

## **Consumerization and Renewing Peoples and Practices Research**

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*This paper documents the beginnings of Intel's recently-launched Consumerization project, and uses these early experiences as a way into exploring new paths to business relevance and impact. These paths weave in and out of the increasingly institutionalized position of corporate ethnography as research that takes place before products are designed. These paths are one response to wider transformations in the business environment, and are not a general prescription, "ethnography should now do X in corporations." However, this project does embody a significant move away from past modalities of conducting and applying research, and in doing so reveals broader possibilities for ethnography that may prove viable for others in different contexts. We begin by providing some institutional history and exploring the wider industry transformations that compelled us to design a research project in the way that we did. The paper goes on to describe our approach in meeting the challenges of this new environment, both conceptually and methodologically. Finally we reflect on some of the very early partnerships we are now able to cultivate and grow as a result.*

### **INTRODUCTION**

This paper documents the beginnings of Intel's recently launched Consumerization project, and uses these early experiences as a way into exploring new paths to business relevance and impact. These paths weave in and out of the now institutionalized position of corporate ethnography as research that takes place before products are designed. These paths are one response to wider transformations in the business environment, and are not a general prescription, "ethnography should do X in corporations." However, this project does embody a significant move away from traditional modalities of conducting and applying research, and in doing so reveals broader possibilities for ethnography that may prove viable for others in different contexts. We begin by providing some institutional history and exploring the wider industry transformations that compelled us to design a research project in the way that we did. The paper goes on to describe our approach in meeting the challenges of this new environment, both conceptually and methodologically. Finally we reflect on some of the very early partnerships we are now able to cultivate and grow as a result.

A few words about what sort of story this is. Intel is one of a very small handful of large firms with a long history of engaging with ethnography. A surface reading of Intel's adoption of ethnography might fit into the genre of a success story. Social science has been present in the company since the early 1990's, and has been growing and thriving over the long term. Its hard-won position can be seen as the result of the work of visionary individuals who successfully made the case for its role. The longevity, however, also obscures the constant transformations, heterogeneity and uncertainties that continue to shape what ethnography is about, even within this single institution. In this way, the Consumerization project is not a story that sits at the end of a 'mature' trajectory, linearly implemented as a series of steps toward a successful outcome. In many ways our experience is one of having been shaped *by* the business and the constant transformations it endures, rather than doing the shaping. Whilst the EPIC conference concerns itself for making a case for ethnography within corporate settings, it is worth noting that other practices and disciplines that straddle academic-private sector worlds are similarly subject to wider social and institutional winds not of their making. In this sense ethnography is part of the rule, not the exceptional case.

### **BACKGROUND: THE NEW PAPR AND THE PROBLEM OF, WHAT NOW?**

Intel's ethnographic research efforts developed out of the corporation's longstanding commitment to invest in long-term research, a commitment entailed in cofounder Andrew Grove's well-known slogan, "only the paranoid survive". These efforts first arose not in product development or market intelligence functions of the enterprise, as is the common association today, but in a strategic engineering research organization, Intel Architecture Labs (1991-2001). IAL's mission was a pragmatic one: to increase demand for personal computers by extending their technical capabilities or "new uses for new users" (Gawer 2000). The Labs' dominant practices were the development of specific technologies in internal labs and the promotion of technology standards through industry consortia. Within this context, a small group of psychologists, engineers, and (later) anthropologists began experimenting with fieldwork-based methods to critique and inspire these technology innovation efforts, originally terming this "engineering ethnography" (Mateas et al. 1996). As the Internet Bubble of the late 1990s expanded, the group developed bottom-up support within Intel's new business start-ups pursuing pen-based computing, internet appliances, etc.. The perception in this new business mode was that research was providing "actionable" findings about "real people" and "real places" (Nafus and Anderson 2006) that could be marshaled to legitimate (or de-legitimate) particular product development proposals.

