



BOOK REVIEWS: WHAT THE ACADEMY IS READING

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Portrait of an Entrepreneur: Vincent van Gogh, Steve Jobs, and the Entrepreneurial Imagination

Van Gogh: The Life, by Steven Naifeh and Gregory White Smith. New York: Random House, 2011.

Steve Jobs, by Walter Isaacson. New York: Simon & Schuster, 2011.

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In October of 1887, after years of trials and tribulations in refining his own art, Vincent van Gogh began to form plans for an exhibition in Paris of the "new school" of art that had amassed in the city. Forcing his art dealer brother, Theo, to help him, Van Gogh's aim with the exhibition was to bring emerging modern painters together and to showcase their art in an attempt to gain approval from art critics, dealers, and fellow artists. The exhibition, held in a restaurant, was an outright disaster. It did not bring the new art world together, and hardly anyone came to see the paintings. Diners at the restaurant also paid very little attention to the paintings, including Vincent's, and the exhibition foundered after only a few weeks. The experience was emotionally draining for Vincent and was typical of his life: he produced stunning paintings that laid the groundwork for modern Western art, but in life he did not sell a single work.

Almost a century later, in 1976, Steve Jobs, together with his Apple partner Steve Wozniak,

took the stage at a gathering of technology enthusiasts in a garage in Menlo Park, California. Jobs and Wozniak were presenting the newly produced circuit boards and microprocessor of what would become the Apple I computer. It was the first step in their vision of developing a personal computer for a mainstream market. At the meeting Jobs and Wozniak emphasized the unique benefits of the device, including its easy-to-use keyboard, and Jobs ended the presentation with a rhetorical sleight of hand when he asked the audience how much people would be willing to pay for such a machine. No one seemed to have been particularly impressed, although one computer store owner stayed behind and was eventually persuaded to buy fifty computers. The first sale of Apple was a fact, and in the years that followed Jobs was able to see his company grow into the most valuable and profitable in history.

While the time periods and circumstances of their enterprises obviously vary, both men, I would claim, were in their own right devoted and passionate entrepreneurs, even though commercial success in life eluded the one but befell the other. In their own ways Van Gogh and Jobs broke new ground in art and design, and both also vigorously pursued a new vision and new ways of doing things. With the benefit of hindsight, we can also see that both created new movements and markets that blended commerce with art and that formed and shaped the worlds of modern art and consumer electronics as we know them today. There is, in other words, sufficient common ground between Van Gogh and Jobs to draw comparisons between them. I do so within these pages by reviewing and reflecting on two recently published biographies: *Van Gogh: The Life*, by Steven Naifeh and Gregory White Smith, and *Steve Jobs*, by Walter Isaacson.

It is fair to say that both books present somewhat extreme entrepreneurial cases in terms of the profound change that both Van Gogh and

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Jobs brought about. Not every other entrepreneur in the world of art or technology may directly compare with their profile and achievements. But, as extreme cases, the accounts of their lives are at the same time generative and put some important insights about the entrepreneurial process into better relief. These books provide insights, anecdotes, and stories that provide some important pointers for our understanding of entrepreneurship. In this essay I use these biographies as sources of theoretical connections to the study of entrepreneurship. Specifically, I draw out possibilities and opportunities for theory development and research and highlight what these books suggest may be important oversights and oversimplifications in our scholarship. In this endeavor my reading is obviously biased and selective, and, as such, I am not able to do justice to the full richness of both biographies or, indeed, to both subjects and the lives they led. However, the themes that I think are worth highlighting and that, in effect, extend the entrepreneurship literature are the role of personality in entrepreneurship, the function of an all-consuming vision that is separate from but directly fuels entrepreneurial passion, and the nature of entrepreneurial imagination as a dynamic and embodied thought process that combines ideas with the craft of making things.

