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Evolutionary Matryoshka: Mapping the Dimensions of the Evolutionary Forces Impacting Survival of Ethnographic Insights within a Large Financial Enterprise

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Evolutionary forces are applied as a framework for understanding the dynamics that determine which insights, generated from a corporately-funded ethnography, flourish in the organization and which fail to thrive. Using duel-inheritance theory model, the paper explores sui generis elements of the ideas themselves, contextual variables, the mechanics and mediums of transmission, as well as contextual selective pressures such as how organizational structures trigger prestige bias. Leveraging anecdotal data, the paper points to the value of evolutionary theory as a framework for understanding broad patterns of information dissemination.

INTRODUCTION

Industrial ethnographies often produce powerful and relevant insights that shrivel and die while more innocuous findings take hold within a client organization. Why does this occur? This paper will map the life cycle of specific ideas generated from a 2010 industrial ethnography conducted on behalf of a large financial services company. In the process, it will outline some of the key "evolutionary" forces at play that determine which ideas were able to thrive, and which ideas wilted. It should be noted at the onset that the research was driven primarily by the needs of the client organization, and not a meta study per se. Subsequent, much of the evidence in support of the evolutionary model is anecdotal.

BACKGROUND

Over the course of the summer in 2010, a small team travelled across the United States to conduct research for a financial services company. The work was driven by a desire to better understand how a product, developed for a specific niche market segment, might be relevant and applicable to a larger audience. We were charged with developing a contextual understanding of the larger audience, their financial lives, and the role of technology in their lives. Relationships to banking and money were evolving -- impacted how the bank might want to initiate a relationship with potential customers.

Altogether, the study generated an enormous amount of rich data that was relevant to people's financial lives. Insights were captured via video recordings, self-directed video journals, usability tracking, and journaling. Results were then synthesized and shared with clients through a number of mechanisms, including in-person presentations using PPT, web-based presentations,

publications, and a research website that permitted clients to log in and review fieldwork findings in real time.

A number of evolutionary forces were at play in determining which insights were able to survive — and become incorporated into the client's business — and which insights were not. We begin by examining the sui generis attributes of the ideas themselves. Some ideas were more "sticky" than others because they are inherently easier for a client to remember, easier for a client to comprehend, or, simply, easier for a client to communicate to others. Transmission mechanisms, such as file format and presentation format, were a second evolutionary force impacting the fitness of ideas. Selective pressures that exist within the ecology in which these ideas need to survive were also important. Office politics, the diverging business interests of key clients, and the innate decision-making biases of the actors, such as anchoring, herd behavior, and confirmation bias, are some of the forces at play. Examples from our case study will profile the relevance and attraction of particular insights to specific business units. We also mapped the impact of the adoption of key insights by influential agents or key decision makers within the organization. Finally, corporate cultural issues, such as the risk-averse nature of large corporations and their agents; and the relevance of an insight in relationship to proximate goals of actors in relationship to the ultimate goals of the corporation also played a role.

METHODOLOGY

Respondents were recruited to represent three populations: Mainstream Non-Users, Cutting Edge Non-Users and Current Users. These triad groups were leveraged to identify the key informants who were open to one-on-one in-home interviews and who were able to articulate their thoughts clearly.

A number of techniques were leveraged to gather data, including directed interviewing, in-home shadowing, naturalistic observation, self-documenting and self-reporting, and IDI's with controlled exposure to stimulus. Interviews were conducted in homes, at workplaces, in neighborhoods, at the bank, and on the commute. Interviews were open-ended directed conversations that dove more deeply into the role of finances and banking in the lives' of participants.

All face-to-face interviews were videotaped by a dedicated videographer. Respondents were also equipped with Flip cams and asked to create video journals that were streams of consciousness with an emphasis on their banking and financial lives. Video provided an observational record and a mechanism to provide non-participants in the research with a proxy to the field engagement. It became a tool of empowerment for the participants and allowed them to provide intimacy and control in exposing parts of their lives that were otherwise hidden to the researchers. But as Sunderland and Denny (2002) point out, video is a medium for cultural performance. Both the participants edited the video they shot, and the agency edited the video that was posted to clients. In the end, the primary value was to provide an efficient and powerful mechanism to deliver the agency's interpretation, via editing, of the user's narrative (including their emic view of the world as exposed via their own videos).

