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The Applied Anthropologist publishes peer-reviewed articles, commentaries, brief communications, field reports, and book reviews on a wide range of topics. The journal's focus is on cultural change and adaptation in the modern world. It explores how humans approach, analyze, and develop solutions to cultural, ecological, economic, and technological problems. The journal is supported and underwritten by the High Plains Society for Applied Anthropology. Guidelines for authors and electronic access to back issues are available on the website or by contacting Managing Editor Andrea Akers at andrea.akers.mader@gmail.com or Editor-in-Chief Stephen O. Stewart at stewart@gmail.com. Further information about the society is available at www.HPSfAA.org.



No. 1 2013

POINT-TO-POINT

STEPHEN O. STEWART



EDITOR-IN-CHIEF

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Volume 33, No. 1 needs to begin by recognizing a changing of the guard. Peter Van Arsdale has carried out the role and tasks of Editor-in-Chief of The Applied Anthropologist during the previous two years, and he has done so efficiently, conscientiously, and admirably. As this responsibility passes to myself, Stephen Stewart, I want to first of all thank Peter for a job well done and for helping me to take over.

I would like to take this opportunity to solicit articles from all readers of The Applied Anthropologist, as well as from their friends and colleagues. It is also important for use to have a varied group of individuals willing to participate as reviewers of these articles. If you would be willing to participate, please send me your name, email, and a short bio detailing your areas of competence. My email is stephen.o.stewart@amail.com.

Kathryn A. Kozaitis reported on one of the most difficult areas of applied anthropology: the reform of a complex organization, namely the state of Georgia university system and the university focus toward improved math and science teaching in secondary schools. Successful reform requires that administrators and faculty from multiple units and levels of the system be engaged and committed to the reform, not an easy task. Kozaitis describes the use of a number of approaches to produce what she has called a "center-outer reform," bringing planners and targets to form a coalition of change agents.

Dengue is a disease spread by mosquitoes in tropical and subtropical area. While not as deadly as malaria, it can be highly debilitating, as my dentist in Guatemala described for me in excruciating detail some years ago. For humans, living without contracting dengue in dengue areas is possible, but it requires knowledge of the mosquito vectors and certain lifestyle precautions. Applied anthropology can help to identify actual cultural practices as well as modifications to those practices. The article by Frank J. Dirrigl Jr and Christopher J. Vitek is a contribution to the literature with specific application to the Texas-Mexican border in extreme south Texas.

Luis Rivas' article contributes to the increasingly complex discussion of cross cultural communication and specifically the inter-ethnic dynamic in the United States between the dominant Anglo-based culture and the Latino or Hispanic culture where Spanish is a primary language. His article focuses on the university setting, the perceptions of Latino students as regards language and identity, the need those students may feel at times to code-switch between English and Spanish, and the power dynamic of the classroom. Rivas argues that "discussing the culture of power with students helps to 1) develop a level of transparency of academia and invites students into important conversations of power relations, 2) identify power structures while building a vocabulary, and 3) gain confidence in their attempt to negotiate themselves and their new academic environment."

The final article by Laura Jagla in this number of The Applied Anthropologist looks at Rwanda through the lens of commentaries in the local press as well as those found in blogs posted by Rwandans living outside Rwanda and those coming from foreign governments. The setting is one characterized by recent economic and political development but always in the context of ethnic tension of the sort which exploded in the massacres of recent years.

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Vol. 33 No. 1 2013 CENTER-OUTER REFORM: PRINCIPLES OF ANTHROPOLOGICAL PRAXIS TO SYSTEMIC CHANGE IN HIGHER EDUCATION KATHRYN A. KOZAITIS

ABSTRACT

A global market in demand for STEM professionals compels the government of the United States to fund in millions educational reform initiatives to improve the teaching and learning of the natural and computational sciences across elementary, secondary, and post-secondary institutions. Such initiatives constitute systemic cultural transformations in higher education, the nature and efficacy of which call for applied anthropological theories, methods, and skills. Principles of anthropological praxis and participatory action research strategies, guided project PRISM (Partnerships for Reform in Science and Mathematics), a state-wide cultural intervention in the University System of Georgia to encourage and reward faculty in Arts and Sciences who work in K-12 schools. Administrators and faculty from multiple units and levels of the System provided ethnographic data that informed a new, culturally affirming Board of Regents policy to increase engagement by college faculty in the state's school districts. This study demonstrates that ethnographic, collaborative, communicative, and participatory approaches to systemic planned change led to center-outer reform, a process through which former top-down oriented planners and their designated targets formed a coalition of change agents with a mutually defined mission, and the activities and rewards to implement it.

KEY WORDS: systemic change, STEM, participatory action research; anthropological praxis

INTRODUCTION

Late 20th and early 21st centuries have seen a meteoric rise in federally and privately funded initiatives to change the culture of public education through university-school partnerships, and the development of respective faculty as partners in reform (Foster et al 2010). An applied anthropological perspective to any form of development insists on collaborative, data-driven, culturally accountable, participatory, equitable, and sustainable strategies of planned change (Kottak 1090; Field and Fox 2007; Schensul and Butler 2012). At the center of contemporary applied anthropology are empirically based analyses and applications to planned cultural change at the community, institutional, organizational, or policy level. Some projects seek to rectify social injustices across local communities embedded in global webs of political and economic interests through various forms and degrees of engagement (Low and Merry 2010). Other initiatives facilitate ethnographically informed, systemic, and organizational changes to solve problems, build communities, ensure human rights, improve public education, and construct new policies to guide programmatic and institutional reforms across domains of practice (Hyland 2005; Mullins 2011; Brondo 2010; Checker 2009; Wasson, Butler, and Copeland-Carson 2012). In this article, I expound a theory of anthropological praxis to inform, guide, and help implement a theoretically and methodologically guided systemic reform initiative in higher education (Kozaitis 2000b; Hill and Baba 2000).

Political, academic, and market-driven discourse claims that enhancement of our economic standing in the world relies chiefly on reforms in the teaching and learning of science and math among students in K-12 in the United States, and in-

creased participation of college graduates in STEM (science, technology, engineering, and math) careers. Leaders in business, industry, and government express concern about a national crisis--low rates of scientific and mathematical literacy among American students, and unmet labor demands for STEM professionals in the United States (Borman 2005). The National Science Foundation's Math and Science Partnerships Program (MSP) supports STEM faculty to engage in activities designed to improve student achievement in K-12 science and math education. (http://www.nsf.gov/ehr/MSP/nsf05069 3.jsp).

Such top-down, external, and planned institutional transformations of higher education imply direct changes on faculty culture in local universities, colleges, and departments; topdown mobilization of faculty development to change where, when, how, and with whom professors work, is to change their customary cultural practices and value(s) as academics (Kesar and Eckel 2002). The standard sociocultural core of academic culture consists of research, publications, and post-secondary education, not working with teachers in primary and secondary schools. This "call for engagement" requires that college faculty members alter their standard workloads and academic trajectories to include work in schools, the nature of which is often unscripted, the activities not identified, required skills not acknowledged, the outcomes typically vague, and the incentives and rewards, questionable. Applied anthropological principles and methods are ideally suited in generating data, analysis, and strategies to situate a community's existing cultural orientation as the reference point of analysis and praxis (Hill and Baba 2000; Trotter and Schensul 1998; Warry 1992; Johannsen 1992). With this framework in mind, I partic-

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ipated in the NSF-funded Partnerships for Reform in Science and Mathematics (PRISM). In this paper I demonstrate the design, implementation, and outcome of an anthropologically designed intervention in the University System of Georgia (USG). Emphasis is placed on the cultural dimension of planned change through all the phases of the project cycle to ensure efficacy, cultural compatibility, and sustainability of the innovation across units and levels of the university system.

PRISM

Funded by a five-year, \$34.6 million grant from the National Science Foundation (NSF), PRISM was a state-wide collaboration of the University System of Georgia (USG), the Center for Education Integrating Science Mathematics and Computing (CEISMC) at the Georgia Institute of Technology, and public schools districts. PRISM targeted seven institutions of higher education (IHE) and 13 school districts in four state regions: Metropolitan Atlanta, Northeast, Southeast, and East Central Georgia. The Principal and Co-Principal Investigators, and members of each constituency, formed the State Leadership Team, a body of planners, decision makers, and program evaluators. PRISM's mission was to help teachers, faculty, and administrators to rebuild America's competitive advantage in science and mathematics in partnership with state policy makers.

The focus of my research in PRISM was the component named Strategy 10: a process to increase the participation of professors in K-12 schools to improve the teaching and learning of science and mathematics among students and teachers (Kettlewell and Henry 2009). At the invitation of the Co-Principal Investigator I joined PRISM in 2004 to study the process ethnographically. My official role as a member of the intersector Reward Structure Committee, charged with implementing Strategy 10, optimized participant observation and fostered direct access to the administrators who sponsored the project, and the faculty to whom they directed the intervention.

The Committee consisted of the University System's Vice Chancellor of Academic Affairs (Chair), another member of the Board of Regents, the Executive Director of grades pre-school through college sophomore year (P-16), two Vice-Presidents for Academic Affairs, two Deans, a professor of mathematics, and an external evaluator. Members of the Committee brought to their work cultural profiles of their own: personal ideals, political interests, academic disciplines, and professional skills related to natural and computational sciences, and education. My role evolved into an active agent of change as I both studied and guided the innovation as "an outsider within" (Harrison 2008).

Participatory Action Research (PAR) produces social and cultural knowledge--the data, theory, and results that ought to inform a culturally informed, local intervention (Trotter and Schensul 1998; Field and Fox 2007). PAR is, by definition, an intervention in its own right, a process that transforms research subjects to co-researchers, co-designers and co-implementers of self-determined cultural changes (Kozaitis 2000a; Burns 2007). Representation in action research from all constituencies of PRISM generated two processes that occurred simultaneously,

and which fostered a collaborative initiative: (1) enculturation of university officials from elite, top-down agents of change, to ethnographically-informed facilitators of systemic planned change; and (2) enculturation of higher education faculty from targets of top-down change, to agents of participatory, centerouter systemic reform (Kozaitis 1997). While a sense of collective agency was initially intellectual and analytical, through structured "communicative action" with representatives of all constituencies, faculty engaged with official PRISM planners to co-conceptualize, co-design, and co-implement innovations to the University System of Georgia (Habermas 1984).

The Making of Ethnographically Informed Facilitators of Planned Change

In order to construct a mutually comprehensible framework "to change the culture of the University System of Georgia (USG)," I facilitated early conversations among my colleagues with the following questions: What do we mean by the term "culture?" What does "cultural transformation" in educational contexts mean, to what end, and for whose benefit do we want to change faculty workloads?" Some insisted that policy and practice are independent of culture, and declared, "We want to change the culture, write a new policy, and change faculty practices by putting in place a new reward structure." I suggested that policies, roles, practices, beliefs, and rewards, like language and technology, are aspects of a socio-cultural system however dynamic and fluid; change in one dimension of the system, e.g., faculty workloads, will bring about change in others, e.g., research productivity. Interventions lead as much to anticipated as unanticipated consequences. We also considered ways by which one might approach what some referred to as "changing a culture" (a problematic reference for anthropologists who dispel notions of a culture with fixed and immutable boundaries). We spoke instead of attention to patterned, collective practices, values, and beliefs of higher education faculty, and the implications of integrating new ones, such as a new policy, to the preexisting "systemic culture" (Kozaitis 2008).

These conversations helped us to establish a shared understanding of our collective task as a Committee by incorporating our varied disciplinary perspectives on what we already knew, needed to learn, agreed to do, and how to go about achieving it. That effective and sustainable planned change must be culturally affirming and relevant is an established principle of applied anthropology. Accordingly, I recommended to my colleagues that a new policy is more likely to affect change in faculty practices and values if the faculty participated in all the phases of the project cycle—rationale, conceptualization, content, planning, design, implementation, and evaluation of a new systemic policy.

PRISM planners gradually understood my emphasis on local knowledge as a critical variable to effective and sustainable reform. Faculty's existing pedagogical practices, values, and beliefs regarding their roles and rewards constituted cultural information that must be taken into account before any changes to "their culture" is proposed or enforced. We agreed that PAR

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would generate collaborative relationships between planners and faculty, and produce data that participants would cogenerate, co-theorize, and co-implement. These discussions strengthened a collective understanding of how to think about, and pursue, anthropologically-informed policy related to changes in faculty roles and rewards. Enculturation of PRISM's official leaders from top-down change agents to facilitators of change, in partnership with faculty, occurred through continued conversations about ethnographically-based participatory reform—as intervention theory and as practice (Kozaitis 1997).

Faculty as collaborators in systemic change

Our formal contact with faculty to enlist their participation began with a pilot study that the Committee designed to reach 60 representatives from the University System of Georgia. We employed unstructured interviews, focus groups, and email correspondence with faculty and administrators to determine the cultural diversity among academics with respect to their discipline, rank, and home institution; we also sought to decipher any evidence of collective positioning—degrees of compliance or resistance vis-à-vis policy changes that came "from the top." Participation in the pilot study increased faculty's awareness of underachievement in science and math as a social problem that requires attention; it also inspired them to consider the role of higher education, and their own participation, to help improve K-12 education in the natural and computational sciences.