USING BIOGRAPHIES

Both biographies are well researched and draw on uncharacteristically good access to their subjects. For *Van Gogh: The Life*, Naifeh and White Smith were able to access the research and archives of the Van Gogh museum and, in particular, the recently completed project on Van Gogh's correspondence, which allowed them to paint a much more intimate picture of the man than was possible in previous work. Isaacson, the author of *Steve Jobs*, interviewed Jobs himself more than forty times over a two-year period, as well as members of his family, friends, competitors, colleagues, and industry insiders. His account of Jobs is probably as close as anyone will ever get to the man and, as such, seems to provide a literal and straight narrative of his life. If anything, the unrivaled access in both cases means that the writing is at times a bit too much about the single person and, thus, about the single entrepreneur and his

success, or lack of it, with others around him being pushed into the background. But this intimate focus does provide us with a rich picture of what drove both men to create such groundbreaking art and products. Naifeh and White Smith write in elegant narrative prose, which makes it quite easy on the reader to get through what would otherwise be quite a hefty tome. Isaacson's writing is more literal and draws heavily on conversations as the main source for his biography.

Before I delve into the details of both biographies, let me first say a few things about biographies and their link to management scholarship. I am inspired here by Ray Monk, who wrote celebrated biographies of Wittgenstein, Russell, and, most recently, Oppenheimer and who likens the role of a biography to that of a reflective philosophical text. Borrowing Wittgenstein's notion of family resemblances as "the kind of understanding that consists in seeing connections," Monk (2007: 528) argues that biographies similarly provoke connections between the profiled individual and people in other times and places. Biography, in other words, provides a kind of nontheoretic knowing around family resemblances. In this particular capacity a biography can play a heuristic role and be instructive in providing insightful connections with other individual cases and broader subjects, such as entrepreneurship. In this manner I believe that both *Van Gogh: The Life* and *Steve Jobs* are useful texts that may push our thoughts about entrepreneurs and entrepreneurship in new directions.

What I have in mind here, thus, is using these biographies as heuristic thought experiments that allow us, as management scholars, to reflect on our current theories of entrepreneurship. Drawing comparisons between what biographies reveal and what we currently assume about the entrepreneurial process prods us into potentially new territory and into new ways of theorizing about entrepreneurship. The key to using biographies in this manner is to heed Bacharach's (1989: 497–498) advice that they have to serve as "a useful heuristic device." Simply put, any novel assumptions, ideas, and inferences that emerge as a result of comparing these texts with our current stock of theory are themselves "not theories but may well serve as precursors to theories, and should be judged on that basis" (Bacharach, 1989: 498). Biographies,

in this sense, are potentially an important source of new theory development and of revising and improving our knowledge base.

I turn now to the first theme highlighted by *Van Gogh: The Life* and *Steve Jobs*—that of the entrepreneurial personality.

PERSONALITY MATTERS

In *Van Gogh: The Life*, Naifeh and White Smith provide a narrative tour through Van Gogh's life and the various choices he made at different junctures. Perhaps much more so than previous biographies of the artist, the authors highlight the emotional strain brought about by his upbringing and Vincent's socially awkward and hard-to-love personality. This mix of biographical factors, firmly rooted in the young Vincent, defined, the authors suggest, how he reached out to art and tried to reinvent it by casting it as expressive of life, as opposed to literally representing life through form and function.

Van Gogh was the eldest son of a reverend, Dorus van Gogh, who preached in provincial towns in the south of Holland. As the spiritual leader in those towns, Dorus brought the same patriarchal and religious fervor to his house so as to keep his children on the straight and narrow. Vincent, however, longed for love and for his parents' blessing, and felt increasingly lonely throughout his childhood. He escaped by wandering over the heath nearby and by burying himself in literature and drawing. With his thoughts traveling to other places, he failed in school and was unable to hold a job. Desperate for a solution, his father solicited the help of his brother, an emerging art dealer, who offered Vincent a position as office clerk in his art dealer shop. The job was one of recording the various prints and sketches they sold of original artworks.

