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Introduction

With global compressions of time and space, intercultural contact is heightening. Digital networks are converging. Perhaps more than ever before, professional communicators require cultural and technical savvy, allowing them to navigate, in a principled manner, digitally-mediated contexts (Spilka, 2010). Since no mediation is value neutral, digital technologies can spark intercultural friction (Thatcher, 2004; Warshauer, 2003, p. 6), blur ethical codes (Capurro, 2008; Himma, 2008), and perpetuate colonial relations (Ess & Sudweeks, 2012, p. xvi). How to operate in such complex, power-laden environments is a central concern in intercultural professional communication (IPC) and merits additional inquiry.

Highlighting needed developments in IPC, Thatcher (2010a) has proposed an etic-then-emic approach. Etics have conventionally provided the bases for comparison across cultures and usefully so. Yet, an etic-then-emic approach should not be adopted unreflexively, for numerous scholars (e.g., Cardon, 2008; Ding & Savage, 2013; Ess & Sudweeks, 2012; Mao, 2013; Shuter, 2011) have critiqued the superimposition of dominant, outsider theories of communication on insider categories of knowledge and ways of being. This critique is not without cause. The global and the local are increasingly inter-embedded (Appadurai, 1996; Burawoy, 1998), and the local may well shape the global (Ember & Ember, 2009). As a result, intercultural communication, IPC certainly included, needs more indigenous theory building and greater attention to subjectivities (Gudykunst, Lee, Nishida, & Ogawa, 2005, pp. 25-26). IPC also needs more data grounded in real-life encounters (Agboka, 2013; Carbaugh, 2007). Thus, an etic-then-emic approach must be carefully tempered by emics-then-etics, as Thatcher (2010a) duly recognized. Although the boundaries between emics and etics are often underspecified (Mao, 2013), IPC methodologies must ultimately capture both—as well as the blurred, digitally mediated areas in between, where much of IPC occurs (St.Amant & Sapienza, 2011).

Given these conditions, I argue that digital ethnography might contribute much to IPC theory and practice, and this article is written so as to further the disciplinary conversation. The first part

reviews core literature relating to digital ethnography, addressing the question *what is digital ethnography*? The methodology's reported strengths and limitations are then overviewed. In the second part, the discussion turns to applications of digital ethnography in IPC, and particular attention is devoted to the question, *what theories and practices, more specifically, are needed in IPC, and how might digital assist in building them?* Finally, the third part distills three best practice principles, and a brief summary and conclusion follows.

Core literature relating to digital ethnography

Reviewing core literature relating to digital ethnography poses several challenges from the start. One challenge is that this core literature, though concentrated in anthropology and sociology, cuts across numerous disciplines, each with its own traditions for research. The resultant methodological diversity can trouble attempts at alignment or cohesion, for authors present varying, at points contradictory, views on digital ethnography's tenets, including the necessity—or irrelevance—of sustained presence in a fieldsite (Hine, 2000, p. 123; Miller & Slater, 2000, p. 21) and the complementarity—or collision—of online and offline interviews (Boellstorff, Nardi, Pearce, & Taylor, 2012, pp. 124-126; Hine, 2000, p. 49). Even so, "traditional" ethnography has always been methodologically diverse, so expecting otherwise of its digital offspring seems unreasonable.

Another challenge is combinatory. Depending on researcher intent, digital ethnographic methods can be deployed without being labeled as such (e.g., Orgad, 2006) or folded into an associated term such as "case study" (e.g., Gu, 2011). They can also be mixed with quantitative tools for purposes of triangulation and finer-grained analyses (e.g., Putnam, Rose, Walton, & Kolko, 2009). Since ethnography is as epistemic as methodological, however, studies that incorporate digital ethnographic methods are not, perforce, digital ethnographies. In fact, aside from Laquintano (2010), relatively little IPC research has claimed to be so; more common is "digital ethnographic" research, which typically combines observations and interviews. Yet, even without a full commitment to an ethnographic epistemology, digital ethnographic studies, too, can throw light on digital ethnography in general.

Owing to these and related challenges, reviewing core literature relating to digital ethnography requires some measure of representation, interpretation, and construction—subjectivities that inhere in all ethnographic research. The writer and readers must therefore be reflexive, considering both what has been written here and what might be, despite my best efforts, absent. That having been acknowledged, it might now be possible to address the fundamental question, *what is digital ethnography?*

What is digital ethnography?

