

# Qualitative Computing and Qualitative Research: Addressing the Challenges of Technology and Globalization

#### César A. Cisneros Puebla & Judith Davidson

#### Key words:

CAQDAS; diversity; peripheries; global qualitative research **Abstract**: Qualitative computing has been part of our lives for thirty years. Today, we urgently call for an evaluation of its international impact on qualitative research. Evaluating the international impact of qualitative research and qualitative computing requires a consideration of the vast amount of qualitative research over the last decades, as well as thoughtfulness about the uneven and unequal way in which qualitative research and qualitative computing are present in different fields of study and geographical regions. To understand the international impact of qualitative computing requires evaluation of the digital divide and the huge differences between center and peripheries. The international impact of qualitative research, and, in particular qualitative computing; is the question at the heart of this array of selected papers from the "Qualitative Computing: Diverse Worlds and Research Practices Conference." In this article, we introduce the reader to the goals, motivation, and atmosphere at the conference, taking place in Istanbul, Turkey, in 2011. The dialogue generated there is still in the air, and this introduction is a call to spread that voice.

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### 1. Introduction

Interpretative and qualitative inquiries can be described and analyzed from a range of perspectives, not least of which are the differences in national perspectives (KONECKI, KACPERCZYK & MARCINIAK, 2005; OOMMEN, 1988; EBERLE & ELLIKER, 2005; SCHUBOTZ, 2005, ENEROTH, 1988 and DENZIN & LINCOLN, 2003). Today it is crucial to understand that there is no one right way to approach qualitative research, and, indeed, there is a diversity of ways by which we could approach qualitative research concerns. From a global context, there are multiplicities of approaches to be learned from each other. These broad possibilities are like a jewel, and if we can recognize its value, it will open up a variety of pathways to be walked and cultivated. [1]

This issue presents a selection of the papers that were offered at the "Qualitative Computing: Diverse Worlds and Research Practices Conference" held in

Istanbul, Turkey, February 24-26, 2011 at Boğaziçi University. The conference sought to bring together users from the North and South, from the East and the West and from the centers and the peripheries. It was planned as an occasion for Computer Assisted Qualitative Data Analysis Software (CAQDAS) users from all disciplines to share their experiences with qualitative software. CAQDAS has been available to social scientists for thirty years, and the conference was thought of as an opportune moment to discuss the strength and diversity of CAQDAS impact on social science. The stated focus of the conference was on how those using research practices from diverse worlds have engaged in qualitative computing and how qualitative computing has, in turn, been fostered by these research practices. In the Call for Papers, presenters were asked to analyze their research practices from methodological perspectives and to discuss the epistemological roots of each national way of practicing qualitative research and how these practices shaped or were shaped by qualitative computing. [2]

A hardy crowd of more than 100 scholars gathered at Bogaziçi University in Istanbul Turkey to consider the theory and practice; past and future of the use of computing in qualitative research. On a tall hill overlooking the Bospherous, they met for three days in a stately old hall. For those of us who attended this first ever qualitative computing conference in Turkey, it was a charmed time. In the single session and during the breaks for tea and cookies, old hands in the world of qualitative computing rubbed shoulders with graduate students, up-and-comers in the world of research. As is frequently found in Turkey, a pair of beautiful cats (befriended by a secretary in the building) prowled in and out at different times of the day, enlivening our discussions with their furry presence. [3]

Our local hosts—Sema SAKARYA, faculty member in the Department of International Trade at Bogazici University and Elif KUS SAILLARD of the Sociology Department of Ankara University had worked with a scientific committee of scholars from Argentina, Australia, Germany, Mexico, Spain, Turkey and the UK to select the submissions and had developed a richly international menu of presentations that featured papers about a variety of software, national perspectives, and methodological concerns. All submissions were refereed and 25 papers were accepted for the Conference. . The uniqueness of this conference-the topic and the international scope-was brought home to participants in the warm words of welcome from the university's provost in his introductory remarks to conferees. Interestingly, at the same time that this qualitative research conference was being held in Turkey, the <u>Turkish Online</u> Journal of Qualitative Inquiry (TOJQI) —the first ever qualitative research methodology journal in Turkey-was posting its third issue. As attendees, we felt privileged to be there at the moment when Turkey began to claim its place in the world of qualitative research. In fact, the first plan to hold this conference in Turkey emerged in 2009 as a very friendly virtual messaging between Elif KUS SAILLARD and César A. CISNEROS PUEBLA to bring together experiences from the East and the South as peripheral regions of qualitative computing users. Since 2003 when they first met in Murcia, Spain in the context of the 6<sup>th</sup> European Sociological Association Conference, a potential collaboration was imagined and their conversations when they met once again at the CAQDAS 2007 Conference:

