



5-1-2009

In Situ 2009: University of Pennsylvania Undergraduate Research Journal

Ryan Jobson
University of Pennsylvania

Jennifer Berk
University of Pennsylvania

Julia Margulis
University of Pennsylvania

Sharon Her
University of Pennsylvania

Leslie Arapi
University of Pennsylvania

See next page for additional authors

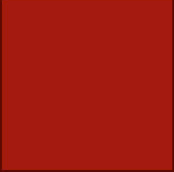
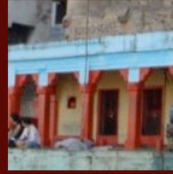
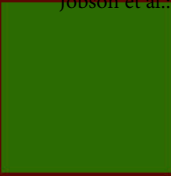
In Situ 2009: University of Pennsylvania Undergraduate Research Journal

Keywords

globalization, transnationalism, cultural heritage, birth practices, mesoamerica, diaspora

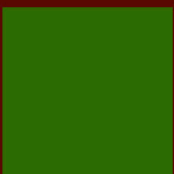
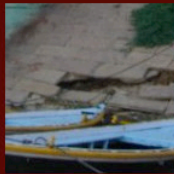
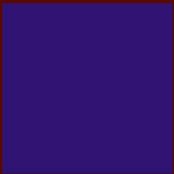
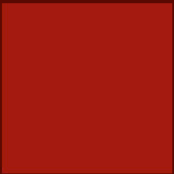
Authors

Ryan Jobson, Jennifer Berk, Julia Margulis, Sharon Her, Leslie Arapi, Brandi Waters, Jacqueline Chaudry, Madeleine Kronovet, Tony Wang, Cara McGuinness, Amber Weekes, Serena Stein, Caitlin Dardenne, Cameron Hu, Nina Johnson, and Hannah Lau



In Situ

Journal of Undergraduate Anthropology
at the University of Pennsylvania



In Situ

Undergraduate Journal of Anthropology
at the University of Pennsylvania

Volume 1
May 2009

Editor-in-Chief:
Serena S. Stein

Editorial Board:
Lauren Kapsalakis
Benjamin Laitman
Katie McCarthy
Catalina Isabel Villamil
Brandi M. Waters
Amber Weekes

Cover Design:
Chloe LeGendre

Editor's Preface

It is with sincere joy that we present to you the first volume of the revived Undergraduate Journal of Anthropology, *In Situ*. In launching this publication, we aim to showcase the diversity of the academic inquiries and research pursuits that are underway by members of our undergraduate student community in the Department of Anthropology. Moreover, it is our hope that this journal will serve to further cultivate the intellectual community among undergraduates.

In Situ proudly highlights the work of undergraduates who are engaging topics in any subfield of Anthropology. In Fall 2008, the Department of Anthropology faculty was invited to nominate students' work for publication. The following articles were selected from among these submissions based upon their excellence, originality, and clarity. *In Situ* was founded with the goal of exhibiting outstanding work in Anthropology, regardless of a student's school, year or major. The authors included in this volume range from freshmen to seniors, and represent a variety of majors in and beyond Anthropology.

The revitalization of the *In Situ* Undergraduate Journal of Anthropology is a testament to the dedication of those students who are working to enhance the academic experience of their peers in Anthropology, and we thank them for all of their hard work. The *In Situ* Editorial Board and the members of the Undergraduate Anthropology Society look forward to the continuing growth of the undergraduate community among students of Anthropology. Therefore, we invite you to join us in our enthusiasm for Anthropology, empirical study, critical analysis, problem-solving and appreciation for our world's challenges and vast diversity.

If you would like to submit to *In Situ's* Fall 2009 edition, apply to the *In Situ* Editorial Board, or learn more about the Undergraduate Anthropology Society and its upcoming activities, please visit the Undergraduate Program tab on the Penn Anthropology website for more information: <http://www.sas.upenn.edu/anthro>.

Thank you for reading,

Serena Stein, *Editor-in-Chief*

Acknowledgements

We would like to thank the student contributors for sharing their work. Additionally, we thank the faculty mentors who nominated student papers and worked with students to revise their articles for inclusion in this volume. Furthermore, we thank Dr. Adriana Petryna, the Undergraduate Chair of Anthropology, for her guidance. Thank you, also, to Charlene Kwon, the Undergraduate Coordinator, for her enthusiasm. Finally, we owe a great debt of thanks to *In Situ's* cover designer, Chloe LeGendre, for all of her hard work.

Table of Contents

Editor's Preface	3
Acknowledgements	4
Table of Contents	5
ARTICLES	
<i>Postmodernism and Transnationalism in the Black Atlantic</i> Ryan Jobson	6
<i>All the King's Horses and all the King's Men: Issues of Cultural Heritage Surrounding the Destruction and Possible Rebuilding of the Bamiyan Buddhas</i> Jennifer Berk	14
<i>Modeling Gardasil: Issues and Perspectives</i> Julia Margulis	23
<i>Birth Practices in Santiago Atitlán: An Evolving System</i> Sharon Her	38
<i>The Yoke and Its Significance in the Mesoamerican Ball Game</i> Leslie Arapi	49
<i>Diaspora as Politics, Culture, Commodity, Contrast</i> Brandi Waters and Jacqueline Chaudry	52
<i>The Global Diffusion of Manufactured Cigarettes: An Analysis of Eastern Emulation</i> Madeleine Kronovet	60
<i>Globalization's Effect on Human Information Processing: Globalized Digital Networks and Horizontal Information Processing</i> Tony Wang	68

Postmodernism and Transnationalism in the Black Atlantic

Ryan Jobson

Following the Middle Passage, during which continental Africans were subjected to varying systems of enslavement across the Americas and Caribbean, historians, literary critics, and social scientists alike have examined the political, cultural, and social significance of the transnational community we now know as the African Diaspora. In *The Black Atlantic: Modernity and Double Consciousness*, sociologist Paul Gilroy undertakes the challenge of conceptualizing the diaspora as a community no longer bound by European oppression or social norms. Gilroy proposes “the Black Atlantic” as an interactive space in which black culture and thought transcends the national boundaries defined under slavery. However, in doing so, Gilroy, as a British scholar, remains rooted in Eurocentric and Americentric views of the African Diaspora that largely disregard the significance of the African continent and do not explore the social context of relationships between Africa and diasporic populations in the contemporary moment. While Gilroy identifies the major flaws in previous models of the African Diaspora, his limited scope precludes an analysis that explains the relevance and function of diaspora in modern society.

Early models of the African Diaspora—often put forward by Caucasian scholars—embrace a Western outlook that upheld the racial and cultural “authenticity” of the African continent, examining the relative “Africanness” of individual diasporic populations. In his 1941 work, *Myth of the Negro Past*, Melville Herskovits presents a “scale of Africanisms”—based on the relatively similarity of a diasporic culture to that of the African continent—with the “Bush Negroes of Suriname” representing the greatest similarity and the black American the least.¹ Later, Sidney Mintz and Richard Price’s classic text, *The Birth of African-American Culture*, first published in 1976, acknowledged the limitations of Herskovits’s study, which did not account for the complexity of diasporic cultures. This suggested that future studies “maintain a skeptical attitude toward claims that many contemporary social or cultural forms represent direct continuities from African homelands” as “the development of institutions must be viewed in their full historical setting.”² However, lacking an explicit critique of the unilateral model of diaspora, examining only the way in which culture of the African continent is reflected in disparate African populations of the Atlantic world, Mintz and Price do not adequately delve into the transnational nature of the African Diaspora.

On the other hand, Gilroy’s *The Black Atlantic* represents a noteworthy attempt at reconfiguring the nature and significance of the African Diaspora in the context of postmodernism. Citing the European travels of African American figures such as W.E.B. Du Bois, Richard Wright, James Weldon Johnson, and the Fisk Jubilee Singers, he theorizes a diaspora that is not concerned with the extent of African survivals, but rather the implications of such individuals’ movement upon their own conceptions of race, indicating a breakdown of the national barriers that limited the work of earlier scholars. Of prior studies of the diaspora, Gilroy writes: “It should be emphasised that, where the archaeology of black critical knowledge enters the academy, it currently involves the construction of canons which seems to be proceeding on an exclusively *national* basis—African-American, Anglophone Caribbean, and so on.”³

For Gilroy, this phenomenon is notably apparent in discussions of music, as hip hop—which arose in the South Bronx, New York following the introduction of the “sound system” and “breakbeats” by Jamaican-born DJ Kool Herc⁴ — is often presented as an exclusively American creation which “sprang intact from the entrails of the blues.”⁵ Accordingly, Gilroy wishes to challenge these inaccurate views of diaspora by constructing a postmodern discourse which rejects the nation-state altogether. However, in his choice to highlight the experiences of Du Bois, Wright, and others in various regions of Europe, the African continent is surprisingly absent. Throughout *The Black Atlantic*, Gilroy clearly distinguishes Africa from a purportedly detached diaspora, which under further review of his featured subjects appears to be mistaken.

Concerning Du Bois, Gilroy argues that his consciousness of diaspora was heightened by his travels through the American South and Europe. His focus falls primarily on Du Bois’s experiences as a student at Fisk University in Nashville, Tennessee and the University of Berlin, where he was forced to confront “the problems of racialised ontology and identity—the tension between being and becoming black” that were “deeply inscribed in DuBois’s own life.”⁶ Similarly, his profile of Richard Wright emphasizes the way in which the West impacted his political leanings. Of Wright, Gilroy notes:

His distinctive perspective was decisively shaped by lengthy involvement in the official communist movement, by the interests in sociology and psychoanalysis which developed while he lived in Chicago and New York, and by the intellectual milieu of life in Paris where he made a new home for the last thirteen years of his life.⁷

While Gilroy successfully explores the importance of “routes” as well as “roots” in the formation of diaspora (as Edmund T. Gordon and Mark Anderson declare in their 1999 article “The African Diaspora: Toward and Ethnography of Diasporic Identification”), in centering his analysis on Europe, and reducing DuBois’s relationship with the African continent to a series of insubstantial images, he fails to recognize a critical moment in his development as an activist for the diaspora, and establishes Africa as a separate entity from the amalgam of transnational relationships that he terms “the Black Atlantic.”

