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Transnational Civil Society, Institution-Building, and IT: Reflections from the Middle East

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Abstract:

The important connectives of information technology will come with institutions that successfully merge IT, transnationalism, and 'civil' society such that each conveys its properties to the other. How to conceptualize and understand these properties is a compelling need for social theory. Comparative study of the Internet in the Middle East, including its supporting and related technologies, points to the crucial role of alliance-building and coalitions that create new institutions. Some of the less-evident ones are the more transnational and 'civil,' providing points of comparison – even suggesting potential future directions – to others not so apparently transnational or civil. Some elements so far not brought into analysis include engineering cultures and the more general practices of thought they privilege, alumni networks that link these cultures with more material resources but also importantly with social capital, and how those pull or are pulled together in projects that are expanding the envelope for IT generally and for its most prominent proxy and gathering point in the region, the Internet.

Keywords:

social networks, democracy, information and communication technology, Middle East

Introduction

Over the years that I have followed the development of the Internet and related information technologies in the Middle East, I've often found myself in the position, familiar to anthropologists, of negotiating between two communities of discourse. Traditionally, this meant communities that met in the person of an ethnographer, whose anthropological task became the translation of cultures, often (but not always) operationalized as "interpretations of interpretations" in Clifford Geertz's famous phrase or as Raymond Aron put it nearer the sociology of these things, making "social or historical content more intelligible than it was in the experience of those who lived it."[1] But in the post-modern world of eroded boundaries, such contact is not a Berkeleyan artifact of analysis. It is a social fact - some would say the defining social fact of the times - and this is particularly the case with infor-

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mation technology. There is a problem and an opportunity here. Let me get to the opportunity via the problem.

Two rather separate communities of analysis and discourse have strong interests in the social, political, economic, cultural life - or as they usually put it, the "impacts" - of information technology. In the world of policy studies, information technology is typically approached from the consumer or user end, which is where social researchers and journalists characteristically first encounter it. From that standpoint, they render IT through a media lens as communications. The composite, "Communications & Information Technology" (ICT is the currently favored acronym), focuses functionally on expanded access to information and a consequent enablement (or not) of human agency and particularly the agency presumed since Kant to inhere in self-informing actors. ICT is identified with tools and uses - in the Middle East particularly with satellite television as the mass version and the Internet as the class version - which imports paradigms developed in mass media studies, a simplified social physics of "impact," and methodologies to aggregate preferences and choices. In applied research, this is known as knowledge-attitudes-practices (KAP) study. This intellectual terrain is populated by intersections of political analysis with market research, opinion-polling and audience-parsing, a commitment to populism and liberal ideal-types actors incorporating information into decision-making.

From the engineering world where these technologies originate also come interests in their social, political, economic, and (more vaguely) cultural impacts, but from producer perspectives that are much more informed about technical side of things. Here, IT is approached not as media but as informational machines that extend or create capabilities, as "embedded intelligence." In this perspective, the Internet is associated not with satellite television but with computing and its extension through networking into an information-storage-and-retrieval tool. A dense familiarity (or "thick description") of technological capabilities, often theoretical capabilities, is combined with a flat view of social action as implementation that is almost a mirror image of a dense view of actors but flattened view of technology on the other side of the screen.

These two communities tend to converge from opposite sides of the screen. For one, IT is the content that appears on or can be summoned to the

screen. For the other, IT is what gets content, which may be anything, to the screen. Initial Internet theory attempted to translate these perspectives into the terms of the other. Software engineers, in particular, project conceptions of a digital future of enhanced agency facilitated by multi-media convergence;[2] on the other side, the political scientist Ithiel da Sola Pool initiated speculation about political and economic implications in the combination of computing and networking that continues to frame discussion.[3] These two bodies of literature also tend to feed off each other as proximal sources for the expertise behind each; but those perspectives remain distinct, one viewing IT as media and generalizing from user experiences, the other as automation and generalizing producer perspectives, exaggerated in software engineering, that anything thinkable is possible to automate.

This complementarity forms a closed loop of intertextual reference in a shared body of ideas about IT that center on enhanced agency that is still sociologically weak. This IT abounds in images of enablement, from porn-surfing teens to on-line students in rural African schools, that ignore or at least background institutional settings and institutional infrastructures in and through which IT is accessed, used, developed, transforms and is transformed. In such imagery, the Internet comes forward as a proxy for ICT generally in which a sense of its institutional dimensions, settings, and backgrounds is particularly weak. This obliterates some while emphasizing other first-mover effects, how IT is institutionalized, what institutions coalesce around it, and how IT-engineering proceeds as a social process of building values into machines. Refocusing on such institutions has the added value of reading the social life of IT from more than American representations.

The Internet in the Middle East

For ten years, I have looked at how the Internet and related technologies spread in the Middle East and its extensions.[4] This is the periphery the IT revolution, which Manuel Castells has characterized as the "new social morphology of our societies,"[5] where this relationship seems a lot more contingent. Comparatively, the region (excluding Israel, but including Turkey and Iran), has perhaps the lowest and slowest rate of Internet growth in end users. Various reasons are advanced for this, most turning on ac-

cess restrictions, poor infrastructures, regulatory and particularly security limitations, linguistic and cultural impediments. Interestingly, all of these impediments are institutional, while individuals profess and exhibit strong interest in agency-enhancing potentials of the Internet and IT generally, and across the board. A new generation of leaders is emerging with strong commitments to IT and centered on the Internet as a development sector and development tool. Modernizing elites see a unique opportunity to reverse the region's eclipse in the industrial period that rendered it a primary producer. These and other visions are taking shape in new institutions from ministries that re-denominate telecommunications in IT terms to faculties that combine subjects formerly dispersed in engineering, business, and arts courses, to the more 'virtual' institutions of Internet portals that represent profiles of what it is to be Muslim in the contemporary world.

These and other developments, processes, or patterns of behavior have a sociological reality that is more than 'virtual'. They neither mimic in another realm nor exist apart from palpable experience. Instead, what they have in common is that they are emerging, to some extent intentional rather than taken-for-granted, and, starting as alternatives to existing institutions, have as part of their self-representation an anti-institutional ethos. This ethos typically operationalizes as an emphatic preference for openness that is at least partly a reflexive response to unresponsiveness of existing institutions. Sociologically, institution-building around and through IT involves more than getting Arabia on-line. It involves (1) the emergence of local developers who participate in a transnational market for products and jobs, (2) applications that introduce local needs, demands, and externalities into technological development, (3) making alliances and forging coalitions in support of IT. How does this work?

The Social Life of the Internet

The Internet is not a single technology but an assemblage of technologies from computing, signal processing, software design, networking, and a site where others developed from email and file archives to remote search and aggregation. These overlap with technologies of communications also used in mobile telephony and with technologies of media, also used in satellite television. Indeed, one of the goals of digital communications engineer-

ing has been interoperability, or multiple "platforms" for accessing the same data, which in computing terms means reprocessing and, in media terms, the "convergence" of multiple data streams. Second, the defining but by no means exclusive feature of the Internet is to unite users more closely with developers in more participatory social spaces than, say, satellite television. It is not only interactivity that is built into the Internet but also barriers to entry that are not much higher for producing than for consuming it. Indeed, the technological trend in Internet development overall has been to blur the very distinction that marks both consumer electronics and mass media produced for it. The first process absorbs social morphology, the second projects it as practices.

These features of the Internet foster uniquely social capital. Contrary to popular representations that it was invented to provide secure communications in the event of thermonuclear war, the Internet was in fact created by engineers for their own work.[6] For that work, engineers built their own work habits and values into an open, universal, skills-based platform that would be interactive, would distributed responsibility for design, administration, and content, and would accommodate multiple uses, multiple users, and multi-media. The Internet has grown sociologically by adding new uses and new users. To the initial remote access to disparate machines, engineers who wrote the software for inter-networking added email (for communicating with the operators of other machines), electronic mailing lists and bulletin boards, archives of information, and means for retrieving it. Every technological innovation down to the World Wide Web that brought the Internet to the widest public and which is the Internet to all new users was initially developed by engineers and applied scientists for their own work. The engineers and applied scientists who conceived and built the Internet were quickly followed first by other scientists, then by other researchers and scholars, and finally by the professionals they trained, each adding their interests, practices, and knowledge to the Internet. So the more basic 'secular' or long-term trend of the Internet is to resemble than to reassemble users, particularly through the development of higher-order applications that resemble existing knowledge practices.[7]

A characteristic social feature of this pattern is that early users tend also to be developers, and the pattern is exaggerated on the peripheries. Among

those users in the Middle East is a predominance of applications developers, both of first-order applications that their own community uses and higher-order applications for a wider body of Arab (and other) users. The resulting Internet in the Middle East has a low public but high developer profile that is comparable to the Internet in the US prior to the invention of the World Wide Web (in 1990). This is not to suggest that the Middle East is somehow a decade behind the US on the Internet, but that the overall process proceeds from emergence from a developer world with developers' values and practices built into the technology, which then develops by incorporating values and practices of subsequent new users into the technology as, analytically speaking, higher-order applications.