Analysis of the pilot data informed the design of a larger scale, systematic participatory action research project. We expanded the research to 112 faculty and administrators from PRISM's four regions; these faculty represented all ranks, science and math disciplines, and colleges of Arts and Sciences of each participating IHE. Participants recorded their experiences, sentiments, concerns, and recommendations with respect to changing their roles and rewards on a three-part ethnographic instrument that I designed and distributed during a two-day symposium. This strategy ensured that faculty input would exist in writing and in their own words; accordingly, the creation of a new policy, and new workload activities and rewards would be informed as much by PRISM's leadership team, as by representative faculty whom this systemic reform would affect personally and directly (Kozaitis 2008).

KEY FINDINGS

Inter- and Intra-institutional differences in academic culture

At the onset of PRISM, planners spoke of "the faculty" and "the system" as a single, unified, perceptibly homogeneous "culture" targeted for top-down reform of roles and rewards. Ethnographic analysis revealed that faculty members define and value research, instruction, and service roles and activities differentially depending on sector, institution, discipline, rank, and existing reward structure. Faculty affiliated with Research Universities expressed the highest degree of resistance to work in schools; they viewed it as incongruous to their primary identity as researchers. "What does K-12 education have to do with our

work?" inquired one participant. Scientists view instruction as secondary to research in the hierarchy of academic activities, and service even less critical to their career. For these faculty members, "my work" consists of federally funded lab studies, peer-reviewed publications on scientific findings, and participation in academic societies and conferences. Most recorded pedagogical interest in developing new "instructional technology," not "working in schools." Generally they perceived PRISM activities as service, and claimed "service doesn't count," so "our adoption of K-12 activities is not very likely."

Faculty from Regional Universities defined professional development as "action research" on how to transmit science and mathematics content to improve student learning. They also included publication of such studies, but in "educational journals accessible to a broader audience" to increase teachers' and children's enthusiasm for science and mathematics. They proposed that instruction would include modification of university-level labs for use in K-12, while service would focus on outreach to schools, development of web connections between professors and teachers, and participation in raising performance standards. Faculty members from regional IHE embraced investment in K-12 education more readily than their research-oriented counterparts, because PRISM activities are "relevant" to their existing workload and compatible with their institutional culture.

Science and math faulty in four-year colleges identified as professional development demonstration of science and math lessons in K-12 classrooms, co-authoring grant proposals with teachers to support innovative teaching strategies, and participation in science and mathematics education societies and conferences. They defined instruction as adding audio-visual aids to instructional labs for K-12 students and teachers. As service they noted involvement with parents and school boards to advocate science and mathematics education, sponsorship of science and math clubs to involve college students as classroom partners in schools, and development of a central system to coordinate outreach activities to schools. This group also embraced "the scholarship of teaching and learning," a core value of PRISM, and proposed culturally acceptable activities they wish to enhance further (O'Meara and Rice 2005).

Compared to the degree of cultural changes imposed to self-identified academic researchers, and concomitant resistance, faculty in four-year colleges demonstrated "cultural comfort" with engagement in schools. Given that lower-division education is a primary mission of four-year and community colleges, this faculty viewed PRISM-related activities as strengthening their professional and career interests. This finding supports the principle that target communities are more likely to embrace planned change when innovations match pre-existing cultural practices (Hyland 2005).

Self-tailored Construction of new Workload Inspires Faculty Engagement

Providing participants the opportunity to design a workload tailored to their own interests, assets, and status, inspired a

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greater degree of commitment to the systemic change than did abstract notions about top-down changes to their work. On the ethnographic instrument faculty constructed in writing a hypothetical, prospective three-year workload, inclusive of potential K-12 activities they might integrate in their standard workload.

Participants from research universities reported some "potential adjustments" to their workload: (1) seek funds for research collaborations with colleagues in higher education and K -12 student achievement, curriculum content, learning theories, and teaching strategies; (2) publish this research in professional, peer-reviewed science and math education journals; (3) lead decision-making bodies to develop curriculum, determine performance standards of student achievement, and teacher competency in learning and teaching science and math respectively; and (4) create new assessment criteria of learning outcomes in K-12 classes to complement standardized tests. While these professors continue to think like funded researchers, given the chance to determine their workload, they shifted focus from research grants for lab research, and peer-reviewed publications in science and math journals, to securing funding for educational research, publications in peer-reviewed education journals, and leadership in curriculum development.

With respect to instruction, the most common response was vague: "Working with school teachers and students." The majority of faculty admitted to having insufficient awareness of needs and concerns of school administrators, teachers, and students. A refrain from many faculty and administrators was, "K-12 is a completely different culture," uttered in a tone that might imply bias in favor of higher education. A majority of the scientists and mathematicians stated that understanding the needs of K-12 schools and their teachers would help determine more relevant interventions by PRISM. Those more familiar with K-12 proposed summer institutes to work with teachers on science and math content, mentoring teachers to enhance inquiry science and math pedagogy, and periodic workshops focused on improving science and math learning outcomes.

At first faculty expressed concern that educational activities outside of academia may not be recognized and rewarded by higher education. As one informant wrote, "I have a feeling that anything I do here will be counted as service, not as teaching." However, inviting self-determined, participatory feedback, encouraged faculty to contribute the following suggestions: (1) provide access to labs on campus as a way to enhance inquiry-based science lessons for schools that lack lab space and materials; (2) conduct after school workshops for teachers that focus on up-to-date content, inquiry based teaching, and hands-on learning; (3) create websites for teachers that would supplement their classroom teaching; (4) provide guidance to teachers on pedagogy in line with "today's standards and with an eye to the future," and (5) offer a senior, capstone seminar on science and mathematics to education majors.

Responses regarding what they might do for service included support as judges in math and science clubs or fairs, e.g., Science Olympiad. A common projection was membership in

committees comprised of personnel from higher education and school districts to create learning and teaching alliances. As one informant wrote, "PRISM must reach not just teachers in the schools, but also others, even more so--those who determine what goes on in the schools, e.g. school boards, local education authorities, etc." Theoretically, this set of responses indicates that people are more likely to consider changes to their daily patterns when they have the opportunity to choose and self-tailor innovations that will sustain, promote, and reward their cultural identity and status in their community.

Meaning as Incentive and Reward in Adopting Changes to Workload

Participants indicated that personal meaning is a key factor that determines their degree of compliance versus resistance to "public engagement." Feedback on incentives revealed participants' more humanistic and moral sensibilities (Blackburn and Lawrence 1995). Patterned responses included voluntary participation as public service, promotion of high quality students and teachers in under-funded communities, and care about the future of disadvantaged students in Georgia's school districts. While the reference to "work in schools" alienated most participants at the start of the Symposium, "work to help underprivileged students" raised their motivation to "fight for equity in science and math education." Also meaningful to them was an organized effort to advance scientific literacy in schools on behalf of their own children, those to whom they are related, and others whom they know in their neighborhoods.

We asked participants to create a free list of rewards meaningful enough that would inspire them to work in and with schools. They recorded: time release, workload reduction, salary increase, summer salary, mini-grants, travel funds, graduate assistantships, and support for instructional and research technology. Assistant professors predictably emphasized credit toward promotion and tenure, while tenured faculty listed promotion to the rank of professor and merit-raises. The faculty emphasized "up front concrete rewards;" faculty members are more likely to work with schools for culturally meaningful rewards that distinguish them as researchers and educators of higher education.

Targets of top-down Change turned Consultants of culturallytailored Change

The faculty recommended that sectors and institutions must determine site-based criteria of what activities constitute professional development, or scholarship, in the various departments, and identify explicitly the rewards linked with such activities. They also advised that institutions of higher education ought to revise their current promotion and tenure guidelines to include PRISM-related activities so that the University System recognizes and rewards K-12 school-based work, and all efforts to enhance STEM education. Without exception, participants requested evidentiary commitment by the higher administration, including members of the Board of Regents, to sustain innovations by continued funding and provision of other resources to meet their

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needs once the NSF funding ended.

Faculty requested from PRISM to expand and diversify the repertoire of activities in which they may engage and for which they should be rewarded. In other words, in response to PRISM's request of faculty to engage in what they first perceived as "additional work," "extra-service," or "public outreach" for "zero credit," faculty engaged in PAR asked PRISM to maintain the rewards that faculty consider meaningful to their careers as academics. We observed here emergent collaboration and integration of a "PRISM culture" inclusive of the leadership, formerly self-proclaimed "agents of change," and the faculty, the initially ascribed "targets of change."

Faculty input guided the Committee's efforts to determine the rationale and language for a course of action that would advocate, encourage, and reward university school partnerships in science and mathematics. At the center of this process was the documented and analyzed feedback from the faculty that informed the writing of a new Systemic Policy that signified a new mission and set of cultural practices of the University System of Georgia: to improve scientific and mathematical literacy across, and within, each of its institutions. By incorporating faculty's sentiments, concerns, and recommendations, PRISM planners proposed to the Chancellor of the University System guidelines on which to base a new policy and reward structure for related activities. The Chancellor issued guidelines to be published in the Academic Affairs Handbook, which serve to encourage formal institutional recognition and reward for faculty in realizing the expectations embodied in this policy.

ANALYSIS AND DISCUSSION

Planned cultural transformations are more likely to be sustainable when these are aligned with a system's, or community's existing culture--demographics, resources, relationships, practices, policies, and values. Partnership with the faculty--the "locals" of this 'development project,' as co-researchers and co-creators of a new policy, inspired them to take the innovation more seriously, and to invest more readily in its implementation. Participants publicly acknowledged concern about underachievement in science and mathematics among students in K-16. PAR generated a new awareness about their potential as reformers of science and math education, and inspired in them a reorientation to their workload to include engagement in K-12 schools in ways that "fit" their existing academic profile.

The more culturally compatible an innovation is to existing community practices, the greater the likelihood that people will adopt sustainable changes to their daily life. Engaging faculty from research universities in K-12 education constitutes a serious challenge. Their input emphasized perspectives and proposals that are more relevant to their scientific careers, then to the needs of teachers and pupils in the state's schools. PRISM's intention to "change" university faculty to serve primary and secondary education is culturally incompatible with the preexisting academic culture of researchers---including the incentives that drive their workload, their relationships, practices, and rewards.

However, research-classified faculty members reported that they are more likely to invest in and sustain educational reforms in science and math when such efforts will strengthen their teaching of undergraduates through higher quality science and math college courses (Savan 2004; Zhang et al 2009). University faculty members are accustomed to professional autonomy and independent productivity; accordingly, they were ideal partners -in-reform as long as they influenced the new directions and rewards of their workload to match their professional status and career trajectory.

Cultural changes to build communities are more likely to occur and be sustained when material resources continue to be available. A significant indicator of sustainable infrastructural support is the "Mini-Grants Program" that PRISM implemented. Universities and colleges provide faculty with "seed money" to fund research related to improving their own teaching, as well as contribute to improving scientific and mathematical literacy among teachers and students in the state's schools districts. Continued funding is now secured by a new STEM initiative by the USG, which ensures that required resources are in place to streamline science and mathematics reform in grades K-16-kindergarten through freshmen and sophomore years in colleges across Georgia.

Planned cultural changes are more likely to be effective and sustainable when the institutional or organizational structure also changes, in this case, to accommodate new faculty roles, practices, and rewards. For example, PRISM's new Learning Communities foster intra- and inter-college and departmental collaborations between higher education faculty and K-12 teachers. New Regional Institutes and Academies of Learning provide structural support to enhance the learning and teaching of science and mathematics in K-16. Moreover, new hires of STEM faculty to work with education majors introduces a new structural element to Colleges of Arts and Science, reinforcing undergraduate education in science and mathematics as valuable, normative, and intrinsic to improvements in science and mathematics in schools.

Sustainable cultural innovations are most evident in practices, patterned and collective behaviors of faculty and administrators across the USG. New practices include newly updated promotion and tenure manuals to ensure inclusion of, and rewards for, work by faculty in K-12 schools. Department chairs incorporate new guidelines for promotion and tenure in the departmental manuals to recognize and reward faculty in the natural and computational sciences with credit for STEM related activities. New cultural practices include acquisition of research grants from educational agencies, scholarship of teaching and learning, and publications by scientists in educational journals.

The new policy signifies a change in the *ideology* of higher education for an emerging *engaged* University System. It reflects a change in systemic value orientations with respect to what *ought* to "count" as standard practice in a faculty member's academic workload, including partnerships with schools. Policy, an ideational element of systemic culture, ensures that related practices will be recognized and rewarded. Faculty in the USG

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are now promoted based not only on "scholarship of discovery" (conventional basic research), but "scholarship in teaching and learning" as well as "scholarship of engagement" (O'Meara and Rice 2005; Ellison and Eatman 2008). Institutional adoption and implementation of the policy indicates reform in the ideal culture of the USG. Evident is a new, overarching value orientation that places education of science and mathematics side-by-side with scientific and mathematical research.

