

“OUGHT” TO “CAN”: QUESTIONS FOR AN ENTREPRENEURIAL FUTURE

What should we be doing to foster entrepreneurship? As academics, lawmakers, investors and aid workers—what should we be doing to encourage entrepreneurs and drive economic development?

It is natural for us to frame our questions in terms of lofty “oughts” and then scrounge around the practical reality of “cans” for possible answers. Resulting compromises, even when useful, leave a sour aftertaste. The lessons from research into what entrepreneurs actually do suggest a promising reversal: that we begin with what we can and then make viable moves toward continually reframing, reshaping, and redoing what we ought in a variety of value-creating ways.

When Muhammad Yunus, founder of Grameen Bank, realized that he could afford to lend enough money for a whole village to rebuild its economy—the princely sum of (U.S. dollars) USD27—he did just that. Only later as he expanded his loans to multiple villages did he bump against the cardinal rule of banking—that loans without collateral ought to be deemed unbankable. The entire microfinance industry is now beginning to wake up to the notion of lending against cash flows as opposed to collateral—a point reinforced by Damian von Stauffenberg, the founder of MicroRate—who emphasizes that this is the key delineator between traditional lending and microfinance as well as the main differentiator between better and worse microfinance organizations within the industry.

In the spirit of recent findings from research into entrepreneurial expertise, we would like to pose a series of open questions meant to reframe—sometimes playfully and at other times more seriously—some of the ways we think about entrepreneurship. To do that, let us begin by examining what good entrepreneurs actually do.

This technical note was prepared by Saras Sarasvathy, Associate Professor of Business Administration, and Sankaran Venkataraman, MasterCard Professor of Business Administration. Copyright © 2009 by the University of Virginia Darden School Foundation, Charlottesville, VA. All rights reserved. *To order copies, send an e-mail to sales@dardenbusinesspublishing.com. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of the Darden School Foundation.*

Questions about Entrepreneurship

Open question one: What do entrepreneurs do?

Entrepreneurs recognize, find, and make opportunities. Conventional wisdom as well as a large portion of academic research has focused on how good entrepreneurs are at searching for opportunities and finding and exploiting them. This raises the question, of course, of where all these opportunities come from in the first place. Who leaves the big bills on the sidewalk for the alert entrepreneur to find and cash in? Answers are as diverse as new developments in science and technology and the dynamics of the socioeconomic environment including demographic, regulatory, and institutional changes. These answers are correct, with the added benefit of keeping academics and the public sector in gainful employment. But it turns out that opportunities are often created by the entrepreneurial process itself—in other words, entrepreneurs and their stakeholders often end up co-creating new opportunities that neither they nor those of us in their immediate periphery could or did anticipate. What is more interesting is that the most experienced entrepreneurs explicitly implement such a co-creation process—that is, they act and behave in ways that generate and power this virtuous cycle. Entrepreneurial efforts thus generate a perpetual motion machine, as it were, that moves Adam Smith's invisible hand beyond static efficiency into an endless dynamic of new opportunities. But there is a kicker to this cornucopian process—namely, that the nature of these new opportunities is inherently unpredictable—even what counts as an “opportunity” becomes in a way difficult to define before it actually comes to be.

For example, what was the elevator pitch for Starbucks? Coffee consumption in the United States had been on a steady downward trend for almost two decades before Starbucks was created. Could one really argue that this was a market waiting to be tapped by an alert visionary? Nor was it an act of heroic individual creativity—Howard Schultz did not found the original Starbucks company nor was Starbucks the first specialty coffee shop. Peet's Coffee was already a niche business in California. The tapestry of the Starbucks we know so well today was painstakingly stitched together from a variety of stakeholder inputs, including those from customers, commercial artists, and community leaders who knowingly or unknowingly participated in a co-creation process that has transformed urban landscapes from Seattle to Ankara.

How about Google? Clearly it was not the first commercially viable search engine—and certainly not the magnitude of success envisioned even by its own founders, who were at one time eager to sell it for a million dollars. Luckily for them there were no takers. If we are to twist the Google story to fit our theories of latent demand, then we would be hard put to describe what is *not* a potential market. Our sidewalks would be strewn with big bills, or even constructed entirely out of stacks of currency that we only need pick up as we go. Surely we need a way out of this absurdity.