It was a formative time for Van Gogh, who saw thousands of images come across his desk and formed a personal view of artists and their work. He could not help but share his views with customers coming into the shop, as opposed to limiting himself to his duties as a clerk. After various false starts, he was finally sacked. Vincent then turned to religion for a brief spell in an effort to emulate his father and assure everyone of his ability to secure a place in life. As with so many of his attempts, this also came to a dead end. But it turned out not to be an outright fail-

ure, for it provided him with a defining insight that would finally give him a purpose and direction in life. He realized that he could channel the fervor and energy that he previously had put into his preaching into art, where it would find a better expression in providing joy and consolation for himself and, potentially, for others.

The authorized biography of *Steve Jobs* paints a picture of a successful entrepreneur who, besides catching a lucky break, made it big through his determination, marketing acumen, and ability to draw others into his ideas—something described as Job's "reality-distortion field" (p. 38). In the book Isaacson provides a brief account of the formative stages of Job's childhood and how this may have impacted his behavior and choices later in life. Jobs was born of an extramarital relationship between Joanne Schieble, who hailed from a rural Wisconsin family of German heritage, and Abdulfattah Jandali, a Muslim teacher from Syria. After a summer in Syria, Joanne found out she was pregnant when she and Jandali returned to the States. They were both in their early twenties, not yet settled in their relationship, and Joanne's father had threatened to disown her if they married. Since abortion was not taken lightly in a small Catholic community, Joanne solicited the help of a doctor in San Francisco, who helped her deliver the child and arranged a closed adoption for her. Joanne, however, did stipulate that her child be placed with educated parents. Although Paul and Clara Jobs, the adoptive parents, had not gone to college themselves, they pledged that the boy would have a college education.

The adoption, it seems, had a significant formative impact on the young Jobs and may explain the contradictions in his personality and behavior. The biggest contradiction came later in life, when at the same age as his biological father he fathered and abandoned a daughter of his own, and it seems from the book that he never really formed a stable and healthy relationship with her. Isaacson quotes Andy Hertzfeld, who worked with Jobs in the early 1980s and saw the contradictory nature of his personality:

The key question about Steve is why he can't control himself at times from being so reflexively cruel and harmful to people. That goes back to being abandoned at birth. The real underlying

problem was the theme of abandonment in Steve's life (p. 5).

Jobs himself was adamant, however, that his adoption did not play a part in his behavior and subsequent success as an entrepreneur. He referred to Paul and Clara Jobs as "my parents . . . 1,000%," whereas he considered his biological parents as "my sperm and egg bank. That's not harsh, it's just the way it was, a sperm bank thing, nothing more" (Isaacson: 5). The theme of abandonment and adoption, and with it contradictory feelings of rejection and approval, however, persisted.

What is striking about both Vincent van Gogh and Steve Jobs is that they felt abandoned by their biological fathers. This is a salient observation and one that may explain feelings of displacement, the extremes in their behavior, and how they were often considered a loner or misfit by others. The feeling of rejection psychologically led to low self-esteem, insecurity, and a lack of confidence. In effect, this feeling haunted both men until the end of their lives. It led Vincent to manipulate his art dealer brother, Theo, into a lifelong financial arrangement of looking after him. Vincent also pinned his hopes on his brother as a substitute for his paternal troubles and harbored, until his death, an image of brotherly love as a picture of salvation. Steve Jobs loved his adoptive father but chose not to emulate his father's calm and gentle demeanor with people. Instead, he often chose to manipulate people around him and occasionally was nasty and mean to colleagues and friends. Isaacson suggests in his book that Jobs was not "lacking in emotional awareness" (p. 565). His behavior instead may have been a way to manifest control and power over others in order to deal with deeper feelings of insecurity and low self-esteem resulting from rejection. Jobs' first job at Atari illustrates this. He had been asked to develop a circuit board for a videogame and was promised a bonus if he was able to cut the number of microchips. He had little knowledge himself of circuit board design and asked Steve Wozniak for help. Wozniak managed to get the design down to forty-five chips. Jobs then shared the base fee with Wozniak but kept the details about the promised bonus from him. Years later Wozniak put this down to fundamental differences in character, yet it demonstrated Jobs' ma-

nipulative behavior, even where it affected his own friends.

