# Session 3: Obstacles and opportunities along "the way"
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## Heroic Complexity in Strategic Innovation

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*I posit that strategic innovation – the act of carrying an idea through to execution – is an act of destruction as much, or perhaps more so, then it is an act of creation. Specifically, innovation is a violent act against an extant complex adaptive system, a system whose purpose is not only to survive, but also to improve its relative position vis-à-vis others in its milieu. Moreover, innovation that happens within institutions such as corporations is an act of violence against a system animated by extant social structures who also seek to survive and improve their relative positions. The result is a system whose emergent properties actively resist innovation, a point well covered in literature. Strategic innovations, already a low probability event, can occur with greater likelihood, therefore, if one leaves the system and returns in a structured manner, a structure I propose is remarkably similar to the Joseph Campbell's "Hero's Journey". Implications for the structure of strategic innovation, innovations very often at the heart of ethnographic work are discussed.*

## FOR YOUR CONSIDERATION

In this community, as researchers, we pride ourselves on discovery and invention, on the clever turn of phrase offering a novel perspective or point of view. As practitioners, we go further, reveling in the potential implications of our insights for innovation and impact.

I suspect we rarely imagine that our innovations are often violent acts. Innovative practices add energy to the society because innovation disrupts the current patterns of living and doing business. Innovation forces change, compelling innovators and their colleagues to change, to adapt. Innovation both creates and destroys.

To the innovator, innovation is a liberating force of good, a bright light of hope bringing us out of the dark night of mediocrity, sameness and oppressive bureaucracy. This is a happy, perhaps necessary, delusion in the mind of the innovator, like the warrior claiming the gods are on his side even while the enemy claims the same gods' allegiance. Meanwhile, the innovation itself rampantly destroys everything in its path, while the innovator pushes furiously ahead of the destruction.

Sometimes innovations are small, continuous improvements, which we perceive as benefits, the improvement outweighing the violence, the violence absorbed by the system. Other times, innovations are large scale events rippling through systems wreaking havoc; these innovations are often resisted.

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Innovation means having an idea and seeing it through. Mathematically, you can write it as: Innovation = ideation X execution; innovation is a product, the result of a multiplication, because if either factor is zero, you get nothing (Govindarajan & Trimble, 2005). G & T define four types of innovation: Continuous process improvement, process revolution, product/service innovation and strategic innovation. There are three important vectors of expense, time and ambiguity of results, with strategic innovations being the most expensive, requiring the most time and offering the most ambiguous of results.

It's the latter, strategic innovations, that are the focus of this paper. These are the innovations that are considered particularly difficult and risky, but with strong upside potential. They are the most violent. They are the innovations that challenge the supremacy of the system.

That the violence often goes unrecorded, unchallenged or unrecognized is merely testament to its suppressed, hidden nature. I content that one of the main reasons innovation is so hard, especially in large companies, especially strategic innovation is *because it is so violent*; because it threatens the supremacy of the system that is the corporation, because it challenges the extant social structure animating the corporation-as-system. What is a corporation but an array of resources and power to wield them, power invested in individuals and groups adhering to norms and policies.

Strategic innovation isn't hard because of a lack of resources – especially not in large multinational companies. Reverse the logic: Resources for innovation are limited because innovation threatens the power base of resource providers. Innovation threatens access to resources and thus position in the within the social structure. Innovation is hard because it is gated by people with power, who wish to remain secure in their power.

The business literature is rife with books and articles on the difficulty of strategic innovation, especially in large companies that have sufficient resources. Disruption Theory, Blue Ocean, Diffusion Theory, Five Forces, Diamond Models, Lead User Models, and the myriad other explanations and theoretical views describe successes and failures, promote processes and procedures and suggest structures and organizations. Individually and collectively, however, they fail to address what I contend is the underlying reason that strategic innovations are so difficult: Innovations are acts of violence that threaten the very same (often corporate) system comprised of the specific social structures, power and resource reservoirs that enabled the innovation to start in the first place. The system that births the innovations, then strives to stifle them. To escape this cycle of creative destruction, I propose that innovations should be framed not for their wonderful innovation, per se, but by recognizing the violence inherent to innovation, to reframe and recast the innovation in ways to mitigate the "system response".

## THE COMPLEX ADAPTIVE SYSTEM

Even in the most automated factories, people still do much of the work in corporations. People are the ones who are accountable. People identify problems, think of solutions and make decisions – most often under at least some uncertainty and duress. People do the work, take the chances, advance

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science and their industry and further establish, enhance or erode their company's position in their business landscape.