By the time of the bubble's collapse in 2000, the group had adopted the name People and Practices Research (PaPR), and had survived internal turf battles over whether both social science and marketing science approaches to consumer research both had legitimacy within Intel. It had begun to institutionalize its role as generator and advisor to new business efforts, primarily by positioning itself as early exploratory research to inform product development, as opposed to research that might help position a product already made, or

evaluate willingness to pay for a product. The subsequent collapse of IAL in 2001 forced the group to reexamine its mission and paths of influence. The Corporate Technology Group (2001-2009) succeeded IAL as a central research and development organization. This was to feed technology “pipelines” into the corporation’s established product groups (servers, desktop PCs, laptops, etc.), and not be distracted by new business pursuits, now seen as excesses of the dot.com era. In turn, this pipeline-feeder created its own externally-focused subgroup, Intel Research, which conducted academic collaborations and external “technology leadership”. In this way, the pipeline had external feelers, of which social science was a part.

Under the Intel Research umbrella, PaPR was able to rebuild and rebrand itself, spinning out pre-competitive research projects with academic collaborations on topics ranging from supporting the aging in place of seniors through in-home sensor-networks, to community-based technology adoption in impoverished areas, to ethnographic analysis of newly affluent technology consumers in Asia. These in turn found resonance within the corporation as the next wave of new business efforts took shape beyond core business—that is, as new ‘blue skies’ became visible yet again. New lines of business formed—Digital Home, Digital Health, and Emerging Markets Platforms Group—and each demanded its own in-house “pre-roadmap” or “x years from product launch” ethnographic research capability with which to energize the product development lifecycle. About half of PaPR’s researchers left to pursue these new opportunities within the corporation, and PaPR began another phase of rebuilding and redefinition.

As of 2009, PaPR is still reinventing itself as one of several ethnographic research groups at Intel, but this time the only one without a defined product development function. Decoupled from any particular product, PaPR continues to enjoy rare breathing room for intellectual exploration, but this freedom is tempered by demands for increased accountability and efficiency in the wake of global economic collapse. As the EPIC conference itself illustrates, ethnographic praxis in industry is becoming institutionalized, and thus facing the challenges of increased visibility, scrutiny, and expectation, and the risks of being appropriated, co-opted, and marginalized. At time of writing yet a new wave of reorganization is underway, and with it will come a new shift in how ‘close’ or ‘distant’ research might be to product development. In some ways these challenges feel familiar: yet another oscillation between innovation and consolidation. But in other ways the challenges, and opportunities, of this particular moment are unique, as other similarly-minded researchers are better positioned to do product development work. This forced PaPR to ask, what else might corporate ethnography be?

## **THE FRAGMENTATION OF THE TECHNOLOGY INDUSTRY**

While these conditions are institution-specific, the broader transformations in the industry and business landscape that brought them on were not. Computing has shifted from being a single object sitting on the desktop to a range of devices that are much more

pervasive (Greenberg 2006; Sellen et al. 2009) integrating themselves in people's lives while also breeding their own strains of new behaviors and perspectives. Concurrently, computers have moved beyond the confines of the garages and offices of upper middle class technology enthusiasts to homes, classrooms, and healthcare. Indeed, these are the areas around which Intel's business has been organized. The industry traditionally has used tropes of "necessity" and sufficiently moral uses of computers to argue for computers' ever expanded involvement these aspects of life. While doing so, computing's privileged place in scientific innovation is often marshaled to suggest that they are the key source of modernization, efficiency and enlightenment. These tropes have been enthusiastically appropriated by development agencies through discourses of "access" to information and communication technologies (ICTs) for emerging economies as a matter of international development and rights. Intel's own chairman of the board, Craig Barrett, very publicly works with these tropes to bring the supposed wonders of technology to poverty alleviation issues.