At this point, the developers expand beyond software engineers to include financiers, regulators, and others who would define the Internet, and a pattern of reciprocal alliance-building emerges around coalitions of interests, resources, and actors. These tend to coalesce around particularly transnational dimensions of the Middle East as the Internet there has essentially been appropriated by local business as a route to globalization and by Islamic activists modernizing da'wa or updating the socialization of Muslims and seekers in a fashion that is responsive to the demands of modern life.

Parallels

Islam has come on-line in three phases or stages. In the first, Muslims largely in the diaspora, brought Islam on-line in the form of core texts of the Holy Qur'an and Hadith of the Prophet. These were mostly students sent for advanced training to the centers where Internet technologies were developed and where they, like others, brought avocational interests on-line, in their case interests in seeing their religion represented in cyberspace. Their practice was to objectify core texts, which every Muslim learns are the bases of the Shari'a or "straight path" of Islam, by applying the analytical apparatus of science and engineering instead of the interpretive apparatus of textual hermeneutics, to which their early tracking into science and engineering educations had not given them access.

These technological adepts of the 1980s, prior to the invention of the World Wide Web in 1990, were followed by a second phase that emerge by the mid-1990s. It featured first oppositional and then official voices that came

on-line to speak for and from, and occasionally against, the interpretive traditions and techniques of specifically Islamic learning. Arguing Islamic expertise, both oppositional and official voices responded to perceived amateurism in religion of the technological adepts. Their tool was the newer, more user-friendly World Wide Web that quickly morphed into a publication medium, which they used to press critiques and more professional apologetics from inside and about Islamic institutions. By comparison to the more creolized discourse of the technological adepts, this discourse has clear Islamic-insider qualities and specifically Islamic-institutional referents, ranging from Islamic oppositions to Islamic establishments. Moreover, it was transnational in specifically Islamic ways: already transnational Muslim institutions from Sufi orders to exile groups to intergovernmental bodies developed Websites with texts, mission statements, position-papers, essentially republished in a new medium.

This characteristic daw'a or outreach to other Muslims takes a turn to modernizing, more moderated voices toward the late 1990s. A number of websites emerged that modulate traditional Islam in more contemporary idioms and around problems of how to lead a Muslim life in the modern world. These include problems of diaspora life from how to find a mosque or halal butcher to matrimonials and cheap airfares, problems of modernizing life disrupting Islamic rhythms, and problems common to both such as securing proper religious education for children and religious advice about rites and relationships. They tend to feature younger shaykhs who combined wholly orthodox theology with a more common touch in line with the professionals who, often using the Internet at work, turn also to the Internet for Islamic alternatives suited to their concerns, styles, and outlook than offered by traditional shaykhs.[8] There are others with similar profiles, including Shi'a and Sufi sites, as well as some with more conservative Salafi profiles, all variously subsidized by interests in representing Islam not just generally on-line but also specifically to Muslims who are on-line and to potential seekers who might become Muslim.

Much as the World Wide Web was the technology that brought activists into the cyber-space opened by technological adepts, this last phase has been facilitated technologically by the development of more sophisticated text-preparation and database storage and retrieval that has made the Web

more interactive. Users can request both fatwa (religious advice in response to a question about religious requirements, preferences, sanctions) from shaykhs and as well as search databases of responses to previous questioners, find on-line religious instruction prepared for children or, for adults and seekers, apologetics for defending the faith as well as more general advice about psychological or social problems of Muslims, particularly in the diaspora where Muslims are minorities, or where Islam does not denominate modern life. The whole is very text-based and technologically puts religion in the hands of users to complete the process of seeking religion more do than traditional face-to-face methods, which it only partly simulates. Such sites also often provide selections of news about and from Muslim countries that users may further tailor by selecting regional and topical profiles - and in both Arabic and English. Some even run polls. In other words, these sites use the highest available Web technology (currently XML programming) that maximizes interaction and user-participation. Moreover, the providers develop that technology (particularly in the fields of text-processing and natural language processing) using the leverage of Islamic patronage.[9]

This is a thoroughly transnational enterprise. Islamonline.net, for instance, was designed and maintained by a firm that also initially produced the Web site (in Arabic only) of Aljazeera Satellite Television, perhaps the most widely watched news-and-opinion channel in the Arab world and the first transnational Arabic broadcaster to locate in the Arab world. The content for Islamonline.net is edited in Cairo, where the shaykhs are located, several preaching and teaching at Al-Azhar University, while technical design and production unit is done by an international crew in Qatar assembled from Jordan, Egypt, Iraq, Lebanon with financing from Gulf countries. Other firms in the Gulf produce websites with more conservative (Salafi) content and financing from Saudi Arabia. From Amman, Jordan a region-focused rather than religion-focused site, also bilingual, is similarly configured as a user-definable portal for regional news and lifestyle features. Each reaches Muslims who are already on-line with Islam that is already transnational in scope and practice and that becomes more so as it assembles scattered Muslims attracted to its profile into a transnational audience.

What brings Islam on-line does not bring the Middle East on-line; but the regional pattern is similar in some respects to both this pattern of trans-

national institution-building and in some respects to patterns of Internet development in the US. The first phase was dominated by national research centers, largely out-of-sight, housing research-oriented specialists with strong international but weak local ties. They were typically repatriated counterparts of the technological adepts who brought Islam on-line and, like them, more connected to a transnational world of experts and not providing much of a channel to their national societies. With the development of interactive, multi-user and multi-use networked computing that emerged in the 1970s, a cohort of public sector technocrats sought to apply training in these new paradigms of computing and networking to modernization, focusing on the "soft" infrastructure of public administration. Theirs was the paradigm of Management Information Systems (MIS) more focused on data structures and databases and by the techniques of dynamic systems analysis than pure computation. They looked beyond automating procedures to apply those technologies for aggregating dispersed data for decision support, a discipline that emerged in schools of administration in this period as the leading edge of MIS, and pursued these projects in government applied research institutes, think tanks, and other hybrid organizations created for the purpose, apart from bureaucratic pressures and under high-level patronage.

For the most part, these public sector technocrats worked through existing institutions. Theirs were scientific and technical agencies isolated from the regular functional bureaucracies. From such perches of relative independence, they developed networks with counterparts throughout the region through public-sector international (UN, EuroMed, Arab League) organizations. Theirs was a mission of national development under the patronage of the independence generation of national leaders at a time when development was modernization and focused on infrastructure. Like their Islamic second-stage counterparts, they were both critical and official, above all committed not so much to the technology as to institutional tasks. Their focus was the infrastructure of administration, which they sought to reform through new MIS models of computing and networked computing which they acquired through foreign technical-professional training in the late 1970s through the 1980s and that internationally evolved into new disciplines of data-driven analysis and decision support, to which some made original contributions.[10]

This generation of technocrats and their MIS paradigm is being superceeded by private-sector entrepreneurs tied to a technology of more open and dispersed instead of closed and centralized networks, a dispersed-responsibility model of PC-based computing, and to programming businesses that variously sell and integrate software. This shift of technology and work model follows a shift in the international development paradigm from modernization to globalization, from public-sector to private-sector development, driven by international patrons and abetted by standards organizations and the WTO property regime that favors copyright laws and privatization of public sector enterprises. Within this cohort, regional networks of the public-sector MIS technocrats give way to more transnational ones focused more by shared technology than by shared tasks and ties, more in the commercial world than ones forged through intergovernmental organizations. They are often rest on old-school ties kept alive by alumni associations, business relations, and relatives in the US and Europe and a shift in patronage, both internally and external, from the public-sector infrastructure to promotion of private-sector enterprises. They promote the Internet as a development sector that will link their countries - actually, businesses in their countries - not to a regional but to an emerging transnational economy that increasingly rides on the Internet and development of its technologies.