Digital ethnography is a many-stranded mesh, encompassing virtual ethnography (Dominguez et al., 2007; Hine, 2000), internet ethnography (Sade-Beck, 2004), connective ethnography (Hine, 2007), netnography (Kozinets, 2010), sensory ethnography (Pink, 2009), multimodal ethnography (Dicks, Soyinka, & Coffey, 2006), hypermedia ethnography (Coffey, Reynold, Dicks, Soyinka, & Mason, 2006), as well as the more recent expanded ethnography (Beneito-Montagut, 2011), trace ethnography (Geiger & Ribes, 2011), and extreme ethnography (Rotman, Preece, He, & Druin, 2012). These strands differ in genealogy, applications, and epistemic foci,

yet they all implement digital technologies at some point. Hence, digital ethnography might be most succinctly and inclusively defined as "ethnography mediated by digital technologies" (Murthy, 2011, p. 159). As each term—ethnography, mediation, digital technology—pulls significant conceptual freight, some unpacking might be helpful.

Ethnography. With its long history across disciplines, ethnography has multiple, overlapping layers of significance. Its Greek roots, *ethnos* and *graphein*, mean respectively "people" and "writing," so ethnography most basically denotes writing about people (Boellstorff et al., 2012, pp. 13-14). Ethnography cannot be reduced without remainder to its written artifacts, however; it is also methodological and epistemological. As a methodology, ethnography is characterized by sustained, local participant-observation[1] (Atkinson & Hammersley, 1994) that allows for both detachment and "thick description" (Geertz, 1973, pp. 5-6, 9-10), careful data analysis and storytelling (Murthy, 2008). These etics and emics, however specified, hinge on an epistemology of ontological relativism. Since ontological relativism emphasizes social, rather than materialist, understandings of human and nonhuman agents (Glass-Coffin & Kiiskeentum, 2012), ethnographers typically explore, follow, and interpret a particular sociocultural phenomenon as it occurs *in situ* (Atkinson & Hammersley, 1994). Its closeness to situated, real-life data makes ethnography re-scalable across sites (Marcus, 1995) but also bundled, at times problematically, to ethics, representations, power, and other tensions that affect intercultural research (Clifford & Marcus, 1986).

Digital technology. This refers to the conversion of data to binary code, which can then be captured, manipulated, transferred, and stored by a variety of electronic devices (Dicks, 2012, pp. xxiii-xxiv). Recent studies of digital technologies, specific to culture and communication, have focused on the internet (e.g., Garcia, Standlee, Bechkoff, & Cui, 2012; Goggin, 2010; Orgad, 2006; Poor, 2007; Takahashi, 2010), mobile telephony (e.g., Baron, 2011, 2013; Baron & Segerstad, 2010; Schroeder, 2010; Westlund, 2010), and their integration: mobile internet (e.g., Humphreys, Von Pape, & Karnowski, 2013). Some digital technologies, such as digital photography and video, have already become widely embedded, invisible, or mundane. Others, such as near field connectivity or global positioning systems, remain to be investigated in IPC scholarship.

It is important to note that digital technologies, though frequently conceptualized as devices, are constructed and operationalized within local, culturally variable contexts, to which all strands of ethnography are responsive. Digital technologies can resultantly be theorized as capital (McEwan & Sobre-Denton, 2011; Tapscott, Lowy, & Ticoll 2000); real or imagined geographies (De Freitas, 2010; Mossberger, Tolbert, & Franko, 2013), including "supraterritoriality" (Scholte, 2008, pp. 1479-1482); ontology (Capurro, 2006; Cheong, Martin, & Macfadyen, 2012; Vadén, 2004); epistemology (Jenson & de Castell, 2004; Kellner, 2004; Lankshear & Knobel, 2003, 2006); discourse (Thurlow & Mroczek, 2011); or the subject, instead of the object, of research. Indeed, with the development of sophisticated monitoring systems, many users knowingly or not, willingly or not, divulge personal information to company loyalty

[1] As demonstrated in the path-breaking research of Bronisław Malinowski, Margaret Mead, Hortense Powdermaker, and the Chicago school of sociology.

programs, mobile phone apps, security firms, archives, search engines, and other apparatuses capable of data aggregation and surveillance. In the wake of these apparatuses, "data gathering and data classification have become an integral (some say indispensable) part of warfare, policing, education, health care, finance, travel, and virtually every other aspect of contemporary life" (Lievrouw, 2012, p. 621). No digital technology, nor any technology for that matter, is innocent.