Such moralizing discourses now have competition. For example, the mobile phone (which increasingly does what computers have historically done), are increasingly seen as something for everyone regardless of class, with little connotation that states and development organizations might work to ensure the poor have access. Indeed, 60% of the world already does (ITU 2009). Meanwhile, "high end" computing, particularly with the revitalization of Apple, revived the idea that computers could serve as prestige consumer goods, but this time not as innovations straight from the lab, but fashionable markers of cultural capital well beyond the geek clique. Put together, the expanded range and diversity of devices, alongside new geographies in which they were situated, instantiated a broader multivalence surrounding what, exactly, computing was for. These increasingly consumption-focused ethics and meanings are beginning to have consequences for a product that for so long has been positioned as above the fray of ordinary consumption. For example, states and development agencies can now only turn to some forms of computing to solve its digital divide problem, but nothing too slickly consumerist if it is to retain its credibility politically. Yet the argument could be made that the status afforded by new, fashionable devices sets its own form of digital inclusion, where consumption, entertainment, and media serve as coins of the realm. This form of (conditional) inclusion mass markets have historically provided to those lacking in other forms of cultural and social advantage. Simmel writes in his philosophy of fashion: "What is at work here is not only the mixture of individual distinctiveness and social equality, but... the mingling of the sensation of domination and subordination." (Simmel 2003: 239)

We came to suspect that these changes in notions about who technology was 'for' and what was proper consumption of it, were being generated by some deeper institutional, cultural and political factors, and that this was more than just a 'natural' outcome of a maturing marketplace. We suspected that there was a social imagination surrounding who the consumer might be, and why technology users were increasingly also 'consumers', which did more than just narrow down a target market for a particular device. Something more

fundamental seemed to be underway. To the extent this imagination was shared across institutions, it may in fact be evolving into a powerful rhetorical resource to make new institutional and social forms possible (and of course, others less possible). The descriptive problem of just who consumers were was more than a question of product development, which by now had become institutionalized as what ethnography is 'for', but actually a force shaping the wider social system in which Intel resides. In these transformations, the consumer was becoming both a source of debate, and a source of nominal consensus that allowed people to talk past one another while seemingly enjoying unspoken understanding.

We have two examples to demonstrate what we mean. In the context of the current US economic downturn, contestation surrounds the figure of the consumer, with people making claims that they never were "consumers." Both elite politicians and ordinary citizens evoke discourses that place the blame for the downfall of the US economy to a greedy figure of the consumer, living on credit card debt and extravagantly spending money they do not have. Yet at the same time there was a widespread consensus that technology is now seen as something stimulating for the economy, the consumption of which was an absolute necessity for the future growth of the country. The US economic stimulus package allocated US \$7.2 billion to be used for "broadband and wireless grants in under-served areas to strengthen the economy and provide business and job opportunities in every section of America, with benefits to e-commerce, education, and health care. For every dollar invested in broadband, the economy sees a ten-fold return on that investment." (see: <http://www.fiercebroadbandwireless.com/story/wireless-broadband-included-economic-stimulus-proposal/2009-01-19>). In this context, it is as if there are 'consumers', but not, apparently, 'technology consumers'. This discussion of whether technology is a 'consumer' product and object of greed or in fact part of the public interest to generate economic growth—and whether those are two distinct things—in turn spurs renewed debates about how to deliver broadband, who should deliver it (public or private sectors) and to whom.

A second example is the recent push by governments, businesses and development organizations for technologies to target the "bottom of the pyramid" or the world's poorest people. The "bottom of the pyramid" discourse, which controversially renders the poor no longer as targets of aid, but treats them as consumers, makes new and previously unlikely alliances possible among aid agencies, the private sector, and governments. A concept coined by CK Prahalad in 2004, it is a model which posits that by treating the poor as consumers, this can enable the eradication of poverty and simultaneously lead to profits for the private sector (Pralhad 2004). Information and communication technologies hold a favored place in these discussions as a tool to achieve these dual goals. The poor as newly rendered consumers lays new conceptual groundwork to make certain things possible such as new markets for corporations, new forms of delivery of public services for the poor (previously dominated by the government), and new consumer identities to which the poor can aspire.

