning by consciously mulling it over. Becoming aware of thought may take a fraction of a second or far, far longer (Libet 2004). Conscious awareness leads to the realization of having a new idea, the so-called “Ah Ha” moment sometimes called the “sudden click of comprehension” (Kounios and Beeman 2009).

Not being aware of a thought doesn’t mean it isn’t present and actively influencing us (Dijksterhuis and Nordgren 2006; Dijksterhuis and van Olden 2006; Gigerenzer 2007). In fact, strong evidence exists that substantial cognition occurs below awareness which is home for much imagination (Custers and Aarts 2010; Humphrey 2006; Damasio 2010; Dijksterhuis and Meurs 2006; Edelman and Tononi 2000; Kandel 2012). Daniel Kahneman provides a reminder of this:

“You believe you know what goes on in your mind, which often consists of one conscious thought leading in an orderly way to another. But that is not the only way the mind works, nor indeed is that the typical way. ... The mental work that produces impressions, intuition, and many decisions goes on in silence in our mind.” (Kahneman 2011, p.4)

However, we fall prey to the illusion that not much happens below awareness and that consciousness dominates overall thinking. Julian Jaynes makes this point with the analogy of a lit flashlight in a dark room which is instructed only to look where there is no light (Jaynes 1976). Of course, wherever the flashlight looks there is light and so it concludes light is everywhere.

Meaning and memory

Another transformational imaginative force involves the partnership with the reconstructive nature of memory and the making of meaning. Like other transformational forces, we have a greater sense of this force having occurred than we do of its ongoing operation. Memory is the spawning ground for “aboutness.” It is the residence of prior knowledge, the meaning of existing thoughts, and the habits of mind for

formulating new ideas. Readers familiar with memory research will recognize the importance of working memory when imagining future events and creating novel ideas. And, as discussed earlier, memory is often reconstructive and thus is itself inherently imaginative. Memory is a dynamic filter that may change even as the experience requiring an interpretation unfolds.

We constantly create meanings about our own and others’ experiences. Personal history and context shape the meanings or ideas that evolve with the creative help of memory and our sense of their novelty, importance, and speed of occurrence. Regarding context, for instance, thoughts of well-being during an ocean swim may change in a flash when we suddenly notice a nearby, rapidly approaching shark fin. The phrase, “Prostitutes Appeal to Pope,” has one meaning as a headline in a tabloid publication at the supermarket checkout and a very different meaning as the title of an article in a religious publication about combating human trafficking.

Container properties

Transformations are changes from one cultural, social, psychological, biological or material state to another. They may be dramatic or gradual and planned or unplanned. The transformed states are containers; they hold some things in and keep other things out. The mind itself is a unique container. And just as nature abhors a vacuum the mind is uncomfortable with blank spaces and constantly generates content to fill them. The newly filled spaces may trigger other transforming changes. For instance, when a disruptive innovation fills a blank space it may trigger marketplace transformations and changes in personal and social practices.

Everyday container metaphors are frequently used to describe thoughts. For example, we may note that something is “in” or “left out” of our thoughts; an idea is described as containing or filling a void; and we wonder if an idea has room for something else. Additionally, thoughts are described as deep or shallow, full or empty, impenetrable, rigid, flexible, about to collapse, within reach or hard to grasp. In short, we treat ideas metaphorically as suitcases. Containers include organizational settings, the frame or viewing lens for a problem, research methods as data incubators, and the vessels or media used to store and share new ideas. These containers may inhibit or expand imagination’s boundaries.

Organizational settings

The workplace is a major container whose design and culture impact imaginative thought (Gundry, Munoz-Fernandez, Ofstein, and Ortega-Egea 2016; Jaiswal and Dhar 2015). (This has already been discussed regarding doctoral programs.) While individuals are inherently imaginative, organizations are not. An organization’s system of values, beliefs,

and practices largely focus on efficiency, which favors incremental change, rather than effectiveness, which is more demanding of imagination. Many organizational settings even instill a fear of being wrong. This isn't hard to do. After all, who doesn't hate to be wrong? For instance, doctoral seminars often focus disproportionately on the technical limitations of published articles with less attention given to their underlying creativity. Such relatively easy critique can be intimidating to would be authors and inadvertently inhibit venturesome thinking early in a career.