Mediation. In general, mediation refers to the dynamic positionality between digital technologies, their users, and the world. These constructs, sensitive to locale, vary by cultural group as human interactions remediate technology and vice versa (Walton, 2013). These constructs vary further within and across research traditions, and perhaps in consequence, mediation is often theorized disciplinarily. For instance, Dicks' (2012) weighty, four-volume compilation illustrates how digital qualitative researchers have viewed mediation through symbolic interactionism, social constructivism, multimodality, and additional theories imported from disciplines that have utilized digital ethnography. Problematically, however, these theories, along with activity theory, may revolve around old socioeconomic notions, making mediation a difficult concept in light of innovation and contemporary social changes (Rückriem, 2009, p. 95). Research practices, too, can render it difficult to conceptualize mediation, which may describe studies of web-based groups through web-based technologies (e.g., Orgad, 2006); studies that use digital technologies to cull, analyze, and disseminate data from offline groups (e.g., Putnam, Rose, Walton, & Kolko, 2009); or studies that combine the two (e.g., Walton, Yaaqoubi, & Kolko, 2012).

For greater conceptual precision, IPC can draw on media studies, which offers an array of analytical tools for understanding mediated interaction. Media naturalness theory, for example, stresses mediation as an embodied, ontological phenomenon that arises from innate and learned schemas (Kock, 1998, 2001, 2002, 2005). Media stickiness theory stresses mediation as a practice situated in group culture, task objectives, and time-space constraints (Huysman, Steinfield, Jang, Poot, & Mulder, 2003). Other influential theories in media studies, formulated as correctives to media richness (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987) and social presence (Short, Williams, & Christie, 1976), include adaptive structuration (DeSanctis & Poole, 1994), medium synchronicity (DeLuca & Valacich, 2005; Dennis, Valacich, Speier, & Morris, 1998), social information processing (Walther, 1992; Walther & Burgoon, 1992), and task-medium fit (McGrath, 1991; McGrath & Hollingshead, 1993; McGrath & Hollingshead, 1994). Each implicates emics and etics differently, yet each underlines that, as no technology is innocent, no mediation is neutral. For instance, in addition to influencing perceptions of technological affordances (see Norman, 2002), mediation can obscure acts of power and privilege certain knowledge, interests, values, and boundaries over others (Beer, 2009). Analyzing mediation, in turn, might involve the imposition of an outsider, etic view over an insider, emic one, and this because of inferential necessity. Without connections between data and theory, research findings, no matter how descriptive, collapse into mere "isolated curiosity" (Hine, 2013, p. 42).

Why the "digital" of digital ethnography. Construed so broadly by Murthy (2011), essentially all ethnography is digital now, and Boellstorff and colleagues (2012) have proposed that the

various strands be merged under a single term: ethnography. Ethnography, they argue, already has sufficient flexibility for digitally mediated environments, rendering any semantic modifiers, such as "digital," redundant (Boellstorff et al., 2012, p. 4; see also Beaulieu, 2004). Granted, digital ethnography is not wholly distinct, in epistemology or in practice, from its methodological predecessors. Nonetheless, there are at least two reasons to prefer the modifier when appropriate. One reason is presence, for digital ethnographers and participants tend to have highly mediated presences in a fieldsite. Indeed, in IPC fieldsites, presence can be mediated not only by technology, but by cultural groups, teams, administrative levels, and geographic locations, as in studies of international companies or humanitarian organizations (see Walton, 2013). Perhaps because of such mediation, digital ethnographies tend to be shorter relative to earlier, pre-digital strands (see Hammersley, 2006).

A second, related reason to prefer the modifier "digital" is the impact of technology and mediation on research findings. Hence, "digital" might encourage more careful, transparent, reflexive consideration of how decisions about technology, as well as mediated presences, might be culturally, methodologically, and ethically reactive. Across disciplines, there has been heightened concern over reactivity, and scholars have given much attention, and rightly so, to the reported strengths and limitations of digital ethnography in general. These strengths and limitations suggest how digital ethnography might be effectively and ethically applied in IPC.