These two sequences of Internet development - appropriation by businesses' leveraging IT skills to participate in the global economy and by Islamic activists projecting a new da'wa modulated to the lives of modern professionals who are Muslims both in the diaspora and scattered throughout home societies - have some common institutional patterns and developments. The initial phase of technological adepts overseas and research centers at home features small, international communities high on technical expertise but low on local linkage; their transnational networks do not provide channels of Internet diffusion into home societies. Those come in a second phase of technocrats and activists with dense horizontal linkages that develop in regional networks, strong institutional commitments, and commitments to applying technology-based models to institutional renewal. The third phase is one of entrepreneurs in business and religion, applying more interactive models of technology and development, engaging supra-national (when not international) patrons, and building new institutions for IT.

Cultural into social capital and the emergence of transnational institutions

These phases and the shifts between them partly reflect shifts in engineering cultures, first from mainframes to more distributed designs that also introduce interactive models, from emphasis on computation to mathematics of organization and representation, and then from closed networks and sharing physical resources to open networks and a paradigm built more around exchanging information (i.e., transactions such as in e-commerce, e-government, e-learning but also in exchanging information in customizing portals, searches, data profiling). The match is not perfect, but shifts in technology and engineering culture associate generationally with cohorts and practices capitalized through them. The relationship, however, is indeterminate. What is problematic conceptually is the stickiness of this cultural capital in comparison to the social capital of patronage that operationalizes as commissions. A possible tool for rendering this is actor network theory, which treats technology not as machines but as relations that include their operators, financiers, and regulators who collaborate, or form coalitions, to design systems with local content.[11] But this, too, is indeterminate, and this micro-sociology stands apart from the more macro picture that seems to support diffusion or encapsulation, itself supported by Zogby polls in ten Muslim countries that find highly favorable regard for American technology, education, and media (alongside precisely the reverse for American government policy toward Muslim countries, regard for Islam, and the Palestine-Israel conflict).[12] Yet, neither evidence suggests that that they are pulled away from their societies.

Part of the answer may well lie in sorting out the ingredients and construction of coalitions that form around new information technologies. In each case, competitions to capture the new technology (as potential sources of rent as well as opportunities in their externalities) are being resolved in the creation of new institutions organized around the technologies' alternative worldviews, on the one hand, and shifts in patronage, on the other. NGOs do not seem to figure large in these processes; only Islamic ones (and, to a lesser extent alumni networks) have both the cultural and social capital that is otherwise split between engineering professionals, on the one hand, and governmental (including inter-governmental, such as UN) actors, on the other hand.

Among the transnational vectors of these processes, four stand out.

1. Entrepreneurs in business and religion are displacing public-sector technocrats and their MIS engineering with a new paradigm of technology, development, and their relationship.

2. They are forging alliances with new rulers and transnational, mobile elites among whom the new paradigm is a description of the present and prescription for the future.

3. They are converting existing transnationalism to globalization through IT.

4. This favors those already transnational or with international networks, such as alumni networks whether of MIT or Al-Azhar.

Islam which is already transnational transitions easily to cyberspace for Muslims already there, while globalizing business piggyback on IT spread by foreign schooling, sponsors, and aid regimes. New patterns of alliance-making and coalition-building emerge around engineering cultures that project alternative social models, which attract sponsors as the world they want to create or at least to participate in. This sponsorship emerges in a new, post-independence, generation of leaders managing transitions to denominating security more in terms of welfare, and in shifts from the more regional ties of the technocrat-activist generation to more transnational ties of entrepreneurs in IT business and religion.

What still needs to be sorted out are conditions and triggers for creating new institutions to contain, develop, and develop with information technologies. Some of the material bases are apparent. In this region, where IT development, and particularly the Internet domain, is being actively appropriated by business and Islamic interests, business appropriation is tied to infrastructure development. In a context of privatizing public assets, this is largely a matter of resource capture in a context of globalization of markets. By comparison, appropriation of IT by Islamic activism is tied to software development and investment, which is a matter of 'mindshare' in transnational public spheres (both of Islam and of software engineering) denominated by professional values.

In this context, new institutions reflect attempts to resolve conflicts over resources and mindshare by fostering coalitions around alternative technological paradigms. Telecommunications and education are particularly significant sites of this competition, overlapping with finance and computer-systems integration. In Egypt a cabinet-office decision support center (IDSC) that established its credibility and model by centralizing and rationalizing Egypt's scattered international public debt went on to promote its model by creating institutions dedicated to IT as a development tool from an NGO (RITSEC) to a company to create a new data-network backbone and a policy of 'free' Internet connection. In Saudi Arabia, conflict over control of Internet service was resolved by placing responsibility in the King Abdulaziz City of Science and Technology (KACST), an independent government agency with functions comparable to the US National Institutes of Health that both conducts and funds others to conduct research. At the same time, regulation made Internet service unprofitable except as leverage for developing other (in practice, existing) IT services such as electronic media publishing, network design and installation, software development. The Syrian Computer Society, organized as a professional association of computer scientists and engineers joined by technocrats from public-sector enterprises and some IT businessmen or would-be businessmen, engaged in a long competition with the state-owned telephone company over Internet service, eventually for the right to redistribute Internet service from the phone company to its members (to show what it could do). In Jordan, public sector technocrats assembled under royal patronage in the Royal Scientific Society were eclipsed by a shift of patronage to private-sector entrepreneurs under a new ruler and a new market-oriented, business-promoting foreign aid regime that aims explicitly to eclipse the old regimes of public enterprises and its culture of "contacts and contracts."

Common to each, and to the limits of their achievements, is a pattern of high-level patronage located just below the ruler and thus outside the representation functions lodged at the highest level. This patronage can speak the combined languages of practicality and moral urgency. A similar pattern emerges in support for such practical but public goods as education: in each country, a high but secondary figure of derived authority promotes incorporation of IT into education, and in a discourse that pivots on combinations of IT as tool in and for reforming education. This is a role given to "first la-

dies" where rulers' wives play public roles (Jordan, Egypt) and to heirs-presumptive where that alter-ego ("softer side"?) role falls to them (e.g., Syria, Saudi Arabia, UAE, and earlier in Jordan). In other words, non-competitive but also non-responsible points for speculation in assembling new constituencies in a changing political economy.

Similar patterns appear in the emergence of Islamic portals that seek to institutionalize uniquely transnational practices. An initial flurry of existing interests and institutions coming on-line has been followed by a sociologically more interesting process of combining doctrinal orthodoxy with expression and interpretation modulated to the rhythms, discourse, and needs of an otherwise dispersed and previously underserved constituency. The link is made by a younger generation of "new Azharites,"[13] who are graduates of (sometimes teaching at) the primary university and public voice of orthodox Sunni Islam but who speak in a more modern idiom. Their link to this new constituency is through shared practice and use of IT in their audience, or at least placement in the social space that does.

Not well-conceptualizable in existing terms is a distinctly class dimension in both business-sector and religious-sector appropriations of the Internet and of IT generally that goes well beyond the "digital divide" issue. The Islamic sector, which is already transnational, and the business sector aiming to become so appeal in their embrace of IT to non-communal interests and bid to gather those into new communities. The bid is stronger in the religious case, which brings a more developed template of transnational ties and a more public one than the business sector. Muslims have always sorted themselves informally into networks and constituencies of the like-minded by study, travel, attendance on particular religious leaders, selections of mosques and other places of gathering; this seeking process is reopened for what locally may be minority interests to assemble in cyberspace, where relations are not only identity-confirming but also transactional. Likewise, IT-business promotion speaks of "doing it at home" but through transnational networks to global markets, often citing Ireland, India, or Malaysia as models of IT business in developing countries. Both rebalance transnational senses of community in ways that would repay examination with the development of more grounded theory of transnational institutions (as opposed to inter-national ones) as spaces not just of (cultural) identity but also of (social) exchange.