Open question two: How are markets made?

Received wisdom from economics suggests that markets exist either as obvious or latent demand, and market competition acts as a discovery procedure for developing technological and other forms of innovation to provide solutions to both. Historical evidence does not always support this for demand does not always preexist even in a latent or dormant form. Moreover, a market is more than demand and supply. Markets are complex webs of relationships and logistics involving the entire spectrum of organizational challenges from individual initiative to collective action. Neither theories of free markets nor governmental and institutional theories are sufficient to explain the coming into being of new markets. Creativity, wile, and chutzpah have to combine with serendipity and endless extended efforts in creating and sustaining new social networks. All these and even the ignition and wildfire of widespread social movements are common elements of new market creation. That is why most new markets are surprises—highly improbable and hence difficult to predict before they actually come to be.

Two sets of evidence attest to this: negative evidence provided by the sheer abundance of failed predictions (including those by entrepreneurs whose own endeavors helped falsify their own predictions) and positive evidence from unanticipated new markets. Naysayers abound in the history of business:

“No imaginable commercial value. Who would pay for a message sent to nobody in particular?”

—David Sarnoff’s associates in response to his urging investment in radio in the 1920s

“Forget it. No Civil War picture ever made a nickel.”

—MGM executive, advising against investing in *Gone with the Wind*

“With over 50 foreign cars already on sale here, the Japanese auto industry isn’t likely to carve out a big slice of the U.S. market.”

—*BusinessWeek*, August 2, 1968

“I think there’s a world market for about five computers.”

—Thomas J. Watson, chairman of the board of IBM

“There is no reason anyone would want a computer in their home.”

—Ken Olson, president of Digital Equipment Corp. 1977

Even entrepreneurs celebrated as prescient and visionary after the fact often had to build their markets brick by brick, long after the light bulb of discovery turned on over their

unsuspecting heads. When Howard Schultz came back from Italy wanting to build his first coffee shop based on Starbucks, the original founders of Starbucks would have none of it. At the turn of the 20th century in India, the Kirloskar brothers could not sell their six metal plows even though they clearly increased productivity tenfold over wooden plows. Not until they worked with social reformers and the independence movement to educate a large swath of farmers on the links between economics and patriotism could they grow their venture into the enduring firm it is today. Thomas Edison had to learn similar lessons in marketing the incandescent bulb in the United States. Preachers inveighed against its use as the work of the devil—how else could the abominable separation of heat from light have been accomplished?

And Grameen Bank was no exception in having to change the world before it could grow its market for what might seem the easiest product to sell—uncollateralized loans—because Bangladeshis had a taboo against women touching money—literally.

In most cases, successful entrepreneurs appear to be visionaries after the fact, persistent, almost pig-headed visionaries at that, steadfast in the single-minded pursuit of their vision in the face of skeptical naysayers and in the absence of resources within their control. But a microscope on their early actions highlights another story—one of doing the doable and stitching together a variety of stakeholder commitments, many from folks who *self*-selected into the process in return for a shot at shaping the vision. Often neither entrepreneurs nor their stakeholders had quite articulated a coherent vision until after it came to be. In fact, it is the co-creation of the vision that is the primary result of the entrepreneurial process, a vision that is concurrently crafted through the actions and interactions that implement it. Here the familiar story of uncommitted prospects haggling over a mouthwatering pie is replaced by the reality of self-selected stakeholders actively engaged in shaping committed ingredients into unanticipated new confections. So who is actually the “entrepreneur” in this process, if not the prescient, persistent visionary hero who makes it all happen against incredible odds?

Open question three: Who is not a potential entrepreneur?

If the category we call entrepreneurs includes not only those who seek and find opportunities but also those who make them almost serendipitously from readily available bits and pieces, and moreover, if we include their self-selected stakeholders who help transform the amorphous vision into valuable new ends through commitments contingent on the unexpected, who could we exclude from the category of potential entrepreneurs? The answer is simply “no one.” Therefore, in our efforts to educate, legislate, and acculturate an entrepreneurial society, we can exclude no one. The appropriate arena for entrepreneurial education thus consists in a distinct set of reasoning and problem-solving skills with or without specialized business tools of the kind found in formal business schools.