In interviews with managers about their approach to messy problems and their experiences as innovative thinkers, the author likes to ask a particular question to stimulate discussions of their organizational environments. Managers are asked to choose the one statement they most closely identify with at work. They have just two options:

A: I love being right.

B: I hate being wrong.

There is normally some hesitation. After all, everyone experiences both options. But, when pressed, option B is usually chosen. A common explanation given is that the subtle and not so subtle penalties incurred for being wrong are more potent than the rewards for being right. One newly appointed executive expressed his frustration with this situation among his subordinates:

“You see this in the questions that are often addressed by our managers and their research teams. They like safe questions even if they require complex and costly investigations.... A safe question [is one] that can be answered with clarity. It doesn't cast long shadows.”

How does imagination figure into this? Problem solutions developed in environments that foster a fear of being wrong are not as bold and innovative as those generated in environments where the love of being right prevails. Simply put, there are many more ways of being wrong than of being right when exercising imagination. Exercising imagination is likely to bring trouble. Rein it in, and you rein in the chances of being wrong. Of course, you also rein in the possibilities of being right in a spectacular way and consequently of being very happy (Schulz 2010; Schwartz 2008; Tarvis and Aronson 2007).

Some environments encourage “seeing the unseen” especially when problems are messy or ill-structured (Martin 2015). By lowering the penalties for being wrong, they encourage personnel to make sense of unclear and even contradictory cues, rather than avoid them. A firm oriented toward detecting and filling blank spaces by encouraging sense-making about its external environment is more likely to develop radical innovations (Weick 1995; Weick, Sutcliffe, and

Obstfeld 2005). These firms have cultures that support accepting approximate answers now, rather than waiting for precise answers that may or may not arrive later.

Frames

Mental frames are containers that establish boundaries which influence what information is and is not allowed “in” when generating new ideas. That was noted in the earlier discussion of metaphors. There is also a tendency to frame decisions in ways that avoid the demands of being imaginative. An example is the convenient light syndrome in which a problem is defined to fit information that is in hand, is easily collected, or is within the problem solver's comfort zone (Barabba and Zaltman 1999). This syndrome discourages making connections across domains and finding potentially path-breaking commonalities among diverse ideas (Johnson 2010). One executive describes how some brand teams in her firm tend to frame questions in terms of desired clarity in the answers provided rather than in terms of their relevance to the issue:

“I stress over and over the maxim ‘better an approximate answer to the right question than a precise answer to the wrong question.’ What they appear to hear instead is, ‘better a precise answer to the wrong question than an approximate answer to the right question.’ They just don't like mudwrestling with tough, slippery questions. They avoid asking them.”

Of course situations do occur where a single, quick, and cost effective methodology can clearly address an important problem. However, important and urgent problems more often require methodological compromise resulting in incomplete data. This produces blank information spaces requiring liberal doses of imagination during analysis and decision-making.

Defining a problem to fit preferred methods and limited resources produces what one executive calls “pretend” oriented research. This research pretends the problem is something simpler than it really is. One executive described a messy problem involving the loss of loyal customers as a result of a misalignment between the firm's chosen brand story and actual consumer consumption visions. Managers initially defined the problem as a package design issue. This avoided confronting the messier problem of conflicting visions between managers and customers regarding the desired product experience and the reasons why this conflict arose. Considerable revenues were lost while the brand team persisted in ignoring these conflicting perspectives.

Frames may unconsciously create temporary blank spaces as part of the process of filling them in, for example, when people change their minds (Gardner 2006; Schulz 2010). A blank space is created when we discover we are wrong or when we become aware of holding unwarranted beliefs.