Summary / Conclusions

It will come as no surprise that the spread of IT, with the complex of technologies and practices composing the Internet at its core, is not a straightforward diffusion from a few centers incorporating more peripheries. Neither is this spread a function of trimming a disruptive force to local standards. What the periphery adds to the overwhelming focus on agency-enhancement in current thinking about the social life of IT are glimpses of institution-building through the formation of alliances and coalitions, which need to be placed front and center in analysis to link micro-sociology with mega-trends. We seem to understand the trends better than the sociology, but largely because trends engage fewer variables and then loosely. Variables of agency, and particularly its enhancement, foreground the experience of new adopters, which make IT generally and the Internet in particular "strong attractors" of representations: as Manuel Castells put it, "networks constitute the new social morphology of our societies," with a "logic" encoded in a "paradigm" in which "the new information technology provides the material basis."[14] What is less well understood is that new adopters also adopt new relations not just through machines nor with abstractions such as "information" or "technology" but through alliances and coalitions with a range of other actors, and with their systematic responsibilities.[15] These have dimensions that are not best rendered through those representations.

Looking beyond those representations for the sociology that produces them draws attention on the wider surrounding of unrepresented, taken-for-granted practices and relationships that compose technology, information, and the social relations that organize them. The praxis we encounter here includes patterns of alliance-formation and coalition-building that actually compose new institutions whose lineaments - what is new and what is institutional - better appear comparatively. In broad comparisons, the Internet on the periphery shows an initial pattern similar to its history at the center. Its point of entrée is the engineering community. Their values and work habits were the first social practices built into the Internet, which then grew by adding new uses and new users, becoming the composite of their profiles. On the peripheries, members of this surrounding community - scientists, academics, and the professionals they train - join with engineers in variously promoting, demanding, and shaping the technology in the societies of the Middle East. Here, a second feature of the engineering end

of the scientific community comes into play, their continuous engagement with customers and patrons for their skills. A pattern of dual recruitment emerges. Scientific-engineering expertise does not translate directly into local social capital. Engineers, in short, need allies; and what is their actual social capital? Where and how does the conversion of cultural capital (knowledge, models) into social capital occur?

The answers would seem to lie in embedded networks, networks embedded in durable institutions of loyalty and of practice. Two practical-institutional sites here appear in religious and educational domains, and particularly on their peripheries. There, identities of practice loom larger than formal institutions. They are relationship-rich but resource poor, variously dispersed or isolated in pockets, weakly institutionalized in formal organizations, and the sort of weak ties that are strengthened - institutionalized - through resource capture, coalition-building, and gaining authority. It is in these settings of embedded networks that information technologies become a resource with potential multiplier effects that are realized in the creation of new institutions for new technologies.

This helps to unify patterns that emerge in the countries of the Middle East I examine. First, while initial Internet installations in each are superficially the same sort as the Internet's early stages in the US - namely, in research centers and institutes, by scientists for their own work - their own transnational networks are not the starting points for spreading the Internet in their countries. The real starting points are elite training grounds for imparting practices and disciplines of technical expertise to practitioners they train. Among these may be projects apart from bureaucracies, but also elite schools. Their practices and disciplines include connections in the forms of referrals and sponsorship for further training and professional association that operationalize in networks of alumni, but alumni importantly of institutions of relatively weak local integration, which thereby elevates their transnational ties and dispositions. Subsequent development is a continuously negotiated outcome of their alliances and of institutionalizing those through combinations of resource capture and coalition building that are not bound to local precedents.

Second, this process is powerfully influenced by shifts of patronage. There are strong competitors in local and thus multi-functional institutions - no-

tably, phone companies and the military, also religious authorities in some countries - which are socially embedded through tasks and goals having more to do with extended social development. These are "hard" institutions of power and function in contrast to softer constituencies in embedded networks and identities of practice. Third, such networks coalesce as moral constituencies through the emergence of narratives that state dispositions in their explicable form of programmatic doxa, a process of progressive entextualization in higher-order master narratives that attract patronage. Here, we see the creation of new institutions around new technology, in this case information technology, by the intervention of patrons who adopt the narratives, but less in their original lower-level forms than in derivative higher-level ones. Likewise, constituencies in front of the screen have to be assembled by commitments of and to patrons first discursively established but then performatively enacted.

Patronage, narratives, and old school ties are dynamic ingredients of alliance and coalition. Their play helps put in perspective how IT is contained (and its development, if not its developmental potential, is constrained) in existing institutions. These include, in Syria and Saudi Arabia notably, the telephone companies but also faculties established to train personnel for established industrial sectors. Egypt and Jordan have shifted patronage to new Ministries of Communications and Information Technology and new faculties that elevate Internet and newer IT engineering cultures. In the religious sphere, extension of existing ties and networks through IT by both technological adepts and Islamic activists appears similarly limited to alliances that form around information-propagation embedded in more loosely institutionalized transnational networks and in practices of an emerging professional middle class of Muslims, both of which are conveyed through patron-client ties embedded in their cultural practices. The Internet and other information technology is embraced by established religious authorities in Syria (and in Saudi Arabia) in limited ways for purposes that focus, like the more expansive formats of vernacularized Islam, on the "weak ties" of a more dispersed, emergent constituency.[16]

What is built into this Internet and into IT generally are not just the practices of engineers (consultation, efficiency, self-administration), but also those in other applied, composite sciences (including business adminis-

tration) and religion which they engage in wider communities of shared practice. "Mechanical engineering taught me how to think" is how an IT journalist put it to me. It is by now a commonplace that IT facilitates this sharing and potentials for mutual recognition. What is not as clearly conceptualized is how these are embedded through the actions of patronage on the peripheries and in interstices of established institutions. Transnational civil society is a compound of such ties. These include alumni networks that introduce actors to transnational networks; they are found in diasporas and in projects; they accumulate around narratives. Theory has been better at eliciting how narratives accumulate identities than for integrating other loyalties and practices (notably, practices of seeking) into the alliance-building and coalition formation around IT.

What do these patterns suggest we should want to understand or to understand differently? At least five classes of data, I suggest, need to be integrated. These are not mutually exclusive.

1. Alliance-making. This is clearly the critical point of integration of exogenous technologies and their cultural constructions into local systems of practice and action. Not only is alliance-making important in the abstract as a step in the creation of extensive institutions, also important are its own practices, customs, precedents, and prioritizations of resources. Who enters and in what sequences?

2. Internal and external patronage and their interplay. It is not self-evident that external patronage encapsulates or otherwise subordinates local relations to global ones. Internal patronage selects among alternatives that include, but do not monopolize, external patronage, attempts to re-shape the field of alternatives, provide a hearing and a channel, and actively affect design decisions. Boundaries of intentionality are unclear: where does the creation of Islamic websites include intentions to develop software, or do software developers drive those choices and then seek patrons for their projects? When, precisely, do regulators take notice that becomes a design factor, and with whom do they negotiate property rights, restrictions, surveillance and supervision? Whom do primary designers recruit to those negotiations?

3. Prexisting networks and networking practices. How do they come into play or pass into the growing field of relations that are composing transnational civil society, particularly against prejudices of some cultural managers that business and religion don't count as "civil"?

4. Paths of representation. Designers and providers often talk about "educating" consumers, regulators, and others: how do they formulate and pass on representations? On what do they draw for bigger pictures, portable representations, and solemn entextualizations for socializing their interlocutors, and for socializing more parochial narratives? What, if anything, limits the portability of IT narratives?

5. Channel effects. Surrounding discursive representations (doxa, in practice theory terms) are wider, more inchoate bodies of taken-for-granted assumptions, dispositions, and practices whose social channels are embedded networks. Operationalizing mutual recognition, such networks are embedded in durable institutions of loyalties and practices. What is not said in the negotiation of alliances, what/whom "trusted"? What is not any more, or not yet, represented discursively, symbolically, either unintentionally or not?

A larger theoretical question is why new institutions. Common sense would suggest inertia, sociological sense would suggest moral investments, economics would point to interests in 'sunk' costs, politics to entrenched hegemonies, even to personal ambitions that stand in the way of forming new institutions. These are negative reasons. Each points to decisions and theorises their aggregation that leave something missing. That may be in part an adequate account of the aggregation of social capital that includes its conversion of cultural subjectivities into social relations, a process that is not self-evident but is evident in forming alliances and building coalitions. What brings these into a social space of transnational ties and institutions includes religious institutions and ties, businesses based on professions (i.e., knowledge practices), education, alumni networks that connect to counterparts, and that loosest of all variables, class. Comparative study on the periphery turns up connections between alliances and the creation of new institutions for new technology even more than through it. It doesn't suggest very convincing explanations of those connections that are adding up

to a transnational civil society of composite narratives, experiences, and identities of practice that at some point seem to demand new institutions distinguished by weak local but stronger transnational relations gathered up by them and re-narrated in them. What makes this "civil" are relative privileges of alternative moral authorities that respond to evident moral crises in more local institutions.