Entrepreneurship, in this view, becomes even more than a specific set of skills; it becomes a generalized method such as the scientific method—a form of reasoning and logic the exercise of which would be as useful a skill as arithmetic, reading, writing, and basic scientific

reasoning. And at least as important as civic engagement are civil discourse and the critical development of moral and ethical judgment. Entrepreneurship, then, is not merely a career option or a fallback position in cases of employer downsizing or economic downturns; it comes to be seen as a widespread driver of social change.

Open question four: How does entrepreneurship go beyond technology commercialization and economic development to driving social innovation and human development?

One could argue that Bill Gates and Pierre Omidyar, the founder of eBay, have done as much if not more for social change and human development than Alan Turing and John von Neumann, Mother Teresa, or Nelson Mandela. Yet there is an important difference. The latter are necessary but insufficient, the former sufficient but unnecessary. Turing and von Neumann were necessary to create computers, but neither computers nor electronic auction sites were necessary for human development. Yet sweeping social changes producing a variety of new possibilities for human development resulted from the Microsoft's products and eBay's services. Similarly, one cannot imagine the end of apartheid or the care of lepers without Mandela and Mother Teresa even if they could not have accomplished these alone. But one can imagine climate change problems being resolved through a variety of commercially viable renewable energy products, each of which may not be necessary in itself. Entrepreneurs operate in and continually create a world in which no particular set of conditions is necessary for success and progress. Their job is to implement sufficient, even if unnecessary, conditions instead. Each solution they implement may be local and temporary, but successful solutions are usually spatially and temporally stable *enough* and profitable *enough* for people to move the goalpost to a new threshold of human aspiration.

In social science, it is customary to regret the difficulty of finding sufficient conditions that guarantee the achievement of valued objectives, even as we discover necessary conditions that we ought to build our solutions upon. Utopias are notoriously hard to come by and impossible to sustain once found. The optimal social choice problem in economics is a case in point. Nobel Prize-winning economist Kenneth Arrow proved the impossibility of creating a system that would guarantee optimal social choice. One inference we can draw from the theorem is that that mysterious and elusive thing called human "judgment" is and will always be inevitable in our efforts to achieving better social choice. On one hand, this is cause for dismay; on the other hand, it may be cause for real hope. Another Nobel laureate, Amartya Sen, showed the feasibility of achieving local optima with a little bit of effort at getting sufficient numbers of people on the same page. Others have also contributed to such optimism. Charles Lindblom, for example, provided a marginal mechanism that could lead (or in his words "muddle through") to better choices even in the face of overall disagreement on larger principles.

Studies of entrepreneurial action offer a procedural rationality for accomplishing such local coherences leading to spatially and temporally limited optima. Such optima provide sufficiently stable conditions that enable human progress. Progress can include building on past

successes as well as tearing down and reshaping parts of the present that do not work well. Which to do and when are decided through the kaleidic dance of evolving stakeholder networks of varying sizes that implement the entrepreneurial process we have been describing. Entrepreneurial action, our studies show, is above all *interaction*—interaction over time, among stakeholders and through local transformations of every kind of environment imaginable. The procedural rationality embodied in these interactions not only reshapes economic and social landscapes, it reconstitutes individual preferences and values, making over everything from utility functions to cultural identities.

In the face of such a radical and transformative process, how can we distinguish a for-profit venture from other kinds of endeavors?

Open question five: Are social ventures different from for-profit ventures?

One simple answer to this question is that some ventures declare themselves for-profit by explicitly incorporating themselves as such and subjecting themselves to the discipline of markets—or price mechanisms of one sort or another. Others eschew the necessity to seek a positive cash flow at the end of the accounting year and deny any individual the residual claims of ownership at the end of the day. Several compelling arguments have been presented for the separation between for-profit ventures and other types of organizations—including market failure, the psychology of giving, the sometime equation of money with evil, cultural and historical dictates against profiting from the unfortunate, and of course, sheer habit.