Within entrepreneurship, these kinds of "personality transformations," as Kets de Vries (1977) called them, may to a greater or lesser degree be important in defining the entrepreneur, his independence of mind, and the nature of his extreme behavior. A survey of our academic journals shows, however, that we hardly ever study the formative moments in an entrepreneur's upbringing, or indeed later on in life. Nor do we often fully flesh out the intricacies and complexities of the entrepreneurial personality, including hereditary factors. Contemporary research on entrepreneurial cognition and personality instead tends to record general cognitive propensities and personality traits—causes that you can readily match to effects. Besides its riches, this focus may blind us to other qualities and aspects (see, for a recent review, Grégoire, Corbett, & McMullen, 2011). It provides what I would argue is a kind of halo effect, which provides coherence in causal explanations and underwrites our generalizing tendency to pin down the defining qualities of an entrepreneur based on one or a few attributes that the data suggest are particularly significant.

A more detailed account of the entrepreneurial personality would require an enlarged frame of reference detailing the formative moments and influences on an entrepreneur's personality and how these link to behavior, choices, and circumstances later in life. In her famous essay *The Ecology of Imagination in Childhood*, Edith Cobb (1959) proposed that a playful contact with nature early on in life stimulates creativity in later phases. When she reviewed the biographies of 300 "geniuses" across the worlds of art and science, she found that intense bodily experiences of the natural world in childhood, specifically between five and twelve years of age, planted the seeds for creativity in later life. It requires hardly a stretch to apply this generalization to Van Gogh, who wandered the heath and made sketches of the natural surroundings around the parsonage. But I would think that it can equally be extended to Jobs, when we replace the object of nature with technical tinkering with physical objects. His adoptive father instilled in Jobs an interest in electronics and gave him a sense of craftsmanship and design. Animals and plants, as well as playing or tinkering with physical objects, are, in the words of

Cobb, "the figures of speech in the rhetoric of play . . . which the genius in particular of later life seems to recall" (1959: 540).

"THIS IS IT!" OR "GETTING IT"

In October of 1877, Van Gogh had a vision. He had come to the realization that rather than art serving religion, particularly around the perfection of the afterlife, both were inextricably linked in the particularity of this world. Religion is embodied in nature and the common man, to which Vincent had been drawn, rather than in divine figures. Seeing the "resemblance" also in the other direction, Vincent started to liken art in general to worship and artists to preachers who, through their art, provide joy and consolation. The result of this new-found vision was an evangelical zeal in the approach to his own art; he could not yet define what he was after, but the basic inference was that art "both illuminated the human condition—the way art has always done—and, like religion, gave life meaning in the face of inevitable suffering and inescapable death" (Naifeh & White Smith: 174). In short, through the right combination of form, color, and emotion, art would be able to provoke, stir, and move us. Vincent could not yet articulate his broader vision for his art, but he saw examples of it around him and had a strong embodied sense of which paintings approached this vision and which paintings clearly did not. He expressed it as "This is it!" with the "it" being largely intuitive and embodied at first, until he found the right form to express it in his own art.

When Steve Jobs was five, he moved with his parents to Mountain View, a small California town. The house they moved into was built by the real estate developer Joseph Eichler, who had built inexpensive homes with great functionality and design. The houses had floor-to-ceiling glass walls, exposed beams, and sliding glass doors. The smart and clean design impressed the young Jobs. It instilled in him a passion for combining great design with functionality:

I love it when you can bring really great design and simple capability into something that doesn't cost much. It was the original vision for Apple. That's what we tried to do with the first Mac. That's what we did with the Ipod (Isaacson: 7).