Key informants also test-drove a banking platform using software to capture both the on-screen actions as well as their reactions (leveraging the on-board cameras of computers to capture

video/audio of the respondents). In a further reflexive exercise, we reviewed the Camtasia footage with the participants, an interview which itself was videotaped. Respondents were subsequently brought together and asked to articulate their understanding of the value proposition created by the platform – enabling the researches to gain line of sight into how they conceptualized the benefit. These positioning statements were modified and exposed to a new, "naïve" audience to back-translate the integrity of the findings.

SYNTHESIS AND REPORTING

Results were then synthesized and shared with clients through a number of mechanisms, including in-person presentations using PPT, web-based presentations, publications, and a research website that permitted clients to log in and review fieldwork findings in real time. The website was conceived and designed to facilitate joint ownership in the research and constructive conversation over the course of the fieldwork (DiLeone and Edwards 2010). The core findings were presented at two key meetings: 1. a mid-term report from the field that was presented to clients via conference call, using a blog post as the mechanism of transmission; 2. a key findings report, composed in KeyNote, which was presented in-person at the client's office. A third key document, an exhaustive list of findings, was later distributed via the research blog, using email to solicit client's to log in and download the materials, another KeyNote presentation.

EVOLUTION AND NON-BIOLOGICAL SYSTEMS

Evolution

The core proposition of this paper is that evolutionary principles inform the dynamics of how research results move through a large organization. While recognizing some of the limits (Sperber 2006), the model overall provides explanatory power (Boyd and Richerson 1985, Richerson and Boyd 2006). Evolutionary principles explain changes in trait distributions over time. Traditionally used to model changes in frequencies of genes within populations, in this case we are interested in the distribution of culturally transmitted ideas within the context of a corporate research setting. The population includes both clients -- employees of a large financial institution-- and members of the advertising agency.

Evolutionary forces are acting upon culturally transmitted information both directly, and indirectly, in that they act upon the biological carriers as well. The dynamics of cultural transmission, and their relationship to biological inheritance, have been well documented since the development of duel-inheritance theory (Boyd and Richerson 1985, Cavalli-Sforza and Feldman 1981). Cultural learning does not occur in a vacuum but coevolves with genetic system that impacts the fundamental learning machinery.

The duel-inheritance body-of-work not only explains and predicts some of the mechanics, it provides a framework for understanding the development of cultural systems to begin with, modeling the cost-benefit of cultural learning over individual experimentation in relationship to environmental

stability. It is a population-level model and accommodates for the fact that learning also occurs via individual experimentation, etc. The principle ingredients for any system, biological or otherwise, to evolve include: inheritance, variation and selection.

Inheritance

ThEre must be a mechanism for information to pass from one agent to another. In biological systems inheritance mostly connotes the generational mechanisms of a genetic transmission, but also include horizontal transmission akin to bacterial conjugation where genetic material passes due to cell-to-cell contact (Holmes and Jobling 1996). Cultural transmission is primarily based upon mechanisms of social learning and imitation. Of all the elements necessary for cultural evolution, inheritance of ideas id the most well documented. It is the very essence of the notion of culture itself. One might argue that it is the primary role of an advertising agency, to convey that are absorbed and learned. Pertinent to our discussion here is simply the fact that information is transferred from advertising agency account planners to their clients and from client to client.

Variation

In the genetic space variation is born out of mutation and sexual recombination. Here, original variation is born out of the researcher's agency in the articulation of concepts that are inherently different. In essence, the original variation derives from the creative process of the researchers collaborating with their informants to produce insights. Much work has been done on the nature of creativity and novel thinking – the point here being that the agency develops and codifies insights that are presented to the client, upon which additional variation is introduced (Mumford 2003, Kozbelt et. al. 2010). Each insight was self-contained, based upon behavioral observation, and anchored to the concordant theoretical framework that is relevant to the idea. Grounded in the principles of vertical integration (or conceptual integration), (Barkow 1980, 1982, 1989), insights presented were congruent, but not necessarily reducible to each other. That is, some insights were built around cognitive or psychological paradigms. Others were sociological in nature.