But the fact is that some goods and services are set aside to be produced through the for-profit system and others through either governmental or some form of not-for-profit system. And as a practical matter, this difference usually means that entrepreneurs have to deal with at least two different systems of funding and accountability when endeavoring to stitch together the local optima in social choice. For practicing entrepreneurs this further means that valuable skills acquired in the production of wealth cannot smoothly be transferred to the production of social welfare. For example, knowing how to make a pitch to investors for funding a casino does not always translate into compelling arguments to private foundations for funding child health care. Nor can the creativity and passion that drive people to save the earth or protect children be easily leveraged to produce economies that can nurture and sustain them after they have been seized from the potential ravages of climate change or disease and poverty. That is why we find that societies with large well-meaning public sectors are not always leaders in job market growth or rapid commercialization of inventions. And as Mancur Olson demonstrated, countries with the most markets are often the ones with large numbers of unresolved social problems. The friction between for-profit and nonprofit costs a lot more than individuals and societies can afford—not to mention being theoretically unnecessary and practically harmful to the very causes an organization is supposed to serve. Even Muhammad Yunus calls for a relabeling of nonprofits to nonloss enterprises. We would like to point out that all enterprises are de facto nonloss—for when they run out of positive cash flows, they, in fact, cease to exist.

But Yunus's call for relabeling is not to be taken lightly. History often pivots on a single word or phrase (*slavery, kismet, God, royalty, government*) battles are waged and debates seem endless, until another word turns the pivot in another direction altogether (*equality, choice, reason, evolution, democracy, market*). It appears to us we are stuck for the moment on profit—for and against. May we suggest an easier pivot? The word is *investment*.

Open question six: Should we *invest* in social problems?

Why is it that we *invest* in Genzyme or Microsoft, but *give* to the American Red Cross or Transparency International? Why is it that it takes 43 cents on a dollar for a good nonprofit to raise a dollar, when less than 5 cents gets the average banker that same dollar *and* he or she lives much better than the average NGO official? Arguments fly back and forth that one subsidizes the other and that the former is less efficient and more fragmented than the other. And of course, the same tired old pivot: that one is profitable and the other is not. We find it difficult to believe that investing in software is more profitable than investing in the creative fount from which such a thing as “software” originated in the first place. If a piece of code that moves around a bunch of electrical impulses can create wealth, it is absurd to think that the mind that creates that piece of code is less profitable—and societies that foster and develop such minds even less so. We seek answers elsewhere.

For millennia, human beings did not realize how to harness and use the energies locked up in steam or in the movement and structure of atoms—just as we today struggle to usefully harness the energy locked up in sun, wind, and corn. Similarly, we simply have not yet found the mechanisms that can unleash the potential to close the virtuous circle connecting healthy societies with healthy babies and wealthy futures. Once a society has grown the baby and the ensuing adult has produced goods and services of value, we have relatively efficient and useful ways of pricing those goods and services and distributing them to others who want them and are willing and able to pay for them. With the invention of credit, we even know how to identify some of these goods and services in advance and reap the benefits within reasonable time lags. But credit markets are relatively new in human history. There is considerable creative work ahead of us to expand them effectively to close the larger circle of human and social improvement. We do not believe this is a task better left to the revolutionary or to the policymaker. Instead we find tremendous scope in innovations already existent in today's credit markets. Moreover, these innovations can be transferred and transformed through entrepreneurial initiatives. The history of microcredit, alluded to earlier, attests to such a profitable transfer. There is more where that came from. To give you but one new example, we present a brief case study.

A Case in Point: the CARE Foundation

In Pakistan, a nonprofit organization called the CARE Foundation has founded and runs 120 schools. These schools are progressive in the sense that they teach both boys and girls, and

their curriculum includes modern science and math. The schools collect data on several measures that can be compared with state-run and other types of schools in terms of relative performance. Like most nonprofits, CARE meets its funding needs through donations.