Jobs later refined his vision as combining ideas from the humanities with ideas from

technology, with many of his products stemming from that association. In the book Isaacson describes how Jobs went to Xerox's Palo Alto Research Center in December 1979 to see work on the graphical user interface. While Xerox had not yet gauged the potential uses of the technology, let alone its market potential, Jobs immediately knew that this interface would be how all of us would work with computers in the future. Jobs later told *Rolling Stone*, "Within 10 minutes, it was obvious that every computer would work this way someday. You knew it with every bone in your body" (see <http://www.rollingstone.com/culture/news/steve-jobs-in-1994-the-rolling-stone-interview-20110117>). He had an embodied, visceral sense of a potential opportunity, which he later famously described to *Fortune* magazine in 1998 as simply "getting it." In his own words, "Innovation has nothing to do with how many R&D dollars you have. . . . It's about the people you have, how you're led and how much you get it" (see http://money.cnn.com/magazines/fortune/fortune_archive/1998/11/09/250834/).

These broader visions channeled Van Gogh's and Jobs' ideas about innovative art and products. As broader frames of reference, they offered Van Gogh and Jobs a perspective that, in effect, allowed them to own a particular paradigm and provided the seedbed for imagining particular works of art or particular products. It also arguably provided a sustaining narrative to both men, with these visions providing the ever-stronger conviction that they were meant to do this one particular thing in their life so that life "added up." Van Gogh was adamant that realizing his vision, and thus changing art as we knew it, was his goal in life. Jobs lived by his vision to create products that would empower humans in their day-to-day lives and, in that way, would change humanity. Visions also more generally seem to fuel passion and emotions and to direct and guide the inferential reasoning, or imagination, that entrepreneurs engage in to spot or create new opportunities for "products." Yet the role of entrepreneurial visions in driving entrepreneurial behavior is not a mainstream topic and is generally less well researched, as it perhaps should be.

A vision, in my mind, essentially blends or fuses different sets of ideas into a single guiding image, which, in turn, may trigger all sorts of inferential leaps. These leaps may themselves

lead to different paths and outputs, such as distinct paintings and products. While often strikingly different, such outputs are still grounded in the same vision and can, as such, be recognized as a single new paradigm by others. This pattern also suggests that a broader vision may be an essential element of the notion of “institutional” entrepreneurship and the emergence of new social paradigms, whether those paradigms are new product categories, markets, or schools of thought in art. In other words, while individual instances, such as a particular painting or the iPod or iPhone, may instantiate the vision, it is the broader template of the vision that travels and that does the institutional work in conventionalizing a new paradigm. Besides the typical focus on social and network dynamics in institutional entrepreneurship (Padgett & Powell, 2012), what I believe may be a complementary lens is a focus on the way in which an entrepreneurial vision creates emergent meaning that is related to but strikingly different from our prior understanding. Such emergent meaning results from blending two previously unrelated broader domains of knowledge, or logics, such as art and religion, or the humanities and technology, which, in turn, leads to high-level and emergent inferences around, in this case, “expression in art” and “human design.” The emergent meaning that arises in this way (Cornelissen, 2005) transposes our earlier understanding so that when it gains a foothold and is copied and reproduced as a template or model by others, it can become institutionalized as a “new” social paradigm.

THE ENTREPRENEURIAL IMAGINATION

When Vincent van Gogh had found his vision, his imagination started to run wild. He collected prints, copied passages of text, sketched images during walks, all in an attempt to come close to “it”—fragments of experience that, regardless of whether they were recorded by others or actually his own, were suffused with deeper significance. He layered words upon words in his letters and image upon image in his drawings in pursuit of what he called the “finest expression.” His scrapbook included a rich tapestry of Bible verses, hymns, poetry, and prints, which the search “for deep significance and different aspect” (Naifeh & White Smith: 176) transformed into deeply creative explorations. At this time, in