"Advances in Qualitative Software" at the University of London followed the same path, so the conference held in Istanbul was the culmination of several chats over time. The goal was always to bring together experiences from non-English native researchers to get a sort of comparison of the predominant ways they were using qualitative software. Due to the birth of her first child, Elif KUS SAILLARD could not join us to prepare this introduction, but the enthusiasm and energy she gave to organizing and facilitating the conference must be recognized. Without her, Sema SAKARYA, and the friendly volunteer students who supported all the activities, the Conference would have been impossible. [4]

The weather outside was surprisingly chilly for that time of year in Turkey, but inside our conversations ranged widely from the future of the tools to perspectives on teaching with these technologies and their integration into particular fields such as cultural geography, sociology, and psychology. We probed the merits of different forms of software and scrutinized the features and their adaptions. A special emphasis of the conference was to consider the international issues—contradictions and complements—of qualitative computing in different national and regional contexts. As CISNEROS PUEBLA (2008) has aptly pointed out, the narratives that are told about the history and development of qualitative research are deeply grounded in the experience of North America, and it is only very recently that the diversity of qualitative research history and experiences is coming to light. Nowadays a very rich discussion is emerging regarding our position as global qualitative researchers (HSIUNG, 2012) based on various reflections that have been initiated from different perspectives about the dominance of the Anglo-American legacies (ALASUUTARI, 2004; MRUCK, CISNEROS PUEBLA & FAUX, 2005; CISNEROS PUEBLA, DOMÍNGUEZ FIGAREDO, FAUX, KÖLBL & PACKER, 2006). [5]

Our meeting, like our collection of papers, represented the formative beginnings of a new and international perspective on qualitative research as a multi-lingual, heterodox, assemblage of overlapping and juxtaposing ideas. Not surprisingly, North Americans were present, but not in the majority; native English speakers were present, but not in the majority. Although English was the common language of the conference, all speakers needed to listen hard, speak carefully, and attend with care to insure they were making sense. [6]

The day-to-day discussions, the follow-up, and many photographs of the event are available on <u>http://qrfrag.blogspot.com</u> in a series of ten blog postings uploaded from 2/24/11 to 3/2/11. [7]

# 2. Diverse World and Qualitative Research Practices Conference

As we look back on the experience of the conference, three prominent themes arose for us:

- the presence of multiple discourse communities that are engaged in the discussion of qualitative computing in the social sciences and the ways qualitative computing has emerged as an expression of these diverse communities;
- 2. the continuing diversity of tools for qualitative computing; and,
- 3. the variety of needs that present themselves as we consider the present and the future of qualitative computing. [8]

# 2.1 Multiple discourse communities shaping the discussion of qualitative computing

Although small in number, the conference in Turkey was remarkably diverse in the disciplines represented (psychology, business, sociology, education, computer sciences, and others), the regions of origin (the Middle East, Europe, South America, and North America) and the methodological perspectives (grounded theory and arts-based research, discourse analysis and other forms of qualitative research strategies). This circumstance was highly beneficial to meeting the aims of the conference, that is, to confront the boundaries of the state of normal in qualitative research through living with the juxtapositions that these many forms of diversity represented to the conversation about qualitative computing. The issues relevant to this diversity emerged in discussions of our different national and linguistic experiences with the tools, the ways different disciplines used the same tools, and concerns about the many qualitative researchers in our respective fields who had not yet embraced CAQDAS technologies. [9]

Along with the sessions where the papers were discussed the participants had the opportunity to attend informative workshops about recent developments in several software packages: MAXQDA, ATLAS.ti and CMAP3. Although it seems like qualitative computing tools are creating a homogenous world of users regardless of their nationality, languages or disciplinary background, during the conference in Turkey we were witnesses to the great diversity of possibilities for using software. [10]