Accordingly, Gilroy ignores the tangible connection between Du Bois and the African continent that grew into his close personal relationship with Ghanaian President Kwame Nkrumah, adoption of Ghanaian citizenship, and the development of Du Bois’s Pan-African consciousness.⁸ Instead, citing one of Du Bois’s earliest works, *The Souls of Black Folk*, he questions the relevance of modern Africa to his life’s work:

This analysis was so deeply rooted in the post-slave history of the new world that it became difficult for DuBois’s understanding of modernity to incorporate contemporary Africa. Africa emerged instead as a mythic counterpart to modernity in the Americas—a moral symbol transmitted by exquisite objects seen fleetingly in the African collection at Fisk University but largely disappearing from DuBois’s account, leaving an empty, aching space between his local and global manifestations of racial injustice.⁹

By remaining concentrated on Du Bois's early works that he would later distance himself from, Gilroy fails to note Du Bois's travels in Africa—chronicled in the April 1924 issue of *The Crisis*¹⁰—and the ensuing changes in his philosophy. For the October 1927 issue of *The Crisis* Du Bois penned “The Pan African Congresses: The Story of a Growing Movement,” outlining the need for Pan-African unity and the common socioeconomic struggle that exists across the diaspora:

Negroes everywhere need:

1. A voice in their own government
2. Native rights to the land and its natural resources.
3. Modern education for all children.
4. The development of Africa for the Africans and not merely for the profit of Europeans.
5. The re-organization of commerce and industry so as to make the main object of capital and labor the welfare of the many rather than the enriching of the few.
6. The treatment of civilized men as civilized despite differences of birth, race or color.¹¹

In this passage, Du Bois expresses a Garvey-esque call for diasporic unity, which should not be dismissed as a superfluous change of opinion. In the same way that Du Bois's early leanings were influenced by his education in Europe, so were his later views, following his first-hand experiences with the African continent. Thus, Gilroy's obsession with the community of the Black Atlantic is flawed even in the select examples he presents in the text.

However, beyond the case of Du Bois alone, Gilroy miscalculates the wider impact of the African continent on the Black Atlantic, and the reverse influence of black New World populations on the African homeland. In the same way that Wright and DuBois saw their worldview as African Americans challenged by their travels in Europe, did Malcolm X not find the same in his interaction with diplomats in West Africa?¹² Did Kwame Nkrumah not experience a similar maturation during his studies in the United States at Lincoln University and the University of Pennsylvania?¹³ Does the aforementioned Pan-African Congresses not represent an example of diasporic dialogue that includes the African continent?

Instead, Gilroy's presentation of the Black Atlantic portrays Africa exclusively as a “homologous point of reference”¹⁴ that reaffirms the notion of diaspora, but is never actively involved in the countless relationships that exist across the diaspora. In his discussion of diasporic music, he effectively takes note of the bilateral (or multilateral) nature of diaspora, Nelson Mandela's admission that he had listened to American Motown artists while imprisoned in South Africa. Of this situation, Gilroy reasons:

The purist idea of one-way flow of African culture from east to west was instantly revealed to be absurd. The global dimensions of diaspora dialogue were momentarily visible and, as his casual words lit up the black Atlantic landscape like a flash of lightning on a summer night, the value of music as the principal

symbol of racial authenticity was simultaneously confirmed and placed in question.¹⁵

The example of Mandela's indulgence in black American music, and later Nigerian musician Fela Kuti's incorporation of funk music into his unique genre of Afrobeat, should point to a model of diaspora that rejects popular notions of "authenticity" and "origins," instead focusing on the complex network that unites distinct populations across Africa, Europe, the Americas, and the Caribbean. But Gilroy's attention to Africa lacks the contextual depth to place Africa within his model of diaspora. Why was Mandela listening to the sounds of Detroit while imprisoned more than eight thousand miles away? Who or what introduced said music to South Africa? What experiences led Fela Kuti to create the *hybrid* music form of Afrobeat? By leaving these fundamental questions unanswered, Gilroy never fully reconciles Africa as a diasporic body within the Black Atlantic:

We have already seen in Chapter 3 that the circulation and mutation of music across the black Atlantic explodes the dualistic structure which puts Africa, authenticity, purity, and origin in crude opposition to the Americas, hybridity, creolisation, and rootlessness. There has been (at least) a two-way traffic between African cultural forms and the political cultures of diaspora blacks over a long period.¹⁶

Gilroy's suggestion of "two-way traffic" remains troubled by his inability to place Africa within the framework of "the Black Atlantic." Does a true bilateral relationship exist within the African Diaspora, or do Africa and the Black Atlantic constitute two separate entities? In excluding the African continent, he essentially renders the African Diaspora incomplete, or as Brent Edwards notes of "the Black Atlantic," "in studies of black transnational circuits of culture...the 'black Atlantic' would have to be set beside a parallel oceanic frame of the 'black Mediterranean' or the 'black Pacific.'"¹⁷ Thus, the concept of black "authenticity" or "purity" simply limits a discussion of the diaspora which examines diasporic relationships of the *present* in the context of a past, as it remains rooted in the historical view of diaspora as a direct result of enslavement. As Edwards suggests, "it is precisely the term *diaspora*, in the interventionist sense I have sketched here, that would allow us to think beyond such limiting geographic frames, and without reliance on an obsession with origins."¹⁸

Regarding music specifically, it is important to note the hybrid forms that now exist on the African continent. Taking into consideration the hybrid nature of Kuti's Afrobeat, and the spread of reggae and hip hop throughout Africa, we observe the "two-way traffic" at work. In this way, the connection between black American and Caribbean popular culture and their counterparts across the Atlantic indicates that the concept of an "authentically black culture" is imaginary.

The article "What is this 'Black' in Black Popular Culture," written by Jamaican-born cultural theorist Stuart Hall, calls for a necessary discussion of black popular culture within the structure of a bilateral diaspora. He writes, "the point of underlying overdetermination—Black cultural repertoires constituted from two directions at once—is perhaps more subversive than you

think. It is to insist that in black popular culture, strictly speaking, ethnographically speaking, there are no pure forms at all.”¹⁹ In this respect, Gilroy’s preoccupation with Africa as the historical origin, but never an active participant in the Black Atlantic diaspora reinforces the construct of the nation-state, which he so desperately wants to break away from. Although, he suggests the existence of a bilateral diaspora, his analysis of diaspora both historically and presently offers what African historian Patrick Manning terms a “‘diaspora apart’ model,”²⁰ that separates studies of Africa from those of the diaspora.

This approach is critically lacking in the way it preserves a model of diaspora that need not acknowledge the significance of the African continent in relation to globalization, capitalism, and the ongoing struggles of black individuals *throughout* the diaspora. Gilroy, instead upholds legacy of enslavement in the consciousness of the Black Atlantic as the primary means by which diaspora is realized:

Plantation slavery was more than just a system of labor and a distinct mode of racial domination. Whether it encapsulates the inner essence of capitalism or was vestigial, essentially precapitalist element in a dependent relationship to capitalism proper, it provided the foundations for a distinctive network of economic, social, and political relations. Above all, ‘its demise threw open the most fundamental questions of economy, society and polity,’ and it has retained a central place in the historical memories of the black Atlantic.²¹

Recent scholarship, on the other hand, has challenged the assessment of enslavement as a means of distinguishing the “routes” of the Black Atlantic from its African “roots”. For instance, *Rethinking the African Diaspora: The Making of a Black Atlantic World in the Bight of Benin and Brazil*—written by historians Kristin Mann and Edna G. Bay—examines the long-standing, bilateral, relationship between Afro-Brazilians and West Africans both during and following the termination of the slave trade. In doing so, she calls for a “shift in paradigms according to which the Afro-Atlantic has been studied... [to see] Africans as mobile in the world, shaping the societies they journey to and from.”²² Furthermore, anthropologist Laura Pires-Hester’s study of Cape Verdean-Americans displays the bilateral diaspora model at work, as the mutual ties between the homeland and dispersed population have developed from “‘imaged/imagined’”²³ —as the African Diaspora is often presented—into an explicit social and political relationship between the American and African populations. Of this development, she notes:

This new phase was first marked by the formation of a different kind of association, the National Coordinating Council for the Development of Cape Verde (NCCDCV)...Its primary goal was to “plan specific strategies to involve Cape Verdean-Americans as a group in a process which can generate economic assistance to the Republic and the people of Cape-Verde” (Manuel Pires Monteiro, 9/21/81:1). It would not replace but build explicitly upon the population’s long tradition of “people-to-people assistance,” using educational, political, intellectual, and expanded network assets of the ethnic population matured within the new homeland environment.²⁴

Considering that Cape Verdean-Americans effectively bridged between an imagined or perceived community into one with true sociopolitical implications indicates the salience of a bilateral diaspora in an increasingly global world. Africa as a mere image or reference point, as it is in the view of Gilroy, denies the existence or even potential for such a connection. Thus, the circumstances presented by Pires-Hester indicate the direction of African Diaspora Studies (to include Africana Studies, Africology, Pan African Studies), as well as the possibility of political cooperation across national boundaries of the diaspora.

The existence of such relationships points to a need to further integrate studies of the African continent and those of dispersed African peoples in *all* regions of the world in adopting what Patrick Manning terms the “‘homeland plus diaspora’ model.”²⁵ In doing so, explorations of the Black Atlantic can account for the complex set of associations between diasporic populations, and as a result, better explain the global phenomena of racial inequality, globalization, and the growth of mass media that social scientists desperately seek to unravel.