Framing universal health care in terms of fairness (health care as a right) is unlikely to change thinking about a national health care policy among some voters (Feinberg and Willer 2015). However, when researchers reframe the issue in terms of purity (sick people are disgusting) these voters tend to drop their opposition. The switch in frames from fairness to purity erased a previous thought thereby creating a blank space quickly filled by a new thought about the policy.

A frame's level of abstraction as well as its specific domain influences the development of new ideas. In general, framing a problem at a generic level permits wider peripheral vision thereby enabling more varied information to be used. For example, a brand team was concerned with creating a new brand story for a popular multivitamin facing increasingly stiff competition. The team initially framed the research issue in terms of how people felt about using vitamin supplements to address possible vitamin deficiencies. This led to less than effective brand stories. A more basic research frame was then employed which asked how consumers saw their own and nature's role in maintaining a healthy body. The broader frame tapped into several previously hidden but relevant beliefs and practices regarding folk medicine, self control, nature as a health agent, and partnering with nature. This produced more imaginative thinking among the brand team and outside agencies crafting the new brand story.

Methods and dissemination

Research methods are also containers as well as a type of frame. They are structured ways of thinking about and generating and presenting information. Different methods orient thinking differently; each casts its own "spell" on what information comes in and is kept out of consideration. Even within a class of methods such as neuromarketing, variation in what is learned about an issue will occur depending on the specific technique used (Varan, Lang, Barwise, Weber, and Bellman 2015).

It is important, then, when extrapolating from the information provided by a particular research tool, to be clear about the kind of insights that are more likely to be captured and those likely to be excluded or missed. As a consequence, we can grasp the limits of what we can extrapolate from the information at hand, and identify where further leaps of faith might be required. For instance, ZMET is an effective method for identifying key constructs (thoughts and feelings) and their interconnections. However, without using more quantitatively-oriented tools such as implicit association tests with ZMET results, it is not possible to say in statistical terms that one construct pair has a stronger or weaker association than another. This may be important to know when making decisions about which constructs to reinforce and which new constructs should be added to customers' mental models.

Even the vessels or media used to convey thoughts have a distinct impact on imagination (Pastory 2005; Kandel 2012). A thought changes as the medium through which it is told changes. An idea presented in casual conversation changes as it is expressed through increasingly formal channels, as when it moves on to a seminar, a conference presentation, and then publication in a refereed journal. Music, poetry, sculpture, dance and fragrance are unique containers with aesthetic and technical boundaries that differentially emphasize or de-emphasize different aspects of a thought (Clark 1978; Dell 2010; Korn 2013). CondeNast found that the consumption vision for a brand is engaged differently depending on whether the message is conveyed via the internet, television or magazine advertising. And an idea "packaged" by one person may be received differently than when presented by another person; for example, one comedian telling a joke may receive a better audience response than another comedian telling the same joke.

Conclusion

Imagination is a process of thinking about something that is missing and filling that blank space using available cues. Our imagination provides our best guess forecast or conjecture about what would ordinarily belong in that space had we complete information. Marketing phenomena and the decisions they require involve an abundance of blank spaces, which makes imagination central to marketing's vitality.

As a central issue the topic of imagination is simultaneously exciting and frustrating for paradoxical reasons. First, a great deal is known about forces that enhance and inhibit imagination. At the same time, it is recognized that much is also unknown including the fundamental question of what we have when we have a thought, novelty and content aside. The mind after all does not reduce to the brain. Second, imagination is widely distributed as a human capability and surfaces in many ways in daily life. However, evidence suggests it is practiced insufficiently among managers and academics. Third, increasingly sophisticated artificial intelligence capacities offer opportunities to fill in more blank spaces than ever before. Yet to do this in a way that augments rather than displaces human judgment, smart machines need to be partnered with the kind of bold thinking and theory building that only imaginative minds can provide (Davenport and Kirby 2016).