Reported strengths of digital ethnography

One reported strength of digital ethnography is its "promiscuousness." Writing of netnography, a digital ethnographic strand adapted for marketing research, Kozinets (2010) explained that, "Many methods are complementary with netnography. Netnography, like its older sibling, ethnography, is promiscuous. It attaches itself to and incorporates a vast variety of different techniques and approaches" (p. 42). This strength holds true for other strands as well but may manifest itself in various ways; digital ethnography can be fragmented (e.g., Orgad, 2006); folded (e.g., Gu, 2011); or rescaled, following the people, thing, metaphor, conflict, or story of interest (see Marcus, 1995). For instance, larger-scale digital ethnographies have explored geographic regions (e.g., Miller & Slater, 2000; Wheeler, 2006), social networks (Rotman et al., 2012), and data logs (Geiger & Ribes, 2011); and smaller-scale digital ethnographies have explored more particular, niched groups (e.g., Laquintano, 2010). To these ends, digital ethnographic methods can be mixed qualitatively and quantitatively, combining with social surveys, policy monitoring, web archiving, focus groups, technology prototyping, and statistical analysis (Walton, Putnam, Johnson, & Kolko, 2009). Such promiscuousness can encourage the cross-disciplinary collaboration often requisite for studying technology and communication across cultures (Ess & Sudweeks, 2012).

A second reported strength of digital ethnography is ontological and epistemic proximities. As they shuttle between the global and the reflexive (Dicks, Mason, Coffey, & Atkinson, 2005, p. 35), digital ethnographers can gather rich, thickly contextualized data on participants' lifeworlds, including ways of being and categories of knowledge (see Boellstorff et al., 2012, p. 3; Hine, 2000; Murthy, 2011; Pfister & Soliz, 2011). These subjectivities might involve local interactions of transnational, macroeconomic forces (Pfister & Soliz, 2011), polyvocality (Mitra & Watts, 2002), and sensory, sociotechnical experiences beyond the scope of other research

methodologies (Pink, 2009). As a result, digital ethnographers, though digital ethnography, can make the research process more transparent (Murthy, 2011), recognize tensions and complexities that shape value-sensitive work (Walton & DeRenzi, 2009), and be empathetic, helping to improve people's lives (Putnam et al., 2009).

Reported limitations of digital ethnography

One reported limitation of digital ethnography is the ambiguity of digital environments, which are of special interest in IPC (St.Amant & Sapienza, 2011). Contributing to this ambiguity, the fieldsite may prove to be conceptually problematic, and the human instrument—researchers themselves—introduces recurrent problems of representation, perspective, and participation (Dominguez et al., 2007). Beneito-Montagut (2011) has resultantly critiqued the work of digital ethnographers who presupposed a virtual-real dichotomy, theorized a digital environment as if it had physical boundaries, struggled with the speed and reach of digital phenomena, or overemphasized textual data to the neglect of other, multimodal possibilities. Researchers might further bias their data through their personal histories, agendas, and social norms (Dicks et al., 2005, p. 129), biases that can be exacerbated in intercultural work.

Within digitally mediated, ambiguous environments, a particularly pressing limitation is access. Digital technologies can certainly expand a study's sample population, yet technological diffusion has occurred at unequal rates (Walton et al., 2012), so access is stratified, still, by class, race, gender, region, and other identity markers—markers that do not, in digital environments, disappear (Cheong & Gray, 2011; Murthy, 2008). Relatedly, power differentials can mediate access through available resources, freedom of action, imagination, and commitment (Jordan, 2002); the researcher-participant relationship (Murthy, 2008); or the seeming ease of data collection (Dominguez et al., 2007). Indeed, data available for collection might not be ethically suitable for research (Hine, 2013), and with much digital ethnography taking place covertly (Murthy, 2008), there are additional issues of informed consent, privacy, and intellectual property (Murthy, 2011), all of which may vary locally, even individually, and require that researchers account for decisions made *in situ*. Digital information ethics, an emergent discipline, has begun to address these issues both normatively and descriptively, but the demands of *on-the-ground* research have invariably tended to outpace any formalized system of research ethics. Thus, digital ethnographers must strive to make contextually appropriate decisions while in the field (Markham, 2006).