Variation in this system is introduced, like mutation, in a number of forms. As the idea passes from agent to agent, the notion of the idea as it resides in the mind of the new actors is modified. It may not be entirely understood. Often the reference that a client or coworker will use to illustrate the general principle of the insight will be drawn from their life, carrying with it connotations that were not contained in the original idea. Other times, individuals cannot recall an idea completely and end up filling in the blanks with information that is novel.

The issue of fidelity is an essential one. It has been argues that a margin of fidelity must exist for evolution to take place (Dawkins 1976, 1982, Dennet 1995, Aunger 2002). If fidelity was 100% in the transmission of information from generation to generation, no variance would exist and selective pressures would have not differential to act upon. On the other hand, if fidelity was too low, it has been argues that directional evolution is impossible. Each generation begins with a new grab bag of traits. Cultural simulations have demonstrated that cultural evolution can take place in a population even when "representations are non-discrete and are transformed during every acquisition" (Henrich et al. 2008:123, Gil-White 2008).

Selection

Some differential much exist in the survivorship of the ideas for they system to evolve over time. In genetic systems these may include environmental pressures, compatibility with other genes, and sexual competition. Within a cultural context, a number of selective pressures are at work. Content biases are those that are depended upon the nature of the cultural information itself. Some ideas are easier to understand, easier to remember, easier to convey – and hence are transmitted more often. Context biases are those that are depended upon the environment in which the cultural variant is transmitted. Who is doing the transmission? What is their position within the organization? How much prestige do they have? How many other people in the environment believe in the idea as well? In the cultural selection process described here, you will see that the self-interest of actors, political position and even cognitive biases all play a role in impacting which ideas are chosen and which are ignored.

CULTURAL EVOLUTIONARY PECULIARITIES

Work was done to create self-contained ideas that were bounded and easily labeled, primarily to aid recall, and to assist the researcher with mapping the totality of insights. The evolutionary principles of cultural learning, however, are not dependent upon the existence of discrete units. (Henrich and Boyd 2002). While the analogy to genetic evolutionary systems can be of use, work has shown that the mechanics diverge in a number of ways. Formal models demonstrate that cultural evolution can occur despite the absence of discrete units, especially in the presence of conformist mechanisms. Nevertheless given the coarse scale of analysis being brought to bear in this context, the units of analysis remain relatively digital in nature.

Measuring Fitness

Some ideas have higher fitness than others – they survive and propagate at a higher rate. As a concept, fitness is both an individual and a population level measure. It connotes the ability to survive and reproduce. Of the individual and is ultimately measured by the individual's contribution to the total gene pool. The consequence is a change in gene allele frequencies in an aggregate group of individuals. Measuring fitness can be difficult. In a biological context, it requires being able to quantify the number or frequency of specific individuals or genotypes. In a cultural context, it necessitates quantifying the variants of an idea. One might use mentions in meetings or emails, or adaptation into core marketing strategy, to connote fitness. Quantifying this data, particularly after the fact, is difficult. Given these limitations, here we use fitness in the broadest sense, recognizing the crudeness of the instruments to measure survivability, and also cognoscente of the fact that the original insight often is modified during the transmission process, a process discussed above, so that that the measure of fitness is inclusive not only of the original insight but of the derivations that result as the idea percolates throughout the client organization. Recognizing that the biological and cultural systems are not analogs, acknowledging that recall and imitation contain elements of inheritance and mutation, the argument nevertheless holds that the basic process is still evolutionary in quality. Over time, there is directional change and selection of the various ideas that an organization is exposed to. Often, a

single idea becomes pivotal and is elevated and canonized in a tag line. Here we will try to outline some of the process using examples from the field.

CASE STUDY – EVOLUTION AND THE ETHNOGRAPHIC ENTERPRISE

Using an actual example from the field, we explore how inheritance, variation, and selection impact cultural evolution. In particular, we look at the sui generis properties of the ideas themselves, (also known as content biases). Next we explore a number of context biases, including the mediums of transmission, the cognitive biases of the actors involved, the political forces that extend to the actors, and the agency of the researchers themselves.