Most people don't work alone, but are instead part of group organized by an ethos, bounded by rules and norms. These groups have various names: companies, corporations, limited liability partnerships, small businesses, government agencies, non-governmental organizations and so forth. But, however different each is from the other, common to all of them is that they are complex adaptive systems, and they behave as complex adaptive systems.

A complex system can be described as a set of entities and rules such that given some input, you get some output. There's a probability distribution associated with the expected output, or outcome given a particular input; this is important. Put simply, some outcomes are more predictable than others given the nature of the system.

Corporations strive for highly probable outcomes. Productivity, efficiency and quality are measures of predictability. A complex adaptive system incorporates feedback from the results and adjusts the input in a continuous attempt to increase the reliability and predictability of the output. In doing so, these systems seek an equilibrium or homeostasis, which is a form of stability, which is a measure of balance between input and output, but also a measure of its own adaptability. That is, systems need to achieve and maintain homeostasis — the expectation of the extent, pace and means by which the system is expected to or required to adapt on a continuous basis.

The corporation doesn't do this in isolation. It is part of a landscape of other corporations and entities all interacting with one another, all adapting to change and attempting to maintain not only their own level of homeostasis but also that of the landscape as a whole. The systems in this landscape are not all equal. Some are stronger, faster or more resilient than others. These have higher "fitness" than the others. One can therefore imagine the landscape not only as entities with interconnections, but also as each entity represented by its relative fitness on the landscape. One way to determine fitness is by the entity's ability to maintain, manage and control its own level of homeostasis in the context of the landscape. For example, the corporation with the highest profit margins may be the fittest entity on the landscape, and you can bet-your-boots that this corporation will want to remain at the highest level of fitness with highly predictable input and output at a high degree of homeostasis. Thus, our complex adaptive system does all it does in the context of a broad landscape with discrete interconnections, input, output, probability distributions and homeostasis.

The final characteristic we need to discuss here is "emergence." The overall landscape is not managed by any all-powerful guiding hand (Smith, 1776). No one tells everyone what to do. (Though some people like to think they do!) In fact, even in large corporations, only rarely are people told explicitly what to do on a continuous basis. Rather, the individual entities in the system *act* and overall systemic behaviors *emerge*, which then feed back into the system entities, which in turn further adapt their behaviors, tuning (and raising) their fitness on the overall landscape. This point is important: The emerging behaviors provide feedback to the system. And the direct actions of individual entities (your boss, your CEO) do less to determine the system's fitness than the emerging behavior of the actions by the whole system.

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Let's return now to the focus on innovation. You have an idea for strategic innovation. You wonder: Will my boss like it? You present the idea to your boss, and your boss - or your boss's boss - likes the idea. And you think: "Great, my boss likes my idea!" But it almost doesn't matter because it's the wrong question. The question should not be: Will my boss like my idea? A better question is: Does my corporate system like my idea? Does the landscape like my idea? Or better yet, *how might I persuade the system or the landscape to like my idea? Or, even better, how might I persuade the system or the landscape to not kill my idea?*

The important shift here is from the individual as source of power to the system as source of power. It's sort of like gravity. It's everywhere. It's very strong. You can't see it, hear it, taste it or touch it. But you can certainly feel it when you hike, run or ride a bike uphill – or even get out of bed some mornings. However, this metaphor breaks down in that gravity is (mostly) immutable. But systems aren't. They adapt and change. But their adaptation is not driven by any one powerful guiding hand.

Perhaps this is the irony of achieving some individual power within a system. In some ways, it's more and less than what you expect. In some ways, you can do things like demand fresh-baked chocolate chip cookies in your hotel room on arrival. But in other ways – ways more meaningful to the system – the power to change the system either locally or across the entire landscape is less than what you expect, and certainly less than you might wish for. The system behaviors emerge as a result of the actions of many people responding to a wide variety of input, all of them acting to maintain or raise their own fitness both individually and as part of their local and global systems. No one individual, regardless of reaching the pinnacle of power, can change this by mere fiat.

Meanwhile, corporations are under continuous assault by current market forces across the landscape, working hard to expel inefficiency at every turn and striving with all their might to maintain fitness and equilibrium, or to improve their position in the landscape through ruthless optimization of their production and delivery of goods and services. Just maintaining a relative position in the fitness landscape is a full-time job *for the system*. Any *strategic innovation* that challenges the existing emergent behaviors of the landscape is a second full-time job, and one that the system may not be willing to readily and genuinely consider.