Although Gilroy’s *The Black Atlantic* crafts an interesting narrative of the history of enslaved Africans in the West, his attempt at a true sociological critique of diaspora is unfounded. African Diaspora Studies is not simply an investigation of enslaved Africans and their descendants, but rather the means by which one seeks to make sense of the modern world. Or, as sociologist Tukufu Zuberi observes, “it is against the background of these arguments against enslavement and a new vision of human freedom, justice, and equality that the African diaspora experience critically engages the study of society.”²⁶ Therefore, in the interest of tangible social change and cooperation across the diaspora, it is integral that social scientists engage themselves in a full view of the diaspora in practice when studying greater societal trends—as opposed to Gilroy’s heuristic analysis—accounting for tangible interaction within a bilateral diaspora that encapsulates the Black Atlantic as it exists today.

Ryan Jobson is a sophomore in the College majoring in Africana Studies, Anthropology and English.

¹ Herskovits, Melville. *Myth of the Negro Past*. (New York and London: Harper & Brothers, 1941), 16.

² Mintz, Sidney W. and Price, Richard. *The Birth of African-American Culture: An Anthropological Perspective*. (Boston: Beacon Press, 1992), 52-64.

³ Mintz, 33.

⁴ Rhodes, Henry A. “The Evolution of Rap Music in the United States:”
http://people.artcenter.edu/~acheng1/design_workshop/01.28.03/rap_evolution.pdf.

⁵ Gilroy, Paul. *The Black Atlantic: Modernity and Double Consciousness*. (Cambridge: Harvard University Press, 1993), 34.

⁶ Gilroy, 116.

⁷ Gilroy, 155.

⁸ Afari-Gyan, Kwadwo. “Kwame Nkrumah, George Padmore and W.E.B. DuBois.” *Research Review*. 7.1-2 (1991): 7.

⁹ Gilroy, 113.

¹⁰ Du Bois, W.E.B. "Little Portraits of Africa." *W.E.B. DuBois: A Reader*. Ed. David Levering Lewis. (New York: Owl Books, 1995), 668.

¹¹ Du Bois, 672.

¹² Curtis, Edward E. IV. "Why Malcolm X Never Developed an Islamic Approach to Civil Rights." *Religion*. 32.3 (2002): 234.

¹³ Smertin, Yuri. *Kwame Nkrumah*. (New York: International Publishers, 1987), 15.

¹⁴ Gilroy, 123.

¹⁵ Gilroy, 96.

¹⁶ Gilroy, 199.

¹⁷ Gilroy, 63.

¹⁸ Gilroy, 63.

¹⁹ Hall, Stuart. "What is this 'Black' in Black Popular Culture." *The Black Studies Reader*. Ed. Jacqueline Bobo, et al. (New York: Routledge, 2004), 260.

²⁰ Manning, Patrick. "Africa and the African Diaspora: New Directions of Study." *Journal of African History*. 44.3 (2003): 494.

²¹ Gilroy, 54.

²² Otero, Solimar. "Untitled Review." *African Studies Review*. 46.2 (2003): 127.

²³ Pires-Hester, Laura J. "The Emergence of Bilateral Diaspora Ethnicity Among Cape Verdean-Americans." *The African Diaspora: African Origins and New World Identities*. Ed. Isidore Okpewho, et al. (Bloomington: Indiana University Press, 1999), 490.

²⁴ Pires-Hester, 494.

²⁵ Pires-Hester, 495.

²⁶ Zuberi, Tukufu. "Sociology and the African Diaspora Experience." *A Companion to African American Studies*. Ed. Lewis R. Gordon and Jane Anna Gordon. (Oxford: Blackwell, 2006), 260



Cara McGuinness

A Midwife

Cara McGuinness is a senior in the College majoring in Biology with a minor in Anthropology. For a total of nine months, Cara conducted ethnographic research on the dualistic approaches to perinatal care in the Maya highland town of Santiago Atitlan, Guatemala as a student researcher with the Guatemala Health Initiative. This image depicts the bathing ceremony that takes place one week after the delivery of a newborn.

***All the King's Horses and all the King's Men:
Issues of Cultural Heritage Surrounding the Destruction and Possible
Rebuilding of the Bamiyan Buddhas***

Jennifer Berk

When the Taliban completed demolition of the Bamiyan Buddhas on Monday, March 12, 2001, Taliban Information Minister Qudratullah Jamal summarized the destruction as “not as easy as people would think”¹. While he meant this assessment in regards to the actual physical removal process, it also speaks to issues surrounding the monumental statues. Carved into the side of a cliff in the Hazarajat region of central Afghanistan, the once-standing Buddhas have turned into a hotbed of international debate and have forced the global community to decide the most appropriate response. Because no single right answer exists to the questions of what to do next and who decides, we must consider the situation from various vantage points, allowing for a plurality of voices to enter the discussion. In particular, thinking about the motivation behind the destruction of the Buddhas and applying ideas of both universalism and cultural relativity will show why multiple conflicting viewpoints each proves relevant in its own right, depending on which interpretation of the event prevails.

Regardless of the interpretation or the theoretical framework used for analysis, some facts about the incident remain incontrovertible. In 1997, UNESCO and the international community successfully combated the initial threat to destroy the 125-foot and 174-foot sandstone statues, which were carved into the cliffs of Bamiyan in the third century A.D. and constituted the tallest standing Buddhas in the world². Despite surviving this threat and centuries of invaders ranging from Genghis Khan and the Emperor Aurangzeb to the British and the Soviets, on February 26, 2001, Taliban leader Mullah Mohammed Omar issued an edict that the statues “should be destroyed so that they are not worshipped now or in the future.” He expressed this concern in spite of the fact that no Buddhists had lived in the Bamiyan valley since the 10th century³. This edict similarly said that the Taliban would destroy any images deemed “insulting to Islam” or which “idolize infidel gods.” The new ruling reversed an earlier decree preventing the destruction of Afghanistan's many archeological sites, which then-Minister of Culture Mullah Muttaki pushed through the Shuria council in 1999⁴. While controversial even within the Taliban itself, the group stood strong against the 55-nation Organization of Islamic Conference and the U.N., who urged the Taliban to stop their campaign against the relics. At the Islamic Conference, Minister Jamal repeated what he had told other delegations: the Taliban will not “back away from the edict, and no statues in Afghanistan will be spared”⁵.

Staying true to his word, the fanatical Islamic group used dynamite to destroy the Bamiyan Buddhas over several weeks and in multiple stages. They first used anti-aircraft guns and artillery with the help of anti-tank mines to damage the statues and later obliterated them by lowering local Hazara men down the cliff face to place explosives into holes in the Buddhas, whose huge outlines still “appear as ghostly shadows on the cliff face”⁶. In an effort to fill in these shadows and as part of the international effort to rebuild Afghanistan after the Taliban war, the Japanese government and several other organizations, such as the Afghanistan Institute in

Bubendorf, Switzerland and the ETH (a science and technology university in Zurich), have committed themselves to rebuilding the two Buddhas. One restoration approach considered acceptable by UNESCO and other experts involves anastylosis, often used for Greek and Roman temples, in which the original pieces are reassembled and held together with a minimum of new material. The Afghan government has joined the charge to recreate the statues and has even commissioned Japanese artist Hiro Yamagata for the job. Yamagata would use a different technique than anastylosis and employ fourteen solar and wind-powered laser systems not only to project the images of the Buddhas onto the cliff where they once stood, but also to supply electricity to surrounding residents. The project would cost an estimated \$9 million, and if UNESCO approves it, would begin in 2009 and take until June 2012 to complete⁷. While waiting for the Afghan government and international community to decide whether or not to restore the Buddhas, a \$1.3 million project funded by UNESCO will sort out the chunks of clay and plaster in the region, a World Heritage Site (a little late) as of 2003, in order to protect them from the elements. The 2008 World Monuments Watch List of the 100 Most Endangered Sites included these remnants in the hopes that the listing will put continued national and international attention on the site and ensure its long-term preservation, to make certain that future restoration efforts maintain the authenticity of the site, and to make sure those working in the area carry out proper preservation practices⁸.

At first glance, this background information appears almost transparently uncomplicated. The Taliban, a regime that has controlled Afghanistan since 1996 but remains unrecognized by the majority of the international community, could not bear these tangible symbols of diversity and destroyed them based on an extremely strict adherence to the tenants of their religion, to the outrage of a more democratic West. The destruction represented a militant act of cultural terrorism, whereas efforts to rebuild the statues represent hope in the face of intolerance and violent barbarity. But does rebuilding the statues not also display intolerance of the Taliban's beliefs? If, in fact, their motives involve the unholy nature of the Buddhas, then claims of religious freedom on their part may require a reassessment of the idols' reconstruction. In addition, whether considered a legitimate government or not, the Taliban did have control of the land at the time of the demolition, lending support to the argument that they had a right to use their property as they wished.

The Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, an international treaty adopted at The Hague in 1954, stipulates that the "primary responsibility for the protection of cultural objects rests with the Party controlling that property"⁹. This post-World War II convention has set the tone worldwide and attempts to do precisely what its title suggests and minimize destruction to culturally relevant objects at risk during times of armed conflict (Lynn Meskell will later discuss how the Taliban fought its opposition for control of the Bamiyan province shortly before the destruction). Under the provision mentioned, the Taliban, having gained control of the Bamiyan Valley, may not have overstepped their legal rights when they destroyed the Buddha statues in cliffs that stood on their land. Notice, it does not state "the government as recognized by the U.N. and international community at large," but "the Party controlling that property." Still, only ratified in the U.S. as of this year, Afghanistan has yet to acknowledge the treaty, and therefore it may not actually apply in this case¹⁰. Moreover, the ambiguous convention has multiple interpretations and someone must still decide what constitutes

“cultural property,” as no concrete, universal definition exists for the term. Would we indisputably consider the Bamiyan Buddhas objects of cultural heritage? Americans in power destroy buildings all the time, as in the notable burial of the President’s house in Philadelphia, because they do not view them as culturally significant or do not believe the story they tell fits in with the past they wish to remember. Still, other groups may disagree and lose a part of their identity upon this demolition (perhaps African Americans in the case of the President’s house, because slave quarters existed there and served as a tangible testament to the mistreatment of African Americans even by those in power). While we cannot save everything, why do certain people get a say while others’ voices get muted in the process? The Taliban, for instance, may not have viewed the Buddhas as a part of cultural heritage worthy of preservation, and they certainly did not support the narrative these Buddhas helped to construct.