Another reported limitation of digital ethnography is the challenge of generalization. Researchers of intercultural communication have long been interested in comparisons across cultures, and some (Connor, 1996; Moreno, 2011; Thatcher, 2010b) have suggested principles for generalizing findings. These principles have not been widely adopted, however, and much of digital ethnography's foundational work (Coffey et al., 2006; Dicks et al., 2005; Dicks et al., 2006; Hine, 2000; Howard, 1998; Masten & Plowman, 2003; Miller & Slater, 2000) has not been explicitly intercultural, apart from researcher-participant relationships. Even ethnographers have expressed skepticism over the validity of ethnographic data beyond a particular case (e.g., Hammersley, 1990), a conundrum in social research writ large (Hammersley & Atkinson, 2007, p. 234). Given this history, the move from thick, emic description to grounded, etic theory will likely always be contestable. Digital ethnographers may subsequently be hard pressed to justify

their methods in detail (Hine, 2013, p. 33), find defensible bases for generalizations, and respond to charges that ethnographic research is unscientific (Bloomfield, 2009). These reported limitations and strengths must be acknowledged if digital ethnography is to be effectively and ethically applied in IPC.

Applications of digital ethnography in IPC

As part of intercultural communication more broadly, IPC needs greater attention to subjectivities (Gudykunst et al., 2005, pp. 25-26) and more data grounded in real-life intercultural encounters (Agboka, 2013; Carbaugh, 2007). Real-life intercultural encounters often are digital and highly mediated, and following from the discussion above, core literature relating to digital ethnography suggests the methodology's potential to address these two needs. Although environmental ambiguity and access will require due consideration throughout a digital ethnographic project, promiscuity and proximities can allow researchers to capture, detail, and analyze data as part of local, intercultural contexts. More difficult is the building of indigenous theory, which depends on some degree of generalization.

By no means is indigenous theory building a clear-cut process, especially for intercultural research on scales broader than case studies. Yet, research landscapes are changing. With time and space compressions caused by transnational flows, the global has become increasingly inter-embedded with the local (Appadurai, 1996; Burawoy, 1998), the principal domain of digital ethnography. Perhaps as a result, generalizing from qualitative data has become increasingly admitted as valid (Halkier, 2011). To do so, researchers must accept two premises. The first is that to generalize does not mean to universalize, and the second is that generalizations may be unstable or contextually variant (Halkier, 2011; cf. Berkenkotter & Huckin, 1995). Both of these premises align with digital ethnography's ontological relativism, which stresses the contextual character of data while rejecting the assumptions of antifoundationalism[2].

In research discourses particular to generalizations across cultures, the emics/etics debates have suggested the utility of demonstrating functional and conceptual equivalence. According to Berry (1990), a cross-cultural psychologist, functional equivalence involves ensuring that behaviors under comparison function similarly across cultural groups; and conceptual equivalence involves ensuring that the research instruments, across those cultural groups, hold similar meanings. While both equivalences necessitate rigorous observations and interviews, intercultural work through ethnography is nonetheless possible. Ember and Ember (2009) expressed similar views, noting that ethnography produces descriptions in words, and words are comparable, generating variables for methods, such as surveys, that are better suited to large-scale comparative analysis. Hence, ethnography, digital ethnography included, might not simply be beneficial in intercultural research but imperative for indigenous theory building.

As IPC is also an applied discipline, encompassing communications professionals who work across digital and cultural borders, good theory must be accompanied by sound practice. Yet,

[2] Halkier (2011) delves into additional detail, explaining three ways that researchers can generalize from qualitative data. The first way is ideal typologizing, as illustrated in Hall's inferences on encoding and decoding or Fiske's work on media use. The second is category zooming, or the fine-grained comparison of single points across studies. The third is positionality, which stresses the unstable and context-sensitive nature of any inferences drawn.

what theories and practices, more specifically, are needed in IPC, and how might digital ethnography assist in building them?

Need for more good theory

Given that IPC centers on culture, communication, and technology, indigenous theory building should serve to illuminate these intersections. These intersections have received considerable attention internationally during the past decade (Ess & Sudweeks, 2012, p. xiii), but IPC researchers still must navigate two pressing concerns: the intricacy of local contexts, and the temptation to overemphasize culture (Hunsinger, 2011). Digital ethnography might help researchers to navigate both.