The resolution of these paradoxes will help realize an age of imagination in marketing. The reader might debate about how optimistic or pessimistic we can be about such progress. This paper takes a position of sober (versus unbridled) optimism. Imagination is an intrinsic part of human nature. Talented scholars and managers continue to deepen our understanding of imagination and its practice. Darker forces that

tend to inhibit imagination do operate but can be offset in the workplace and in our educational programs (Hsee and Bowen 2016). I believe we can manage our way into an age of greater imagination with the help of advances in various human sciences, technology, and analytics. These advances provide unprecedented opportunities for filling in blank spaces with fresh ideas and previously unseen paths to explore.

Unfortunately, knowledgeable and hard working academics, students and practitioners far too often express what might be called the “imagination lament.” This refers to a dismissive attitude regarding one’s imaginative abilities. Dismissive statements include, “I’m not the creative type,” “Thinking outside the box is not for me,” or “Imagination is not my strong suit.” It is the equivalent of a skilled and well-conditioned boxer throwing a towel into the ring before the bell sounds for round one. The personal and professional costs of the imagination lament are too high to ignore.

Evidence that the imagination lament is common is admittedly anecdotal. This paper noted several of its outcroppings. In the practitioner domain, many executives report dynamics that diminish deep and bold thinking in their firms. In the academic arena, these outcroppings include the relative lack of published conceptual papers and the tendency to downplay theory development in training future scholars. If academics are singled out as having a special responsibility for addressing some of the root causes of the imagination lament it is because they have the opportunity to nurture future scholars and practitioners in undergraduate, graduate, and executive education programs. In many ways, the classroom, like the world of practice, is an imaginarium. It offers “time outs” or “safety zones” where certain barriers to being imaginative can be suspended and experiments in flexing the imagination muscle can be undertaken.

More can be done in doctoral programs, for example, by offering courses on theory construction, encouraging the exploration of theory in other courses and assignments that focus on substantive and methodological issues. Being a subject matter expert should include expertise in filling a subject’s blank spaces not just mastery of existing, codified knowledge. Other graduate and undergraduate programs should stress the operation and development of theories-in-use.

One barrier academics can address is the fear of being wrong. If, as many note, ignorance is the garden within which science plays and knowledge grows, then surely making mistakes is a powerful stimulant for growth (Barabba 2011; Burton 2008; Firestein 2012; Harari 2015; Livio 2013; Rescher 2009, 2010; Schwartz 2008). Being wrong provides disconfirming evidence, a principle condition for learning. Imagine if infants brought to their experience of learning to walk the same reticent attitudes about making mistakes and appearing foolish that students bring to the classroom and managers bring to the workplace. The adverse developmental consequences for the infant would be enormous. Though less

visible, the fear of being wrong in the classroom (as in the workplace) also stunts the development of imagination and the willingness to express it.

The challenge is not in teaching people how to be imaginative, though to the limited extent that is doable it can be constructive. The primary challenge is to encourage students to leverage their innate imaginative capacity while also instilling the codified knowledge needed to grasp the subject matter of a course. Helping students and managers become aware of their personal imaginative styles when filling blank spaces while teaching subject matter material is not easy. It requires a sensitivity to and respect for our students’ and colleagues’ unique personal touches when being imaginative.

Marketing is a world populated by major blank spaces. Imagination’s job is to fill these blank spaces. It is not incidental that doing this is a natural capacity that has played a pivotal role in human evolution (Harari 2015). Being imaginative requires (a) acknowledging that a knowledge void exists; (b) a willingness to theorize about what might belong there; (c) subjecting those imagined states to verification; (d) and using knowledge of being in error as a springboard to further learning. This is the art and the science of marketing. Because imagination is marketing’s central engine it is critical that we pay attention to issues involved in its operation and to the forces that enhance and diminish its power. Hopefully, the observations in this paper will stimulate readers to formulate their own thoughts and identify still other imagination related topics that merit further reflection.

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