This special issue is part of the continuing dialogue about the issues of qualitative research and its technologies, which includes the recent *FQS* issue published last year (EVERS, MRUCK, SILVER & PEETERS, 2011) and the issue published a decade ago (GIBBS, FRIESE & MANGABEIRA, 2002). [11]

A major impetus for this conference was the lack of information related to a range of CAQDAS issues, specifically, what software would work best in which situation; how researchers are employing CAQDAS with different methodological approaches; and, in particular, how do these approaches differ around the world? Given what was not known about qualitative computing in the international context, a conference was particularly exciting because it provided opportunities for people to understand what challenges other researcher communities are facing in their countries, disciplines, and substantive fields of research. [12]

## 2.2 The continuing diversity of tools for qualitative computing

Despite 30 years of CAQDAS in the social sciences, this conference demonstrated that there is not yet one standard tool. Different tools are favored by different national areas or disciplines, and new tools continue to emerge. At the conference in Turkey, each of the "big three" more comprehensive tools in the arena of qualitative computing (NVivo, Atlas.ti, and MAXQDA) had representatives or paper presentations using the tools. There were also presentations about tools designed for more specialized purpose (a presentation on Tropes, a tool for lexical and content analysis was an example), and the presentation of new tools (CMAP3 designed for comparative causal mapping in the business world). [13]

For those who have followed CAQDAS for some time, as well as for those who were quite new to the field of CAQDAS, there was much to learn from the comparison and reconsideration of various tools, their capacities, design, and the ways they were used in the hands of different researchers. Again, the juxtaposition of diversity in this small conference allowed for maximum comparison and contrast. [14]

For the first time in a non-central and non-English speaking country, persons very closely related to qualitative software development, including the developers themselves, were discussing with users from Turkey, Mexico and Argentina, just to mention some of the nationals present, who had not had the opportunity to talk about their doubts, projects, and specific use of diverse software tools. In our view, it is highly valuable to promote conferences to be held in developing countries to facilitate such kind of discussions. [15]

# 2.3 The future of qualitative computing

Nigel FIELDING kicked off the event with a provocative talk about new communities of users (who are often not official social scientists) engaging online in CAQDAS-like activities, which offered one view of the future. In this potential future scenario, CAQDAS will have shifted to online tools and qualitative research will be the practice of the many not just the few, meaning social science researchers with Ph.D. working in academia. However, many of the talks that followed stressed the more classical stand-alone CAQDAS software and all were presented by academics using the software to conduct research that was rigorous in adherence to standardized methodological and disciplinary pathways. FIELDING's talk presented the quandaries that currently face the CAQDAS social science user: What will the Internet bring? How will it change the tools we use? How will it change the role that we, as qualitative researchers, play? [16]

Throughout the conference, participants were well aware that, as dedicated CAQDAS users, they represented only a slim percentage of the bulk of social scientists practicing qualitative research. Despite the multi-year history of CAQDAS availability, many qualitative researchers have still not been exposed to or learned to use these tools (DAVIDSON & DiGREGORIO, 2011). Many, indeed, hold strongly negative views about the use of this kind of computer technology in qualitative research. Why, we asked ourselves, does this circumstance continue? What are the barriers to use? What kind of supports do users need? Who is at fault? Does the problem lie in academic training? Or in the focus of disciplines or methodologies? And, is all of this worrying about CAQDAS going to be a moot point in a year or two, when the Internet takes over everything and stand-alone tools are relegated to the morgue of qualitative research technologies? That was a sobering thought for all of us. [17]

Because of the great diversity of voices from different countries, this historical querying in regard to the many years of CAQDAS history available was particularly impressive. However, we were aware that we missed the presence of researchers from Africa and Asia to integrate their experiences into this debatable and contested future of globalized qualitative computing. [18]

# 3. From Conference to Journal

As is apparent from this discussion, the small, but intense, gathering allowed for a high level of stimulating exchange. Before we left the conference, we had already begun to make plans to share the experience and its contents with a wider audience through a special publication. Over time and with the guidance of Cesar CISNEROS, a key conference planner, that publication evolved into this issue of *FQS*. [19]

It is divided into four sections, each representing a different perspective on the shape and direction that qualitative computing has taken or could take in the future:

- 1. Looking into the Future
- 2. Urban Studies
- 3. Creativity and New Tools in Qualitative Computing
- 4. Focus on the Cultural Context [20]

The first section, *Looking into the Future*, is composed of the keynote offered by qualitative computing expert Nigel FIELDING from the Sociology Department, University of Surrey UK. It provides a heady introduction to the possible future of this field ("The Diverse Worlds and Research Practices of Qualitative Software"). FIELDING, who has lived the changes in qualitative computing, brings this historical insight to the debate, at the same time that he looks forward to consider what is coming in the next phase of qualitative computing. His work takes us beyond the limits of the stand-alone software (CAQDAS) and suggests what the future might look like in a time and place dominated by Internet activity. Fielding

demonstrates how globalization and digitalization has led to the rise of citizen researchers, many who are conducting qualitative like research with CAQDAS like tools, outside of institutions of higher education. In this world of blurred boundaries between experts and lay people, what role will academically trained qualitative researchers play? [21]

Section 2 *Urban Studies* focuses in on how qualitative computing is applied to generate approaches to create knowledge of urban spaces. Two papers represent the discussions in this area. The first is a case study of the use of GIS and Atlas.ti as applied to an urban studies problem in Spain. "An Application of Qualitative Geographic Information Systems (GIS) in the Field of Urban Sociology Using ATLAS.ti: Uses and Reflections" is co-authored by Joan Miquel VERD and Sergio PORCEL from the Autonomous University of Barcelona [22]

The second paper is "A Methodological Approach to the Study of Urban Memory: Narratives about Mexico City" by Martha de ALBA, a member of the Department of Sociology, in the Social Psychology Area at the Universidad Autónoma Metropolitana-Iztapalapa, located in Mexico City. ALBA's work has us walking the streets of neighborhoods in Mexico City, seeing the past and the present through the eyes of older inhabitants who have experienced the many stages of this rapidly changing urban area. [23]

*Creativity and New Tools in Qualitative Computing*, the third section, presents new ways of understanding qualitative computing tools and introduces a very new qualitative computing tool. [24]

The contribution "The Journal Project: Qualitative Computing and the Technology/Aesthetics Divide in Qualitative Research," by Judith DAVIDSON of the Graduate School of Education, University of Massachusetts-Lowell, explores the ways arts-based research and qualitative computing can be combined to leverage richer and more intense interpretation from a qualitative research project. DAVIDSON studied 18 months of her personal journals using the CAQDAS tool—NVivo—and this investigation led to further, complimentary exploration in her chosen art medium. Looping back and forth between the "hard facts" revealed in NVivo and the "soft facts" of the fiber pieces, she is able to integrate notions of aesthetics across the two. [25]

The second article in this section—"Hypertextuality, Complexity, Creativity: Using Linguistic Software Tools to Uncover New Information About the Food and Drink of Historic Mayans "—was written by Rose LEMA, a Linguistics and Anthropology professor at the Universidad Autónoma Metropolitana in Mexico City. LEMA uses a French linguistic software (Tropes) to study the language of Mayan food and drink through the examination of a dictionary written by a Spanish priest, one of the first to come to the Americas and serve the Mayan people. She demonstrates how language analysis and visualization can be used hand-in-hand to bring forth richer understanding of texts produced at a time and in a culture distant from our own. [26]

These two contributions are paired with the work of Mauri LAUKKANEN of University of Eastern Finland. LAUKKANEN's article "Comparative Causal Mapping and CMAP3 Software in Qualitative Studies" describes a software he developed that has powerful capacity to aid in the study of the mapping of relationships. His examples are related to his area of study—business. Thus, this trio of pieces provides new glimpses into the use of existing software but also provide the opportunity to interrogate CAQDAS use from new or unorthodox perspectives or even to include in our CAQDAS' discussion software developed with non-qualitatively data driven purposes, but that can, ultimately, provide a richer qualitative outcome. [27]

In the final and fourth section, readers are offered a pair of articles that are deeply embedded in specific cultural contexts, and hence the title of this section *—Cultural Contexts*. The work in this section illustrates the importance of culture, setting, and place as the locus for studies that employ qualitative computing. Göklem TEKDEMIR YURTDAS' work on "Repetitions in Turkish: Talk Among Friends" is deeply embedded in the field of conversation analysis and shows us the strong methodological background of one of our Turkish conference participants. [28]