Much of our understanding, or apparent understanding, of the social life of information technology has been tied to parochial narratives. Turning the inquiry back to the center from the periphery makes problematic not only the unilinearity of the master narrative, a narrative of ultimate success despite setbacks on the way. These narratives prominently arise in the world of software development and convey its animating ethos of anything-is-possible and the elevation of simulacra, which are ultimately closed systems. This is totemism, not sociology, and in it IT becomes a floating signifier. Turning back also suggests what is omitted from the master narrative is an equivalent appreciation of the alliances that float the signifiers. We become cognizant of alliances through rushes of various cultural managers bringing additional design criteria to the Internet and IT in the form of property and propriety rights that in the master narrative are relegated to a past left behind. This can convey a false sense of society catching up. It is easy enough to demonstrate a secular trend in Internet development that increasingly resembles the society it is in, or the social components it accumulates. What is devilishly harder to represent, in terms other than those of the master narrative, is what arises and is transformed.

Notes & References

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[2] For example, at the height of the Internet's public introduction in the US, Nicholas Negroponte's Being Digital (New York: Basic Books, 1995) and Bill Gates' The Road Ahead (New York: Penguin, 1996).

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[7] Surveys by the Pew Internet in American Life Project have shown that women and minorities bring on-line interests (in relationship maintenance and social mobility, respectively) that distinguish them from early adopters (predominately young males) and dilute the profile that the latter give to the Internet. See Tracking Online Life: How Women Use the Internet to Cultivate Relationships with Family and Friends (May 10, 2000) http://www.pewinternet.org/reports/toc.asp?Report=11 and More Online, Doing More (February 18, 2001) http://www.pewinternet.org/reports/toc.asp?Report=30

[8] Malika Zeghal. "Religion and politics in Egypt: The Ulema of Al-Azhar, Radical Islam, and the State (1952-94)," International Journal of Middle East Studies 31(4): 371-99, 1999.

[9] The pioneer of this pattern has been Sakhr Software, a Saudi-owned company formerly based in Kuwait and currently in Cairo that began with the intention of producing Islamic software and found that it first had to produce the underlying software for Arabic text-processing. Sakhr has long since spun off its Islamic software to concentrate on enterprise-level bilingual text-processing and automated translation. The technical designers and maintainers of Islamonline.net likewise leverage its patronage to support development of software components for commercial clients.

[10] Hisham El-Sharif & Omar A. El-Sawy. "Issue-based decision support systems for the Egyptian Cabinet" MIS Quarterly 12(4): 551-69. December 1988.

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[12] Ten Nations Impression of America Poll, individual country reports at http://www.zogby.com/features/features.dbm?ID=146.

[13] Zaghdal, op.cit.

[14] loc. cit

[15] "The Internet and Islam's New Interpreters." In New Media in the Muslim World: The Emerging Public Sphere, edited by Dale F. Eickelman & Jon W. Anderson. (Bloomington: Indiana University Press, 1999), pp. 41-56.

[16] The concept of "weak ties" is Castells', and I'm indebted to Lutfi Arslan for this observation.

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Virtual Dasein: Ethnography in Cyberspace

Daniel Martin Varisco

Abstract:

The cyberculture created by individuals who enter cyberspace is a fieldsite only recently visited by anthropologists. In this essay I argue that one way of approaching the ethnography of cyberspace is to treat it as virtual Dasein, in which the issue becomes being there in something-like-a-world yet still being in the world. Ethnographers now need to consider the impact of the Internet on the people they study, even in the remotest villages. The promise and potential peril of virtual reality calls for critical assessment of the economic and political consequences of cyberspace development. Finally, our own involvement with the Internet demands a reflexivity that goes beyond musing over the mutant prospect of becoming cyborgs to assessing a new combination of humans, technology and information.

Keywords:

social aspects, ethnography, information and communication technology, sociology

Introduction

> "Tens of millions of Americans are online every day and are doing a variety of things. The Internet has become a part of everyday life rather than a separate place to be." (Howard et al. 2001:385)

> "The Internet is a unique creature, sharing some attributes with print publishing, others with telephones and mail, still more with television – and in other respects it is unlike any system that has preceded it." (Moschovitis et al. (1999:vii)

The Internet is here to stay. It is not just that most scholars routinely capitalize the concept, but we are all involved. For most Americans under the age of eighteen the idea of life without Internet access is tantamount to living without electricity. It is virtually taken for granted. Coming-of-age adult cybernauts, having grown up on neuromanced cyberpunk and MUDdled through video nirvana, cruise cyberspace with a virtual cybermania in search of the heterotopian cyborg and in the process create something which is potentially everywhere and in a real sense nowhere: cyberculture. Over half of Americans use the Internet in some way, while only twen-

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ty-four percent have no experience at all with being online (Pew Internet Project April, 2003). Hotmail and Yahoo have millions of e-mailers, who can stay connected just about anywhere they go. Online shopping goes well beyond Amazon.com. Every day thousands of horny men dole out their credit card numbers on insecure sites to view naked housewives, the Zapatistas resist in the full light of online (http://www.ezln.org.mx/index.html) recognition and Microsoft seemingly always has the last Word. Forget the postcolonial era; we are now across the digital divide into a domain of Internetalia where El Dorado and Erewhon share space with E-bay and your neighbor's AOL home page.

Meanwhile cybersociologists, who are becoming digital authors, compete with cyberpsychologists to cyberpsychoanalyze cybersex, poly-sci[ber]scientists look for signs of cyberocracy and cyberphilosophical Luddites cut and paste Adorno, Baudrillard, Deleuze, Derrida, Foucault, Habermas and Heidegger, among others. In aanalyzing the Internet, historian Mark Poster turned to the German philosopher Martin Heidegger for a kind of cyberontology of the virtual space enabled by computer technology. The culture encountered online is indeed a kind of being "there," although the kind of there that does not require a physical going there. Like the telephone, wireless and television, the internet seemingly brings "there" to where we are at, if we have the right technology. But, of course, it is an an imagined there that goes beyond print culture since it is dynamically and simultaneously interactive between real people somewhere. If, as Marshall McLuhan phrased it several decades ago, the medium is the message, then those of us who study culture "got" mail.

Anthropologists, however, have been slow to answer this e-mail. As Wilson and Peterson (2002:450), "anthropology's interest in Internet-based social and communciative practices is relatively new, and a coherent anthropological focus or approach has yet to emerge." Academic interest in the Internet is, of course, new for all disciplines and a "coherent anthropological focus" is often hard to find for any topic, but the point is well taken. Anthropological study of cyberculture has been virtually absent. Why have anthropologists trained to encounter "exotic" others in the field not looked deeply into the mirror of their own computer screens? In part this is a continuation of the prime directive set by the pioneering fieldwork of Bronislaw Malinowski: the ethnographer going to and living in a geographically distinct field. A

decade and a half ago, the same lack of involvement by the heirs of Malinowski was cited for the study of modern mass media in general (Spitulnik 1993).

As an ethnographer whose being there has always been over there, I now observe the Internet as a critical site for fieldwork, not just as a tool I use to communciate with colleagues and students. The critical difference is that cyberspace is hardly a virgin territory where no modern scholar has gone before. The crowd that studies culture, especially the interface between technology and culture, is already there. If my next fieldwork, or indeed a substantial portion of all my future fieldwork, is directed at cyberculture on the Web, the existing tools of ethnographic research will have to be refined and redirected. There is no isolated Trobriand.org for me to explore or set up my tent in. Language is far less of a problem given the predominance of English as the translation of choice from digital bits, but only if one ignores the increasing orality potential in electronic communication. The aura of ethnographic authority, tarnished as it has become in the past quarter century, will certainly suffer in the classroom and over beers at conference reunion parties. But, if anthropologists do not recognize the Internet as a necessary part of current and future research, the discipline is in danger of becoming as marginal as the "primitive" tribes it slowly archives into the Human Relations Area Files (HRAF). The point of this essay is to reflect on ways ethnographers might approach cyberculture ethnographically.