Ideas about the importance of technology consumption for nationhood and economic development is challenging boundaries and roles associated with the public and private

sectors. Many governments around the globe are partnering with technology companies to offer incentives that make it easier for citizens and businesses to purchase or lease PCs for home use through government-assisted PC purchase programs. That is, governments are going well beyond regulatory roles and builders of public infrastructures such as public utilities, and are actively subsidizing the individual purchase of the machines to make use of that infrastructure. In some cases, as with the Magellan project in Portugal, the government is aggressively involved in developing a PC manufacturing industry. The government of Portugal is partnering with a local company to develop an ultra-cheap laptop for school children. It aims to distribute 500,000 laptops to school children in Portugal as well as to export them to initiate new trade alliances with countries in Latin America and Africa. As a result, the state is directly orchestrating a local manufacturing capacity, exporting both the machines themselves and knowledge of how to deploy those machines in schools to countries like Venezuela. Efforts like these shift the meaning of consumption and production, private and public, in ways we need to more thoroughly understand.

Within these various examples the figure of the technology consumer—the imagined agent through which ‘stimulus’ occurs, or agents of market-centric ‘development’—acts as a hub around which diverse set of actors, business strategies, government policies and development strategies intersect in interesting and novel ways. Examples like these reminded us that that the context for a company’s products went well beyond their end users, and that we could bring our ethnographic skills to help our “client” (here, Intel) see its wider system of stakeholders and relationships in a new way.

### **THE ETHNOGRAPHIC RESPONSE**

Given this changing landscape and the increasing importance of strange public-private bedfellows, it made sense to begin not with the more common question of “who is a consumer and what do they want?”, but instead ask, “What are the institutional, political and cultural processes that create consumers?” Rather than taking this figure as a matter of what lies ‘out there’ on the marketplace, we launched a research project to explore the strategic work the figure of the consumer does within the industry. Here we are acknowledging the tension pointed out by Mazzarella’s work on advertising in India (Mazzarella 2003), where marketers believe the purpose of market research is to find pre-existing ‘needs’ out there in the world, only to find through their research efforts whatever meme they themselves have created. While the claim is not that advertisers and marketers can invent whatever they please and markets will passively tolerate it, this ambivalence about where agency actually lies in the push and pull between businesses and the markets they serve, became part of the research itself. In phrasing the question this way, we were better positioned to explore the dynamic and shifting nature of consumption, and to understand just how many different groups are trying to influence outcomes by constituting what consumption means.

As we began this undertaking, it seemed that everyone we conversed with had their own ideas about who “the consumer” was, and who the consumer wasn’t. Businesses, designers,

states, multilateral development organizations, public policy bodies, and indeed, “consumers” themselves all held varying notions around the term “consumer.” But rather than having these different and sometimes competing notions of the consumer become the context and background for our research, we made these varied and often times nuanced notions of the consumer the actual subject of our research. The business had fragmented, the system of actors that shaped markets had grown significantly more complex, and so by tracing notions of the consumer, we thought we might be able to help Intel make sense of the now deeply fragmented system it was now in.

The ethnography (underway at time of writing) follows the figure of the consumer as it shows up in the creation of technological infrastructures such as broadband build out in rural areas, the systems of relationships between technology firms, national and local governments, and the multilateral institutions that build them, and finally amongst the talked about ‘consumers’ themselves. By tracing this figure across varied milieu, we can understand where points of nominal consensus lie, who is talking past whom, and identify places within this system where an intervention might be made, and what kind of intervention might create better conversations across different actors.

Because the issues involved do not take place within a single geography or institution, but rather sit across them, we turned to multisited methods. Multisited ethnography gives us a way to trace the image of the consumer through all of the above loci: business and institutional practices and plans, and discourses and practices around new and old infrastructure creation and revival, and in actual technology consumption, which allows us to understand what discourses are and are not getting through to people and shaping consumption.