Because local contexts are richly intricate and variable, culture and technology can affect a multiplicity of rhetorical dimensions "on the ground." There is thus a great need to study rhetorical contrasts across cultural groups (Barnum, 2011), including differences in communicative purpose, author-audience relationships, perceived information needs, and stylistic preferences (Thatcher, 2004). Local contexts are not limited to rhetorics alone, however; researchers might also need to consider sociotechnical frames that capture both individual and institutional influences. Variously bounded, sociotechnical frames can account for academic and professional values (Gu, 2011); political organs, legal frameworks, historical fields, and economic conditions (Goggin, 2010; Hunsinger, 2011); social hierarchies and project stakeholders (Gu, 2011; Walton & DeRenzi, 2009); and technological features (Andersen & van der Velden, 2010) such as digital power relationships encoded in the technology itself (Beer, 2009). Wheeler (2006) is a case in point. Her digital ethnography of the internet considered political history, economics of the oil trade, military movements, censorship practices, cultural power relationships and values, gender, everyday life, and related factors in Southwest Asia, in Kuwait particularly. From these considerations, Wheeler could then highlight the general epistemological challenges of studying locally mediated, nonlinear digital phenomena (pp. 189-198). Such local to global, emic to etic moves permitted contextually nuanced generalizations, suggesting that indigenous theory building might be grounded, at least initially, in sociotechnical frames, concepts, categories, and mediational relationships—which digital ethnography can capture in rich detail and on multiple scales.

Although "culture *does* make a difference" (Ess & Sudweeks, 2012, p. xiii), it can be overemphasized in IPC theory building. A common theoretical system deployed in IPC research, for example, is Hofstede's (1984) cultural dimensions, and these can indeed explain some cultural variations. Yet, as Hunsinger (2011) noted, Hofstede's cultural dimensions tend to portray subjectivities, such as individual or collective expectations, as overly abstract, context invariant, and wooden. These and related difficulties, added to the research demands of digital environments—where users' cultures are recurrently remediated and hybridized—have subsequently heightened the exigency to reconsider the culture's variable relationship to technology and communication. To address the exigency, IPC researchers should carefully account for their own assumptions, which are significant in any intercultural work. Work on intercultural communication, in particular, long has been divided by competing assumptions regarding ontology, power, knowledge structures, and research goals, and Martin and Nakayama (1999, 2010) have proposed intercultural dialectics as a way forward. These dialectics highlight

tensions, pervasive in digital ethnography because of its proximities to people and their lived subjectivities, between the cultural and the individual, personal and contextual, different and similar, static and dynamic, privileged and disadvantaged (Martin & Nakayama, 1999, 2010). While finer-grained than Hofstede's cultural dimensions, intercultural dialectics, if applied carelessly, risk the superimposition of researchers' *a priori* assumptions over participants' real-world subjectivities.

More broadly, then, IPC researchers might require an "orienting ideal" (Hunsinger, 2011, p. 24) that tempers etic theory with contextualized, emic experience, as Fraiberg (2013) and Agboka (2013) described. In their respective studies, Fraiberg explored the uses of Hebrew and English at an Israeli start-up company, and Agboka investigated the localization of sexuopharmaceutical documentation in Ghana. Both used digital ethnographic methods to research how a variety of individual and institutional agents—not simply etic understandings of culture—interacted in complex, mediated ways. Fraiberg resultantly called for a less bounded, more fluid conceptualization of digital technology, communication, and culture that pays "close attention to the manner in which they are rewoven, remediated, remixed, and reassembled across local-global contexts" (p. 24). Resisting the temptation to overemphasize culture in IPC research can thereby contribute to indigenous theory building and, additionally, elucidate the needs of in-the-shop professional communicators.

Need for more sound practice

In the wake of globalization, professional communicators are increasingly called upon to work across cultural borders, performing tasks, such as translation (Gnecchi, Maylath, Mousten, Scarpa, & Vandepitte, 2011), that require intercultural competence. Challengingly, however, scholarship shows little consensus as to what, precisely, intercultural competence includes[3], and IPC training programs have generally not kept apace of workplace exigencies. This lag has resulted, at least in part, from difficulties concerning teacher preparation, lesson objectives, and teaching methods and materials (Matveeva, 2008). For example, as Matsuda and Matsuda (2011) found, popular technical writing textbooks tend to center on North American contexts and portray international audiences as *Other*, focusing on mere awareness rather than actual competence. Training for intercultural competence, however defined, will likely require greater attention to subjectivities and more data grounded in real-life intercultural encounters. Indeed, contextualizing etics with emics, IPC trainers can ground their practices in data culled from twenty-first century workplaces, nuancing, fortifying, and challenging current training programs and models. Digital ethnography might, in this way, prove highly useful in practice development.