1877, Van Gogh was for the first time moved by the night sky, in which he found solace and redemption. Struggling for words, he drew on scripture, poetry, and literature to put the image he felt and saw into words. He also recalled a Rembrandt drawing of a biblical scene he had seen and reimagined the night sky as a backdrop for the scene. Years later, in one of his bouts of loneliness and depression, Van Gogh returned to the image when infatuated by the images of Monticelli and the writings of Zola. He again imagined a biblical scene, this time of Christ in the Garden, but in the end opted to paint the night sky itself, on the banks of the river Rhône. The image that he produced in 1888 was still deeply religious; he used citron highlights within a palette of greens and blues, colors that he had long associated with Christ. He also contrasted the radiance of the night sky with the dark and earthly world below. With broad but fine brushstrokes, reminiscent of his fascination with Mauve and Rembrandt, he imbued the stars in the sky with animation and atmosphere so as to capture in paint “the feeling of the stars and the infinite high and clear above you” (Naifeh & White Smith: 651–652).

The final months of 1888 brought a whirlwind of emotions that triggered what we can now assume was something like an epileptic seizure. The initial turmoil stemmed from Paul Gauguin’s announcement that he would leave the artist community that Vincent had been trying to build in Arles and from his brother’s news that he was soon to be married. Confronted with a loss on both sides and a shattering of his dreams, Van Gogh went into a rage that culminated in his hospitalization after cutting off part of his own ear. After months of rest, Van Gogh finally settled in his mind at least the uproar of the previous months. He had moved to an asylum and by June of 1889 was occasionally allowed to go out during the day to “find scenery” for his drawings. Outside he set foot in mountainous terrain and, while seeing fantastical shapes and meandering lines, conceived of a new form of art. He wrote to Theo about the importance of “finding agreement” between the “thing represented” and “the manner of representing it.” The agreement he was thinking of was rather loosely one of “character”; besides color, Van Gogh meant that lines and shapes in an exaggerated and playful form could “express” our experience of the subject (Naifeh &

White Smith: 757). His ideas and mental serenity at this point in his life found its way into his new art, which he likened to more “primitive” forms of artistic expression, such as in ancient Egypt as well as in paintings by Chardin, Hals, Rembrandt, and Vermeer. Van Gogh also returned to the night sky and combined it this time with a series of studies of cypresses, which he had transformed into dynamic and somewhat surreal images that “do not ask the correct shape of a tree at all” (Naifeh & White Smith: 758). Liberated from all the “isms” of the day, including impressionism, he fathomed a new art that would do away with the usual strictures of color, form, and representation. From memory he set out to paint an entrancing *Starry Night* (1889); wound up in this image was a culmination of imagery and inferences that he had obsessed about all his life. In the words of Naifeh and White Smith:

Unconstrained by sketches, unschooled by a subject in front of him, unbounded by perspective frame, unbiased by ardor, his eye was free to meditate on the light—the fathomless, ever-comforting light he always saw in the night sky. He saw that light refracted—curved, magnified, scattered—through all the prisms of his past: from Andersen’s tales to Verne’s journeys, from Symbolist poetry to astronomical discoveries (p. 761).

In his own words, Jobs positioned himself at the interface of the humanities and technology. The intersection channeled his creativity, initially into changing the design and functionality of existing products that were already in use, and later on into creating radically new products and, with that, new markets. When he produced the iMac with Steve Wozniak, his interest in Eastern spirituality and Zen Buddhism triggered the suggestion that they had to get rid of the rotating fan so that using a computer would be a calm and tranquil experience. It is also well known that Jobs dropped out of college after six months and decided to follow classes that he liked rather than classes that required sitting exams. One was a calligraphy class, which he later claimed he had used to his advantage in designing the user interface of the iMac. A further source of influence was the Bauhaus movement of design and architecture, which advocated a simple and functional but expressive and sleek design. Jobs adopted it as a motto for many of the new products that he would create,

such as the iPhone, which he gave an inspired rounded rectangular form.