To quote Marcus:

"Although multi-sited ethnography is an exercise in mapping terrain, its goal is not holistic representation, an ethnographic portrayal of the world system as a totality. Rather, it claims that any ethnography of a cultural formation in the world system is also an ethnography of the system, and therefore cannot be understood only in terms of the conventional single-site *mise-en-scene* of ethnography.. For ethnography, then, there is no global in the global/local contrast so frequently evoked. The global is an emerging dimension of arguing about the connection among sites in multi-sited ethnography." (1998:83)

Marcus is suggesting a de-territorialized concept of a field site. Previous PaPR studies, while involving multiple sites, have nevertheless foregrounded Marcus’s *mise-en-scene*: in China, people value this, in Brazil that. This is not through ignorance of Marcus’s argument but through institutional necessity. A key role for PaPR has historically been to answer questions about, is this nascent technology likely to find traction in this new and exotic market? This sort of question necessitates a *mise-en-scene* answer. In this project, however, it

is the interstices, the cultural web that sits between physical, institutional, and social locations, which is foregrounded. We are attempting to draw a figure of the consumer as a kind of global assemblage (Ong and Collier 2005) that sits across different actors in different locales, some of whom talk only obliquely to one another—or not at all.

Nevertheless, the literal fieldwork necessarily does have sites. We have selected examples to study that reflect multiple categories of products or infrastructure issues, in order to surface what is indeed a matter of a larger social system, and what is place-specific. We are also working to establish geographic diversity within the project. This does not mean conducting fieldwork in every country, of course, but balancing wealthy countries with poorer ones, large emerging markets with smaller places that receive less attention.

For example, one leg of the project examined class as a process through which consumers are formed in Mexico. Guadalajara and Mexico City are two places where the middle class has been claimed to be on the ascent, and where new consumers might be found, enabled by NAFTA free trade policies which have opened the markets to now easily attainable and desired goods. While in the past we may have focused on what people thought being middle class was, or what the needs of middle class people were that technology might provide, here we looked for traces of how class was being used to shape consumption through shopping malls, technology vendors, supermarkets, large retail trade shows, banking districts, and museums. These are all places where class was as a means by which to create and legitimate consumption, and where middle class people themselves were in fact conflating middle class with consuming class.

Another example is in recent fieldwork we completed in Kenya, where the focus turned more to infrastructure building. The event that has captured the imagination of many Kenyans was the laying of a submarine cable that would deliver high-speed Internet connections from its landing in Mombasa and linkage to Nairobi. Each group of actors had its own version of why this was important, and these versions did not come about through the dominant vehicle of class as in Mexico. The government trumpeted the cable as the rebirth of the nation, and an opportunity for rural Kenyans to “have everything” now that they would have the Internet. Their discourse centers around how best to use the cable to further public education and similar provisioning for the supposed good of people. But technology entrepreneurs, particularly smaller internet service providers (ISPs), are charging ahead laying claim to the new network both by laying out more lines to “hook up the country” and in imagining a wealth of profit from future growing business. Meanwhile, potential users of this technology are talking about how they can finally watch YouTube videos, which, while not exactly a “proper” aspiration for consumption-driven economic growth, nonetheless could be made into one, depending on whether it is framed as consumption or the production of a local media industry. Indeed, there is talk of offering tiered services in terms of favoring Kenyan produced content over what is seen as “non-local” or Western. In these ways, discussions about the coming undersea cable is all about consumption, and who gets to define what consumption is about and why it is important to the nation, the economy, and individuals.



At time of writing the project is all of three months old; the intention is that by surfacing multiple ethnographies of the kinds of (non)discussions that happen around “proper” technology consumption, we can identify patterns and understand what is behind them, in order so that we can better understand how Intel fits into this heady, complicated mix.

## **NEW CONVERSATIONS**

Through this work we aimed put the business in a position to be much more careful about the kind of consumer society it already shapes, intentionally or not. Grappling with this intentionality sensitively and responsibly is a difficult, ongoing issue that many anthropologists working outside the academy will recognize. While there is much to be said about this—too much for this paper—here we wish to comment on the groundwork this lays for making it possible to move outside product development roles.