Sui Generis Qualities

Innate qualities of the insights themselves influenced their fitness – impacting the rate of infection, and the survivorship of the ideas. These are often referred to as *content biases* in the literature because the bias is derivative of the information the idea contains (Henrich and McElreath 2007). Content biases impact only the frequency of the trait and do not modify the traits themselves. This may be a function of being able to recall the idea, understand the idea, and convey the idea. In addition, attributes of the content itself will impact the degree to which these ideas are taken up by new agents. Religious ideas, for example, have sui generis properties that promote their propagation. Beyond their often proselytizing nature, religious ideas parasitize off of latent elements of cognition (Atran and Norenzayan 2004, Boyer and Ramble 2001, 2002, Barrett 2008). For example, claims that violate our ontological experiences, like a burning bush that does not burn, enhance memorability. Research elsewhere suggests that any data that surprises, even if it is not in violation with observable reality, are better recalled (Hastie 1984). Other elements include having agency and being strategically relevant heighten an idea's saliency and memorability (Barrett and Nyhof 2001, Boyer and Ramble 2001; Norenzayan, Atran, Faulkner and Schaller 2006).

Recall

Simply put, ideas that are easier to recollect are better adapted. They are communicated more frequently (Heath and Heath 2007). This includes schema that may in and of themselves contain complex ideas. So simplicity is not simply an absolute measure based on the number of bytes. Rather, simplicity is in reference to the units of memorization and hence the cognitive load (Graesser and Nakamura 1982). Consequently, a number of mnemonic devices were leveraged to simplify and enhance recollection. To facilitate recall, each insight was associated with a label that was meant to be short, provocative of the idea it represented, and witty. It was meant to elicit a schema, including via metaphor, with which the clients would be familiar (Lakoff and Johnson 1980). In addition, each concept was accompanied by an image (McDaniel and Waddill 1994). Cued by the importance of association and location as mnemonic devices, many of the insights were delivered in an A to Z deck (Hasher and Zacks 1979). While the use of the alphabet as a structure was to facilitate recall of the specific insights, it also demanded that insights be labeled within the constraints of the alphabet.

D is for Data

One idea that was more easily recalled by the clients was the notion of *data ownership*. The idea was associated with a *safe* metaphor (Carruthers 1990). It depicted data as an asset that was locked up. It was accompanied by the video of a key informant who discussed how they felt like the data was theirs, how they had primary ownership of the data. They argued that while they might share the data with their bank, the banks locked up most of their data despite the essentially null cost of storage. The concept, with the visceral illustration, the saliency of the example, analogies to physical assets, all added to making this concept easily recalled by the client.

X is for Xenophobic

In contrast, another insight, labeled *xenophobic*, never was recalled by the clients. The word and concept was unfamiliar to the audience. The illustration, a black sheep in a white heard, was also a poor depiction of the concept. The actual idea, that some segments of the population are resistant to innovation, is quite different than either a fear of the Other, as connoted by Xenophobic, or the notion of being a pariah, as indicated by the illustration. The poor articulation and labeling of the idea itself reduced clarity. Not surprisingly, neither the notion of xenophobia, nor the idea of laggards, was ever raised outside of the original presentation, as far as measured.

Comprehension

Closely related to recall is comprehension. Ideas that were easier for a people to comprehend, not surprisingly, had a higher fitness. There is a relationship between comprehension and recall – the better you understand an idea, the easier it is to recall (Bobrow and Bower 1969, Bransford and Johnson 1972). Also, the more you understand an idea, the more likely it is that the idea will influence your belief (Eagly 1974). The work on cognitive load theory outlines how any learning is accompanied by a degree of effort and difficulty. Apparatuses that reduce the cognitive load in the learning process, referred to as germane cognitive load, facilitate comprehension (Sweller 1988, 1994). Schema, for instance, help reduce cognitive load. So schema improves comprehension.

Data was a concept that the clients understood. The desire to access past banking data was a common experience. The schema of taking your data with you, packing up and moving, reduced cognitive load. Other insights were not so successful. Some participants felt like the financial services industry had failed to evolve with the times. They were seen to be like sharks, highly effective but with a design that had not changed. Other respondents saw banks as highly evolved – responding to market pressures and the drive for profitability. These respondents saw great innovation in the creation of complex financial instruments, ATMs and online banking.