The reason why these fundamentalists did not see the Buddhas as objects of cultural heritage becomes relevant here. According to anthropologist Lynn Meskell, in the eyes of the Taliban, “the Buddhist statues represented a site of negative memory, one that necessitated jettisoning from the nation’s construction of contemporary identity, and the act of erasure was...about religious difference.” Meskell, however, also acknowledges the fact that the Afghan Shiite minority lives in the Bamiyan province, and that control of this unstable region wavered between the Taliban and their opposition just before the release of the edict. Furthermore, she blames the Taliban’s inability to achieve international recognition and the implementation of economic sanctions in Afghanistan by the U.N. Security Council for the annihilation of the Buddhas¹¹.

Clearly viewing the action as solely motivated by religion proves controversial. The Taliban could easily justify this position--the invocation of worship, Islam, and “infidel gods” in the declaration that resulted in the statues’ ruin does seem to indicate an inherently religious component to the destruction. In contrast, then-ambassador-at-large for the Taliban, Sayed Rahmatullah Hashimi, explained the decision as a manifestation of the Islamic government’s anger after a Swedish monuments delegation offered money to preserve the ancient works while a million Afghans faced starvation. In a *New York Times* interview, Hashimi made the point that, “When your children are dying in front of you, then you don’t care about a piece of art.” He failed to mention, though, that the Metropolitan Museum of Art offered to purchase the “piece of art,” which could have provided funding for food. If the Taliban did not care about the statues as he claimed, then why did they have to destroy them instead of just moving them away to avoid the possibility of their worship? While the article featured anger and a kind of political revolution as possible motives, the same report also cited other accounts which argued that religious leaders debated the decision for months, and ultimately deemed the statues idolatrous. During a later interview for Japan’s *Mainichi Shimbun*, Afghan Foreign Minister Wakil Ahmad Mutawakel likewise called the destruction “anything but retaliation against the international community for economic sanctions.” Moreover, he said their decision is in accordance with Islamic law and “is purely a religious issue.”¹²

No one can seem to unequivocally determine the motivation behind the Taliban’s decision to wage war on the stones. If, in a fit of rage, they meant to assert their power as the governing body in Afghanistan and proclaim to the rest of the world that they will destroy anything which does not closely align with their principles, then this radical intolerance may very

well represent a form of cultural terrorism that other nations should in no way support. Perhaps these other nations should even rectify this use of political violence and make a clear statement against coercive tactics used to force others into submission by helping to rebuild the statues. We must not tolerate the use of might to intimidate people (both Afghanis themselves and other nations) into recognizing authority or to subordinate a group. Not only is this a weak form of power when compared to fighting with ideas because it does not change basic ideologies, but acts of violent rage thwart any attempt to establish a sustainable global community. Without the possibility of open dialogue and acceptance of cultural diversity, we will never adapt to a post-colonial world.

Again, though, the acceptance of cultural diversity would include the Taliban, who worship differently than many other groups, if they interpreted the Quran to mandate the abolition of the Buddhas. It would prove hypocritical to admonish the group based on their religious beliefs, for just as we can follow the word of any god we choose, so too can they. Even the Old Testament condemns the behavior of the Jewish people who created a golden calf to worship when Moses climbed the mountain to receive the Ten Commandments. Who decided that this idol was sacrilegious while the Buddha statues constituted important symbols of cultural heritage? Western notions of acceptability and what should hold a place in history start to stand in for universal notions and risk falling prey to the kind of intolerance they set out to combat. In the case of the Buddhas, rebuilding the statues could easily translate into asserting the power of the West or the power of certain religions over others.

This final point shows that establishing motive would still not fully resolve the issue and would actually invite even more controversy. One could argue that even if the Taliban based their decision on religion and regardless of the fact that they had control of the land at the time of the destruction, they had a moral obligation to the rest of the world to preserve the Buddhas as objects of our universal cultural heritage. The previously mentioned 1954 Hague Convention sums up the idea of a global heritage when it states that "damage to cultural property belonging to any people whatsoever means damage to the cultural heritage of all mankind, since each people makes its own contribution to the culture of the world"¹³. This idea of global heritage has dominated the landscape in recent decades, but has actually relied on the ancient Greek ideal of cosmopolitanism to dictate how it will take shape in the new millennium. As we draw distinctions between democrats and republicans, between brand x and brand y, some scholars have tried to shed light on similarities and draw attention to connections among groups we initially consider highly diverse. They operate under the assumption that separate can never truly be equal, and even Buddha himself said that "in the sky, there is no distinction of east and west; people create distinctions out of their own minds and then believe them to be true"¹⁴. Following up on this idea centuries later, philosopher Kwame Anthony Appiah similarly views boundaries between nations, states, cultures or societies as imaginary and morally irrelevant, or at the very least culturally constructed. He also notes that much of what people want to conserve as cultural patrimony came into existence long before the creation of modern nations and because of societies that have died out or completely transformed. Taking these ideas together, instead of seeing objects of cultural patrimony as only relevant to certain groups that claim to identify with them because they informed their past, Appiah believes all objects of cultural heritage have potential values for all human beings and "belong in the deepest sense to all of us"¹⁵.

A riff on this somewhat general idea of universalism more specifically places it in the context of nation-state claims to antiquities. Taking a cue from Appiah, archaeologist James Cuno focuses on the “imaginary” boundaries between nations and why their socially contingent nature makes them inadequate determinants of who owns antiquity. When a nation claims cultural patrimony over an object, these claims are inherently political and “serve the purpose of the modern, claiming nation”¹⁶. With a regime change comes a change in the parameters of the claim, as what one leader deems to have ongoing historical, traditional, or cultural importance may not include that which his or her successor believes to represent the instable culture. Those in power at a certain time make national, cultural identity claims that “reflect the interests of the powerful over those of the powerless”¹⁷. Again, because these claims do not prove absolute, Cuno would dismiss them as irrelevant when deciding in which museum an object should reside or which people technically own an antiquity. No single nation has the right to totally control an object’s destiny because it does not constitute any particular nation’s property.

Framing the controversy of the Bamiyan Buddhas in this way, “as an issue for all mankind,” helps explain why countries like Japan, Switzerland, and the U.S. think they have an obligation to reconstruct the statues and do not view them as ever belonging only to the citizens of Afghanistan or those ruling the country. According to this school of thought, when the Taliban placed dynamite into the rock, they did not just erase the cultural memory of those who adhere to Buddhism, rather they severed ties to the past that maintain the modern identities of every culture on Earth. In other words, people who the destruction does not initially appear to affect actually took it quite personally and want a say in how it plays out. If we view this desire through a universal lens and understand the statues as belonging to humankind in general, then we must take into account the opinions of the international community when deciding what to do with the destruction site. In theory, the idea of a universal culture that crosses national borders and provides an answer to the question “who owns antiquity” with a resounding “we all do,” seems like the ideal solution to this and just about any other conflict over cultural heritage. Still, in practice problems arise because we are talking about tangible objects that must reside somewhere. Additionally, since we do not have the means even as a universal culture to save everything, someone must ultimately decide what gets saved and what does not.

Even a universal cultural heritage would prove necessarily culturally constructed, since we must always draw the line somewhere. While questions of “where?” and “who wields the pen?” remain, it seems that, upon application to real world events, nations with power, prestige, and money end up gaining control. The utopian concept of universality includes the caveat that it can easily divulge into Western colonialism. The Met offering to purchase the statues in the first place or the international community contemplating their reconstruction would result in a devastating loss of, or significant change in, original context. Even more, these alternatives exemplify how countries that currently have worldwide hegemony can maintain their authority and impose their ideals onto others. In either case, countries with a considerable amount of international influence, like the United States and Japan, would have control over how the story of the Bamiyan Buddhas ends, and they could subjectively create narratives which privilege their ideologies. These stories would likely leave out “specific cultural, political or religious positions that diverge from Western, secularist viewpoints,” such as the religious beliefs of the Taliban or their claims of governing legitimately. Given inequalities between groups, ranging from sheer size (the Taliban constitute

the minority in Afghanistan) to vast differences in education or media access to available finances, how can any particular nation or institution justifiably take the initiative to legislate for others?¹⁸ Although the desire to preserve international heritage proves noble, we must also acknowledge the hypocrisy of specific organizations and countries who attempt to implement particular global policies. We might also try to embrace cultural diversity as productive instead of attempt to impose a single world order, which would prove hegemonic at best and ethnocentric at worst¹⁹. Cultural relativism developed in response to this fear of (Western) ethnocentrism, and while not directly in contradiction to ideas of universalism and the related cosmopolitanism, this notion moderates them and fills in many of their gaps. Generally, the idea of cultural relativism says that we can best understand an individual's beliefs and activities in terms of his or her own culture. The hope of this framework is that it might allow us to salvage "distinct cultural forms of life from a process of apparent global Westernization," as it forces us to resist homogenization toward a dominant Western model with its appreciation of cultural variation²⁰. Even Cuno noted earlier in regards to nation-states that civilization does not prove absolute. If we interpret "civilization" as a relative construct, then a person's conception of the world must necessarily be contingent on his or her specific cultural experiences. Extrapolating this idea to value judgments, because no one can rid themselves of their own cultural baggage or prefab assumptions about how the world works, no ontological, objectively verifiable truth exists independent of one's own particular culture. So how can any individual or nation presume to know what standards should apply universally?