Enter Marc Freudweiler, founder of Derilab—a Swiss for-profit venture that provides customized derivatives for high net worth individuals in Europe. Freudweiler has designed a unique fixed investment instrument to fund CARE in Pakistan. The idea is very simple: An interested donor (in this case *investor*) buys a (European euro) EUR10,000 CARE note that is underwritten by a major bank—such as UBS. Like any other fixed investment, the CARE note is invested in global capital markets and earns a fixed income. The coupon payment that comes in at the end of the year goes to the CARE schools if they have met preset performance metrics; if they fail to meet the metrics, the coupon payment reverts back to the investor. The specific metrics are decided by an independent body of experts—known to and trusted by both investor and investee in advance.

The design is simple. The schools only need to continue doing what they need to do well anyway—and they are not only guaranteed funding, they can clearly estimate the magnitude of the funding in advance so they can plan ahead. Most guesswork and whim are taken out of the process, and the virtuous circle of need and funding is closed through that purest link of all—performance.

The beauty of the design is the way it stands a more familiar view of investment on its head while at the same time pivoting us away from that old dichotomy of for- and nonprofit. Here the investment is based on the return—both the for-profit return from the market and the nonprofit return from the investee. Yet no generalized measures are required; specific metrics designed to fit the needs of the particular venture and its spatiotemporal or sociopolitical environment are sufficient. This is in contrast to other initiatives to “rationalize” social ventures—such as the development of Social Return on Investment (SROI) and other generalizable accounting metrics for nonprofit ventures.

There are, of course, problems with even such an ingeniously simple design. Formidable hindrances come from the tax code as well as from the pervasive separation thesis that keeps for- and nonprofits apart. Not only is the effort to overcome the separation considered radical and quixotic, it is also assumed that society as a whole, or at the very least, governments and policymakers will have to step in to spearhead such a revolution. A more general principle is at work here: Whenever it is not clear which components of a problem are to be left to private enterprise and which to collective or governmental action, the meta-decision between market and nonmarket mechanisms should be left to sociopolitical processes and not to creative entrepreneurial actions. Our challenge to this principle brings us to one of our most provocative questions.

Open question seven: Is entrepreneurship an instrument of free markets or is it an alternative to the market versus government debate?

Long after Frank Knight emphasized the importance of entrepreneurial “judgment” in creating the very notion of “profit,” entrepreneurship scholars such as Schumpeter and Baumol have bemoaned the lack of a central role for the entrepreneur in economic theory. The oft-repeated quote about the Prince of Denmark is a notable symptom of this lament. Yet economists refer to the “entrepreneur” all the time—a word that pinch-hits for the firm, the production function, the manager, and more recently the innovator, besides being a surrogate for a variety of other mechanical devices at the heart of the economic system of supply and demand equilibrated by the invisible hand. In this rhetorical free-for-all, the entrepreneur has simply disappeared into the market versus government debate. Instead of empirically examining where new markets come from we simply assume this elusive and obliging figure called the entrepreneur will miraculously produce it out of thin air. Even Arrow acknowledged it: “When a market can be created, we assume it will be.”

Clearly entrepreneurship, embodied in the process we have so far sketched in this technical note, is not merely an instrument of free markets. Instead it uses both markets and governments as instruments in formulating and achieving new ends, even inventing other types of institutions along the way. Entrepreneurship thus provides a way to transcend the market versus government debate just as it provides new pivots away from the old dichotomy of for-profit and nonprofit ventures. In our view, entrepreneurship is a method, a metalogic or procedural rationality if you will, to help us coherently yet pragmatically rethink and reformulate the categories that matter to human and societal progress.