The iPod perhaps best signifies the entrepreneurial mind of Jobs at work. In January of 2001 Jobs unveiled iTunes, in a two-pronged response to the changing business model of the music industry and to Apple users’ demand to integrate their video and music devices as part of a single digital hub at work or at home. The rationale for the iPod, as a portable music player, pretty much grew out of the development of iTunes, the inference being that storing your music would naturally lead Apple to develop a playing device. But it also came about because of Steve Jobs’ fanatical love for music. Isaacson describes in his book the admiration Jobs had for songwriters such as Bob Dylan, as well as how he frequently recounted his very eclectic taste in music. This fanaticism gave Jobs a defining insight: he reasoned that we all build our very personal archives of music, with scores of purchased CDs reflecting our own taste. Our own music collections are by their very nature personal, and he, in turn, made the metaphorical association that if something is personal to us, it is physically close to us (as opposed to distant). The typical association is that we metaphorically liken things that are personal, such as emotionally important relationships and friends, as physically close to our own bodies. The inference that came from this imaginative leap was that Jobs felt Apple needed to develop a *portable* music player so that we could take our personal music collection with us—literally keep it close to us—wherever we went.

One would have thought that this path would pit the iPod directly against MP3 players, as well as evoke memories of the older stalwarts in the portable music category, such as the Sony Walkman and Philips CD player. But Jobs judged that the music players that were already on the market “truly sucked.” In a crucial meeting in April of 2001, Jobs also waved away the threat of other players in the market; “Don’t worry about Sony,” he said, “we know what we’re doing, and they don’t” (Isaacson: 387). At that meeting Jobs and his colleagues instead focused on the design and functionality of the iPod device, all the while engaging in counterfactual reasoning of how they could do something different from, and better than, their competitors. One outcome of this thought process was the famous trackwheel on the original iPod,

allowing users to scroll through a collection of songs, as opposed to having to press the same button repeatedly (which would be rather irksome). Jobs worked with the team on every little design detail, including the color scheme, often late into the night. And as Isaacson describes, the “most Zen of all simplicities was Jobs’ decree, which astonished his colleagues, that the iPod would not have an on-off switch” (p. 389). It actually became a mantra that Jobs applied to most products after the iPod.

By the sheer force of their imagination, Van Gogh and Jobs created groundbreaking innovations in art and consumer technology. The mentioned episodes of their creative breakthroughs illustrate that rather than having a single all-defining thought or flash of insight, their imagination rested on a combination of inferences and on a culmination of ideas and insights they had built up over time. The ultimate version of *Starry Night* in essence combined analogical and counterfactual thinking, allowing Van Gogh to “see” broader connections and not only to be inspired by other artists but also to distinguish his work from his predecessors’ and contemporaries’. The painting is overlaid with a rich set of metaphorical connections and allusions, inspired by scripture, poetry, and more popular writings. Likewise, Jobs’ imaginative work on the iPod combined deductive reasoning (from iTunes to the iPod), a deep metaphorical connection around the personal significance of music, and a series of counterfactual leaps and inferences that went into the design of the iPod and, in turn, positioned it in such a way that even if the device was seen as superficially similar to MP3 players, it was considered unique and starkly different from (and thus allegedly superior to) competing products. What this demonstrates quite clearly is that imagination firmly rests on inferential reasoning and that, more often than not, the act of imaging opportunities for products may involve combining multiple connections and a range of inferences.

Imagination is also an embodied activity. It obviously manifests itself in cognitive associations, but those may be tied into ways of speaking, writing, or designing an artifact. As such, it clearly pushes us to think about conceptual thought and reasoning and any inferences that emerge from it as situated and embodied; bodily actions, including speech, gestures, and drawing, do not simply express previously formed

mental concepts but are part and parcel of the very activity in which conceptualizations and inferences are formed (Mitchell, Mitchell, & Randolph-Seng, in press). Van Gogh and Jobs are the embodiment of this very insight in that every physical stroke or design choice provoked further thoughts and ideas and led them to refine their thinking about a particular painting or product. Jobs, for example, fidgeted over every little detail of the iPod, going over design choices and often pushing his colleagues to go back to the drawing board.