This question clearly relates back to the case of the Bamiyan Buddhas, as it forces us to reconsider if other nations should help decide what happens in the unique valley. It becomes important to note that cultural relativism in no way helps us reach an obvious solution because it too has its theoretical and practical flaws. One could argue that the risk of ethnocentrism remains, for instance, since understanding may become provincial, and we may come to dismiss modes of behavior that differ from our own as savage or "the wrong way." Just as the Supreme Court concluded that separate actually never proves equal, the ideals of cultural relativism could degenerate into segregation or the isolation of cultures we come to view as completely unrelated to ours. In the age of post-colonialism and attempts to build a global village, this threat may prove less dangerous, but we must still consider its possibility. We must similarly consider the associated risks involved with "Othering" cultures. The concept of "otherness" helps us construct our identity in relationship to another as part of a fluid process that does not necessarily have negative consequences²¹. Still, though, this process often ends up normalizing the "self" or one's own group while at the same time decreasing the "Other" to minority status. This practice has historically led to the exclusion of the "Other," such as women or Arabs, who more powerful, normalized groups can then subordinate and dehumanize in an attempt to civilize and control these lesser people.

Thinking about Taliban or Afghani culture in terms of relativism, then, does not exist free from risk, but it does add another layer to the problem of what to do next. If we respect the regime's individual (religious) beliefs and admit that we cannot put ourselves in their proverbial shoes because we always come to the table with our own cultural baggage, then perhaps we should follow a hands-off approach. Why do Americans or the Swiss or anyone else have the right to judge the Taliban's distinct actions or determine what is right for all humankind when no

absolute right actually exists? Rebuilding the statues might constitute more of a cultural coup d'état (let us recall who controlled the region at the time of the demolition) than an essential part of cultural healing. In the context of cultural relativism, it seems like the ultimate hypocrisy for the West to criticize the destruction, or even think it deserves a say, when a parallel action on behalf of the Taliban would be met with insurgency.

Hypothetically, what if the Taliban protested the burying of the President's house in Philadelphia? Even if the group brought forth legitimate claims of cultural heritage, American authorities would likely ignore or readily dismiss these opinions. This relatively analogous situation does not indicate an approval for the decision the Taliban made or a dismissal of the outrage on the part of other nations, it merely points out the hypocrisy on our part. (The Taliban exist as a unique terrorist regime, responsible for many deaths and human rights violations, so they clearly do not equate to the governments of most other nations, although even the U.S. put the Japanese in internment camps during WWII and stole the lives and land of many Native Americans. The distinction still proves important, but ultimately too complex to flesh out in this paper.) We preach tolerance and preservation as long as it fits in with our perception of what should constitute history.

So, according to ideas of cultural relativism, we should not rebuild the Buddhas. Based on ideas of universalism, however, perhaps we do have an obligation to not only preserve but to restore objects of cultural heritage, regardless of where they reside. Either way, the answer does not prove as simple as "all" or "some," and neither solution indisputably resolves the controversy over what to do next. Even if we officially decided to rebuild the Bamiyan Buddhas, how would we go about doing so?

Would we use the U.N.-approved method of anastylosis or project laser beams against the cliff as the Afghani and Japanese want to do? Dr. Zemaryalai Tarzi, a French-Afghan archeologist conducting a dig near the site would approve of neither method. Tarzi claims he became a "militant for Afghan culture" the day of the destruction, and believes the scars should remain untouched as an enduring monument to "the darkness that descended on Afghanistan under the Taliban"²². It seems for some the emptiness speaks just as loud as the statues' presence, although it admittedly may tell a different story. In order to tell a story which benefits many various cultures to the maximum extent, we must resign ourselves to confusion at the outset of the decision-making process. We must understand that no clear answer exists and instead acquire multiple perspectives because, if the remnants of the statues could talk, they would remind us that "nothing ever exists entirely alone; everything is in relation to everything else"²³.¹

Jennifer Berk is a senior in the College majoring in Communications.
After graduation, Jennifer plans to attend law school to study intellectual property law.

-
- ¹ Hannah Bloch and Ben Wedeman, “UNESCO confirms destruction of Bamiyan Buddhas,” CNN.com, March 12, 2001, <http://edition.cnn.com/2001/WORLD/asiapcf/central/03/12/afghan.buddha.02/>.
- ² Ibid.
- ³ Matthew Power, “Rebuilding the Bamiyan Buddhas,” Slate, July 23, 2004, <http://www.slate.com/id/2104119/entry/2104187/>
- ⁴ Nic Robertson, “Analysis: Buddhas’ fate signals Taliban division,” CNN.com, March 2, 2001, <http://edition.cnn.com/2001/WORLD/asiapcf/central/03/02/taleban.analysis/index.html>
- ⁵ Bloch and Wedeman, “UNESCO confirms destruction of Bamiyan Buddhas.”
- ⁶ Power, “Rebuilding the Bamiyan Buddhas.”
- ⁷ Carlotta Gall, ““Afghans consider rebuilding Bamiyan Buddhas,” International Herald Tribune, December 5, 2006, <http://www.iht.com/articles/2006/12/05/news/buddhas.php?page=3>.
- ⁸ World Monuments Watch, “2008 world monuments watch list of 100 most endangered sites,” World Monuments Fund, 2008, http://www.wmf.org/pdf/Watch_2008_list.pdf.
- ⁹ “The Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict,” International Council on Monuments and Sites, May 18, 1994, <http://www.icomos.org/hague/>.
- ¹⁰ Richard Leventhal, class lecture on “Public Policy, Museums, and Cultural Heritage” at the University of Pennsylvania, PA, October 7, 2008.
- ¹¹ Lynn Meskell, “Negative Heritage and Past Mastering in Archaeology,” *Anthropological Quarterly* 75, no. 3 (2002): 562-63.
- ¹² Barbara Crossette, “Taliban Explains Buddha Demolition,” *The New York Times*, March 19, 2001, <http://www.nytimes.com/2001/03/19/world/19TALI.html?ex=1228626000&en=9c137fe6e90c6599&ei=5070>.
- ¹³ The Hague Convention.
- ¹⁴ Christopher Titmuss, *The Buddha’s Book of Daily Meditations: A Year of Wisdom, Compassion, and Happiness* (New York: Three Rivers Press, 2001), 34.
- ¹⁵ Kwame Anthony Appiah, *Cosmopolitanism: Ethics in a World of Strangers* (New York: W.W. Norton & Company, Inc., 2006), 120.
- ¹⁶ James Cuno, *Who Owns Antiquity? Museums and the Battle Over Our Ancient Heritage* (Princeton: Princeton University Press, 2008), 11.
- ¹⁷ Ibid., 12
- ¹⁸ Meskell, “Negative Heritage and Past Mastering in Archaeology,” 564.
- ¹⁹ Ulrich Beck, *The Cosmopolitan Vision* (Cambridge: Polity Press, 2006), 45.
- ²⁰ George Marcus and Michael Fischer, *Anthropology as Cultural Critique: The Experimental Moment in the Human Sciences* (Chicago: University of Chicago Press, 1999), 1.
- ²¹ Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis* (New York: W.W. Norton & Company, Inc., 1998), 203-216.
- ²² Power, “Rebuilding the Bamiyan Buddhas.”
- ²³ Titmuss, *The Buddha’s Book of Daily Meditations*, 187.



Amber Weekes

In the Oriental Institute Holdings Room

Amber Weekes is a junior in the college majoring in Anthropology. In this image, Amber stands in the holdings room of the Oriental Institute in Chicago. She participated in an NSF-REU program in Bioarchaeology in Summer 2008.

Modeling Gardasil: Issues and Perspectives

Julia Margulis

The successful implementation of a new health care technology depends in large part on accurate and realistic scientific models that can predict what impact that technology will have in a variety of scenarios. These models help determine the new technology's optimal price, target population, and route of administration or access. Such projection involves a variety of assumptions about the new technology's cost, efficacy, safety, ease of access, and practicability. Although a model, by definition, necessitates making such assumptions, these assumptions will never fit the reality of the health care situation exactly. The populations themselves and the ways in which they respond to the implementation of a health care technology are by and large heterogeneous, such that notions of efficacy, ease of access, and other parameters will not apply in the same way to every consumer of the health care technology in question. How does this interaction between projection and reality manifest itself? And where does this interaction play out? Such questions are important not only to refine the aforementioned models but also to gain a greater awareness of how the public health reality can best be addressed in order to successfully traverse the many health care challenges that we face today and will face in the near future.

The recent introduction of Gardasil®, Merck's quadrivalent HPV vaccine, provides a unique opportunity to analyze the scientific models that serve as a basis for arguments for and against mandating the vaccine as a condition for school enrollment. As of February 2008, Merck had distributed 13 million doses of its vaccine in the United States alone. At a cost of \$360 for the three doses required over a six-month period, this amounts to \$4.7 billion already spent on the vaccine, with an annual profit for Merck of \$1.5 billion.¹ As administration of the vaccine expands to younger and younger girls (the current suggested age range for vaccine administration is 11-12 years old) and even boys, tens of millions more doses of the vaccine will be administered in the next few years. Moreover, Gardasil is now compulsory for all immigrants into the United States (an ethical issue all its own), which will only increase the vaccine's predominance. Recent discussions about Gardasil have centered on arguments for or against mandating the vaccine for school entry. Many other common childhood vaccinations, such as diphtheria, tetanus, and acellular pertussis (DTaP), polio, and measles, are required by all states in order for a child to enter kindergarten.² It has now been suggested that Gardasil join them. In fact, Texas governor Rick Perry signed into law in February of 2007 a mandate requiring all 11-12 year old girls to receive the HPV vaccine before entering the sixth grade (which was later blocked by Texas legislators, however).³ Increasing numbers of efficacy and cost effectiveness models have sprung up to deal with the controversy surrounding the vaccine and its widespread administration. In this paper, I will consider the reach and relevance of the HPV vaccine model (particularly its claims of efficacy) and the limitations of this model given the reality of the "public" that will actually become the consumers of this medical technology.