The point of all this is that the user research, market research, technological innovation and everything else you need to convince your boss to fund you is largely irrelevant to strategic innovation. Or perhaps I should say it's insufficient. For your strategic innovation to have any chance, it needs to reflect a specific understanding of the system's emergent behaviors, the relative fitness of entities across the landscape and the degree of homeostasis achieved and desired.

In some ways, business models like Porter's Five Forces and Christensen's Disruption Theory do address the concept of system performance over individual actions. And authors like Govindarajan & Trimble address incremental adaptations when conducting strategic innovations – a nod to the unpredictable emergent behavior of the system. However, all of these models stress the actions of the innovator as key to the success of the endeavor. I argue that the actions of the system should be

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stressed instead; the emergent behaviors of the system are key and should be considered paramount by the innovator.

The system is a source of energy, and the innovator needs to channel that energy back into the system in a way that's palatable to the system. It's like judo: Direct challenges will be met with strong resistance. Challenges where the *benefit to the system* is unclear will be met with strong resistance no matter how brilliant the idea.

Consider these unwritten system rules:

- *Your strategic innovation must not conflict with any of our current business endeavors anywhere in the world or undercut any of our current products.*
- *Your strategic innovation must not conflict with any of our current customer's business endeavors or undercut any of their current products.*
- *Your strategic innovation must embark on something the company can do uniquely and that the company should do uniquely.*
- *Your strategic innovation must be more profitable than anything that anyone else at the company is doing for the same investment in the same amount of time – regardless of future possible growth.*

Taken together, these rules mean the system is suppressing strategic innovation by forcing the innovation to conform to the (often unwritten) rules of the existing system. This charter all but eliminates the possibility of a *strategic innovation* – one that changes the system dynamics. You can't both conform and change the current system dynamics simultaneously. Or maybe it's just very hard to do! Put this way, your idea, no matter how wonderful, is stripped of its power to change the emergent behavior of the system.

Thus, corporations are complex systems, continuously adapting to maintain and improve their fitness across a given landscape. Any strategic innovation necessarily threatens the corporate fitness. Therefore, most innovations while initially welcomed, will be met with latent resistive force eventually quashing them.

In this context the innovator can now be seen as nothing less than heroic, as one who is out to change the system.

## THE HERO'S JOURNEY

The Hero's Journey describes an arc of near impossibility, a low-probability event in which the hero and his fellow journeyers challenge the system they left. After all, Joseph Campbell's 1949 analysis of the world's great stories makes this perfectly clear: The point of all hero journey's is to go off and acquire new capabilities of some sort – through *(very often violent!)* trials and tribulations – to return and change the status quo. The Hero's Journey is, in fact, a structure – a recipe – for challenging systems. Canonically, hero's only change systems by leaving theirs, going through another and returning with the resources necessary to change the former.

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To me, the Hero's Journey captures and describes the humanity of practicing strategic innovation. It relates how much more challenging it is to do so within the confines of the current system, how the *heroic* drama of the innovation plays out structurally and systematically across the system and whether it's a success or a failure.

The word "hero," as commonly used in day-to-day conversation, connotes people jumping in front of buses to save children and old people, or soldiers diving on grenades to save their comrades. But these are not the heroes that Campbell references; his are the heroes of our mythological inheritance, Eastern and Western, Northern and Southern over the millennia. They include more modern heroes as well, such as Luke Skywalker; George Lucas expressly relied on Campbell's structure in the telling of the Star Wars epic.

Not all hero journeys end gloriously. Many heroes perish in the telling, while fewer seem to survive and return. I haven't counted, but I can't help but wonder if the proportion of successful hero tales – given the number of heroes attempting journeys – rivals the proportion of successful innovations – given the number of attempted innovations. The point for our purposes is that the returning hero changes the system like Mahatma Gandhi, Lech Walesa, or Vaclav Havel – or Jason, Hercules or Luke Skywalker. In fact, the hero's job isn't done until the system is changed. And since we now know about the strength of the system's resistance to strategic innovation, I think it's a fair statement to say that systemic change is heroic, certainly in this sense.

We take a further step, and situate the hero's journey in the context of complex adaptive system dynamics. In this way, we can read about the journey of the hero (and/or the strategic innovator) with all the drama and heroics necessary to capture its humanity. We can also identify key resources, questions, methods and approaches to securing our passage on our journey or preventing embarkation before spending our time and treasure.