Getting There to Be There

> "More distinctive to the medium are what I would call cybernauts, or that class or group of cyberspace travelers, who, like the Greek originals and Malinowski's subsequently, as much explore what to be in cyberspace as they move through it." (Anderson 1997)

In 1978 I arrived in a highland valley of Yemen, on the southwestern corner of the Arabian Peninsula, for an extended period of anthropological research in a tribal farming community. Having digested three years of graduate training and classical Arabic, I was theoretically prepared to enter the field. This was the participant-observation style of fieldwork inaugurated by Malinowski about ninety years ago. At the time of my graduate study the very idea of "being there" was being challenged. "As graduate students we

are told that 'anthropology equals experience'; you are not an anthropologist until you have the experience of doing it," reflected Paul Rabinow (1977:4) a few years after returning from Morocco. It is hard to imagine how modern anthropology differs from other disciplined approach to the study of culture apart from the emphasis on going to a different culture, learning the language and writing up something called an "ethnography." But in the last quarter of the twentieth century the ideas of Western anthropologists going "back" to former colonized or exploited areas as well as the seemingly objective expertise of the outside observer were put under critical scrutiny, usually at the expense of the methodological contribution anthropology does best (Varisco 2006). The discomfort was not just with what ethnographic documentation did to "alien" others. Increasingly anthropologists started observing others close to home, including at times themselves.

Ethnography remains today both the boon and bane of anthropologists, at least those trained in America. In remapping the boundaries of anthropology as a field science, Akhil Gupta and James Ferguson (1997:1) note that "the single most significant factor determining whether a piece of research will be accepted as (that magical word) 'anthropological' is the extent to which it depends on experience 'in the field.'" To be blunt, library dissertations in cultural anthropology are assumed to be reserved for wimps or those who are unable to cope in the field. Not just any "field," it is important to note. Asking about ritual cannibalism in the New Guinea highlands or watching an ax fight in an Amazon shabono scores higher on the prestige scale than living among the Neapolitan working class. Studying waitresses in New Jersey might as well be sociology. The irony is that going to exotic fields has in some ways become more difficult for anthropology students even as the physical means of getting there has vastly improved. Evans-Pritchard (1969:9-10) took several weeks to travel from Oxford to the Nuer in the rural Sudan of the 1930s. Of course, he could go there because the British were officially in control of the region. But at least he could go there and we are richer for it with the results of his first-hand observations.

The reflexivist turn and postmodern critique of the negative "positivist" aura underlying the legitimation of ethnographic authority have forced anthropologists to question the most fundamental practice that defines the discipline. It is clear, however, that consensus among practitioners has not thrown out the methodological baby with the post-colonial bathwa-

ter. There is nothing intrinsically wrong with observing human behavior in context and communicating with people in their own language, unless one succumbs to the mantra of "knowledge is power" to the point of paralysis. But anthropology has come a long way since the publication of Margaret Mead's Coming of Age in Samoa and Napoleon Chagnon's The Fierce People. Experimentation with dialogical interaction between ethnographer and informants, activism for indigenous people's rights and a continuing professional concern with the ethics of fieldwork have reoriented the field. I think it is safe to admit, at least I hope it is, that anthropology is now more about the way we study and represent others rather than the necessity to do so in an exotic, untouched-by-civilization location.

To this point ethnography has had three main outlets for returning field anthropologists. First and foremost is the written genre: dissertations, formal ethnographies, journal articles, conference papers, even the ambitious HRAF files. "Writing culture" is not the only way of communicating the results of anthropological field research. Ethnographic films have come of age, moving beyond the earlier photographic documentation of ethnic others in the field. Most introductory anthropology courses use a combination of text and film to communicate the discipline. In the process a third form of representing ethnographic fieldwork takes place: professor's lectures invariably draw from personal fieldwork and spin a sense of what it was like to "be there." In less than a decade a new form of ethnographic presentation is emerging online. Websites allow for an inexpensive and potentially widespread multisited dissemination of ethnographic writing, photographs and, more recently, film. Internet technology also holds promise for a kind of interactive ethnography in which the far-off field can be brought close to home. My introductory anthropology students have been reading about the Trobriand Islands kula ring trade and watching Tim Asch's The Ax Fight year after year. I wonder which ethnographies of cyberspace students will be reading or simulating online, whatever that will mean, in the future?

Being There as Virtual Dasein

> "Thus Dasein's understanding of Being pertains with equal primordiality both to an understanding of something like a 'world', and to the understanding of the Being of those entities which become accessible within the world." Martin Heidegger (1962:33), Being and Time

> "The question of technology is not about technology per se but about modern humanity's way of being. Technology is fundamental to modern 'culture,' a term I will use for Heidegger's Dasein." Mark Poster (2001:29), What's the Matter with the Internet?

Having been there and done that – that being ethnography – I am curious what it means to be there in cyperspace, not just as a user but as an anthropologist bent on participant webservation. How should an ethnographer approach virtual reality? Like Mark Poster, I wish to return to the philosophy of Heidegger, more for his germane neologistics than his trenchant concerns about technology. In attempting to move the study of "being" beyond the shadowy essences of Plato and the res cogitans of Descartes, Heidegger proposed a hermeneutic of "Being-in-the-world," which he called "Dasein." To the extent Dasein is a call to understand being beyond the abstract and the rhetorical seduction of discourse, the issue of being can be approached with far more potential. Unfortunately, the study of what it means to be a human is still locked into battles over how much is wired and how much is learned. Seemingly, there should be less mystery to understanding what it means to be online. But Donna Haraway's manifesto-ization of the fictional cyborg complicates matters. Consider her warning that "... we are all chimeras, theorized and fabricated hybrids of machine and organism," and that now the "cyborg is our ontology" (Harraway 2000:70). The individuals clicking mouses at home or in Internet cafes are not visibly turning into bionic people, except on the screen, but there is a pragmatic difference in being with others online from simply and complexly being in the world as living and cultural organisms. I suggest that the "something like a 'world'" created out of cyberspace be approached as a virtual Dasein.

The advantage of starting with a concept like virtual Dasein is apparent if we follow Poster's gloss of Heidegger's Dasein as another term for culture. The Culture Wars have been raging across disciplines for several decades now. Anthropologists, who have tried to move deeper into Edward Tylor's nineteenth century common denomination of culture as a whole, have lost academic control of the culture concept to scholars across disciplines, most notably with the emergence of Cultural Studies. Ontological treatment of the culture concept has diminished to the point where it has become more fashionable to write against culture than about it. Research on other primates and genetic decoding have blurred the classification of "human" and

postmodern deconstruction of humanist metatheories has further blurred the very idea of classification. Just about everyone agrees that something like culture is important, but there is no consensus on what exactly culture means.

Definitions of culture abound, many of which were articulated after Alfred Kroeber and Clyde Kluckhohn's thesaurus of culture definitions half a century ago. Eight decades ago, Kroeber offered some useful advice: "What culture is can be better understood from knowledge of what forms it takes and how it works than by a definition." As Kroeber noted, it is hard to imagine culture without society, but in a post-Darwinian world there is space for many kinds of biological societies without something humans like to call culture. Likewise, it is impossible to imagine cyberculture without the human society that produces and maintains the enabling technology, but there are communities and individuals who do not directly participate in cyberspace. Kroeber is most famous, perhaps infamous, for insisting that culture was "superorganic." He was well aware of the metaphysical warning lights such a term implied, arguing that culture should not be approached the way theologians detach a "soul" from the body. What made the working of culture something more than the individual organisms who lived it was the crucial fact of sustainable learning. Writing well before Jane Goodall began her primate ethnography in Tanzania, Kroeber was still aware that humans are not the only animals that learn. The distinct and "superorganic" aspect of human culture was for him the cumulative result of that learning, the shared knowledge that could be perpetuated beyond individual lifespans. One need not subscribe to a Durkheimian collective unconscious to note that humans can draw on a history of prior knowledge in a way no other species can. This is even moreso the hallmark of cyberculture, which is by definition a shared digital archive of the imagination.

It is possible to live a full and meaningful life without ever defining a culture concept or fretting over whether such a term is useful or not. Because culture is something we all participate in and cannot escape, it must be an issue at some level of awareness. Could there be a human society that does not discuss "Why am I here" or "How can I take advantage of the others here"? The situation is different for cyberculture, because it involves a choice. As integrated as Internet technology has become in our daily lives, individuals in wired societies can just say no; nor is every village on every continent

likely to be wired soon. By its virtual nature, cyberculture is necessarily an imagined space, the illusion of a society of individuals. When I log on to my email or a chat room, I can communicate with friends and encounter new people, but the potential community created is ephemeral. I can not clone myself into a cyborg, except by metaphor. My presence in virtual reality simply opens up the potential to be what I can imagine myself to be. I may act on what I say or hear via the web, but what ultimately matters is when I do so in the real social world where I am situated in categories such as male, "white," husband, father, part-Italian or professor. While my being-in-the-world should be, as Heidegger would say, an issue for me, my being on the Internet need not be. I do not intend "virtual Dasein" as a projection of ontology onto a form of technology but rather to draw attention to the fact that being in cyberspace is really about being there and still being here. That is certainly an unusual situation worth pondering, an issue for those of us who study culture.