CONCLUSION

The demand for a STEM-literate workforce and citizenry is increasing, funding agencies support partnerships to broaden applications of science and mathematics research, and universities establish roles and rewards to increase the number of faculty to reform science and math education in K-16. PRISM exemplifies this national phenomenon. Unique to its design is and ethnographically informed systemic reform. As this study demonstrates, an applied anthropological approach to planned change increases the likelihood that interventions will be participatory, collaborative, and sustainable. Participatory action research produced a rapid assessment of faculty needs, concerns, and interests. System officials, faculty and administrators had the opportunity to communicate and gain mutual awareness of their shared social capital as citizens of the USG, regardless of rank, discipline, or institution. PAR unified faculty and administrators as a body of social actors, free to think and argue in a public sphere about the feasibility of PRISM as an intervention, and the extent to which participation was in their best interest.

The process also reinforced an asset-based approach to change (van Willigen 2005). Faculty entered the process as targets of top-down change, and left it as prospective, self-conscious consultants of planned change guided by their own intelligence and authority. In this respect, participatory action research proved to be a form of cultural intervention, in that it facilitated new ways for formerly independent faculty to identify, communicate, and work together as members of a larger community to which changes were directed, and which now they were empowered to influence.

The challenge to my role as an applied cultural anthropologist was to argue against non-anthropology colleagues' conceptions of "college faculty," "partners," or "a school district" as bounded, static, or "unique cultures" to be compared, contrasted, or changed (Kettlewell and Henry 2009). Instead, I fostered a shared understanding of cultural entities, e.g., an IHE, as permeable, malleable, hybrid, hierarchical, and dynamic organisms that reflect alternating and flexible patterns of behavior and thought among those who ascribe meaning to these. Equally challenging was implementing the principle that effective participatory reform requires acknowledgment of, and shifts in, power across participants and the institutions that they represent if collaboration is to be genuine and egalitarian, and the distribution of roles, activities, and rewards, more equitable. Informed by praxis principles of planned change, this study demonstrates that systemic reforms are more likely to be desirable and sustainable when the relationships between stakeholders across constituencies and levels of a sociocultural system, are based on participatory ethnography of asset-based community needs and concerns, guided by culturally compatible and ethically sound strategies to innovation, and maintain equitable distributions of roles, actions, and rewards that any cultural intervention project requires and generates.

This study took place during 2004-2009. Aspects of this research have been presented at the annual meetings of the American Anthropological Association and the Society for Applied Anthropology. A report of early findings has been published in the journal Practicing Anthropology. Kathryn A. Kozaitis received her Ph.D. in anthropology from the University of Michigan. She is an associate professor of anthropology at Georgia State University. She may be reached by email kozaitis@gsu.edu or by phone at: 404.413.5151. I am grateful to Drs. Janet S. Kettlewell and Ronald J. Henry, the Pl and Co-Pl of the PRISM project for providing me with the privilege to study ethnographically and help guide the project according to principles of anthropological praxis. I also thank Dr. Angelique Blackmon-Tucker, my post-doctoral fellow, and Mr. Sunny Sun, my graduate research assistant, who helped me organize a large and complex body of qualitative data.

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SOCIOENVIRONMENTAL FACTORS AND POTENTIAL DENGUE EXPOSURE IN SOUTH TEXAS

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ABSTRACT

Dengue is an emerging disease worldwide, and recent outbreaks in Florida highlight the potential for the disease to spread to the US. South Texas may be at increased risk from outbreaks occurring in Mexico and spreading northward into Texas. Socioenvironmental factors potentially affecting dengue risk were investigated in the Lower Rio Grande Valley of south Texas where the vectors, Aedes aegypti and Ae. albopictus, are found. Interviewing of 50 residents in the vicinity of mosquito vector breeding and resting areas focused on work, home, and travel conditions and activities, mosquito prevention practices, and knowledge about mosquitoes and dengue. Responses were cross tabulated to identify trends and patterns between behavior, knowledge, and work or home conditions. Our results demonstrate that there is a linkage between the socioenvironmental factors associated with increasing or decreasing the risk of being bitten by a mosquito vector. The results further strengthen the suggestion that increased outreach may be successful in increasing public awareness of mosquito control efforts and methods, thus reducing the potential of dengue exposure.

KEY WORDS: cultural factors, dengue, mosquitoes, risk, socioenvironment, Texas

INTRODUCTION

Dengue virus is a member of the family flaviviridae and can lead to dengue shock syndrome and dengue hemorrhagic fever. The incidence of these severe conditions has been steadily increasing since the 1970s (World Health Organization 2009). The World Health Organization estimates that two fifths of the world's population is at risk, and that dengue is one of the top causes for the hospitalization of children in endemic regions. Dengue has become a major problem in the western hemisphere. This tropical disease has an established history in Caribbean nations, Mexico, Central America, and the United States of America (US) (Ehrenkranz et al. 1971).

Potential vectors found in the southeastern US include Aedes aegypti and Ae. albopictus (Gratz 2004; Mitchell 1991; Moore et al. 1988). Both species are associated closely with human habitation. They readily enter homes to feed and rest, and they breed in containers filled with water in residential areas (Jansen and Beebe 2010; Moore and Mitchell 1997). These two mosquitoes are daytime biters, and tend to bite more in the morning than afternoon hours of the day (Chadee and Martinez 2000; Thavara et al. 2001).

A similar threat exists for those people who live and travel along the US-Mexico border, which may be considered a single, unique, epidemiological unit for dengue and other viruses (Hotez et al. 2012). The dengue virus has become endemic in Mexico in recent decades (Brunkard et al. 2008; Center for Disease Control 1996) because of the prevalence of the primary dengue vector, Ae. aegypti. However, there has been relatively little crossover of dengue into the southern United States, with reports showing a high disparity in the proportions of residents testing positive for past dengue infections between neighboring US and Mexico communities along

the border (Brunkard et al. 2007). Studies have identified risk factors associated with dengue disease in the Brownsville, Texas, US - Matamoros, Tamaulipas, Mexico area and found associations with both socioeconomic and entomological factors (Brunkard et al. 2007; Ramos et al. 2008) as well as those factors potentially reducing infection rates (e.g., use of screens on windows and doors) in southern Texas (Reiter et al. 2003).

The peoples of the northern Mexico and south Texas border regions, including the lower Rio Grande Valley (LRGV), have experienced dengue infections and outbreaks, although the disease is more prevalent in Mexico (Adalja et al. 2012; Brunkard et al. 2007; Rawlings et al. 1998). Texas and the LRGV experienced past dengue outbreaks in 1922, 1945, 1980, 1995, and 2005, and therefore people inhabiting this region may be at risk for future outbreaks (Adalja et al. 2012; Rawlings et al. 1998). In south Texas, dengue cases have occurred in Laredo, Brownsville, and Corpus Christi (Center for Disease Control 1980). Risk factors identified in this region include low income, lack of air conditioning, poor street drainage, and presence of water-holding containers (Brunkard et al. 2007; Reiter et al. 2003).

Approaches to the Study of Dengue

Studies of dengue by medical entomologists generally focus on the transmission, virus and serology, vector control and dynamics, and mosquito responses to chemicals applied to control insect populations (Frances et al. 2011; Kay et al. 2002; Ramos et al. 2008; Scott and Morrison 2010). When survey questionnaires or interviews have been included in dengue studies, they can include demographic information, socioeconomic factors, peoples' behavior or activity and

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knowledge, in addition to ecological variables, that contribute to risk of infection (Aarunachalam et al. 2010; Claro et al. 2004; Rosenbaum et al. 1995; Smith 2012; Suarez et al. 2009; Swaddiwudhipong et al. 1992).

Anthropological approaches and study of dengue have contributed to understanding the dynamics of community health, conceptualization of the disease, public and governmental relationships, and factors hindering disease control and treatment (Coreili et al. 1997; Kendall et al. 1991; Pylypa 2008; Whiteford 1997; Whiteford and Hill 2005; Yasumaro et al. 1998). An important premise of medical anthropology and ethnomedicine is that biological approaches alone are often ineffective at revealing the socioenvironmental factors that are equally important to understanding disease control and prevention (Erickson 2008; Pelto and Pelto 1997; Singer and Baer 2007; Winkelman 2009). Ethnoecological perceptions of people can provide insights into a population's response to the management of diseases such as dengue (Kendall et al. 1991; McNaughton et al. 2010; Whiteford 1997). Along with physiological symptoms of dengue infections, outbreaks can also affect psychological well-being, economic status, social life, and social status also can be affected (Torres 1997).

The strength of our study is that we combined surveys with mosquito surveillance to examine the common factors associated with the increased risk of being bitten by two mosquito vectors in the LRGV. Because the household and family may be considered the primary site for dengue infection (Scott and Morrison 2010), a study combining medical entomology and anthropology at this scale can provide valuable information. Surveying of households, families, and individuals is a proven method to study people-disease relationships in populations that may be potentially exposed to dengue (Torres Lopez et al. 2006; Torres 1997).

MATERIALS AND METHODS

In this paper, we propose that the potential of exposure to the dengue flavivirus is heightened by socioenvironmental factors in the LRGV. We investigate the contribution of workplace, home, travel, and knowledge of mosquitoes as socioenvironmental factors contributing to increased dengue exposure in the LRGV, Texas. Our findings will increase understanding of potential dengue exposure factors by providing valuable information from people working and residing in known mosquito vector areas. This information can be used in local public outreach initiatives and mosquito control practices, particularly those that focus on self-help and community participation and intervention in south Texas and along the US-Mexican border (Kendall et al. 1991; Whiteford 1997).

Lower Rio Grande Valley

This study took place in Hidalgo County, Texas in the cities of McAllen, Edinburg, Mission, and Hidalgo. Hidalgo County is a 4,130km² area of the LRGV bordering Tamaulipas, Mexico. The median family income in the county is \$26,009 with 31.30% of families living below the poverty line. McAllen, Edinburg, Mis-

sion, and Hidalgo have populations of 129,877, 79,147, 158,485, and 11,198 respectively. The 2011 US Census reports a county population of 774,769 total people of which approximately 91% is Hispanic or Latino.

Mosquito Surveillance

Mosquito trapping took place between June and August 2010 at eight locations in the cities of Edinburg, McAllen, Mission, and Hidalgo (Hidalgo County, Texas). The presence of the dengue vectors, Ae. aegypti and Ae. albopictus mosquitoes, in the LRGV was confirmed by the authors through oviposition trapping and egg and larvae collection. Ovitraps (5 to 10) were placed in urban and rural areas where dengue vectors were expected, including open fields, parks, abandoned lots, and junkyards. From the ovitraps, unhatched eggs were placed in a nutrient broth and larvae reared. Pupated larvae were raised to emerge as adults, which were identified to species using Darsie and Ward (2005).

Surveys

We structured peoples' risky activities or knowledge into four domains: work habits, home habits, travel activity, and mosquito and dengue knowledge. In each of these four domains, we included behavior or lack of knowledge considered by us to increase the risk of dengue infection. The survey consisted of 50 yes/no questions. For example, if a person did not have an air conditioner and therefore relied on open windows for air would increase the risk of being bitten by a mosquito, especially if the windows lacked screening because of a person's unemployment and poverty. When asked if they have air conditioning, a 'no' response would receive a score of 1, identifying a higher risk activity, a 'yes' would be scored as 0 (i.e., a lack of risk). Likewise, a person's place of employment (inside versus outside) could also increase the likelihood of being bit by a dengue carrying mosquito, since more mosquito bites occur outside than inside. Additionally, we considered the effects of gender or employment to dengue exposure when appropriate in our interpretations.

In the vicinity of samples sites where Ae. aegypti and Ae. albopictus occurred and people were active, surveying took place August-September 2010, within a distance of 400 meters, or approximately half the maximum flight distance of the mosquitoes from field collection location, since mosquito dispersal is considered short in human, local communities (Harrington et al. 2005; Reiter et al. 1995). Survey areas corresponded with mosquito trapping sites and included places such as public parks and the university campus where people congregated. Fifty interviews in English or Spanish were administered throughout the day by trained bilingual interviewers (JoAnn Gutierrez and Jesse Rivera). The selection of interviewees was random at the sites and included a representative, overall sample of adequate size, because responses began to be regularly repeated (Bernard 2011; Pelto and Pelto 1978). The sample includes both males (n=28) and females (n=22). Seven of the 50 surveys (14%) were conducted in Spanish, the rest were conducted in

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English.

IBM® SPSS® Statistics Version 19.0.0 (Armonk, New York) was used to compute univariate (counts and percentages) for each question, and cross tabulations (Fisher's Exact Test). The Fisher's Exact Test (one-sided) was used to evaluate work, home, and knowledge of mosquitoes and dengue with other variables. This test is preferable over the traditional chi-square because it is not influenced by low 2x2 contingency table cell size (Siegel and Castellan Jr 1988), which may result from interview data. To examine the association (asymmetric) between age and influence of the interview, Cramer's V was used. Variables were considered to be statistically significant at α <0.05. Four responses were eliminated from the no (0) versus yes (1) matrix (44 by 50), because of missing data.

RESULTS

Mosquito Surveillance

The dengue vector Ae. aegypti was collected within the vicinity of eight interview sites, although a secondary vector Ae. albopictus was found at just six of the sites where interviews were conducted. An average of 123.8 mosquito eggs were collected each week, while the number of mosquito eggs at each per oviposition trap ranged from a low of 0 to a high of 81.1, with a high degree of weekly variability.

Sociodemographics of People Interviewed

The interview response rate was 96% and only two people refused to participate (perhaps because of the need to sign a consent form to participate). A majority (75%) of people participating in the interview identified themselves as Hispanic. Half of the respondents had some college education, and 35% had a household income between \$25,000-\$50,000.