We remember Jason's struggles to steal the golden fleece; and that's the exciting part. But it's a small part of the story. The context matters. I argue that a deep understanding of the relevant system dynamics is that context, that preparation and re-preparation are where a strategic innovation is won or lost.

Central to the thesis of Campbell's book is that strategic innovation challenges and is challenged by the social, political, cultural and social structures embodied in the system. Campbell talks about three main parts of the hero's journey: departure, initiation and return.

Departure is dominated by the "Call to Adventure". How does the call happen? Where does it come from? What initiates a "call"? The call arrives in context; it's not random. Campbell's explanation draws from Freudian analysis; in mythology, the call represents the deepest parts of our collective unconscious. But even the collective unconscious is context. Similarly, strategic innovation is not random. It happens in context. Innovators don't come up with ideas out of thin air. Lateral thinking, "Eureka!" moments represent only the pinnacle, culmination or climax of context.

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For innovation, context is the system to which the innovator is attuned; it may be his or her group, corporation or industry system. The "insight" can be seen to represent the collective unconscious; it can come from the deep-seated fears of the corporation or from the optimism of youth.

The competitor – a source of angst – threatens the system directly, and when he or she is working well, elicits an *innovation response*. The system has built systemic processes and defenses for just this purpose. Continuous innovation maintains the fitness of the corporation, which ensures the system's survival.

The insight is itself a call to adventure. It lures the innovator forward, like Sirens to sailors. In strategic innovation, the insight can be seen as an opportunity to respond to a threat. But the response often becomes a challenge to the nature of the system. And the journey is engaged.

The innovator wrestles against two foes: The system resists change, and the threat resists attack. Both sources of resistance are strong, but we suspect the system's resistance is the more formidable foe. At least it was in our case. The system is closer. It has more control. The innovator is part of the system's social structure. Consider this: Within this system, you have friends and colleagues; you've known each other for years. You're counting on them for a little rhythm. The system is not expected to resist. Certainly not to the extent it does. Certainly not in the way it does. It stealthily seeks to maintain homeostasis and fitness. Ruthlessly. And herein lays its strength: The innovator is often caught unaware; he or she feels a sense of betrayal. Rather than fighting for the home front, the innovator is struggling *against* it.

In the beginning, the lure seems almost irresistible. But most heroes recognize the peril – at least a little bit. Answering the call to adventure must be intentional. The call has the scent of danger. The innovator knows it, feels it, senses it. While there are several stages of the "departure", I delved a bit into the "call" because it gives us a strong sense of the "set-up", the milieu or palette, against which the hero commences his/her journey of innovation.

Eventually, the hero accepts the call, and with supernatural aid proceeds through the various difficulties that test the hero and his comrades. It's these relentless tests and struggles that make these stories so compelling – each one more improbable than the last. The hero passes into a *zone of magnified power* requires an actual passage. In mythology, the hero undergoes a passage through sojourns in the bellies of whales, elephants, monsters, wolves and other entities, then "…undergoes a metamorphosis: "The passage of the magical threshold is a transit into a sphere of rebirth." The hero's former self is demolished, "annihilated," and "ceases to exist" – in one way or another.

At this point, the perceived threat to the system is at its height. The innovation is poised for expansion, even though its business value is not yet clearly manifest. It can't be. The system has kept a "governor" on the gas pedal to increase the restriction up to this point — the exact point at which the innovator wants the governor off entirely. Tension is at its maximum. This is precisely when we kill off many of our innovations.

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In our corporation, the hero must cease to be a part of the corporate system and represent the new system instead. At this point, the hero has little choice. And he must not waver. This is the point at which a new system is forming; this is the beginning of anthropologist Gregory Bateson's (1935) conception of schismogenesis – the beginning of the split. It's the start of seeking autonomy, as Govindarajan and Trimble suggest, and it is absolutely necessary.

This is the point at which all the powers on your behalf must be sufficient to overcome the system's resistance. Here, you will need to muster all your power, to bring to bear all your knowledge of the existing system and all your knowledge of your strategic innovation and force past the point(s) of tension.

Of course, the trick is to know exactly when this point is. It's not an argument. It's not a business case. *It's a social power challenge* – a "power struggle" if you will allow that phrase redefined here. It's not a clash of individuals and their power, but of systems and system power. I think it's OK to recognize it for what it is. I think it's OK to shift your game plan from logic and argument to socio-cultural power dynamics. I think this is the time to use every last bit of system power that you can muster on your behalf. This is the time to be ruthless – because if you don't use enough force, your endeavor will fail. Like so many others, your innovation will falter. And you will not return to a hero's welcome. Thousands of years of myth can't be wrong.