This realization that entrepreneurial imagination is embodied does not mesh well with established cognitive and sociological traditions in entrepreneurship research that are premised on distinguishing language from thought, thought from action, or language and thought from artifacts (for an illustration of this, see, for example, Alvarez & Barney, 2013; Eckhardt & Shane, 2013; Garud & Giuliani, 2013; Venkataraman, Sarasvathy, Dew, & Foster, 2013). The life histories of Van Gogh and Jobs, however, inspire us, as management scholars, to study the plastic, dynamic nature of imagery and imagination and how emergent inferences, in turn, are realized within the institutional, technological, and economic constraints of a market or industry. This stands in stark contrast to a singular focus on the static, condensed simultaneity of a single thought or symbol, characteristic of many cognitive and institutional approaches to entrepreneurship.

In an even more direct sense, these observations prod the study of entrepreneurship in two helpful directions. The first is that we may need to dig deeper into our understanding of inferential reasoning in language, action, and thought and how this constitutes acts of imagination, or sensemaking, that form the basis of constructs, such as entrepreneurial narratives, effectuation, world making, bricolage, and the entrepreneurial perceptions of opportunities. This would bring a finer level of granularity to our understanding of entrepreneurial imagination compared to these relatively higher-level constructs. Arguably a greater focus of our efforts at this level would, in turn, allow us to flesh out the constituent details of these broader constructs and their relative differences from one another. To give just one example, narratives and models of effectuation are typically based on metaphorical reasoning (Cornelissen & Clarke, 2010), where narratives in an entrepreneur’s speech

highlight how the individual entrepreneur moves metaphorically with respect to fixed temporal landmarks, while effectuation is manifested in action-driven metaphors that picture the entrepreneur as physically designing his surroundings and in anticipation of future outcomes.

The second prod is that it reinforces the importance of the trajectory of research on metaphors and analogies in entrepreneurial thought (e.g., Grégoire & Shepherd, 2012), but it adds an important further impulse to that body of work. So far, research has spotlighted the role of analogies as the missing link between prior experience and inferences, or conjectures, about possible opportunities, but with a strict emphasis on single high-level analogies, such as seeing online retailing in more conventional offline terms (e.g., Cornelissen & Clarke, 2010). Such single flashes of insight may apply to, and indeed be useful in, changing industry contexts or new emerging markets, but it may only be one part of the broader picture. The act of imagining opportunities covers a much broader array of forms of inferential reasoning, including many varieties of analogical and counterfactual thought, which on top of that may also coalesce, as happened in case of the iPod. Counterfactual reasoning may also, I believe, be worth singling out as essentially a particular variety of analogical reasoning where individual entrepreneurs think, while speaking, of the difference or "break" from the previous business models and products in an industry or market. Counterfactuals involve analogical mappings between organizations, their activities, and performance in similar but contrasting scenarios that may form the basis for inferences or conjectures about business opportunities (e.g., Mullins & Komisar, 2010).

WHEN STARS ALIGN

In the end, Van Gogh passed away without seeing the fruits of his labor, whereas Jobs bowed out safe in the knowledge that Apple profited from his entrepreneurial drive and that his legacy would be carried on within the company. The wheels of institutionalization in the art world turned for two more decades after Van Gogh's death before his contribution was more broadly recognized, and this to a great extent

was due to the indefatigable efforts of his sister-in-law, who promoted his work wherever she could. The diffusion and adoption of consumer technology and, with that, the institutionalization of new product categories and markets generally go much quicker and highlight the real pressure for Apple to maintain its innovative edge. In the world of consumer technology, where imagination is not the preserve of a single company, or indeed of a single individual, Apple may come to miss the rhetoric of Steve Jobs and his ability to draw you into his "reality distortion field," rather than following the hype that is built up around competing products.

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