Work Habits

The employment rate of the respondents was moderate (Table 1) with 70% stating he or she worked full or part-time. The most common job reported is store retail (food service jobs was included in this category) at 38%. Other jobs included, city or government employee (21%), followed by manual labor (15%), and health care (11%) or childcare (6%). In the "other" category, 9% worked in an office.

Sixteen percent of the people worked outside, and therefore potentially were at greater exposure to biting mosquitoes. Overall, less than a quarter (20%) of the respondents claimed to be bothered by mosquitoes. However, the majority of those working outside did so in the daytime when Ae. aegypti and Ae. albopictus mosquito biting activity is highest (Judson 1967), and therefore could be at a greater exposure for dengue. Few people (18%) worked within a 400 meters of a site where a dengue vector (Aedes aegypti and Ae. albopictus) was found.

Home Habitation

Seventy-eight percent of the people spent at least one hour or more outside of their house per week; most (58%) spent one

Table 1. Work Habits Among Respondents (n=45)

Activity	Respondents
Employed full or part-time	31(70%)
Worked within 0.40 km from mosquito trapping site	8 (18%)
Worked outside	7 (16%)
Bothered by mosquitoes when working	9 (20%)

to five hours outside per week and during the evening (71%). All of the respondents had air conditioning in their homes and most (87%) had window screens but not door screens (38%) (Table 2). The majority of people (80%) reported they were bothered by mosquitoes when outside of their house. Almost half of the people (47%) lived within 400 meters of the mosquito survey site.

The mosquitoes' egg deposition in water holding containers make them especially common around human dwellings, where buckets, tires, flower pots, and even discarded children's toys may be found. A majority of the people (69%) had these items in their yards, which contained standing water after it rained (Table 2). Over half of the people (62%) travelled to Mexico regularly, where dengue incidence is considered greater (Ramos, Mohammed, Zielinski-Gutierrez, et al. 2008); however, few (33%) had travelled there within three months of the interview. When people did travel to Mexico, they went twice a year (22%), or once a month or more (33%).

Table 2. Home Habitation and Personal Travel Among Respondents (n=45)

Activity	Respondents
Live at within 0.40 km from mosquito trapping site	21 (47%)
Outside at least 1 h a week	35 (78%)
House with air-conditioning	45 (100%)
House with screens on doors	17 (38%)
House with screen on windows	39 (87%)
Bothered by mosquitoes while outside house	36 (80%)
Standing water outside house after it rains	32 (71%)
Containers that potentially contain breeding mosquitoes exist	31 (69%)
Travel to Mexico regularly	28 (62%)

Mosquito and Dengue Knowledge

The dengue flavivirus vectors, Ae. aegypti and Ae. albopictus, are container breeding mosquitoes (Sota and Mogi 1992). People living in house lots with water holding containers (e.g., old tires, buckets, unused flower pots) provide breeding habits for these mosquitoes and could have more bite exposure. Simi-

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lar to another study (Koenraadt et al. 2006), we found less than half of the people (47%) reported dumping containers after it rained, most likely because they did not know the containers provided breeding habitat or that dumping containers is a control method (Table 3). Few people (18%) were aware of any mosquito control methods. After the interviewers mentioned that emptying containers would lessen the number of mosquitoes near their homes, a majority of people (84%) said they now would do so.

A little more than half of the people (53%) used mosquito repellant (Table 3), and a similar percentage (51%) knew what dengue was and that mosquitoes were responsible for getting people sick. No one interviewed had any family members or knew of anyone that had contracted dengue, even though they lived among the mosquitoes (i.e., vectors) responsible for infection. However, it is possible that undiagnosed dengue cases could exist, as positive serosurveillance in nearby cities indicates a high rate of past exposure to the dengue virus (Brunkard et al. 2007).

Table 3. Mosquito and Dengue Knowledge Among Respondents (n=45)

Activity	Respondents
Dump containers after it rains	21 (47%)
Understood that containers are mosquito habitat	19 (42%)
Understood that dumping containers is a control method	17 (38%)
Influenced by survey to now dump containers	38 (84%)
Awareness of mosquito control methods	8 (18%)
Uses mosquito repellent	24 (53%)
Had dengue infection personally or family member infected	0 (0%)
Knew how people are infected with dengue	23 (51%)
Knew that mosquitoes are responsible for dengue infections	23 (51%)

Association among Variables

Cross tabulation analyses found significant associations (Fisher's Exact Tests) among those bothered by mosquitoes at work or home (Table 4). People likely to be bothered included those unemployed (p=0.030) or that worked manual labor (p=0.016). Not surprisingly, people who worked outside (p=0.000) were bothered by mosquitoes; however, those people that worked one to five hours a day (p=0.000) and during the day (p=0.000) were likely to be bothered more than those working in the early morning or other times of day. People who worked 10-40 hours per week or more and in the evening or night were not likely to be bothered by mosquitoes (all cell values scored "no"). At home, people bothered by mosquitoes had items with standing water inside after rain (p=0.000), but tended to dump the items (p=0.121), because they knew that dumping is a control method (p=0.011). Those people knowledgeable about mosquito control methods were not likely to be bothered by mosquitoes (p=0.388). As expected, people who had air conditioning, screen doors, window screens, and used repellent were not likely to be bothered by mosquitoes.

Table 4. Fisher's Exact Test Results for People Bothered by Mosquitoes at Work or Home.

Values significant at P<0.05 identified with an asterisk. Activities designated with P values of "na" signify that all cells were the same.

Activity	P Value
Worked Full-time	0.522
Worked Part-time	0.11
Not Employed	0.030*
Worked within 400 meters of vector	0.153
Worked in Health Care Industry	0.53
Worked in Child Care Industry	0.341
Worked in Manual Labor Job	0.016*
Worked in Government/City Job	0.067*
Worked Outside	0.000*
Worked Outside 1-5 Hours per Week	0.000*
Worked Outside 5-10 Hours per Week	0.186
Worked Outside 10-40 Hours per Week	na
Worked Outside >40 Hours per Week	na
Worked Early in the Day (4 am-9 am)	0.186
Worked During the Day (9 am-5 pm)	0.000*
Worked During the Evening (5 pm-9 pm)	na
Worked During the Night (9 pm-4 am)	na
Lived within 400 meters of vector	0.114
Spent 1-5 Hours Outside Home	0.314
Spent >5 Hours Outside Home	0.579
Outside Home Early in Day (4 am-9 am)	0.318
Outside Home During the Day (9 am -5 pm)	0.681
Outside Home During the Evening (5 pm – 9 pm)	0.648
Outside Home During the Night (9 pm – 4 am)	0.682
Air Conditioning in Home	na
Screen Door in Home	0.525
Window Screens in Home	0.392
Standing Water around Home after Rains	0.000*
Items that Contained Water Present at Home	0.142
Dumped Items Containing Water after Rain	0.121
Understood that Dumping Items is Control Method	0.011*
Would Consider Dumping Items after Survey	0.209
Had Seen, Read, or Heard about Control Methods	0.388
Used Mosquito Repellent	0.582

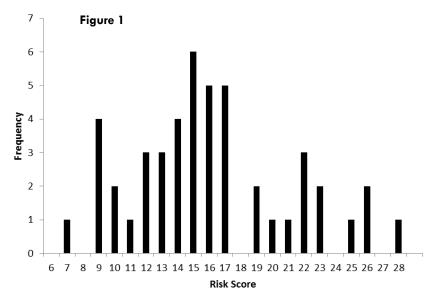
Risk of Infection Based on Socioenvironmental Variables

Respondents varied in the total amount of socioenvironmental factors that would increase their potential risk of being bitten by a mosquito vector potentially carrying the dengue virus. Risk scores ranged from a low of 7 to a high of 28 (Figure 1). The average risk score was 16.08. The respondent of least risk (score of 7) was a female who:

Worked full-time in the healthcare field and entirely indoors, and therefore her risk of being bitten by mosquitoes while working was low. She lived in a house with air conditioning and screens on the windows. Also, she spent time outside in the evening and reported that she was not bothered by mosquitoes. She knew that mosquitoes breed in containers filled with water, and thus dumped them after it

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rained. Additionally, she used mosquito repellant and was knowledgeable about mosquitoes carrying the dengue virus.



Contrarily, the respondent with the most risk (score of 28) was a male, who:

Worked full-time, 5-10 hours daily outside as a government employee and complained that he was bitten by mosquitoes. He lived in a house with air conditioning and window screens, and he spent time in the evenings outside, where he complained about mosquitoes. He had containers that could fill with water after it rained (providing a place for mosquitoes to breed), did not dump them, and did not use mosquito repellent. However, he said, he would dump them now that he had been interviewed. He also travelled to Mexico regularly, once a month or more, and did not know that mosquitoes carry the dengue virus.

Among the eight sites, no single local where the mosquito vectors were found had a prevalence to display activities, behaviors, or knowledge resulting in lower or higher risk at being bitten.

DISCUSSION

Traditionally, studies of dengue risk using surveys have focused on serological and demographic (Brunkard et al. 2007; Ramos et al. 2008; Siqueira et al. 2004) variables rather than socioenvironmental factors (Aarunachalam et al. 2010; Rosenbaum et al. 1995; Swaddiwudhipong et al. 1992; Torres Lopez et al. 2012). In this paper, we proposed that the potential of exposure to the dengue flavivirus is heightened by socioenvironmental factors in the LRGV. We considered "exposure" to consist of those behaviors or activities at peoples' home or work

and knowledge or lack thereof that increased a person's exposure to being bothered and potentially bitten by Ae. aegypti and Ae. albopictus.

Dengue exposure is often associated with a lack of air conditioners and screening on doors and windows. We found no significant differences for people employed (full or part-time) or unemployed and their likeliness to have any of these items (p=0.158 to 0.583) in their household.

Contrarily to another study (Claro et al. 2004), we found that people bothered by mosquitoes at home would consider changing their behavior (e.g., emptying containers) as a result of this study. Seventy-nine percent of the people interviewed (excluding those who already dumped containers) stated that they would dump containers filled with water that were found outside their homes, now that they had been interviewed. This result is similar to other researchers who have found that people will change their behavior and decrease dengue exposure when offered accurate information through public outreach (Ahmed and Taneepanichskul 2008). However, we did not find age (0.223, p=0.709 [Cramer's V]) and sex (p=0.657 [Fisher's Exact Test]) to affect how a person's behavior at

work or home would change after being interviewed and learning more about dengue, where others have found a relationship (Butterworth et al. 2010). Our results warn researchers and public officials that more research about people's work, home activities and behaviors and their knowledge is necessary.

We also observed a general lack of knowledge of how to prevent mosquito bites through control methods (e.g., not empting containers filled with water and not using repellent) (Phuanukoonnon et al. 2006).

CONCLUSION

Our study is the first in the LRGV to conduct mosquito surveillance and interviewing. It also provides evidence that the mosquito vectors known to carry the dengue virus continue to be present in the LRGV. Futhermore, our results demonstrate that there is a linkage between the socioenvironmental factors associated with increasing or decreasing the risk of being bitten by a mosquito vector. For example, there was a self-perception of being bothered by mosquitoes and increased potential breeding sites around the respondents' homes. The results further strengthen the suggestion that more outreach may be successful in increasing public awareness of mosquito control efforts and methods, thus reducing the potential of dengue exposure.

Overall, our results complement a previous phone survey about dengue in the Brownsville, Cameron County area of the LRGV that focused on human behavior, economic status, culture and education (i.e., knowledge of the virus) (Winn B., unpublished thesis). The semi-structured interviewing we performed provided an opportunity for people to ask questions about com-



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prehending the questions in ways a structured questionnaire does not permit. We suggest that this approach was well-received in the lower Rio Grande Valley based on the high participation rate for our study (96%).

We agree with others that mosquito spraying is only one step in controlling the Aedes vectors (Aarunachalam et al. 2010). Socioenvironmental, entomological, and ecological factors when georeferenced (i.e., geographical information systems, GIS) with mosquito breeding data is important in epidemiological studies of dengue (Kolivras 2006; Scott and Morrison 2010). Furthermore, we recommend that future dengue studies in Hidalgo County include colonias and evaluate how people living in them protect themselves from mosquitoes.