While there was disagreement among respondents about the state of the banks, the process underlying their logic was the same –the familiar schema of survival-of-the-fittest. In an attempt to create a label that captured the notion of highly adapted and either changing or not changing, the insight was labeled "Phylogeny." This concept, however, was totally unfamiliar to the clients – a concept that was complex and poorly understood. Consequently, it was not recalled.

Transmission

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Next, we discuss the impact of mechanisms of transmission on the evolutionary process. Here we consider how the medium impacts how successful and idea is at being passed along. Elements, such as file format, presentation programs, and hosting locations are evaluated. A number of media were leveraged to convey insights to the client. These include KeyNote presentations, PDF files, an interactive webpage, and videos. Presentations were conducted both in-person and via conference call. An initial share of findings was conducted mid-way through the research while in the field. This research was presented by phone via the research blog. This meeting was followed by a formal report of key findings, conducted in-person on location at the clients' office. Here KeyNote was leveraged, presented on a projector in a conference room. An addendum presentation was later distributed via PDF that was meant to constitute a summary of secondary findings that were significant yet which did not find their way into the formal presentation.

The Research Blog

Prior to the launch of the fieldwork, a web portal was developed and deployed to enable clients to interact and guide the research. The web portal was intended to provide a bridge by enabling engagement with the research and a sense of ownership across the client organization prior to the synthesis and reporting of findings. After each phase of research, data and finding were reported along with bios of the respondents. Artifacts included video snippets of interviews, quotes and photos. Reports were also posted in multiple formats, including interactive sites and pdf documents.

As a novel medium for communication, the blog was in many ways under-utilized. It was hoped that individuals engaged in the research, both clients and agency staff, would have vital group conversations via the blogs comments functionality. Over the course of the research, a discourse did not develop on the platform. This is probably a function of the limited bandwidth of clients as well as the demands placed on the researchers in field, given the expectations for speed in industrial research. Thus the blog functioned more as a one-way presentation platform than a space for discussion or negotiation of meaning.

"PowerPoint" (KeyNote Actually)

As Wakeford (2008) points out, PowerPoint is a normative and normalizing mechanism, filtering out the noise and standardizing results in a way that corporation can consume, eliminating variance in the results. Not only does it standardize the format to facilitate dissemination, it declares in-group membership. This includes PDF distillations of PowerPoint decks are equally familiar and connote the same corporate culture while enabling the author to at least preserve the contents of the material they are sharing – a partial response to the life of artifacts beyond the intent of the creators (Dalal and Wall 2005).

Keeping in mind the inclusive nature of PowerPoint, we chose to develop our presentation materials in KeyNote. Keynote allowed us to quickly create more graphically interesting presentations while adhering to the fundamental PowerPoint grammar. It also facilitated reliance on video by embedding the files rather than linking to them. Output as PDFs, the client has no ability to distinguish between the KeyNote presentation and a PowerPoint. KeyNote was used specifically as a reassuring normative measure when the contents of the documents were polemic. In the past, use of

alternative platforms, such as Prezi, distracted from the content because the novel modality of sharing the information itself became a central topic of conversation.

More interestingly, the medium of KeyNote had an impact on the selection of the insights themselves. The authors were cognoscente of cognitive style embedded within the medium and hence crafted insights that would fit within the shallow, vertical, one-off nature of the application (Tufte 2006). In composing for KeyNote, the researchers made a conscious decision to limit the information on each insight, relying more on voice-over to provide the contextual thick description. It meant balancing the benefit of preserving the pneumonic devices at the cost of the ability for the artifact to stand on its own as it was re-distributed throughout the organization.

The researchers calculated that the key audience members would be in the audience and their understanding and acceptance of the insights took precedence over the secondary audience to whom the deck would be distributed. In the absence of discourse, the ideas are passively incorporated or rejected by the recipients. In contrast, during face-to-face meetings, meanings are negotiated and massaged. At times, clients are initially reluctant to accept an idea or only partially understand a concept. Agency strategists have the opportunity to reframe ideas or advocate as to why they are valid. When passed along from client to client, these documents are much less successful as agents of cultural transmission than live presentations. The fidelity of the documents also reduces the variance. It retains the original concepts even after generations of redistribution. So while to halo of additional information that is present during a presentation is lost, the artifacts do protect the ideas from copy errors. In addition, the mechanism of transmission impacts the ability of ideas to be passed along.