The rationale for the creation of a vaccine for HPV is based on the link between HPV infection and cervical cancer in women. HPV is the most common sexually transmitted infection in the United States today; approximately six million people are newly infected with the virus each year, and some models estimate that up to 80% of sexually active women will have contracted the virus at some point in their lives by the time they reach 50 years of age.⁴ In addition, 500,000 women develop cervical cancer every year. Half of those die as a result.⁵ 99% of cervical cancers are attributable to infection with HPV virus strains. HPV can manifest itself as a variety of high- and low-risk types; low-risk types (including types 6 and 11, both present in Merck's vaccine) are generally associated with genital warts and benign or low-grade cervical cell changes (i.e. those not linked to a transformation into cancerous lesions). High-risk types of the virus can cause both low- and high-grade abnormalities that are precursors to cancer. High-risk

types 16 and 18, which are detected in 70% of cervical cancers worldwide, are also included in Merck's vaccine. Gardasil was approved by the FDA in June 2006 for use in females 9-26 years of age for prevention of cervical cancer and its precursors as well as prevention of anogenital warts. However, this vaccine does not include all HPV types that cause cervical cancer; thus, it does not eliminate the need for cervical cancer screening. Current recommendations state that Gardasil should be routinely administered in 11-12 year old girls in three separate doses; the series can be started in girls as young as 9 years old. Catch-up vaccination of 13-26 year old girls is recommended as well.⁶

Gardasil was proven to be nearly 100% effective in preventing precancerous lesions in women without prior HPV infection based on the results of four randomized, double blind, placebo-controlled studies in 21,000 women ages 16 to 26.⁷ The duration of antibody protection was not studied past five years post-administration; it is unclear at this time whether or not booster shots will be necessary every five or more years. There is no current evidence that the vaccine's immunogenicity declines significantly over time. The most common adverse event due to vaccine administration was pain at the injection site. Serious adverse events occurred in <0.1% of study participants.⁸ Although the vaccine seems to be relatively safe given the available data, study participants were only followed for five years after vaccine administration so any long-term side effects would not be noted. In addition, current adverse event reporting systems, such as the Vaccine Adverse Event Reporting System (VAERS), are voluntary and present a necessarily incomplete picture of vaccine safety. The vaccine is currently priced at \$120 per shot, or \$360 for the entire three-shot series. This cost is covered by most, but not all, insurance companies. Most universities, such as the University of Pennsylvania, do not yet cover the cost of the vaccine.

Vaccine mandate discussions invoke the concept of herd immunity, "in which the protective effect of vaccines extends beyond the vaccinated individual to others in the population, [which] is the driving force behind mass immunization programs."⁹ For diseases transmitted by contact with or proximity to an infected person, rates of infection will decrease as more and more people in that population become immune to infection due to vaccination. The more resistant individuals are present in the population, the lower the risk of encountering an infected person that can pass the disease to someone else. The concept of herd immunity has no mathematical basis; there is no percentage of immunized individuals that guarantees herd immunity for the rest of the population. However, as the rate of vaccination increases, protection of others indirectly increases until the infection is essentially eradicated. Such a model for disease transmission and efficacy works best for highly transmissible diseases such as measles; in fact, many modern compulsory vaccination laws were enacted in response to the prevalence of measles in schools in the 1960s and 1970s.¹⁰ The incidence of highly transmissible illnesses such as polio, chicken pox, pneumonia, and meningitis is now extremely manageable due to mandatory vaccination programs.

However, the concept of herd immunity breaks down when it is examined in relation to the HPV vaccine. As per current recommendations regarding vaccine administration, it is only to be administered to (and has only been approved for) girls. Studies of the vaccine in boys are ongoing, but this raises the question of whether or not it is ethical to mandate the vaccine for boys so that fewer girls will be infected with HPV. Boys would derive some benefit from the vaccine as well; HPV in men can cause genital warts as well as certain anal and penile cancers. However, many parents may not be satisfied with these justifications, and pure altruism or chivalry will not do much to convince them to give their sons the vaccine if it does become available for boys.¹¹ Thus, the concept of herd immunity in relation to HPV vaccine administration is inappropriate because of the gender-specific character of cervical cancer. Herd immunity as a model to describe disease transmission is irrelevant in a case where a disease only affects one segment of the population but can be transmitted by everyone. The public cannot be generalized as a "herd"; different groups (in this case males and females) respond differently and are differentially susceptible to disease. Thus, the creators of medical technologies will continue to target various

groups according to their particular health care characteristics. Such targeting began years before Gardasil with BiDil, a heart disease drug intended by its manufacturer for African Americans. Innate group differences negate the concept of a “herd”; although modeling vaccine efficacy in such a way can be effective for certain diseases, it is by no means a universally applicable concept.

Arguments for or against mandating HPV vaccine administration for school enrollment are based on a set of criteria used to evaluate the costs and benefits of vaccine on several levels. The most comprehensive set of these has been set out by the Washington State Board of Health’s Immunization Advisory Committee. The Committee grouped its criteria into three categories: disease burden, vaccine effectiveness, and implementation. Each antigen that makes up the vaccine (four separate antigens, in the case of Gardasil) must be considered separately against these criteria. Criteria on the effectiveness of the vaccine question its efficacy in terms of immunogenicity and disease prevention, cost effectiveness, and safety. The disease burden criteria examine the vaccine’s prevention of diseases with significant morbidity and/or mortality and its reduction of person-to-person transmission. Finally, the implementation criteria question the degree to which the vaccine is trusted by the public, the administrative burdens of its delivery and tracking, and the burden of compliance for the parent or caregiver. In effect, the potential benefits of the vaccine, including its efficacy and reduction of disease burden, are weighed against its risks or costs, including both adverse side effects and economic burden.¹²

However, the IAC itself states that it makes several assumptions upon which the aforementioned criteria are based. These assumptions are that “(1) some kind of process exists for exemption from mandated immunization requirements in cases when vaccination is not appropriate (e.g. medical, religious, or philosophical reasons) and (2) that mandated vaccine(s) with the antigen are accessible to those for whom it is mandated and cost is not a barrier.”¹³ Are these assumptions truly reasonable? Almost every state has some sort of process for requesting exemption from an immunization requirement; therefore, (1) is a reasonable assumption to make given the reality of state immunization laws. However, assuming equal access and ability to shoulder the cost of the HPV vaccine ignores the inherent disparities and inequalities that persist in our health care system. Racial and socioeconomic identifiers still play an important role in the degree to which one can access health care. According to the 2007 National Health Disparities Report, black and Hispanic children aged 19-35 months are still the racial and ethnic groups with the lowest percentages of children who receive all recommended vaccines. Poor and near-poor children are also less likely to have received all of their recommended vaccinations compared to middle- and high-income children. In addition, only vaccination levels in white, non-Hispanic white, middle-income, and high-income children met the standard of 80% of children receiving all recommended vaccines set out in the Health People 2010 objectives.¹⁴ The criteria set out by the IAC ignore instances of structural violence present in today’s health care system; instead, it is assumed that all have equal access to the vaccine in spite of obvious indications to the contrary. The vaccine becomes a sort of “magic bullet” whose medical efficacy is sufficient for it to accomplish its intended goals (in this case, preventing HPV infection and precancerous lesions that could lead to cervical cancer). However, the efficacy of a medical technology is negligible when it is unavailable to the majority of those who would benefit from it. João Biehl’s *Will to Live* illustrates this concept in a global health context, where the availability of antiretrovirals in Brazil did nothing to help destitute AIDS patients who were not formally included in Brazil’s health care infrastructure and thus could not gain access to the drugs on a regular basis in spite of the drugs’ proven efficacy and availability. The population that the IAC criteria assume to exist is homogeneous both ethnically and socioeconomically; every 11-12 year old girl who should get the vaccine is supposedly able to get it. The real “public” cannot be characterized as a uniform entity nor can it be referred to or expected to act in a particular way given the invention of a new technology. Reality is far more complicated; although the IAC criteria are useful for evaluating a vaccine, they are also fundamentally flawed considering the complexity of the recipients of the medical technologies they are meant to evaluate.

Given a set of reasonable, though not necessarily accurate, set of assumptions, models can be extremely effective at predicting both disease transmission rates as well as the efficacy of a new medical technology, such as a vaccine, at slowing or reversing these rates. The results of randomized controlled trials can provide proof of efficacy as well. The HPV vaccine and other comparable medical technologies treat the existing prevalence of a particular disease; however, they do not address the root cause of the disease's prevalence in the first place. It can be argued that herd immunity, a supposed product of widespread vaccine administration, eliminates disease prevalence no matter the source; however, as previously discussed, the concept of herd immunity does not apply to Gardasil because of the gender specificity of the health care problem it aims to address.

Cervical cancer incidence varies greatly by racial/ethnic group in the United States. Black women are 1.5 times more likely than white women to develop cervical cancer; the incidence of cervical cancer in Hispanic women is also higher than in white women. In addition, twice as many black women as white women die from the disease. Pap tests are the most effective way of detecting early cervical changes. Approximately 82% of women in the United States have had a Pap test in the last three years. However, women with less than a high school education, foreign-born women, women without health insurance, and certain racial/ethnic groups such as Hispanics have lower screening rates. Half of the women diagnosed with cervical cancer have not had a Pap test in the three years prior to their diagnosis.¹⁵ Of course, high rates of HPV transmission and the relatively high frequency of the virus in the U.S. population contribute to cervical cancer; this is a scientific fact and cannot be ignored. Nonetheless, much of existing cervical cancer prevalence and mortality could be decreased or even eliminated by ensuring that all women, no matter their race, ethnicity, education level, or socioeconomic status, be given access to routine Pap tests and cervical cancer screening. Scientific models of the efficacy of medical technologies do not consider how health care infrastructure or lack thereof contributes to a health problem. Vaccinating young girls with Gardasil may very well have dramatic effects on the spread of HPV; however, such a strategy does not address the existence of high rates of cervical cancer because of inadequacies in access to screening and prevention. Neither medical technologies nor the models used to predict their efficacy address the underlying structural inequalities that can lead to health problems; instead, they act as surface solutions to issues that run much more deeply in the fabric of society.