Where exactly is the "there" of cyberspace? Anthropologists entering this field are beset with a technical jargon every bit as confusing as their own. The term "cyberspace" surfaced in 1984, when the idea of being online was still in the Jules Verne stage. One of the choniclers of this recent technological phenomenon, Pierre Lévy (2001:xvi), notes that the term "refers not only to the material infrastructure of digital communications but to the oceanic universe of information it holds, as well as the human beings who navigate and nourish that infrastructure." Humans, technology and information: these are necessary ingredients for understanding culture. For Lévy, the more targeted term "cyberculture" stands for "the set of technologies (material and intellectual), practices, attitudes, modes of thought, and values that developed along with the growth of cyberspace." I see here an echo of Tyler's famous initiatory definition of culture, mediated by anthropology's semantic genealogy of cultural materialism (Marvin Harris, for example) and linguistic modeling of culture as a grammar for behavior (Ward Goodenough, among others). For Lévy, the baggage of an elitist "best of the best" view of culture, á la Matthew Arnold, does not seem to have tarnished the culture created as virtual reality over the Internet.

Altering the common sense of space and culture with "cyber" is somewhat akin to a penchant several decades ago among anthropologists to "ethno" everything from archaeology to poetics. The key cypher, in several nuances

of the term, behind cyber is its neologistic presumption. Unlike the original Greek prefixing for "ethno," the idea of "cyber" is a modern machine-age musing, stemming back to the coining of "cybernetics" in 1947 by Norbert Weiner, followed by the lexical spinoff of "cybernation" in 1962. The overwrought use of cyber, as I intentionally parody in my second paragraph above, threatens to reify the technological innovation into a metaphysical metaphor. There are few common terms that have not been cyberized in tabloid style. For example, the first ten of 6,950,000 hits for "cyber" on Google in July, 2003, yielded titles with the following: CyberPatrol, Cybersitter, the Cyber Hymnal, CyberAtlas, Cyber Cyclery, Cyberdiet, CyberAngels, Cyberkids, Cyber-Kitchen and Cyber Weather. Linguistically the digital divide is more like the bottomless pit.

The technical environment maintaining cyberspace goes by several terms. "Internet" seems to be the mainstream choice, often shortened to the "Net." In computerist dialect the Internet defines a "worldwide network of networks that all use the TCP/IP communications protocol and share a common address space" (Netdictionary 2000). The medium is very much the message for the programmers who created cyberspace. TCP refers to Transition Control Protocol, a term more military in nuance than socially scientific. The first TCP message surged through cyberspace in 1977, exactly a century after Edison scratched "Mary had a little lamb" onto the first phonograph record. The acronyms cycling through cyberspace invariably supersede the lengthier technical descriptions. The somewhat wordy World Wide Web is more easily handled as WWW, an abbreviation that appears on most website urls after the enigmatic http://, or simply as the "Web." Most net users are probably unaware that MUDs come from multi-user dungeons (domains or dimensions) and content-edited MOOs evolved from multi-user object-oriented environments. Then there is VR for "virtual reality," a term introduced in 1989 by a software company named Autodesk. Within months the The New York Times and Rolling Stone diffused this highly suggestive word to public culture at large (Chesher 1994).

The technical language is only one of the argots useful for studying cyberspace. With the embedding of instant messaging on popular browsers, our web-savy children are growing up with a streamlined dialect of abbreviations (lol, for example), video game slang and smiley faces. Although I purchased my first personal computer before my son started elementary

school, his e-vocabulary soon surpassesed my own. An added dimension with electronic communication is a return to orality. "Voice activated" is challenging the post-Gutenberg hegemony of print culture. As computers and phones merge into single-cell telecyborgs, it may soon be that written text will be routinely created without keyboards or mice, just the human voice. Such technological innovation is no longer confined to the Western societies that create anthropologists, but is increasingly evident in remote fieldsites. What will it mean, down the information highway, when webcam evolution and Star Trek variety communication access allow a returning ethnographer to remain virtually in a traditional fieldsite while writing up a dissertation or teaching a class?

Virtual Dasein by Design

> "Ethnology compels us to strive after more self-consciously shared intellectual weavings. To do ethnography in cyberspace, one should first clear rhetorics like these from one's conceptual space by defining a more precise set of research questions. Which approach to the design of a general cyberspace problematic is best?" David Hakken (1999:6) CYBORGS@CYBERSPACE?

I suspect this is not unusual for my generation, but I entered the field without having taken a formal class in ethnographic research methods. Part of the required reading in my four-field core curriculum at the University of Pennsylvania was the 1300-page Handbook of Social and Cultural Anthropology. The fieldwork article, written by Pertti Pelto and Gretel Pelto, described the early history of participant observation, the benefits of extended fieldwork, specific case-study methods and even the psychological aspects of being away from home. But apart from a few specific guidelines on how others had collected data in the field, the bottom line was that "successful fieldworkers have been those who were able to meet the research community on the basis of face-to-face, human universals – although these are hard to define" (Pelto and Pelto 1973:251). The "essence of successful ethnography," they added, was "a form of behavior that makes the fieldworker a 'friend' of the community he [regretably still 'he' at the time] studies" (Pelto and Pelto 1973:257). Although I had a rather specific research agenda, I assumed that making friends in the field was as unteachable and seat-of-the-pants as it would be anywhere else. One might as well read Dale Carnegie as take a methods class.

Approaching the ethnography of cyberspace needs to go beyond making friends. Given that virtual reality is a product of human technology, it is perhaps better to think about it first as an archaeologist or cultural materialist would before exploring the symbolic and political significance. As David Hakken (1999:44) suggests from experience, the anthropologist's reading must "range broadly" through the literature of Computer Science and STS. Like an archaeologist who is aided by detailed knowledge of soil science and geology, the kind of cyberspace ethnography conducted by Hakken virtually demanded that he have technical expertise in computing and IT. In Hakken's Norway case, the twist was that the computer programmers he studied ethnographically tended to take him seriously only if he could demonstrate technical competence. It is, of course, possible to study online communities without knowing the technology, as though interviewing through email, instant messenger or chat rooms could be like sitting in a village headman's house. The informants may be as ignorant of the technical process as the anthropologist, so such participant webservation can still yield results. Unlike the traditional field, which is simply another cultural setting, making friends and a learn-as-you-go approach are not likely to result in an explicitly "anthropological" study online. Personal skills may compensate for lack of adequate research design in the kind of ethnographic fieldwork done by Malinowski, but cyberculture is not simply the puzzle of observable human behavior in another human society; it is distinctly a superorganic mode of relating to the imagined selves of other people. To be blunt, there is no behavior to "observe" online and the cyberethnographer enters the field without leaving the comforts of home.

Anthropologists and sociologists have already approached cyberculture ethnographically, although not in great numbers. Studies are available on the makers (Green 1999), the shakers (Hakken 1999, Uimonen 2001) and the users (Blank 2001, Miller and Slater, Mizrach 1999). Not surprisingly, anthropological attraction to the Internet has been strong among those who study indigenous peoples and societies in so-called "Developing Countries." The journal Cultural Survival Quarterly dedicated an entire issue in 1998 to "The Internet and Indigenous Groups" (<http://www.culturalsurvival.org/publications/csq/index.cfm?id=21.4>). "Currently, it seems that indigenous peoples are eagerly using the Internet when they have the opportunity to do so," observes David Maybury-Lewis (1998). Steven Mizrach (1999) found

this to be the case among the Lakota, who see Internet technology as a means for cultural revitalization and reassertion of identity. In their ethnographic study, Miller and Slater (2000) argue that "Trinidadians have a 'natural affinity' for the Internet." For indigenous advocates cyberspace is now a part of the development process; anthropologists can hardly afford to ignore this.