Visualization

What makes an idea easy to convey? There are a number of factors. Those ideas that require visual representation to be fully conveyed (Pinker 1990) are naturally restricted to presentation where monitors or projectors or print outs are available. For example, in as part of our presentation we discussed how cognitive biases effect decision making among the client's customer-base. We refer to a Dan Arielly (2009) presentation, where he uses the optical illusion of two lines to depict how the mind can play tricks on perception.

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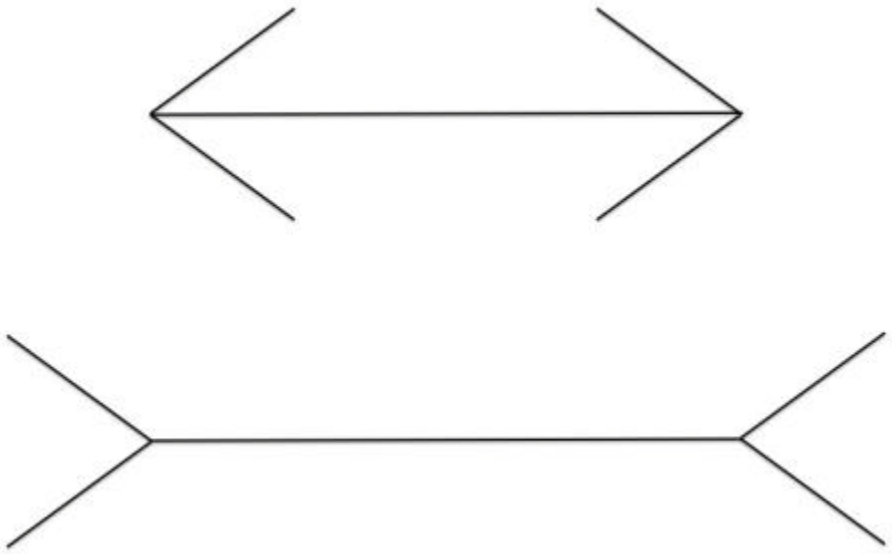

Figure 1

It is much easier to convey the notion of a cognitive bias that repeatedly impacts perception when you can provide a concrete example of the experience. More importantly, one you can recreate the experience in the mind of the recipient the idea is much more likely to be adopted then if you provide a mere description of the experience. In the absence of the image, the generalized notion that the brain plays tricks on you is much less provocative, as there is also a bias to discount ideas that are contrary unless faced with overwhelming and stark data to disprove for preconceived notion -- confirmation bias (Evans 1990). So while the idea itself impacts the likelihood of comprehension and adoption, so does the representation of the idea.

SELECTIVE PRESSURES

A number of contextual selective pressures are brought to bear on the ideas that arise and are expressed, impacting how successful specific ideas are in propagating through the organization. Not surprisingly, the prestige and power of the actors who either posit an idea or accept an idea sways others to accept the ideas as well. Sometimes, it is a mandate by a superior, tacit or explicit. Experience seems to suggest that other factors, such as frequency-dependent transmission, impact how ideas spread as well.

Organizational Structural Pressures

A large and complex organization, the client consists of a number of business units that operate with autonomy. Each business unit is itself vertically hierarchical. Ultimately all ladder up to the very senior management including the President of the division and ultimately the CEO of the entire organization. A parallel marketing structure exists to serve the internal client-base. Marketers report up to the CMO who in turn reports to the President of the division. Both the marketing services and the business units are considered the clients of the agency. Further complicating the picture, the client has an internal research division that serves both the business units and marketing managers. The research division ultimately reports to marketing. This research unit often interfaces with the agency to shape the nature of the research through a negotiated process. Within the organization, despite a policy to not rely on org charts, actors are highly aware of the relative power and position of each individual around the conference table. One cannot function in a large corporate environment if not sensitive to hierarchy. As such, the publicly traded for-profit organization is radically differs from other forms of enterprises, such as the open-source community described by Poirier (2010). The structural hierarch triggers cognitive biases in institutionalizing power and prestige difference.