A historical analogy with the development and role of the scientific method may be useful here. For millennia, until Roger and Francis Bacon spelled out the techniques and logic of systematic discovery embodied in scientific experiments, inventions were occasional events, products of serendipity or thanks to so-called gifted men who could “read” the signs of nature. But by the 19th century, to paraphrase Whitehead, invention had been routinized and millions of scientists trained in the scientific method have since helped move the world from a speed record of about 20 mph in chariots to over 18,000 mph in orbit over the course of less than two centuries.¹

As Feyerabend and others have provocatively argued, there may be serious holes in the notion of an ironclad scientific “method”—be it the one embraced by Carnap or Popper or others before and after. Yet the notion of a scientific approach to solving problems, especially those related to discoveries about physical and material reality is a meaningful and useful one. We usually know what we mean when we say, “Let us approach this scientifically”—as opposed to say, biblically, or politically, or any other way. Similarly, the notion of tackling problems in the human realm using an entrepreneurial as opposed to sociological, spiritual, or even an economic approach is a meaningful and useful distinction. Furthermore, it is a distinct category of thinking

¹ For more details on such fascinating statistics, see Alvin Toffler's *Future Shock* (New York: Random House, 1970).

that can be taught and learned. The notion of working with readily available means to co-create local transformations through self-selected stakeholder commitments is distinguishable both from governmental or massive collective action and from the spontaneous order of free markets. Yet it consists of a set of teachable and learnable techniques that are empirically evident in the actual construction of enduring ventures that have created private wealth as well as the public good.

To summarize our arguments so far, there exists a distinct method of human problem solving that we can categorize as entrepreneurial. The method can be evidenced empirically, is teachable to anyone who cares to learn it, and may be applied in practice to a wide variety of issues central to human well-being and social improvement. But to complete our thesis, we need to examine one final issue—the role of the entrepreneurial method in setting those goals for individual well-being and social improvement. For the entrepreneurial method is not merely a method to achieve exogenous ends received from other systems of value such as religion, culture, or sociopolitical movements. Instead, the creation of new ends is intrinsic and endogenous to the application of the method. Just as the scientific method carries within it a way of rejecting what we held true yesterday as new truths about the universe stand revealed through its exercise today, so too the entrepreneurial method is capable of generating both the means to achieve yesterday's ends and the reasons for rejecting them in favor of new ends undreamed of previously. In this sense, it pervades and intervenes in every sphere of human hope—from economics and social welfare to the very definition of who we are and what we want for ourselves and the societies we live in. In this, entrepreneurship, as we have spoken of it here, is very much in alignment with Amartya Sen's arguments in his book *Development as Freedom*.² Our last question thus brings us back to the title of this essay.

Open question eight: How can we foster an entrepreneurial society—that is, a society that reinvents ends as well as means?

Ernesto Sirotli, founder of Sirotli Institute, attributes his inspiration for facilitating the entrepreneurial development of hundreds of improbable communities to the closing paragraph of Fritz Schumacher's book *Small is Beautiful*:

Everywhere people ask: "What can I actually do?" The answer is as simple as it is disconcerting: We can each of us put our inner house in order. The guidance we need for this work cannot be found in science or technology, the value of which utterly depends on the ends they serve; but it can still be found in the traditional wisdom of mankind.³

The "traditional wisdom of mankind" has always concerned itself with defining and debating what ends are worth pursuing. The freedom to do that, Sen points out, ought to be an

² Amartya Sen, *Development as Freedom* (New York: Alfred A. Knopf, 1999).

³ Fritz Schumacher, *Small Is Beautiful: Economics as if It Really Mattered* (New York: Harper & Row, Publishers, Inc., 1973).

essential part of what we call “development.” Both Sirolli and Sen criticize the treatment of indigenous peoples as “patients” awaiting treatment rather than as active agents seeking to build environments that will allow them to fashion and pursue their own aspirations. Both call for a need to rethink our priors in this regard.

It is important to recognize, however, that most of the economic development tools human beings have invented so far are not designed to function in the absence of clearly defined goals set ahead of time. Nor do they function well in the face of evolving or contingent goals. But the entrepreneurial method we have outlined here is explicitly untethered to preset goals. In fact, it is designed to act in the face of ambiguous goals and an unpredictable future. It thrives on a logic that begins with readily available means strewn around in the dirt of today’s reality. Even in seeking to build new goals that capture and leverage human ingenuity, it eschews the quest for a global optimum in favor of solutions that suffice and open up exciting new quests. The movement of the entrepreneurial method, in sum, is from “can” to “ought.” And so as a first step in our own quest here for an entrepreneurial future for the world, may we suggest moving away from “ought” to “can”?