Ethnography is always about communities, usually along the lines of Robert Redfield long ago called the "little tradition." Individuals may come and go in a particular society or take up residence in diaspora. But how does one get from "online interactions of dispersed groups of people with shared interests" (Wilson and Peterson 2002:449) to a valid concept of online community, especially when web users also remain in their own societies? One useful approach is to view cyberspace as an advanced case of creolization. Drawing on Benedict Anderson's modeling of the rise of print capitalism, anthropologist Jon Anderson (1999:44) views the new web-based interpreters of Islam as akin to the alternative voices that rose with early printing presses. In the process it is the public sphere itself that is being redefined through creation of a shared cyberculture. Regardless of the ways formal Islamic organizations are at last taking to the net, the stage has been set by a wide range of interpreters outside the mainstream. The potential impact on observable behavior will occupy ethnographers for years to come.

Anthropologists, like Jon Anderson, have been drawn into cyberspace by the people they study. But there is also the issue of cuberculture as a global phenomenon, a field without geographical borders. The closest thing to a how-to manual for what might be called e-ethnography is David Hakken's (1999) Cyborgs @ Cyberspace. Hakken lays out an agenda for "doing ethnography in cyberspace." The hurdles he faced include framing the "problem" behind the research, mastering the skills and language, conceptualizing the field site, multi-siting the field, protecting the research from sabotage, talking "cybertalk" and sampling issues. As Hakken observes, the epistemological issues raised about traditional fieldwork and representation are just as relevant for cyberspace research. Ethical issues about dealing with humans as subjects do not disappear when others are screened through computers. Nor is it clear how to evaluate online conversation minus the cues of nonverbal behavior and voice tone. After wrongly assuming a chat

in an online interview was a sexual proposition, Hamman (1999) warns that "misinterpretations of language are frequent in the narrow bandwidth of text based cyberspaces."

I can illustrate the ethical and communication issue with reference to an exploratory e-ethnography I conducted in 2000 (Varisco 2000). My focus was on the representation of Islam and Muslims on websites, in particular those sites that attempt to convert Muslims to Christianity or claim that Islam is a "false" religion compared to Islamic sites set up to convert Christians and counter anti-Islamic stereotypes about Islam. My limited participant webservation focused on a sample of about 120 Muslim-to-Christian testimonials, which take on the aura of biographical statements from informants and offer opportunity for feedback through e-mail, and Muslim webmasters. I began, confessions up front, by surfing through AltaVista, a popular search engine at the time. Like a good fieldworker, I tried mapping out the range of potential sites I came across, including Islamic megasite gateways, Muslim Student Association pages and various types of of organizationa and individual advocacy pages. In addition to analysis of the site content, I responded to the email of thirteen former Muslims, who had posted their conversion-to-Christianity messages on a site called answeringislam.org. As an experiment in e-interviewing, I sent an email message under a hotmail pseudonym:

> "I read your testimony on a website and wanted to ask you a question. I never know whether real people write these things or are they made up. I see that converting from Islam to Christianity caused hardship. I don't know any Muslims who have left their religion without suffering for it? If the things you say about Isa are true, why do so few Muslims accept them? Are you saying Muhammad was not a prophet either? I have always been taught to respect Isa, but Christians don't seem to have respect for Muhammad. If you have time to respond, I would really appreciate it. Abu Jihan."

Within 24 hours I received three responses from the eight males, while two of the email addresses were returned as undeliverable. A week later I had not received any other response, nor a follow-up to my original query.

The ethno-email was an afterthought, not the main point of the research. I was mainly curious if the individual testimonies were archival or active.

Thus, I had not identified myself as a researcher or explained why I was sending a query. Clearly, this would not be a good practice for building a relationship with potential interviewees, on or offline. Ironically, the only response I have received in the two years the article has been posted online is from one of the creators of an anti-Islamic site that I critiqued sarcastically. Since I chose to upload the paper it is thus theoretically and almost instantaneously available to the very people whose websites I criticize. This is quite different from "normal" fieldwork, where a formal ethnography might not be available (either physically or in the appropriate language) for years. I can only imagine what would have been the result if Samoan readers of a wired Coming of Age could have emailed complaints to Margaret Mead or if Mead herself had the opportunity to instant messenger the local taupau and check on fuzzy points in her ethnographic fieldnotes. What if a central part of future fieldwork involves a webcam, so that an academic advisor can interact during the process and so that informants could watch the writing of an ethnography in a graduate student's dorm room?

Summing Up: Ethnographers@Cyberculture

> "The anthropology of cyberculture similarly holds that we can assume a priori neither the existence of a new era nor the need for a new branch of anthropology. Indeed, the discipline is in principle well suited to what must start as a rather traditional ethnographic project: to describe, in the manner of an initial cultural diagnosis, what is happening in terms of the emerging practices and transformations associated with rising technoscientific developments" Escobar (1994:216).

No individual can escape the culture that defines being human: body, soul and spirit or however our being in the world is divided up. This is what makes Heidegger's Dasein such an intriguing concept and at the same time such an elusive quest. Thanks to sexual reproduction and our evolutionary trajectory, humanity is social by definition. Being-there is necessarily being-with. John Donne, the poet, made that clear four centuries ago, even with his debatable theological spin. Interacting over the Internet is still, although perhaps not for all, a choice to be made. No one is actually born online; death in cyberspace is simply going offline. The difference between heaven and hell depends on the ISP. Flesh-and-blood bodies can feel pain

and inflict physical harm, but online personalities are merely constructed and inevitably ephemeral. Except for the demonstrable ways in which interaction on the Internet or in virtual reality games affects human social behavior, cyberculture only exists as a simulation.

The concept of virtual Dasein does not avoid the problems inherent in trying to understand the nature of human culture and variation in social behavior across time and space. But it may allow for a temporary truce in the ongoing Culture Wars that have challenged long-standing notions of objectivity and being. Cyberculture as an imagined space escapes the philosophical stalemate in the representation of reality problem, because it is obviously a recognizable byproduct of technology. Americans still debate whether we descend from a created Adam or australopithecines, but no one (post-van Daniken) challenges the material origin of computer technology. Online is representation and, at least to this point, nothing but representation. The enemies blasted in "Unreal Tournament" don't really die. Cybersex kept online – one might say in line – will never produce any unwanted children. Even the most radical posthumanist would never deny that cyberspace is made possible by computer language rather than God, society or genetic wiring. If scifi writers are right that our species is destined to become bionic cyborgs in the future, we are more likely to be like the machines that enable cyberspace than be merged into the digital code that provides the illusion of material existence.

My point is that as ethnographers we should enter virtual reality to be there in the sense of Dasein, in which our being online is an issue for us, but without the worry that we might or might not be "there" in the sense of Sein. I am not arguing that anthropologists approach cyberculture the way critics approach literature and film. There is no fixed text, no director's cut to be studied as such. Websites and web communication evolve too fast to allow for text-driven exegesis. Certainly studying the logic of html is of technical interest, on a par with the type of font and lines to a page in a book or frames per second in a film. The crucial difference with the Internet, as currently positioned, is that reality can be simulated on a new and open scale. Conversing with instant messenger, surfing websites and playing online games are extensions of what can be done face-to-face in real life, but without the same constraints of real time and physical space.

Ethnography needs to be more than a game. There are three serious issues that anthropologists can approach with an ethnographic mindset. The first is observing the use of the Internet by people we study. It will obviously help to be web-literate before going to the field, just as knowing something about medicine is important for the medical anthropologist. Yet, part of the process is learning the native point of e-view. A second concern is the impact of the Internet and associated technology on the local economic and political contexts. As a Western invention driven by global capitalism, it remains to be seen if this new technology bears within it the seeds of resistance or an operating system for greater centralized control. If we are still reeling from the effects of print capitalism, imagine the possibilities of digitally popped up consumerism. Will the notion of distinct "cultures", in the HRAF sense, soon become extinct? The third focus is on our own participation as users of a tool that has become essential to academic research and communication. The Internet is more than a tool, since it creates a space for cyberphilosophical reflection in the steps of Heidegger, Foucault and so many others. Machines have always been clearly demarcated as extensions of humanity, clothing rather than skin. Our becoming cyborgs, by way of metaphor, brings us back to Heidegger's view that the way we become like the machine we create, or the environment we alter, is invisible to us. Our goal should not be to return to a pure nature, anymore than an adult can re-enter the womb or an Amazonian tribe be preserved in a human zoo, but to probe what Heidegger (1962:286) calls the "not-yet" along with the learned experience. In terms of cyberanthropology, we are not yet there. But perhaps we are only a few proper clicks away.

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