Hierarch & Prestige-Bias

Boyd and Richerson (1985) argue that one should imitate high-prestige individuals more than low prestige individuals. The logic is straight-forward: it is hard to ascertain exactly which behaviors let an individual to gain success and status so you should have a general bias in favor of all their behaviors. Marketers have long used this technique and hence Michael Jordan sells Nike shoes. Selective and deferential imitation makes sense in a formal organization. Not only is there a formal power differential, titles convey significant status and are canalized by a myriad of highly visible signs of status, from which floor you sit on to the size of your office. Furthermore, the formal institutionalization of positions makes it difficult for actors to separate the degree to which prestige is ascribed or achieved. Presumably in a merit-based system, much of the prestige would be achieved.

Significant work has been conducted on the social psychology of persuasion, confirming the existence of subconscious prestige-bias (Wilson 1993). When the SVP expresses interest in an idea and adopts it into his or her thinking, their subordinates typically follow suit. Partially this is a calculated effort that is driven by job preservation. But partially this is unconscious. For instance, a key leader in the organizations clearly adopted an insight about the nature of personality vs. technology fluency in defining the prospect market. His subordinates largely agreed. Meanwhile, other insights, that this SVP ignored, were also ignored by his subordinates. It may be that this was a function of the ideas themselves, and the different actors holding similar criteria of evaluation: consensus. The consistency of the pattern, however, would seem to support the possibility to prestige bias also playing a factor.

Office "Politics" and Business Interests

Beyond the cognitive biases that accompany reporting structures, other forces are brought to bear, impacting the pattern of cultural transformation. Game theoretics and differentials in incentive

structures shape the pay-offs of actors, impacting their adoption of ideas. Different clients have different business interests. They have distinct time-horizons and metrics of evaluation.

Different selective pressures are acting on different clients. Take, for example, marketers versus employees within the business units. As Denny (2003) points out, client organizations are layered. They contain marketing and brand managers who may be fluent in the vernacular and conceptual paradigms of advertisers and even anthropologists. These internal marketing divisions report to and/or service the business units. Often the business units are less familiar with the paradigms of consumer and marketing intelligence. Consequently, corporate marketers often find themselves trying to translate concepts that originated from the advertising organization --concepts that they themselves adhere to and share -- to their internal business client. When the business units resist any of these ideas, because they are incongruent with their own concepts, unfamiliar, cognitively challenging, driven by different incentives, or subject to the many content-biases discussed, the marketing managers judge how hard to sell an idea before abandoning it, in order to retain their cultural-capital with the business clients. They need to balance their own political incentives with the benefit of a marketing idea being adopted by the organization. This benefit is an economic externality to the extent that the benefits of adopting the idea are not confined to the authors. Furthermore, it may be years before it is clear how an insight, impacting either the business or marketing strategy, influences the overall business. Therefore even potentially powerfully insights that could ultimately drive the business are at times left on the cutting-room floor because the immediate risks to the actors who advocated for them.

Time Horizons

Not surprisingly, clients and agency actors behave in response to different time-horizons and incentives. Clients who are engaged in the innovation pipeline are innately interested in putting into motion strategies that have consequences several quarters into the future. They are more vision-oriented. Clients who are tasked with marketing the brand in the present and are held accountable by the quarterly tracking studies are logically more focused and concerned with the current state of the market and the immediate future. Clients in specific business-units are held more accountable to quarterly returns, and make choices within this context. Accordingly, clients who are tasked with more immediate-term health of the company and the brand were interested in those insights and ideas that have immediate impact and implication. One insight, for example, defined the qualities of a likely customer for the platform. Those responsible for immediate business growth were keenly focused on this primary insight. Another insight, which would have required significant investment in bank infrastructure, but which could have potentially high ROI, was of little interest to anyone. Few were willing to advocate a strategy that would take a long time and be costly to implement only to bring returns far into the future.

Metrics of Evaluation

Marketers and business units are also evaluated according to different criteria. Business performance, be it in sales, revenue, profit, share of wallet, or a number of other metrics, define the success of each business unit. In contrast, while the marketers are in some way ultimately held accountable to the performance of the business, there are more immediate metrics to which they are held accountable, including copy test scores for specific pieces of communication as well as brand

equity measures tracked continuously. As the relationship between marketing and business performance is complex, with a great number of interceding factors, each division is primarily concerned with their own evaluation criteria.