Frank Dirrigl is an Assistant Professor in the Environmental Science Program, Department of Biology, The University of Texas-Pan American (UTPA). Christopher Vitek is an Assistant Professor also in the Department of Biology, UTPA. The primary bilingual interviewers assisting in this research were JoAnn Gutierrez and Jesse Rivera. The interview methods were approved by The University of Texas-Pan American Institutional Review Board (IRB# 2010-036-03). This article is part of a larger study of dengue infection rates on both sides of the US-Mexican border funded by a grant by the South Texas Border Health Disparity Center (STBHDC) at The University of Texas-Pan American. STBHDC is funded by a grant from the Center for Disease Control and Prevention (Grant H75DP001812). The contents of this article are solely the responsibilities of the authors and do not necessarily represent the official views of the Center for Disease Control and Prevention and STBHDC. The authors would like to thank Margaret Graham (UTPA) for her review of the manuscript. Dirrigl may be contacted at 1201 W University Drive, Edinburg TX 78539-2999, dirriglf@utpa.edu

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The Applied Anthropologist

Vol. 33 No. 1 2013 CULTURAL CAPITAL AND THE HISPANIC/LATINO/A
STUDENT NAVIGATING ACADEMIA'S CULTURE OF
POWER: AN INTERPRETIVE ANALYSIS LUIS BALMORE RIVAS

ABSTRACT

There is a rise in enrollment of Hispanic/Latino/a students entering universities across the nation. Most students of this demographic may not be prepared with the cultural capital to navigate and negotiate the cultural moors of higher education. This study is an interpretive analysis of students' written narratives of their experiences and interviews based on their reading about the culture of power in higher education. This study explores the perception students may have on 1) language and identity as they enter the institution, 2) the need to code-switch, and 3) the classroom space (and professors) where power structures are enacted. This article makes the argument that discussing the culture of power with students helps to 1) develop a level of transparency of academia and invites students into important conversations of power relations, 2) identify power structures while building a vocabulary, and 3) gain confidence in their attempt to negotiate themselves and their new academic environment. Understanding students' perception of themselves and the culture of the university, and having conversations on the culture of power, may empower these (and other) students to better navigate their transition into academia.

KEY WORDS: Hispanic Latino/a Students, Cultural Capital, Culture of Power

So thoroughly prepared was I for college during my four years of high school that my first two years at the small state university from which I graduated were mostly review... Linda Brodkey

INTRODUCTION

Unlike the experience described above, so unprepared are many students entering universities that they lack the study skills and academic knowledge necessary to succeed in their newly encountered social environment. Substantial (yet incomplete) thinking around Hispanic/Latino students' academic experiences has been done, but too little cultural change in universities has been achieved. Thus, members of the Hispanic/Latino community actually notice no differences in their educational lives, nor outcomes.

Studies conducted in predominantly white universities about the negotiation of identity, persistence, and performance of minority students continuously argue for a change in the environment, be it social, physical or pedagogical. For example, Renee M. Moreno, in "The Politics of Location: Text as Opposition," says,

...many students (Latinos, African American, Native Americans, Asian Americans) have much awareness to name power relations in this country, but they don't always have the words to define unequal distributions of power or the consciousness to define their own powerlessness. Through language, students have the power to counter stereotypical images of their bodies and socially constructed knowledge of their communities (Moreno 2002: 226).

Because of the great number of Hispanic/Latina/o students entering institutions nationwide, "it is not unusual for teachers who are overwhelmed by the presence of language differences to tell students simply to 'proofread more carefully' or to 'go to the writing center' ...those who are not native speakers of dominant varieties of English are thus being held accountable for what is not being taught" (Matsuda 2006:640).

One example of unequal power distribution is found in instructors' approaches and expectations. It appeared that the expectations some instructors have of students disregard many students' backgrounds. For example, some professors may have false expectations that students can easily, "appropriate (or be appropriated by) a specialized discourse, and they have [sic] to do this as though they [sic] were easily and comfortably one with his audience, as though they [sic] were a member of the academy... They [sic] must learn to speak our language" (Bartholomae 2003:590). Often, students are asked to perform in ways unsupported by their cultural background. It is evident that the responsibility is placed on students without considering the discourse/identity conflict. Yet many professors believe minority students who do not identify with the specialized discourse community have to learn to speak, as Bartholomae puts it, "as a person of status or privilege...in the privileged language of university course" (593). But neglecting the identity/discourse conflict leaves the impression of an elitist individual protecting the interest of the community. Therefore, holding such an elitist view of the discourse community and placing the responsibility on the student to find ways to enter on their own comes from an ideology of superiority, an elitism that is oppressive and normalized.

This piece does not argue against academic standards, but points out that placing the responsibility of academic expectations and standards on Hispanic/Latino students may



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become oppressive when students are not given the social capital to navigate higher education. Many of these students are not affiliated with the culture of power that exists in academia. Instead,

Students must be taught the codes needed to participate fully in the mainstream of American life, not by being forced to attend to hollow, inane, decontextualized subskills, but rather within the context of meaningful communicative endeavors; that they must be allowed the resource of the teacher's expert knowledge, while being helped to acknowledge their own "expertness" as well; and that even while students are assisted in learning the culture of power, they must also be helped to learn about the arbitrariness of those codes and about the power relationships they represent (Delpit 1995:585).

If professors want to change the climate of the university to be more inclusive and diverse, the university must stop demanding/expecting Hispanic/Latino students to assimilate. Instead, institutions need to develop a different approach to advocate and provide access to marginalized students because students continue experiencing unfamiliar cultural expectations. This article will report on the findings of a study based on student writing and conversations on the culture of power with the hypothesis that these conversations would aid students negotiate the culture of the university. It will share students' perception on language and identity, code-switching, and the classroom space and professors. This article also posits that displaying the culture of power empowers students in their identity and their negotiation of academic culture by creating for them a level of transparency and invites students into conversations of negotiating the space, helps students identify and build vocabulary for the conversations, and helps them to gain confidence in their persistence.

METHODOLOGY

The Students

This study was organized to investigate students' literacy narratives and analyze their individual responses to Lisa Delpit's "The Silence Dialogue: Power and Pedagogy in Educating Other People's Children." After approval from the Institutional Research Board (IRB), I recruited Hispanic/Latino college students who identified themselves as being from the United States and international students from Latin-American countries such as Mexico, Peru, Venezuela and Argentina. The recruiting method was posted flyers in areas allowed by the institution. To those who responded, I explained my interest in the subject of literacy and the Hispanic/Latino student and informed them that they would write a literacy narrative, read an article, and participate in individual interviews following the writing and reading assignments. The literacy narrative was explained as an autobiography that tells stories on issues regarding reading, writing or speaking. I did not want to influence students' reconstruction of whatever accounts they would write about in their narratives so I asked for only one draft. I did not explain or review the article before the interview in order to receive honest responses that were not lead by my opinions on the article.

The six participants who volunteered for the study were students from a private religious liberal arts college in the Midwest. The Institutional Research Board asked that I not include students' names nor name the institution.

In order to avoid homogenizing Hispanic/Latino students, it is important to think carefully about cultural naming. For this study I took a similar approach as John Ogbu and H D Simons, adapting the terms voluntary and involuntary minorities in which he classifies minorities into two groups; "by (1) the nature of white American involvement with their becoming minorities and (2) the reasons they come or were brought to the United States"(Ogbu and Simons 1998:164). Though Ogbu and Simons claims there are no strict differences between voluntary and involuntary groups, based on beliefs and behavior, and because in this study I investigate issues of identity, culture, and language, I differentiate between the two by using the umbrella terms US Hispanic (USH), to refer to individuals who identify themselves as American, and International Latino (IL) for international students who identify themselves by their country of origin. I allowed all participants to self-identify: there were three United States Hispanic (USH), Eva, Silvia, Gilberto; and three International Latina/os, Andrea, Omar, Veronica.

I tried to approach this study objectively, though my identity as an immigrant raised in the US has influenced my reading of the narratives and analysis of the interview data. I tried to step away from my background to explore the individual representation of the authors but saw many personal connections with themes raised. This may have caused potential biases in my conclusion.

DATA: STUDENTS' NARRATIVES

All six narratives shared an expression of struggle. Omar was quick to recognize the challenges he and many students face. He states, "It was difficult and challenging, at times, to adapt to my new culture, life style," "The hardest thing of living in this country was learning the new language, English." Students also encountered gatekeeping by professors who held expectations but, as Andrea points out, "they never taught me the actual 'rules'." Without having established relationships with students like Omar and Andrea, professors did not know the educational background of these students. Instead, professors run a risk of having false expectations that cannot and will not be met.

Gatekeeping destabilizes students' understanding of their own abilities and makes them question their place in the university. Omar's shared experience of being told by a student in the Writing Center to consider changing majors because of his language use. He was left wondering the meaning of such encounters, and stated, "I wonder if everything I do in life has to be based upon my writings or because my English was not good enough in the fields I was pursuing," and thus claims he was left "confused and disappointed hearing those suggestions." He questioned if "he should stop feeling this way" and even contemplated whether he deserved the joy of education or success: "I am wondering because English or other language, beside Span-

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ish, as not being my first language I can enjoy or deserve to reach my goal of someday graduating from college as a physician and work."

Despite the obstacles encountered, only Omar and Andrea sounded optimistic. Both display the theme of an established relationship that helped sponsor their literacy development. Andrea describes the involvement of both her parents when she recounts her dad giving her books for her birthdays and her mom reading her stories at night. Omar also points out the importance of relationships when he claims, "I never thought how much we, as humans, depend upon friends until one needs every bit of help from them," and "My new friends helped me a lot to adapt into my new culture, my new life style."

Omar and Andrea's narratives are similar because they recognize the support from family and friends. Despite their struggles with language Omar states, "Fortunately I had the support of my beloved parents who helped me during my teenager years to continue striving for the best in this life without mattering where I was living," and also writes, "faculty and friends of that Academy helped me tremendously to learn and to adapt to my 'new life' away from my parents." Omar also goes beyond the familial sponsorship when he recognizes faculty and friends, even to the point of going outside of the university. He found sponsorship through his "Latino amigos" who" were encouraging." In his words, "Working at Burger King made me think a lot about how important is to pursue a higher education. I met wonderful Latino co-workers... As soon as they found out that, I was going to attend College they were encouraging. I will never forget the wise words regarding on obtaining a higher education that can make a difference in this world."

These student literacy narratives, especially Omar's, also show how students can develop critical literacy as they begin questioning how society can change. Omar states, "I do not think that language [should limit] one to achieve their goals." Questioning whether he deserves to enjoy educational success he wonders how society can change the system. By raising the issue Omar begins communicating the need for change. It is evident through literacy narratives that a sponsorship that moves to a more active role involves recreating a community in and out of the classroom.

STUDENTS' PERCEPTIONS

On Language and Identity

It was evident to me, through the participants' narratives and the interviews, that the students of this study were interested in establishing a socialized identity with their American peers. This driving interest in becoming part of or accepted into the structure of their social development motivated both groups of students to quickly communicate at some level in English within their social circles.

However, the way students associated language use and their perception of how people perceived them differed between the two groups. For example, in the USH group, Eva said she didn't know how others perceived her; she had never thought about it. Silvia said that she never thought about diversity issues nor championed for diversity, and would disregard race "all the time" and simply responded, "people don't know me." Gilberto and Silvia considered Spanish as a weakness in their personal, social, and academic development. These students were more willing to let go of their primary language to the point of not speaking it anymore. Silvia thought that speaking Spanish in public places was rude. Moreover, she said other students labeled her as racist for siding with the faculty of her high school who decided to announce that Spanish was no longer allowed to be spoken at her high school campus.

By contrast, the IL students responded with more detail and self-reflection on how others may perceive them based on their language use. Andrea, from Venezuela, recognized that, if she did not speak, others would think she was from California but noticed people reacted differently toward her when they heard her accent. She felt that because of her accent, White Americans identified her as Mexican. This generalization of the Latino race/identity really upset her; and she felt it was very insulting among non-Mexican Hispanics/Latinos because it is based on assumptions that carry with them negative identifiers.

Similarly, Omar, from Peru, and Veronica, from Argentina, understood that their language usage can give the perception that they are well educated if they attempted to speak "proper English." Omar claimed to avoid using slang and Veronica stated that she did "not have an understanding of American slang." Like Andrea, Veronica stated that some people will no longer speak to her after hearing her accent, making her feel stigmatized and rejected. Veronica said she spoke English in public places because she was embarrassed that others would judge her as uneducated because of her use of Spanish.

Despite the hesitance to use their native language, I noticed that IL students were adamant about holding on to their first language, recognizing that their language is a part of their identity. Because Spanish had been the primary language for a longer period and they had grown up in their culture of origin, it was easier for them to return to the cultural background of their native country. They also did not grow up with negative responses to their language. They, unlike Gilberto and Silvia, did not feel shame early on in life due to the language that identified them.

On Code-Switching

Part of my interest in this study was to explore whether the participants were aware of any code-switching practices they performed. I explained that code-switching can be between languages, Spanish and English, but that there are also shifts between formal and informal speech, also known as a persons' public and private voice. In terms of performance, code-switching can mean the difference between the persona on stage or backstage. In each case, this speaks to the question of how identity is constructed through language.

The awareness of an ability to code switch was another difference that divided the groups' responses to the issue of language and identity. For example, Andrea noticed that back-

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stage from the university "nobody cares" how she uses language but, like many students, she understood the importance of identity performance on campus; in the academic front stage, she felt that in the university she had to "fake her accent," which made it hard for her to read in public. She recognized the need to code switch because, as she puts it, "they [White Americans] don't like it" when others speak with a foreign accent. So she had to adapt to feel accepted. She said, "I'm trying to be like them and not them like me because I'm the minority." Andrea perceived Americans to be so resistant to difference that she felt it was her responsibility to adapt because she harbored a fear the she would not be accepted as she was.

Veronica was different in that she was committed to speaking Spanish outside the university setting but tried to read in English. Later in the conversation she admitted she was embarrassed to speak Spanish in public places. Veronica realized that she would struggle with both languages, but that intimidation was the biggest factor in the quality of her code switching. Because she was in a university setting for long periods of time, she said "speaking a lot of one language makes speaking the other language more difficult."