One change, which was felt by researchers immediately as the project was being launched, was that it became possible to engage with the marketing side of the business without having to talk about uses of specific technologies or translate into a single dominant process of product development. Our new stakeholders, who range from government affairs, to corporate responsibility roles, to education and health groups, to marketing and branding, are not necessarily interested in the ways in which ethnography as a specific practice could inform their design and business decisions. They do, however, have reasons to figure out how their own actions and decisions had (or would have) an effect on these socially-constituted worlds. They do not, of course, put it quite this way, but suddenly, the groups who work with governments and multilateral development organizations became very curious indeed about how Intel’s messages get interpreted, and where market opportunities were mixing with economic development efforts. Particularly in a context with stimulus packages being implemented throughout the world, marketers see systems of governance as directly relevant to them, not just setting business-friendly or unfriendly environments. Through this work we are better able to help them understand what it is policymakers may or may not be able hear from the private sector, and in turn are able to signal to their constituents about technology consumption. Eventually, we wish to work toward a situation where we are able to broker new kinds of relationships across different components of the firm—specifically those that deal with technology as a matter of development/corporate responsibility, and those that deal with it as a matter of core consumer business.

The notion of consumers as a construct negotiated through business processes was at times instantly recognized by stakeholders, even though in product development circles what consumers ‘want’ continued to be treated as a fixed, pre-existing fact. Occasionally, the very presence of consumption as a lens has proved problematic. The very prospect that consumption might be at stake sometimes conjured an illegitimate image of inappropriate

business participation. Are students consumers of education technologies? Are poor people consumers of World Bank ICT for development programs? UNGAID, the United Nations organization responsible for technology for development projects, consistently talks about technology 'adoption' as if it were not consumption in its reports and conferences, despite the widespread enthusiasm for Prahalad's bottom of the pyramid rhetoric (met, of course, by equally widespread distaste). Regardless of one's views of Prahalad's claims, there is something about consumption that is uncomfortably and intriguingly revealing about development.

Speaking on such a loaded topic to development communities is further complicated by the fact that our voices necessarily are tied to industry: it may be easier, or it may be more problematic, for Intel researchers to point out this ongoing misrecognition of consumption in development, as opposed to those working in development agencies or academia. The problem, however, is quite close to home. Intel's business increasingly grapples with these questions by moving into areas such as health and education where the 'social' case for technology consumption needs to be made. In some cases it sees itself as the catalyst of development. This is not merely case of industry trying to persuade policymakers of this or that course of action, but industry trying to find for itself an inhabitable position in this problematic landscape alongside traditional development agencies.

### **CONCLUSION**

We have shifted our research to a new set of values, concerns, interests, artifacts, and actors that PaPR has not grappled with before. This shift does appear to loosen the constraints that came along with the institutionalization of ethnography within our corporation. When we began responding to the fragmentation of the technology industry in this way, and started asking what in the world holds it together, we observed a qualitative difference in the kinds of concerns, discussions, and rhetoric, as well as in our own forms of participation. One might view this shift as the design of institutions rather than objects. In this arena, the product line is distinctly discursive – marketing campaigns, new standards, new policies that, particularly as is the case in multilateral development agencies, often do more discursive work than literal action (Ferguson 1994). Such discourses can and do shape business strategies, practices, and values by shaping the imagination about what is and is not possible.

There is perhaps no news in emphasizing that the value of ethnographic practices lies beyond the unveiling of pre-existing consumer 'needs', and can recursively help the organization shape the impact it has on the market and its partnerships. In this sense our project bears a kinship to ethnographies of workplace organization, where inquiry seeks to establish what holds working relationships together. Here we have asked a similar question but taken unit of analysis beyond the vertically integrated firm. It also is an approach that echoes similar changes in critical management studies (Miller and O'Leary 2007), where accounting is no longer treated as that which goes on inside firms, but something that

shapes and is shaped by the wider social relations in which those practices sit. What we take from these kinships is that, while we are doing something very new for a particular context and application, there are plenty of intellectual resources to draw upon, and that others have found it practical as well as analytically compelling to approach both business and scholarly problems in this recursive way.

## NOTES

*Acknowledgments* – The authors would like to thank Maria Bezaitis, Simon Roberts, Tye Rattenbury and ken anderson for their challenging and insightful contributions to this work, as well as the thoughtful comments from anonymous reviewers. All views expressed in this piece are the views of the authors and not necessarily Intel Corporation.

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