This problem of structural violence in health care infrastructure is exacerbated globally, where basic necessities such as food and water, much less access to advanced health care technologies such as Pap tests, are sorely inadequate. Compared to the developed world, only 5% of women have had a Pap test in the last five years. As many as 87.3 women per 100,000 are diagnosed with cervical cancer in sub-Saharan Africa and Central America.¹⁶ Comparatively, in the United States, 7.9 women per 100,000 are diagnosed with cervical cancer.¹⁷ Women in developing countries bear the brunt of this disease, and revolutionary technologies such as the HPV vaccine are still prohibitively expensive for poor governments and the people they serve. It is clear from these statistics that models used to predict Gardasil's cost and efficacy in the United States are not applicable to the starkly different public health situation in developing countries. For example, one model of cost-effectiveness of a potential HPV vaccine assumes that 71% of the adult female population receives twice-yearly Pap testing.¹⁸ This statistic is observably realistic, and even conservative, for the U.S. population; however, it is a completely invalid assumption to make for a developing country. Models of efficacy are in no way objective or universal; they are as subjective as the "public" they attempt to describe. The way in which diseases and other health care problems affect this "public" depends not only on the makeup of this entity and its susceptibility to the disease (both parameters that can be measured to a relatively accurate degree) but also on the societal and geographical context in which this "public" exists. Models of efficacy for medical technologies do not take these parameters into account; thus, such models are inherently limited in their scope and applicability.

The harm principle, a common philosophy used in the study of public health, was first stated by John Stuart Mill in his book *On Liberty*: “The only purpose for which power can rightfully be exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant.”¹⁹ Mandatory vaccination programs abide by this principal in that they force vaccinations on individuals that may not necessarily benefit from them on the basis of a greater good bestowed onto the entire community, such as herd immunity. What is this community for which we are supposed to sacrifice our own physical or moral good? It cannot be classified as a “herd” or any other sort of homogeneous or generalizable group. Moreover, the effect of a particular medical technology on an individual depends on who that individual is, particularly his or her socioeconomic and racial/ethnic identifier. Thus, although the harm principle sets out a reasonable tenet on which many public health initiatives can base themselves, the concepts of individuals and communities that the principle invokes are not useful unless they are qualified by a specific context and identity.

Ultimately, a medical technology is meant to alleviate a health care burden without imposing an impossible-to-manage economic one. The optimization of this delicate balance between the ideal application of technology and a feasible cost is represented by the scientific model. However, models inherently ignore the complexities of the manifestation of a health problem within a population; a model must assume a set of parameters that often ignore the specificity of a medical technology to a particular subgroup (such as women or African Americans) and the realities of unequal access to medical technologies that both make it impossible to achieve ideal levels of administration of the medical technology and often cause the disease in question to be prevalent in the first place. This inadequacy of models redefines the way in which we think about efficacy and other parameters of health care technology evaluation. These parameters and their quantification are in no way universal or unbiased. A medical technology affects each individual differently based both on that individual’s innate biology and identity as well as his or her environment and its existing infrastructure. A model is limited in its ability to understand how health care infrastructure and structural violence affect each individual. Thus, the manifestation of the interaction between the model’s projection and reality takes place within the individual and his or her relationship with the medical technology in question. In spite of their obvious weaknesses, models can still be effective tools. Given the right perspective on its limitations, a model is vital to the successful implementation of lifesaving and quality of life-improving health care initiatives. In addition, cognizance of these limitations helps bring greater awareness to existing health care disparities and the ways in which new technologies must be adapted to an increasingly globalized world.

Julia Margulis is a senior in the College majoring in Biology with a concentration in Neuroscience. Julia will be starting her doctoral study in Neuroscience at UCSF this fall.

¹ Hoffman, Jan. “Vaccinating Boys for Girls’ Sake?” *New York Times* 24 Feb 2008.

² Javitt, Gail, Deena Berkowitz, and Lawrence O. Gostin. “Assessing Mandatory HPV Vaccination: Who Should Call the Shots?” *Journal of Law Medicine, and Ethics* 36 (2008): 389.

³ Blumenthal, Ralph. “Texas is First to Require Cancer Shots for Schoolgirls.” *New York Times* 3 Feb 2007.

⁴ Javitt et al., 385.

⁵ Parry, Jane. “Vaccinating Against Cervical Cancer.” *Bulletin of the World Health Organization* 85. 2 (2007).

⁶ “Quadrivalent Human Papillomavirus: Recommendations of the Advisory Committee on Immunization Practices (ACIP).” *CDC Morbidity and Mortality Weekly Report* 56 (2007).

⁷ Javitt et al., 385.

⁸ “Quadrivalent Human Papillomavirus: Recommendations of the Advisory Committee on Immunization Practices (ACIP).”

⁹ Javitt et al., 388.

¹⁰ Hoffman.

¹¹ Ibid.

¹² Immunization Advisory Committee of Washington State, “Criteria for Mandated Vaccines for Childcare Center and/or School Entry.” 12 April 2006, 3-4.

¹³ Immunization Advisory Committee of Washington State, 2.

¹⁴ Agency for Healthcare Research and Quality. “2007 National Health Care Disparities Report.” Feb 2008, 197-8.

¹⁵ “Quadrivalent Human Papillomavirus: Recommendations of the Advisory Committee on Immunization Practices (ACIP).”

¹⁶ Katz, Ingrid T. and Alexi A. Wright. “Preventing Cervical Cancer in the Developing World.” *New England Journal of Medicine* 354. 11 (2006), 1110.

¹⁷ “United States Cancer Statistics: 2004 U.S. Cancers By Type.” *National Program of Cancer Registries*. Center for Disease Control and Prevention. 8 Dec 2008

<<http://apps.nccd.cdc.gov/uscs/Table.aspx?Group=TableAll&Year=2004&Display=n>>

¹⁸ Sanders, Gillian D. and Al V. Taira. “Cost-effectiveness of a potential vaccine for human papillomavirus.” *Emerging Infectious Diseases* 9. 1 (2003), 39.

¹⁹ Mill, John Stuart, *On Liberty* (London: Longmans, Green, and Co., 1921) 6.



Serena Stein

Toba Child

***Serena Stein** is a senior in the College majoring in Anthropology and Comparative Literature. In Summer 2007, Serena traveled to the Formosa province of Northern Argentina to conduct ethnographic fieldwork in Medical Anthropology. This image depicts a Toba indigenous child in Barrio Nam Qom, Formosa on Día del Niño or Children's Day, celebrated annually throughout Argentina.*

NAGPRA as a Challenge to the Use of Museum Collections and Exhibits as Tools of Colonialism

Amber Weekes

The Native American Graves Protection and Repatriation Act (NAGPRA) explicitly pertains to the ownership of Native American sacred objects, objects of cultural patrimony, human remains, and funerary objects that are either housed in museums receiving federal funding or have been excavated from federal or tribal land since 1990. However, NAGPRA's implications extend far beyond the realm of property law. NAGPRA limits the ability of museums to exercise power over the material culture of Native peoples and facilitates the inclusion of Native perspectives and agendas into exhibits about Native American groups. In doing so, NAGPRA challenges the acceptability of 21st century museums continuing to function as artifacts of colonialism and extends the idea of Native self-determination into the cultural sphere.

Understanding how NAGPRA curtails the use of museums' Native American collections as tools to reinforce the dominance of the West over Native cultures requires a cursory understanding of the specific responsibilities that the legislation confers on Native groups and museums. NAGPRA defines a museum as an institution that possesses or controls Native American material and receives federal funds¹, and requires that within five years of its November 16, 1990 enactment, museums must complete an inventory of all Native American human remains and associated funerary objects in their collections². Additionally, within 3 years of the law's enactment, museums are required to produce a summary of all their Native American sacred objects, unassociated funerary objects, and objects of cultural patrimony³. These reports must include all known information about the cultural affiliation of the objects concerned, and must be made available to inquiring Native American tribes and individuals. NAGPRA further mandates that museums engage in a discussion about the possibility of repatriation of objects with any Native American individual or tribe that can demonstrate a biological or cultural relationship to an object included under NAGPRA. Since it is often difficult for a claimant to establish cultural affiliation with an object without the cooperation of the museum, and since what constitutes sufficient evidence of "cultural affiliation" can be very subjective, complying with this mandate has not resulted in the depletion of museum collections⁴, but has instead fostered a dialogue between Native Americans and conservationists and curators about how Native American artifacts should be conserved and presented.

NAGPRA itself, and the discussions that have grown out of it, have inspired substantial change in the way that museums think about, maintain, and present their Native American collections. A brief discussion of the ways that ethnographic collections and exhibits have been seen as reflecting and perpetuating colonial power structures is necessary to understand the theoretical implications of the changes that NAGPRA has catalyzed.

In many cases, the accumulation of ethnographic collections by Western institutions was facilitated by colonial relationships that allowed for objects to be "obtained through unequal power relationships"⁵. Ethnographic collections are populated by objects that were looted from indigenous peoples⁶ purchased from individuals who were not entitled to sell an object owned by an entire community⁷, or extorted from Native peoples at unreasonably low prices⁸. Further, this collecting was often fueled by paternalistic sentiments and ethnocentrism. Many collectors justified ethically questionable acquisition practices by reasoning that their work was necessary because indigenous cultures were near extinction⁹, or because the cultural artifacts they were collecting would be "far more valuable amongst the records and treasures of a museum than in the dinginess and filth of their [native homes]"¹⁰.

The amassing of large quantities of indigenous groups' material culture by Western museums is in and of itself a manifestation of the power differential that exists between politically dominant and subordinated cultures. The attempts of Western institutions and individuals to

gain a monopoly on an indigenous group's cultural heritage can be seen as an expansion of colonialism out of the geopolitical sphere and into the cultural sphere. When a dominant group possesses the material culture of a politically subjected group, the objects become war booty, "trophies"¹¹ and "material signs of victory over their former owners and places of origins"¹². The collection itself can even be seen as "colonized": Classen and Howes describe the ethnographic collection as an "unruly mass of displaced Natives that has to be disciplined and rendered subservient to its masters"¹³. This theoretical approach suggests that even before an object is exhibited, those who possess other's material culture are empowered to organize, store, preserve, and categorize the objects in a way that asserts the supremacy of the individual or institution that owns them¹⁴.