On the other hand, though Gilberto would refrain from using slang with "people in authority," the trend in the USH group was that they had not thought about the need to code switch, or did not recognize code switching. Gilberto claimed that his friends could tell he spoke differently with authority figures but believed that speaking slang did not affect him. He did however consider word choice in order to show "respect to someone who deserved respect," someone in authority, but he himself did not recognize any shift in language and presentation of self in or out of the classroom. Eva and Silvia did not know how using language outside the university would affect how they use it within the university. Silvia's language did not change throughout the day. Eva said she writes the way she speaks and realized that writing that way would explain why "it doesn't sound good on paper." The only code switching Eva noticed is when she alternates between English and Spanish.

Understanding students' differing perceptions about language and language negotiation is important because it assists them in acquiring a new foreign language in higher education, that of academic discourse. Though not all participants saw differences in language uses in and out of the university, or the need to code switch, all participants saw the benefit of learning the cultural capital of academic discourse. Students defined academic discourse as the language and method of communication within the university. The participants saw academic discourse as promising the potential of acceptance into academia (Andrea), as a way of preparation to "enter the professional world" (Omar), a way to "improve speech and higher level of communication" (Veronica), "depth of reading and writing" (Gilberto), the application to "use something you learn from one teacher with another" (Silvia), and a way to "build vocabulary knowledge" (Eva). Though all said learning academic discourse is a good thing, only two International Latino students saw

a potential for harm. Andrea felt that in using academic discourse "you are trying to fake something you are not, putting your culture away from you for acceptance." And Omar said, "It can be elitist."

On the Classroom and Professors

Though IL students in this study believed education in the United States to be an opportunity that should not be wasted something they could use to help others, which would not be possible in their country of origin (what John Ogbu calls a tourist mentality) (174)—they also saw at the same time unequal treatment that affected their persistence and performance in their acquisition of higher education. According to Ogbu, a "Positive Dual Frame of Reference" held by voluntary minorities affects the attitude that ILs have towards success that is based on their comparison to the home they left behind. These students see the opportunity of studying in the United States as a means to succeed in a way they would not be allowed "back home"; therefore, they were "willing to accommodate and to accept less than equal treatment in order to improve their chances for economic success" (Ogbu and Simons 1993:170). For example, Andrea, Omar and Veronica struggled with understanding processbased instruction that required them to revise their writing several times. Omar didn't know what to expect entering the class and didn't know what the teacher wanted in each assignment. He felt he did not know the basic requirements yet was expected to do more in his revisions. Veronica and Andrea struggled with too much detail and digression from the thesis/support structure in writing. Andrea claimed to have learned to write about what White instructors want to hear when writing about her country. Asking to revise every assignment meant, to these students, that their writing was unacceptable. Veronica felt she needed to go to the Writing Center for all the drafts to find out what was wrong with them. She, like Omar, felt being asked to revise without direct practical instruction/evidence did not help because they did not know the theory behind revision. Veronica said, "If you don't tell us what you want, we're not going to know."

Another of Andrea's challenges was that she was made to prove she belonged in the first and second level of English composition. Her first English I instructor, an older White male, asked her if she had passed the TOEFL. Despite answering that she had, he asked her to write an essay to see if she was at the right level. And although he questioned the authenticity of one of her assignments during the semester, she passed with an A-. Her English II class was taught by a younger (maybe late 20's) White female, which brought up the issue for her that, "White girls [are] always mean to me." This instructor also asked her if she had passed the TOEFL. Andrea saw this as an ignorant and ridiculous question because she had to pass English I before entering English II, and had passed the TOEFL before English I.

The most negative perceptions were held by IL students towards some of their professors, a contradiction to Ogbu's theory. Several students said they did not speak in class or visit

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their professors during office hours because of how uncomfortable they felt. Several IL students gave examples of how they felt so uncomfortable with and intimidated by some of the White professors that they struggled in their speech and felt dumb speaking English with them. However, with other White professors they had, they felt more at ease, which gave them confidence to speak clearly and articulate what they wanted to say. Omar went on to say, "Teachers need to be more open with students: students see teachers as intimidating because they [White professors] want to look that way."

Contrary to the IL students' responses, the USH students did not identify the university in a negative light, which also goes against Oabu's claim. These three USH students' responses did not go beyond a simple "no." This immediate response contradicts Ogbu's notion of the "Negative Frame of Reference" held by involuntary minorities. Ogbu argues that USHs do not have the "back home" perception of IL students but instead base their minority status on their "social and economic status in the United States" compared to "the social and economic status of middleclass white Americans" (171). For Ogbu, USH perspective is based on discrimination, thus these students "tend to be more critical of the school curriculum and mistrustful of teachers and the school than [international Latino students]" (Ogbu and Simons 1993:171). Gilberto, Silvia and Eva seemed less aware of cultural barriers that exist in the university. Though Silvia recreates a negative experience in her narrative, she nonetheless saw it as an issue of conformity because "we are in America" and she should not be resistant to an institutional culture. What Gilberto felt was the greatest challenge to his experience in the university was his lack of "a good foundation from high school," which affected his "arrangement in assignments."

It is unclear as to why there are inconsistencies between Ogbu's theory and the perceptions of these participants in this case study. It could be the small representative sample. However, Nancy Barron says, "I'm not sure why involuntary minority students have difficulties seeing beyond the mainstream's systemic power. It's as if we buy into our places as minorities, somehow second, somehow on a lower footing"(Barron 2003:21). Silvia's response throughout the interviews is an example of this appropriation of systemic powers. Silvia disregarded culture and language as contributors to her confrontations in school. She also sided with the faculty and staff on the issue of prohibiting students from speaking Spanish in her school because, she says, "we are in America." Barron says it is difficult for USH students to respond to the university "because of unarticulated interpretations and assumptions of the mainstream system." (Barron 2003:13). While these students expressed they could not identify negativity during their interviews, they were more likely to address issues of the racialized social tensions and individual perceptions in their literacy narratives.

DISPLAYING THE CULTURE OF POWER

Asking students to read Delpit, I had hoped all students would experience a moment of revelation about their previous experience in the classroom. I speculated they would recognize

those moments in which they had encountered the culture of power and realize how that moment could have been negotiated differently.

During the six individual conversations, students demonstrated that they were aware of the expectation to write how teachers want them to write. Students also knew that these expectations generally do not have cultural, language and identity differences in mind. As one student put it, "they [professors] teach for them [the White culture] and not for our culture" (Eva). Omar agreed and said, "Sometimes you could see it in their faces... They don't give you an opportunity." Eva also said that reading gave her access to instructors' knowledge that would "help [her] meet more of teacher's expectations now that they are clear."

Gilberto's perspective of the university changed because he realized he was not the only one who felt the way he felt. Gilberto knew students "give them [professors] what they want not what you [students] want." He also identified moments when students were asked to revise according to professors' expectations without having been explained the expectations of professors.

TRANSPARENCY/OR INVITING STUDENTS INTO CONVERSATION

Some students' perspectives were altered because the article provided a view into the discourse of academic disciplines. Omar said reading Delpit in a writing course would have been "more helpful than reading Shakespeare or Frost because it has more meaning that [he] can apply" and "its shows the entire picture of education."

However, some perspectives did not change, but the articles created a discourse space to begin a conversation. Veronica thought the reading was nothing new to her, but added that teacher's expectations are questionable when dealing with ESL students. "Teachers need to be patient," she said. Teachers have higher expectations and she struggles to think of the words Americans use. Because of high expectations she felt professors expect little of ESL students based on spoken literacy. Because education in her country is free (and very expensive in the US), she sees the culture of power as a way to maintain class structure, "by power structure and access of education." She stated, "If I work I can reach middle class level."

Veronica was able to give an example of this maintenance of knowledge and power (an example of students' experiencing gatekeeping in other areas of the university due to language, not only in English classes). Veronica wanted to get into a math class but, based on her perception, was told by "an arrogant professor" that she needed to learn the English language first. She was determined to enroll in a math class because "math is the same in whatever language." The second professor she asked allowed her in the class, and she did well.

Identifying and Building Vocabulary

Having these conversations provides students with a venue to identify their experience. Andrea said, "I couldn't identify it before but now I realize we all need to change." Omar also



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said reading Delpit, "changes my vocabulary." These conversations demonstrate that some students are aware of the culture of power that surrounds them, but they do not have the vocabulary to gain access into the conversation of the culture of power with those who are in positions of power. Omar adds, "I went to a White academy for high school so going to a White college I thought it was going to be more of the same. But I noticed little things of how people see me when they hear my accent." The reading has made him "more aware of what I have noticed entering a white college."

Gaining Confidence

Another trend I observed in this study was how students who recognized the culture of power came across as confident in their previous knowledge of its existence, though they lacked the vocabulary to identify it. "I already changed," Andrea said, "more professors need to read this so they can change." Andrea also said she will continue to do what she has been doing because it seemed to help her get through different courses. Omar also gained confidence in reading these texts and decided to "speak out in class no matter what."

Discussion

Because Hispanic/Latino students are entering a different culture as they enter the university, it is important for them to be equipped with the social capital necessary to negotiate the culture of power. By learning the language conventions of the university, students may begin to understand social and ideological expectations in higher education, thus perceive the institution as an inclusive space.

What I found in my research is that students do recognize some kind of dynamic or different types of relationships and tension in academia but may not have the language, awareness, or vocabulary, to define it. Without language, what they perceived was just a feeling they had and not an actual occurrence or existence of the culture of power. These studies also demonstrate how negative perceptions affect students' persistence and performance and how the university needs to be aware of minority students' perceptions. This applies to both issues of class and race. Delpit includes "the power of the teacher over the students..." and "the power of an individual of a group to determine another's intelligence or 'normalcy" as evidence of the culture of power in the classroom (25).

Through this exploration I began to recognize several themes across students' experience with language and schooling. First, all students represented themselves as engaged in complex ways of negotiating barriers that exist, such as the need to code-switch, not only through public/private voice, but also public/private Spanish and public/private English languages. This constant switching between languages and voices creates a problem for many students because many professors do not understand the struggle the student faces throughout the day. Second, negative perceptions exist about the university culture. And third, it becomes problematic to expect disenfranchised students to identify with professors of a specialized discourse

community when the student has not been taught the codes of that culture of power.

CONCLUSION

Asking students to "adapt to the cultural norms and values of peers and faculty in the university and abide by the formal and informal structural requirements of the community" is problematic when it is viewed as the students' responsibility to overcome "university social and cultural norms and face systemic barriers to integration" on their own (italics mine, Castillo et al. 2006:267). Instead, she claims, "researchers, practitioners, and administrators [should] examine their university environment from the perspective of high ethnically identified Latino college students, because this group is the most sensitive to the environment" (Castillo et al. 2006:271). Universities, and all educational institutions, need to create a multicultural environment that welcomes diversity, an environment that raises the critical consciousness in all individuals, through engaged faculty.

Depending on the level of the relationship, professors can acquire rich cultural knowledge from individual students' histories/academic backgrounds in order to establish a foundation for implementing different pedagogical approaches and practices. As professors begin to theorize and practice ways of meeting the needs of students, they can demonstrate their democratic pedagogy.

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COMMENTARY

THE MEDIA, HUMAN RIGHTS, AND STATE-BUILDING: THE SAID AND IMPLIED IN RWANDAN AND DIASPORA MEDIA

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ABSTRACT

While Rwanda has progressed economically and politically in the last several years under the leadership of President Paul Kagame, issues of human rights remain sensitive. Rwandans are often limited in the media in their critiques of these issues. The Rwandan Diaspora, i.e. those living outside the country, can speak more freely and give glimpses of underlying tension. This content analysis of the pro-government *The New Times* and diaspora sources examines the differences in the government-projected stance and disparate voices of Rwandans. The study takes a snap shot of media from July – August 2012 during the alleged Rwandan support of the M23 rebel group in the Democratic Republic of Congo (DRC), the start of the Agaciro Development Fund (AgDF), and claims of government media censorship. The government-projected image of national growth and pride conflicts with varying national sentiments; restrictions in freedom of speech could lead to greater tensions in the near future.

KEY WORDS: media, human rights, state-building, Rwanda

INTRODUCTION

Rwanda stands out as an African anomaly. Once a failed state devastated by a civil war and genocide that killed around 1 million people less than twenty years ago, it now boosts one the highest and most stable GDP growth rates on the continent. Rwanda experiences steady GDP growth, low inflation rates, increased financial access, and general macroeconomic stability. Touring Kigali and the rural areas, one observes increases in the number of banks and ATMs throughout the country, on-going construction in governmentimplemented economic zones, and brand new high-rise buildings. While Rwanda's economic development has received significant attention internationally, people may see signs of political promise and ethnic reconciliation. Stores with names such as "Never Again Genocide" and "Welcoming Diversity" line the paved and dirt roads throughout the country. The turnaround and development are primarily attributed to President Paul Kagame, whose leadership aims to propel Rwanda into a middle-income country by the year 2020. From these positive economic and political developments, one may think that Rwanda has turned a corner from severe ethnic conflict and irreparable damage to significant progress.