Assessing intercultural competence and other situated proficiencies has proven difficult, however. Addressing this difficulty, Yu (2012) discussed nine possible assessments, among

[3] Part of the non-consensus results from terminology, with many writers preferring related terms such as cross-cultural communication, cultural competence, intercultural sensitivity, effective intergroup communication, ethnorelativity, intercultural cooperation, global competitive intelligence, global competence, international competence, metaphoric competence, etc. (Fantini, 2009, p. 457). Despite their divergences, though, a close reading of scholarship on intercultural competence and related terms reveals common categories of knowledge, motivation, macro-level skills, interpersonal skills, and situated proficiencies (Spitzberg & Changnon, 2009).

them observations and interviews—ethnographic methods—but stopped short of recommending digital ethnography explicitly. Since the field of intercultural training commonly implements ethnographic methods and digital technologies but seldom invokes the term "digital ethnography," this absence is somewhat unsurprising. It should not be read as a disavowal. To be sure, with its combinatory potentials and ontological, epistemic proximities, digital ethnography might be a valuable supplement to IPC classrooms, perhaps serving to realize Cleary's (2011) framework for teaching international communication. That framework has several key processes: integrating intercultural issues into the classroom, encouraging students to interact with numerous cultural groups, facilitating intercultural collaboration among faculty, and involving industry in debates over intercultural communication (p. 17). With the requisite access negotiated, digital ethnography can contribute to each of these processes, providing entree into real-world intercultural issues, culturally diverse groups and worksites, collaborations across borders, and professions involving intercultural communication. Digital ethnographic assessment of intercultural competence, then, might be based on students' written artifacts (field notes, theoretical memos, personal reflections, formal reports, etc.), demonstrated abilities with research methods and project design, or other indicators of intercultural savvy. Such emics-then-etics possibilities remain to be explored in greater depth, though ethnography has already proven effective as a training tool outside of IPC (see, e.g., Roberts, Byram, Barro, Jordan, & Street, 2001). Digital ethnography might be equally, or even more, effective.

Digital ethnography might therefore contribute much to IPC research and training, to IPC theory and practice. Of course, as with all methodologies, IPC professionals should judiciously weigh reported strengths and limitations when considering the use of—or whether *to* use—digital ethnography. In light of this discussion, it might now be possible to distill some best practice principles, which can help make digital ethnography not simply effective in IPC but rigorously ethical as well.

Some best practice principles

Any best practice principle for digital ethnography must operate both etically and emically. Etically, IPC trainers and researchers are bound to the ethical codes that guide their professions (see Ess & AOIR, 2002). They are also bound to research standards of their local Institutional Review Boards (IRBs), which will require thoughtful consideration, at minimum, of 1) the rights and wellbeing of the participants; 2) the appropriateness of the methods used to obtain informed consent, especially in intercultural work; and 3) the balance of hazards and potential benefits of the research. An IRB, in particular, might be sensitive to how digital technologies are shifting discourses from "a longstanding emphasis on possibility, novelty, adaptability, and openness toward current preoccupations with risk, conflict, vulnerability, routinization, stability, and control" (Lievrouw, 2010, p. 617); consequently, researchers should be prepared to justify their project designs in detail and make principled adjustments as the project evolves, perhaps in unanticipated, emic ways. With these concerns acknowledged, at least three overlapping principles for best practice can be distilled from core literature relating to digital ethnography: accountability, transparency, and care.

Accountability. This entails thorough knowledge of ethical codes, IRB requirements, and means of minimizing risk to participants. Digital environments can change unexpectedly, as in

the case of Facebook's privacy policies (Rotman et al., 2012), but researchers are nonetheless responsible for their project preparations, in-field decisions, data security, and published accounts. Subsequently, researchers should be competent in the methods and digital technologies they intend to use. They should also be well versed on critical issues such as anonymity, confidentiality, copyright, mediated identity, public-private boundaries, and justness of participant selection (Buchanan & Ess, 2011)—all of which may be compounded across cultures.

Transparency. As with accountability, transparency operates on numerous levels, scales, and contexts. Accordingly, Hine (2013) has listed a series of questions that, though specific to the internet, apply to a range of digital environments. These questions were written to readers of research, supplying etic and emic criteria for evaluating digital qualitative studies:

- "Can I tell clearly what the research did and what limits there are on a study?" (p. 124).
- "Was the research population appropriate to the question and did the use of [digital qualitative] methods impose unacceptable or unacknowledged biases?" (p. 124).
- "Was the medium of interaction appropriate to the population and the topic?" (p. 125).
- "Are the interpretations plausible and do they feel authentic in light of the particular qualities of [digital] data?" (p. 125).
- "Has the response been presented to the participants and what was their response?" (p. 216).
- "Is the research well-founded on existing knowledge going beyond the specifics of a particular [digital] situation? Is the contribution to existing knowledge clearly articulated?" (p. 127).
- "Is there a methodologically defensible reason why [digitally-]mediated interaction was deployed?" (p. 127).