But for those who do emerge from Campbell calls "the belly of the whale", feeling all refreshed and invigorated, our hero is finally ready to slay some dragons and achieve some boon. In other words, after significant preparation, the innovator can navigate both the old system and the new, can begin the long, tough propulsion of her endeavor up the fitness landscape. The preparation is crucial — the earliest stages set the course of the hero's adventure through hardships and perils of every sort. Her friends and associates, the assets at her disposal, the charms and amulets available to her, the power she possesses – all of these are laid early in the preparations. They don't magically appear at the precise time of need.

Sometimes the hero doesn't want to return: *"Who, having cast off the world would desire to return again? He would only be <u>there</u> [original emphasis]. And yet, in so far as one is alive, life will call. Society is jealous of those who remain away from it, and will come knocking at the door.".* Here Campbell talks about the society as an entity, society as a force. Society as a system.

The system needs to keep an eye on its heroes. The system should attend more to returning strategic innovators, whether they are successful in the classic sense or not. The system should hold the returning innovator accountable for improving the system, for deriving from the innovator the last shreds of value even as the primary threat is neutralized. The strategic innovator's journey is an expensive endeavor in terms of treasure and human effort. Its risk can be mitigated, and the endeavor can seem far more palatable to the system if the innovator actively considers how the system can benefit independent of the innovation.

It's also incumbent on the innovator to improve the corporate system. The corporation enables these forays into the zone of magnified power. It's difficult, of course, for strategic innovators to want

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to or plan to come back with good grace and enlighten the corporation after the system fought them and ultimately squashed their innovations. But this is not the system's fault; it's what systems are designed to do.

The innovator, returning, finds that she comes with experience, knowledge, insight and capabilities foreign to many or even most of her colleagues who haven't been on the journey, as well as espousing concepts foreign to the system as a whole. The innovator must find her way; and must find a way to "…*teach again…what has been taught correctly and incorrectly learned a thousand times…"*. The goal of the innovation is not to diminish the system, but to raise it higher on the fitness landscape, even if the system perceives the innovation as a threat. This is the great irony of strategic innovation.

In the end, the system must do everything it can to survive the onslaught of innovation, from within as well as from without. In the end, the system must act prudently to maintain its fitness, stability and social structure. It must because it can act no other way; it would defy its own nature as a system. The hero/innovator must bring the boon – the capabilities, learning and outlook – from the innovation to the system. Ultimately, the innovator becomes a master of the two worlds, possesses the ability and the *"…freedom to pass back and forth across the world division [from the day-to- day to the extraordinary] not contaminating the principles of the one with those of the other, yet permitting the mind to know the one by virtue of the other"..*

This vital and final point is often lost or missing in the endeavor of strategic innovation. Hence, even in the end, when the system has "won," it sets the innovation more at odds with the system than is warranted, increasing the system's negative response to this innovation and to innovation as a whole. The innovator must return as teacher, or master. And the system must recognize and welcome the innovator back into the fold as such.

The cycle is now complete. The strategic innovator has returned, successful innovation or not, heroic nonetheless.

## SUMMARY

I would suggest that at least some if not all of the heroes in our story are too self- centered, too focused on "their idea," too enamored with "their story" and their own imagination of the possibilities for "glory". They feel oppressed by "the system" in large part because they fail to address the energy of the system.  They struggle against the system because they operate under the misperception that their direct actions should have direct, predictable effects. And their local systems – and social structures – operate under the same misimpression: that your individual actions should result in what you say they should result in, thus increasing overall system fitness and our collective relative position on the landscape. But the system resists. Bad judo.

I submit that the perspective of the strategic innovator should reverse from the innovator looking out and adopt a view of the system looking in toward the innovator and the innovation, considering explicitly how the overall landscape would see the innovation. The strategic innovation should be viewed from the outset as if the landscape were the gatekeeper, not your boss or your boss's boss or

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even the CEO. The strategic innovation should consider the system energy, direction, equilibrium and where that innovation would be disruptive, as well as how to divert, use, recombine and embrace the system energy as the innovation is initiated. This is what strategic innovation requires: an inverse, converse perspective from the individual to that of the system and of the landscape. Good judo.

## NOTE

*The Intel Powered Classmate PC: A Heroic Tale of Complexity is presented in Comic Form during the presentation at the conference.*

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