However, beneath the surface of significant economic development and state building lies a country with deep and sometimes hidden problems in national unity. The government has faced significant human rights violation allegations in the media from the international community and the Rwanda Diaspora, i.e. those Rwandans who are living abroad. The press within Rwanda is pro-government, with the government having little to no tolerance for opposing viewpoints. In this study, I will focus on the primary written source of Rwandan news for literate Rwandans, the pro-government *The New Times*. I perform a systematic content analysis. While the majority of me-

dia sources within Rwanda are pro-government, the Rwanda Diaspora provides a critical source for recent developments within the country. These people are able to speak more freely on human rights issues with less fear of repercussions. In Section IV of this study, I will go into detail on the types of repercussions those in the media face if they present conflicting viewpoints to the Government of Rwanda (GOR). The Rwanda Diaspora diffuses information largely through online sources. I will note the Diaspora's online, independent papers Umuvugizi ("Voice of the People"), Le Prophete, and Inyenyeri news as well as the online blogs. This is not a comprehensive list of Rwanda Diaspora sources, but it provides a starting point for looking at the underlying tension within Rwanda. Through analyzing the language, content, and tone of *The* New Times in comparison to these additional sources, it is possible to perceive a dichotomy in what the government has "said" versus what tension really may exist.

In the summer of 2012, three issues topped Rwandan national and Rwanda Diaspora press: the GOR's support of the M23 rebel group in the Democratic Republic of the Congo (DRC), the Agaciro Development Fund, and a recent journalist disappearance and arrest. These issues are not the only examples of matters where human rights and state-building come under scrutiny, but they provide a significant case study of what can be said, what cannot be said, and what is implied in Rwandan media in contrast to responses from the Rwandan Diaspora. In Section II of this study, I will introduce the M23 conflict in the DRC and explain The New Times stance on the issues in comparison to the Rwandan Diaspora position. After analyzing the bias of The New Times in contrast with the Diaspora sources with respects to the DRC, I will conduct a similar comparison of Agaciro Development Fund press in Section III. In Section IV, I will conclude on the national implications on



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press restrictions and consequences for national sentiment. Rwanda's denial of M23 support impedes the country's state-building capacity. The threat of donor aid suspension and President Kagame's "home-grown solution," the donation-based Agaciro Fund to supplement the national budget, may call into question either national pride or national oppression. By examining these media sources, we see that the image projected by the Rwandan government of national growth and pride may conflict with varying national sentiment.

RWANDA'S INVOLVEMENT IN THE DRC M23 CONFLICT

In the last several months, the Government of Rwanda (GOR) has come under international scrutiny regarding its alleged support of the M23 rebels in the Congo resulting in threats of donor aid reduction and/or suspension. The initial claims came from a UN draft report issued in June. The draft claimed that the "Rwandan military trained, for two weeks, M23 rebel recruits at the Kanombe military barracks before deployment to DRC, supplied the mutineers with ammunition and fatique, and that senior defense and military officers were actively involved in the formation of the rebel group" (Munyaneza 2012). The M23 is a rebel group that has overtaken parts of Eastern Congo leading to instability throughout the region and a mass flow of refugees into Rwanda and surrounding countries. While the pro-government The New Times stipulates that Rwanda does not support the M23 in any way, diverse media sources charge Rwanda's leadership with an economic guise of development that hides underlying political and ethnic tensions.

The New Times

On July 17th Joseph Rwagatare of *The New Times* wrote an article entitled "New hope or old broken promise in DRC?" Rwagatare acknowledged the grave nature of the M23 conflicts in the DRC where "blood flows in torrents" (2012). He articulates the GOR public stance in the DRC through confirming its position to end the conflict through employing a neutral force to disarm rebel groups in the area. He stresses the intergovernmental cooperation between President Paul Kagame and President Joseph Kabila by mentioning their agreement to establish a neutral force to monitor rebel groups, which to him indicates positive developments in the DRC conflict.

"I suppose one can say that this is some sort of progress – at least as the expression of intent to deal with the security and political crisis in Eastern DRC that always spills over into neighbouring countries" (Rwagatare 2012).

When referring to agreement between the two leaders, his word choice "expression of intent" indicates his sentiments of optimism. However, when speaking about the fighting in North Kivu, he attributes the conflict strictly to the Congolese and indicates its results in neighboring countries. Through choosing the words "spills over" when referring to the conflict, the progovernment writer is portraying the conflict in the Congo as an independent event not caused by outside actors. He takes a somewhat accusatory tone in stating the conflict negatively impacts neighboring countries.

While Rwagatare expresses optimism in government initiatives, the language that he employs about the international press indicates contempt. With regards to comments from the press attributing the conflict in the North Kivu region of the DRC to Rwanda, Rwagatare writes:

"This is a sneaky endorsement of the unfounded accusations made by the UN, DRC Government and rights groups that the problem in eastern Congo is essentially a cross-border issue mainly emanating from Rwanda. Such distortion, creeping into how the proposed force is to be viewed cannot be helpful" (2012).

Rwagatare criticizes the press against the Government of Rwanda by calling support of international opinion a "sneaky endorsement of the unfounded accusations." He indicates that the press is influencing the public about the level of commitment of a neutral force. He states:

"Press reports are also skewing the expected mandate of the force by stressing the policing on the common border and keeping silent about fighting, disarming and disbanding (neutralizing as the agreement says) the armed groups" (2012).

From the text, we see an alliteration of words with negative connotations in this context: "skewing," "stressing," and "keeping silent." This gives the impression that the press (other than *The New Times*) is biased against the government. When other news sources are not to be trusted, he implies this establishes *The New Times* as the foremost trusted source.

In addition to accusing the press of an anti-Kagame, anti-GOR position, Rwagatare goes on to rebuke a larger group, which includes national and international media and foreign donors. On July 30th, Rwagatare followed his article with another pro-government/Kagame support piece further accusing the international sources of "mudslinging" and a "we have finally got you" attitude in his article "Why Kagame and Rwanda are under attack over DRC" (2012). He commences the article by denouncing the international media's "gleeful cry" of accusing Kagame's support of rebel groups in the DRC. By this time, international donors have threatened to cut aid, with the U.S. already withdrawing \$200,000, which would have been used for a Rwandan military academy. Rwagatare states, "They are even happier that some countries have 'cut' aid to Rwanda, or 'delayed, suspended, or withheld' it, or whatever term they prefer to use" (2012). In this case, he is referring to the foreign media. He refers to the accusations as "obscene" and a "sustained attack" on Kagame and Rwanda. As for international donors, he states, "at the same time none of these groups is comfortable with an African country being successful and charting an independent course, or an African leader with an independent mind." He uses vivid language to paint these groups as malicious to Rwanda's leadership by stating, "And so, with a pail of mud and brush in hand, they proceed to paint him as a villain and write a script in which he acts the part" (2012). Through his language, Rwagatare implies that the accusations of Rwanda's involvement are unfounded and that the international community is acting maliciously out of spite for Rwanda's success.

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With constant accusations and threats of aid withdrawal, the GOR finally submitted an official rebuttal on July 31st. James Munyaneza reported the developments at the Rwanda's Ministry of Foreign Affairs in an August 1st New Times article "Rwanda submits rebuttal to controversial UN report" (2012). Munyaneza cited Foreign Minister Louise Mushikiwabo who commented to the press, "We are eager to see what the final report will look like; we systematically responded to every allegation with concrete evidence that proves the accusations were unfounded" (2012). Throughout the article, we can see that Mushikiwabo systematically refutes the UN draft report accusations on the use of Rwandan facilities, weapons, and expertise to support the M23. More interestingly, both Munyaneza and Mushikiwabo take a defensive tone, employing language such as "the government also dismissed claims," "Rwanda also proves that it never facilitated movement of M23," "it is equally impossible," "Kigali further dismisses claims," "It also challenges allegations" (2012). Munyaneza supports the GOR's firm stance that it does not support the M23. The article explicitly states that Rwanda did not support the M23 - an official stance that would be difficult to refute.

By August 29th, The New Times issued an article on the GOR's official response to the UN sanction committee entitled the "DRC Crisis: Rwanda makes case before UN sanction committee" by James Munyaneza. The article details Foreign Minister Louise Mushikiwabo's official rebuttal to the UN Panel of Experts (PoE) allegations against the GOR in supporting the M23 rebels. She said that the report "fell short of impartiality since it did not include any word from Kigali" (2012). As in the July 31st meeting, Mushikiwabo systematically refuted the panel's evidence. However, during this meeting, she brings up the issue of ethnic bias of a lead expert in the study. According to the article, the lead expert, "Hege, was accused of being anti-Kigali, owning to his past publications which depicted the Rwandan government in the negative light, describing it as 'a Ugandan Tutsi elite" (2012). The statement is strong in its implications; in Rwanda, ethnic tensions are rarely mentioned in the media. The Foreign Minister's final stance is that "the rebel group is largely composed of former Congolese soldiers who mutinied in April after the collapse of a 2009 peace deal between the [National Congress for the Defence of the People] (CNDP) rebels and Kinshasa" (2012). Her statement contends that the DRC conflict is solely the problem of that country. Rwanda should not be held responsible for the mutineers.

Diaspora Sources

Umuvugizi, "The Voice of Rwanda."

While *The New Times* is highly supportive of the government's stance, *Umuvugizi* pointedly accuses Kagame and the GOR of M23 support. On July 16th, the source published a piece that tells Kagame to "stop leading Rwandans with the iron hands and try to slow his dictatorship" and stop sending "young people to support M23" ("Inama perezida" 2012). An article that was published July 23rd entitled "USA stops its defense aid

on Rwanda" accuses the GOR of M23 without question (2012). It states that the "USA has stopped its Defense aid to Rwanda, which supports M23, a rebel faction in Democratic Republic of Congo (DRC)" (2012). "M23 enjoys full support of Rwanda military, under direct president Kagame's supervision" (2012). Umuvugizi continued to reprimand the Rwanda government in articles on August 2nd, "Kagame Government continues to launch cruel assails against foreign donors," and August 5th, "Kagame resorts to forcing Rwandans to pay contributions after aid cuts" (2012). The second article is particularly interesting in that it comes prior to the GOR launch of the Agaciro Development Fund at the end of August. I will discuss the media's response to the fund in Section III.

Le Prophete

The language of Umuvugizi is accusatory in nature, but Le Prophete goes a step further in implicating the GOR. Mid-July, Le Prophete released an article condemning Kagame for DRC instability and suggesting DRC mineral access is an incentive for Rwanda-backed M23 involvement. The July 17th article states, "Without condemning Kagame, there will be no peace in the region, because Kagame will continue to cause insecurity in the Eastern DR Congo and in continuing, he wanted to get access to the DR Congo minerals" ("Guerre a l'Est de la RD Congo" 2012). This is the first article in my study where I see the economic implications of backing the M23. The article implies that it may be in the interest of the GOR to create political instability in the DRC for economic reasons. Le Prophete brings attention to political as well as economic implications of the M23 movement. In a country where speaking about ethnic tensions is limited, the source mentions possible underlying ethnic tensions and human rights concerns. On July 16th, Le Prophete wrote that the "RPF [Rwandan Patriotic Front] brought wars, killings, imprisonments of political opponents and hatred among Rwandans and in the region" and that the "Hutus were slaves of Tutsis" ("Iriburio" 2012). The media implies that the ethnic tensions are everpresent, although sometimes hidden in Rwandan society. Le Prophete claims also back Umuvugizi in suggesting unlawful government funding by stating on August 3rd, "In Kibingo of Karama Sector Hutus have been asked to pay money for compensating genocide survivors" (2012). Le Prophete brings attention to Rwanda's political, economic, and ethnic tensions.

Inyenyeri news

While Le Prophete and Umuvugizi take an accusatory stance on GOR involvement in the DRC, Inyenyeri news employs multiple viewpoints of the conflict. Inyenyeri suggests that Kagame could be a cause of DRC conflict. Writing in a July 12th article, Kayumba Nyamwasa, former army chief of Paul Kagame, "accuses the president of being a dictator, imprisoning political opponents and destabilizing East Africa" (Africaglobalvillage.com 2012). In addition, on the same day, the source stated the level of conflict of "increased fighting between Government troops...and the M23, which has displaced more than 100,000 people, including many who have



fled to neighboring Rwanda and Uganda." *Inyenyeri* indicates that Kagame places the blame for the conflict internationally, in a July 24th article entitled, "International Community messed up Congo, says Kagame," which contests, "President Paul Kagame yesterday lashed out at Western countries and International organizations, saying they are the cause of the ongoing [DRC] crisis" (Musoni & Nkurunziza 2012). Furthermore, *Inyenyeri* questions if the GOR will take positive strides in settling the DRC conflict. On August 11th, the source states, "Kagame Meets Kabila in Kampala in Search of Peace for DRC; Will the Glass Hold Water This Time?" (2012). The article confirmed "neutral international force," which it attributes to negotiations between Kagame and DRC President Kabila.