Answering these questions affirmatively, or making provisions so that they can be answered affirmatively, can increase transparency throughout a digital ethnographic project. Since generalizations from ethnographic data often are unstable or context relative (Halkier, 2011), transparency might provide some bases for building indigenous theory from thick description.

Care. As Boellstorff and colleagues (2012) explained, care is key to principled action because, without care, other principles become effete. Care arises from an awareness of mediated, asymmetrical power relations with participants, who, compared to researchers, may be less likely to benefit from the study, belong to different cultural groups, and lack the privilege of covertness. Thus, care entails more than simply doing no harm; rather, care entails ensuring that participants benefit from the digital ethnography to the greatest extent possible (Boellstorff et al., pp. 129-130). In that light, care involves an obligation to secure informed consent (which might be as contextually variant as any research findings), mitigate institutional and legal risks, protect sensitive information, create fair and accurate portrayal of participants' lifeworlds, and resist any enticements to deceive—despite the capacities of digital technologies to conceal, added to the

complexities of dynamic, multinational organizations common in IPC research. Care also involves doing good.

In a recent article, Beneito-Montagut (2011) specified some recommendations for navigating ethical problematics, illustrating some basic ways that accountability, transparency, and care might be at least minimally combined. First, apprise all focus participants of the research goals, and resist, as controls for potential reactivity permit, the adoption of covert positions. Second, obtain informed consent before the research starts, and assure confidentiality, privacy, and anonymization where necessary. Third, notify participants of the research results. Fourth, only use information cleared through informed consent. Of course, these recommendations are not a panacea, and they might not always be possible. Beneito-Montagut recognized, for example, that some participants, such as those co-observed, cannot always be apprised of the research goals or results, but, providing that these participants are not the research focus, ethical problematics can be reasonably minimized.

Doubtless, despite thorough preparation, digital ethnographers must invariably make in-field, contextually appropriate decisions (Markham, 2006). Not all research elements can be controlled or even anticipated, but they can be handled in a principled manner. Formalized ethical codes will likely always lag behind the evolving demands of in-practice research, but as digital ethnographers commit themselves to accountability, transparency, and care, they can help satisfy the need, as Himma (2008) explained, to build an intercultural ethics agenda that is normatively and descriptively robust. Given these best practice principles, intercultural research ethics merits sustained consideration for both profession-wide, etic standards and for particular, emic applications. To be sure, as research and training contexts continued to evolve, understandings of best practice principles must ineludibly adapt with them.

Summary and conclusion

With ongoing globalization, IPC must address three disciplinary needs: the need for additional indigenous theory, for greater attention to subjectivities (Gudykunst, Lee, Nishida, & Ogawa, 2005, pp. 25-26), and for more data grounded in real-life intercultural encounters (Agboka, 2013; Carbaugh, 2007). Digital ethnography can help address these three needs and, relatedly, provide an essential, emics-then-etics counterbalance to Thatcher's (2010a) proposed etic-then-emic approach. Thus, I have argued that digital ethnography might contribute much to IPC, developing more good theory and sound practice. In terms of good theory, the methodology might serve to illuminate the intersections of communication, culture, and digital technology; account for the intricacies of local contexts; and avoid the temptation to overemphasize culture in theory building. In terms of sound practice, the methodology might enhance the training of IPC professionals, who increasingly work across digital and cultural borders. These discussions grew from core literature relating to digital ethnography, including the methodology's conceptual freight and reported strengths and limitations.

Moving forward, applications of digital ethnography should be principled. Hence, digital ethnographers should adhere to, and contextually adapt, best practice principles of accountability, transparency, and care, which can help ensure that applications of the methodology are both effective and rigorously ethical. Yet, these best practice principles are

only points of departure, and a fuller research agenda, at once normative and descriptive, is needed for intercultural research across disciplines (see Capurro, 2008; Himma, 2008). All in all, then, I hope this article will encourage further thought on how to do IPC in a compressing, often-ambiguous world where principled research and practice are not merely ideals. They are necessities globally, locally, and in the blurred, digitally mediated areas in between.

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