Congruency

Related to the content biases depicted by Spelke and Kinzler (2007), agents are more prone to learn an idea that they consider to be plausible. Those ideas that are congruent with their existing ecosystem of ideas and values are more evaluated to be more plausible. If it fits within their current worldview and dovetails with the constellation of other beliefs, the idea tends to survive where as challenging ideas have a very high mortality rate. One of the key finding of the research centered on the redefinition of the target based more on a core personality trait and less on their usage or adoption rate of technology. Marketers, our client included, often depict potential customers in accordance with Roger's diffusion of innovation model.

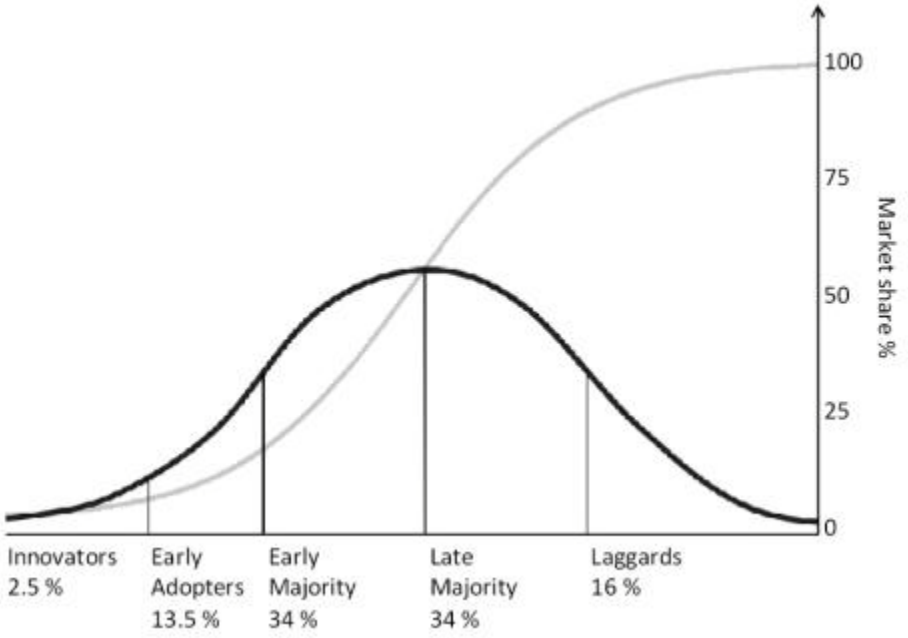

Figure 2

While this depicted a behavior in the marketplace it was not very descriptive or predictive of behaviors related to banking, other than when interfaced with technology. We redefined our target according to one key variable of the Big Five Personality Trait, namely "openness to new experiences."

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The trait had strong predictive power on the likelihood of an individual experimenting with how they bank. It also had some correlation with adoption to technology.

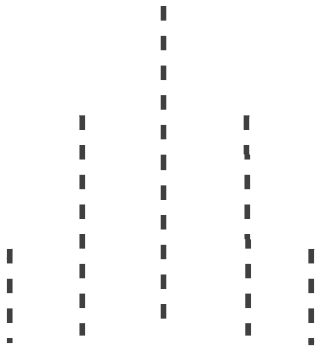

Figure 3

These two segmentations could be overlaid, enabling the client to understand how one existing way of thinking about their customer base would be mapped onto the new model. In contrast, our concept of Phylogeny, with is dialectical materialist undertones, was at odds with how the agents of the bank thought about the organization. It demanded the acceptance of a whole host of underlying ideas – about the nature of markets, competition, the role of profit in driving organizational structure, etc. The cognitive dissonance that the pregnant concept created caused it to be avoided by the clients. If you accepted the cultural materialist model, it was unclear what the insight did to inform future bank behavior. The agents of the bank were not going to change the market, the impact of quarterly reports on the shareholders, etc.

CONCLUSION

Evolutionary principles provide a framework for understanding the mechanics that shape how ideas transform, beginning with their genesis by agency-based ethnographers through to their canonization within a large corporation. The basic principles of inheritance, variation and selection provide both descriptive and explanatory power in modeling the basic patterns and processes that define how ideas move from the agency to the client, and reside within the ecosystem of the client's organization.

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