Rwandan Blogs

Rwandan blogs use less-than-savory language to implicate the GOR. In an August 4 post, "Our Man in Kigali," Veritasinfo.fr blames both Kagame and the West for supporting human rights violations through writing, "for years, Rwanda's budding dictator, Paul Kagame, has gotten away with murder, while winning praise (and billions of dollars) from the West" (2012). The post followed a blog written previously that week on August 2nd, where the anonymous author states, "But while Mr. Kagame's economic achievements continue to impress, his human-rights record is getting grubbier, both at home and abroad" (Umuvugizi "Kagame Government continues to launch cruel assails" 2012). While the strides in economic development are acknowledged, this underlies significant human rights violations. One blog went so far as to say the following against President Kagame, his party, and reconciliation. This is one of the extreme cases (but not exceptional) of government hatred:

Concerning this blog quote: Caution:

We believe that God's call is always to peace for ALL RWANDANS and CONGOLESE people, but it is also to justice and mercy. When Paul Kagame and his RPF Nazis are trampled upon with force and impunity, war, we repeat again, war becomes inevitable and even necessary. It is often the best Rwandans can do when faced with great evil running the country. Rwandans won't stop asking why.

Rwandans deserve better.

Prosecute RPF criminals Bring to justice Paul Kagame So That Rwandans Can Fully reconcile, The Media, Human Rights...

Do more than to remember, Never allow The humanity be controlled by evil forces.

Jean-Christophe Nizeyimana Chairperson ASI Foundation

Retrieved from: http://www.survivorsnetworks.blogspot.com/

While not all blogs are useful, some help in understanding scale of the conflict and its consequences. Some suggest that the conflict is ethnically driven, as M23 forces are primarily Tutsis fighting against a Hutu population. There is a current of fear as Veritasinfo.fr confirms, "several special specialists in the region think that with ethnic tensions between Hutus and Tutsis other genocides are possible" (2012). The blogs shows Rwandan concerns about potential cuts in donor aid. Urwatubyaye reiterates a statement made by State Department spokeswoman Hilary Fuller Renner stating the United States "will not obligate \$200,000 in fiscal year 2012 Foreign Military Financing funds that were intended to support a Rwandan academy for noncommissioned officers" (2012). In the next section, I will examine one GOR response to funding cuts, the Agaciro Development Fund, and the onslaught of press with regards to its mission.

THE AGACIRO FUND: NATIONAL DIGNITY OR NATIONAL OPPRESSION?

With the M23 support allegations and the resulting donor aid threats of suspension, the GOR devised new means of raising financial support. The principle budgetary supplement, the Agaciro Development Fund (AgDF), coincided exactly with allegations from the Diaspora that the GOR was using unlawful and mandatory means of money collection (as seen in Section II). According to the Agaciro site, set-up by the GOR, the fund's description even presents a contradiction: the fund's "voluntary nature" (people can contribute if they want to) contrasts the "high accountability it will maintain" (people may be forced to contribute). I observe through The New Times that the GOR was marketing the AgDF as a means to restore Rwanda's dignity in self-development in the midst of over-reliance on donor aid, which finances about half of the Rwandan national budget, and threats of donor pull-out. In fact, the word "Agaciro" mean "dignity." Although the AgDF was advertised to the international community as a voluntary means to collect additional funding, Diaspora sources show a different story. Though voluntary giving to the funding is supposed to show national pride, does its alleged mandatory participation indicate a level of oppression?

The New Times

The New Times endorses the Agaciro Development Fund, advocated by the GOR. In an August article, "Rwanda: Kagame Launches Agaciro Development Fund," Kagame is quoted, "aid is never enough, we need to complement it with homegrown

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schemes" (2012). Kagame stresses the need for Rwanda to become more self-sufficient through comparing the fund to one of Rwanda's "home-grown schemes" in line with key GOR initiatives such as Umuganda (mandatory, monthly day of service for all Rwandans). The New Times implies that reliance on donor aid is lessening Rwanda's dignity, in quoting Kagame on the subject: "We are not changing our relations with our partners, but rather adding value. More dignity can only help" (2012). Through Kagame's statement, the Agaciro Development Fund marks a change in national attitude - an attitude of a nation moving away from over-dependence on international aid towards one of self-reliance. Kagame confirms, "No people in the world, no nation in the history of the world has ever progressed with assistance of others" (2012). Throughout the story, The New Times agrees with the government-sponsored fund promoting independence and the dignity of Rwanda.

After the August 23rd launch of the fund, *The New Times* tracked development in donations to the funds. "BNR staff top Agaciro contributions" by Jean d'Amour Mbonyinshuti on August 29th topped the headlines for that day. The story on the major donation from the National Bank of Rwanda (BNR) emphasized Minister of Finance John Rwangombwa's remarks, "What is important is the spirit that makes you contribute, what we are getting is the signal and the proof that Rwandans understood the value of Agaciro Fund" (Mbonyinshuti 2012). *The New Times* hailed the fund and the patriotic spirit of those making donations. *The Times* lent its support to the government-backed initiative to promote Rwanda's independence, thus ushering it into a new era.

Rwandan Diaspora

The New Times may advocate the fund as a necessary means for Rwandans to express their collective independence, but the Rwandan Diaspora indicates a different story. On August 17th, *Umuvugizi* issued a story by an anonymous author entitled "Rwandan business community are crying foul due to 'Agaciro Development Fund.'" The source makes accusations that donations to the fund are not voluntary – they are mandatory. The article mentions that the fund is really "taxes imposed on them by President Kagame's government." With regards to the nature of the fund, the article proposes:

"A so called Agaciro Development Fund (where Agaciro means value) has been introduced by the government to the business people who are forced to contribute large amounts of money to this fund regardless of how they earn, they are forced in a way that if a person doesn't contribute to the fund, he/she is considered a traitor and against the Government of president Kagame" (*Umuvugizi* 2012).

The article presents thought-provoking language as it states that business people who do not contribute to the fund are considered "traitors." The implied mandate is that people must contribute to the fund. An unnamed businessman is quoted, "We don't understand why we are forcefully charged to pay contribution to this fund yet our leaders were the ones who were supposed to meet this cost given that they are the ones who initiat-

ed and head the M23 mutiny group" (2012). This unidentified person traces the need of the AgDF to the GOR support of the M23 mutiny group. Although the GOR denied its support of M23, international donors still suspended aid. This article shows the resentment of Rwandan citizens to the fund while hinting that the fund is mandatory.

The *Umuvugizi* article is only one of many stories of contention against the fund. In an article published out of Brussels by *Inyenyeri News*, Jacqueline Umurungi wrote "The Untold Stories: Rwanda's Balance of Trade not the Economic Mask of Agaciro Fund," contending that the fund "will only contribute to Paul Kagame's economic empires....which is ploy to spread the gospel of the RPF doctrine and ideology" (2012). The article concludes with a warning to Rwandans:

"However, with this kind of political atmosphere where President Kagame kills whoever he/she wants, prosecutes and judges at will, manager of all business empires in Rwanda, it will take Rwandans some more years to think of economic independence" (Umurungi 2012).

As the *Umuvugizi* article called the AgDF a GOR scheme resulting from the international fall-out from M23 allegations, an *Inyenyeri* article goes a step further in directly insulting the Kagame regime. The article depicts Kagame as a ruthless leader with complete control over political and economic life in Rwanda.

Through examining the stance of *The New Times* versus the one of Rwandan Diaspora on the Agaciro Development Fund, I can make some projections from what is said and what is implied in the media. *The New Times* says that the AgDF is in line with the goals of the nation and its people: national independence and dignity. Thus, contributions to the fund are a matter of national pride. At the same time, outside sources coming from the Rwandan Diaspora contest the voluntary nature of the fund. From the language, tone, and content of these articles, an unrelenting attitude of resentment from the Diaspora is not only implied, it is stated. The media in this case brings forth undercurrents of tension about the future development of the nation. With the imminent donor aid cuts and some resentment about the future national budgetary supplement, this calls the sustainability of Rwandan development into question.

MEDIA CENSORSHIP

Throughout this study when drawing on anti-government sources, I focused solely on Rwandan Diaspora sources because it gives more encompassing viewpoints than those expressed in the in-country media. Journalists within the country are often restricted in what they can say. Yet, the GOR has a different story. In our first case, I will look at how Kagame and the GOR propose to promote media freedom. However, even in *The New Times* article on a recent summit for media freedom, Kagame's statements about press freedom allow for a deeper interpretation and for warnings to the press. Secondly, there are consequences when a Rwandan journalism student decides to test freedom of the press within the country are illustrated. *The New Times* story places the blame on the journalism student, as he

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suffers the consequences for supposedly faking his kidnapping to test his limits as a journalist. Lastly, a Rwandan Diaspora source that depicts the results when journalists bring up ethnic tensions is illustrated. Through these three articles, it becomes clear that the press has significant restrictions, and the government has substantial power.

Case 1: Media freedom - The New Times

In an East African Community (EAC) Media Summit in Kigali at the beginning of August, Kagame addressed members of the EAC community on media freedom and cooperation in Rwanda. Ivan Mugisha of The New Times wrote "Tell our story, Kagame urges East African media" showing Kagame as urging the regional press to create a platform for significant Rwandan issues (2012). Ironically, in a conference entitled, "Media on the Move: Harnessing the EAC Common Market for Media Enterprise and Freedom," Kagame discouraged journalists from "biased reporting" and blamed the regional media for "remaining silent" in the midst of negative international media attention with the DRC conflict (Mugisha 2012). This can be viewed in several ways. Kagame could be identifying gaps in reporting. Or, perhaps the press is remaining silent about the negative international media because identifying the perpetrator in the conflict requires speaking against the government, which could have negative political repercussions. Or, to the extreme, one could also view this statement as a threat against journalists giving "biased reporting" - biased in the sense of presenting viewpoints that go against the GOR. Although Kagame stated, "governments and the media should not be adversaries but rather partners without either compromising the independence and effectiveness of the other," his statements during the conference may indicate otherwise.

Case 2: To what extent do people have freedom of the press?

Kagame may publically advocate for "independence" of the media and government, but those who try to express freedom of the press experience certain consequences. In July, a journalism student was allegedly kidnapped after receiving Short Message Service (SMS) threats. The kidnapping received so much publicity that The New Times issued a rebuttal on July 20th, "I faked kidnap to get story - journalist," stating that the young journalism student, Idriss Gasana Byiringiro, faked the story (Asiimwe 2012). The Times quoted Byiringiro, "This was my plan – as a journalism student I wanted to investigate if this profession (journalism) is feasible in Rwanda or if it's true that the government harasses journalists as indicated in international reports" (2012). As the government continually arrests journalists, this article calls into question the truthfulness of Byiringiro's responses in The New Times. Was he pressured by the government to give this response? Was he really kidnapped? If, in fact, Byiringiro were actually kidnapped by pro-government forces, this would have confirmed his investigation that the government harasses journalists. If he really faked the story, this still questions the GOR's freedom of the press, as Byiringiro still faces legal consequences.

Case 3: Journalist jailed

The New Times may show media freedom in a positive light and place the blame on journalists when stories do not fit the government's liking. However, the Rwanda Diaspora speaks on detentions of journalists and abuses against the press. Robert Mugabe of the independent, online paper Great Lakes Voice wrote "Rwanda: Police detain Umusingi editor" on August 1st. The source attests that the Umusingi editor Stanley Gatera was held at a police station for two days after he published an opinion column that brought up ethnic bias in that "Tutsi women are responsible of family breakdown" (Mugabe 2012). As a result of the article's publication, two additional journalists were arrested and then "temporarily" set free. The Great Lakes article indicates that ethnic tension is still a sensitive subject, and that the government has taken action to keep the tension contained. According to the reaction of the GOR, this may mean imprisoning members of the press or restricting press freedoms. Despite an attitude of promoting media freedom and independence, the GOR operates a tight system of media control.

CONCLUSIONS: NATIONAL SENTIMENT

From this systematic content analysis of the pro-government The New Times and diverse Diaspora sources, I found a disparity between the government-projected stance on issues and an underlying tension projected by the Diaspora. Although the Diaspora represents a small sub-section of the Rwandan population, the fact they are able to speak more freely on national development brings certain obstacles to light. I examined this in the last three case studies where Kagame reprimanded the press for bias reporting at a conference for media "freedom." The Diaspora press judges the extents to which journalists are persecuted. As pro-government and Diaspora media tell a different story about media freedom, they also differ in justifying or explaining major policy issues. Regarding alleged M23 support, The New Times systematically refutes all allegations stating that the government has the nation's best interests in mind and that development is on-track. However, the Diaspora gives a different picture. The Diaspora media suggests continuing ethnic tensions, illegal economic dealings, and mass flows of refugees. The Diaspora also shows a different picture of the Agaciro Development Fund. It suggests that the fund may be mandatory and a source of Rwandans' resentment. Yet, The New Times states that the homegrown Agaciro fund is a voluntary means of the nation to gain self-sufficiency, establish dignity, and develop. These cases are only several instances of media divergences.

With varying viewpoints, which viewpoints are legitimate, and what do the conflicts say about the future state-building potential of the nation? The pro-government sources in Rwanda show a strong national leadership. Kagame is the allencompassing leader who has his people's best interest at heart: stability, growth, and freedom. However, through these sources, it is apparent that some have varying resentment towards Kagame, and their opposition has limited visibility in Rwandan national media. Kagame promotes economic growth and nation-





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al pride – much of which truly exists in Rwandan society. Yet, if people cannot express their opinions about the government, resentment may continue to grow. This paired with underlying ethnic tensions may cause civil strife if Kagame's successor does not have a strong control of society. The next scheduled presidential election takes place in 2017. Rwanda is a gem in Africa with its economic growth and political stability, but with a change in leadership, hopefully its society will not unravel.

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