"Features of a Local Culture as Viewed from the Perspective of Strangers" was written by Silvia BENARD, Professor in the Department of Sociology and Anthropology, Universidad Autónoma de Aguascalientes, Mexico. BENARD uses grounded theory and auto-ethnographic approaches to explore the effects of the psychologically conserving forces of a regional city in Mexico on newcomers, including herself. [29]

# 4. Final Comment

This issue represents the work of a quartet of editors, Cesar CISNEROS of Department of Sociology, Universidad Autónoma Metropolitana-Iztapalapa; Judith DAVIDSON of the Graduate School of Education at the University of Massachusetts-Lowell, Bob FAUX of the Psychology Department, Duquesne University, and Jane WONG, Graduate Student at the University of Massachusetts-Lowell, Department of Music Education. All papers submitted by conference attendees were peer reviewed by a minimum of three readers following FQS guidelines. From those submitted, a smaller number were selected to be published in this issue based upon meeting the quality standards for FQS on line journal. [30]

The experience of shepherding the papers to final publication in this FQS Special Issue has been an international experience of the greatest sort, as we worked across disciplinary, cultural, and linguistic differences to make coherent meaning across boundaries and develop the meaningful *bricolage* that we believe this issue represents. Working in this way (truly the FQS way), requires deep commitment to solving the most complex and intricate puzzles of cross-cultural translation. The papers represented sophisticated thinking, grounded in specific disciplinary perspectives, written by scholars with highly polished writing skills in

their native languages. Each scholar was responsible for translating their paper into the first English draft. The editors then worked closely with the writers to insure that the revised English translation had fidelity to the author's original meaning. In most cases this required many conversations back and forth between writer and editor, enriching the understanding of both. [31]

Our thanks to all of the attendees at the conference in Turkey that sparked this issue and to the authors from that conference who share their papers here. [32]

Based upon our experience in Turkey and in the development of this issue, we feel more strongly than ever that it is critical for qualitative researchers to challenge the underlying assumptions of our Anglo-American roots. Addressing the challenges of our methodological assumptions is essential for researchers both within and outside of the nations that make up that hegemonic discourse formation. Qualitative research with its roots in anthropology and sociology and its dynamic critiques of the issues of culture and community, is particularly well suited to take up these concerns and lead the way for social scientists to address the changing landscape of our world. We strongly urge the scheduling of more such international meetings, like the one reported on here, and, particularly in those countries identified as "third world," "developing," "peripheries," "dependents" and so on. In this way, we will continue the process of decentering the discourse of qualitative research methodology, bringing first world researchers into confrontation with their assumptions and allowing researchers in developing countries to present their ideas from settings more closely related to their own cultural and historical contexts. These rich exchanges held on new territory have the potential to open up new methodological possibilities and lead to exciting collaborative opportunities. Reflecting on the process, such as occurred in the construction of this special issue, has the value of extending and disseminating those special moments of intersection among diverse members of the clan of qualitative researchers. [33]

At the end, we must recognize that qualitative research is diverse because of the polivocality of its practitioners. It is diverse because the multiple national and cultural origins of its researchers. It is multi-faceted as a consequence of its different conceptual and methodological legacies. To enrich our practices living in the middle of such diversity must be our vocation and conferences like this one are a perfect means for qualitative researchers to develop their full potential within the global community. [34]

In regard to CAQDAS, we would raise a simple question here, one that can only be answered in the future: Is the responsibility of qualitative software to create homogeneity in the practice of research, independently of what historical, cultural, social or linguistic context the researcher is analyzing? In other words, is the "neutral" feature of technology imposing on us a "one right way" of using it? The answer to this question is highly significant to what it means to be a global qualitative researcher in the debatable and contested future of globalized qualitative computing for the next couple of decades. [35]

*FQS* 13(2), Art. 28, César A. Cisneros Puebla & Judith Davidson: Qualitative Computing and Qualitative Research: Addressing the Challenges of Technology and Globalization

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## Citation

Cisneros Puebla, César A. & Davidson, Judith (2012). Qualitative Computing and Qualitative Research: Addressing the Challenges of Technology and Globalization [35 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, *13*(2), Art. 28, http://nbn-resolving.de/urn:nbn:de:0114-fqs1202285.