Ethnographic collections also transfer power from indigenous groups to the dominant social group that is doing the collecting by restricting the access of indigenous peoples to their material cultures. Since artifacts are important in any community's ability to connect its past to its present¹⁵ and to assert its unique cultural identity¹⁶, communities that cannot access, use, and care for their material culture are at a severe disadvantage when trying to preserve customs and consolidate cultural identity. In these ways, the museum storeroom with its rows and rows of captive, controlled, and contained ethnographic objects continues to affirm the colonial attitudes and power structures that facilitated the filling of its shelves decades or centuries earlier.

Exhibition galleries are the one place in museums where colonial power dynamics may be more influential and palpable than they are in the collection storage rooms. One of the most elemental ways that exhibition spaces work to reinforce colonial power dynamics is by facilitating the representation of indigenous cultures as an "other"; Karp describes "the other" as a "generalized conception of people on the losing side of the colonial or imperial encounter"¹⁷. Exhibits create "otherness" primarily by drawing parallels and contrasts between "them" and "us"¹⁸. However, regardless of whether "the other" is presented as "familiar" or "exotic"¹⁹, its definition is entirely dependent on its relation to Western culture, and its material culture is understood only within the context of Western typologies and aesthetic standards. The creation of this "otherness" is not necessarily dependent on the content or form of an exhibit but can also be seen as a product of the fact that museums are "undeniably part of a Western philosophical tradition"²⁰ and embedded in a dualism of "entrenched oppositions between 'self/other', 'subject/object', 'us/them', which becomes problematic as a conceptual framework for addressing issues of representation"²¹ because it "inevitably leaves power in the hands of the defining institution"²².

In addition to empowering curators to *define* indigenous cultures as passive objects of the "imperialist gaze"²³, exhibition spaces allow curators to *represent* cultures to museum-goers. In selecting certain objects for display, designing the aesthetics of an exhibit, and writing interpretive text panels, the curator acts to mediate all of the museum-goers' contact with the indigenous culture. Western curators are trained and employed by the dominant cultural group and hence, they "perceive value in objects based on Western scientific categories of knowledge"²⁴. This bias often results in exhibits that are not accurate representations of dynamic and contemporary indigenous cultures, but "culture-writing formations"²⁵ in which indigenous cultures are constructed as stagnant, defeated, and temporally isolated²⁶. This distortion is important because museum exhibits both "reflect" and "refract" the colonialist attitudes of their Western patrons²⁷. Museums are recognized as authoritative sources of knowledge about non-Western cultures²⁸. As a result of this perceived authority, museum exhibits can "affect the behavior and consciousness of museum visitors to advance various governmental [or colonial] agendas"²⁹ if the tone, content, and message of an exhibit in a Western museum reinforce the political and cultural dominance of the West. In this way, the museum exhibit acts as a translation device that converts control over objects and their public interpretation into crude colonial power.

In the almost 500 years of domestic imperialism that separate the first colonial encounters in North America and the passage of NAGPRA, the use of ethnographic collections and exhibits

as tools of colonialism was facilitated by the exclusion of Native voices from discussions about the ownership and representation of Native American cultural heritages. NAGPRA is the first federal law to effectively solidify the rights of Native Americans to their material cultures. Earlier laws aimed at protecting human remains were often written and judicially interpreted to exclude Native American materials³⁰. The 19th and 20th centuries are full of examples of how this lack of legislation and dearth of public outrage resulted in collection practices and museum exhibits that marginalized Native Americans and abetted American internal colonialism. Since the ethnocentric attitudes these examples evidence stand in stark contrast to some of the outlooks and approaches that have emerged in museology as a result of NAGPRA, these examples are also important to any discussion of how NAGPRA undermines the use of museums as props of the United States' colonialism.

The effects of colonial power relationships on museum methods and practices in the pre-NAGPRA world are particularly pronounced in regards to the collection and exhibition of Native American human remains. Many contemporary museum collections are filled with Native remains that were curated on the orders of the US surgeon general³¹, collected through Works Progress Administration programs³², stolen from graves and battlefields, and appropriated for science despite the fact that Euro-American remains excavated from the same site were reburied³³. These disrespectful collection methods were perceived as necessary and justified despite the protests of many Native groups that they “view the bodies of deceased loved ones as representing human life”³⁴ and “believe that if the body is disturbed, the spirit becomes restless and cannot be at peace”³⁵. In not extending the same respect enjoyed by Euro-American remains to Native American remains, and in treating Native remains as “scientific data” and “specimens”³⁶, these museum collection practices functioned to reify the supremacy of Western priorities and perspectives over those of Native groups. The amassing of Native American remains by US museums and scientific institutions is also a superb example of how Western anthropological collecting can be seen as a form of imperialism. When Indian remains are used as “data” to be manipulated and studied by US scientists, Native American skeletal material becomes, like timber, coal, and oil, just another natural resource of North America that the colonizing power has appropriated from Native peoples.

The United States' colonialist agenda also benefited from the display of Native human remains in museums and other public spaces, a practice that was common until 30 or 40 years ago. This type of exhibit worked to justify and rationalize the cultural genocide, removal, and disrespect that characterized federal Indian policy before the 1970s by presenting Indians as “culturally and physically different from and inferior to non-Indians”³⁷ ³⁸. This effect was amplified by the fact that Native remains were often exhibited in Natural History museums alongside dinosaurs and displays about parasitic worms³⁹. Public exhibitions of Native American human remains not only illustrate museums' complicity with colonial ideas about race and power, but also evidence how thoroughly Native beliefs and perspectives were discounted and ignored.

The mode in which Native Americans have been presented to the Euro-American public has fluctuated in the last 400 years, but there has been a stalwart continuity in both the lack of Native American input in the development of the presentations, and in a reliance on tropes of “otherness”, “inferiority” and “extinctness”. Regardless of whether American Indian cultures were encountered in cabinets of curiosity, world expositions, or art museums, the voices of authorship were white and the perspective was that of the colonizer.

The expositions and world's fairs of the late 19th and early 20th century were the first time that large portions of the American public were exposed to representations of Native cultures. Exhibits were not composed solely of cultural objects, buildings, or foods: people were also on display. Native Americans from all over the continent were showcased as “artifacts” of their cultures. Many of the artifacts displayed in these expositions came to from the basis of prominent ethnographic collections. In the 20th century, museums became the primary place where white Americans interacted with Native cultures. Though the vast number of ethnological exhibits

developed in the first half of the 20th century make it difficult to identify and discuss specific exhibits, there are several themes and exhibit types that were, and still are, common to displays about Native American cultures. Regardless of whether exhibits were organized based on culture group, time period, or whether they used panoramas or open storage to display their wares, they rarely made reference to the persistence of Native cultures into the present times⁴⁰. By displaying only objects and photographs from the past, museums played into the myth that Native cultures had been vanquished by the might of the American spirit. Another commonality is the “anonymity” of many ethnographic displays, which “rarely identify the makers of Native American objects on display”⁴¹. In disassociating objects from human beings, museums supported colonial power structures and rendered exhibition spaces “bounded sites of difference energized by asymmetrical power relations, which confined Native Americans, seized their property, and constrained their cultural practices and precepts within EuroAmerican categories”⁴².

These discussions collectively demonstrate that the theories linking colonial power with museum collection and display strategies are excruciatingly applicable to North American museums’ collection and exhibition of Native American remains and artifacts. The decades of abhorrent collection practices, Native skeletons on public display, frozen-in-time-panoramas, and white perspectives have forced NAGPRA’s implications into the theoretical. For more than a century American museums functioned to abet internal colonialism, and because of this legacy any legislation limiting the power of museums over Native material culture and narratives is inherently imbued with theoretical significance.

At its most basic, NAGPRA is an acknowledgement that the way in which US museums and archaeologists have historically interacted with Native American groups is unacceptable. NAGPRA is certainly not an apology of any sort, but the fact that a law intended to level the playing field between Native Americans and anthropologists was passed suggests a congressional recognition of indigenous peoples’ right to at least some degree of control over Native cultural heritages. Even though it may be inadequate and misguided⁴³, NAGPRA’s aim is clearly to transfer some of the power that has traditionally been held by curators and anthropologists to Native peoples. The most explicit way that NAGPRA accomplishes this is by requiring the “expeditious return” of human remains, funerary objects, sacred objects, and objects of cultural patrimony to individuals and groups that are “culturally affiliated” with them.

NAGPRA’s position on repatriation directly challenges many of the assumptions and practices that have historically characterized Western curatorial practices. In recognizing that “Native American human remains and cultural items are the remnants and products of living people”⁴⁴, NAGPRA challenges the motif of the “extinct” or “vanquished” Indian that was so common in 20th century exhibits about Native Americans. Further, in asserting that these contemporary cultures have a right to their material heritage, NAGPRA frames Native cultures not as fossils of “traditional Indianess”, but as vibrant dynamic organisms with agency that are fully capable of maintaining independent interests and objecting to colonial power structures. Also, unlike the ethnological exhibits about Native cultures that worked to “disassociate” individuals and groups from their material cultures, NAGPRA uses the concept of “cultural affinity” to affirm the importance of the “cultural and spiritual relationship” that descendents have with the deceased⁴⁵. In these ways, NAGPRA both calls into question many of the practices and attitudes that have defined ethnological exhibits for centuries and affirms the agency and relevancy of contemporary Native Americans groups.

NAGPRA’s call for “expeditious return” also challenges the acceptability of superimposing Western typologies and conceptions of value onto Native American cultures by forcing non-Indian museums to “consider what is *sacred* from an Indian perspective”⁴⁶. NAGPRA’s content and syntax reflect an understanding that Native American bones, art, and artifacts are not just “scientific collectibles” or inanimate museum objects, but living objects of contemporary importance to Native peoples; its requirements oblige museums to act with a similar awareness. Since so many of the museum exhibits and attitudes that worked to perpetuate

colonial power dynamics grew out of an ignorance and disregard for Native perspectives, this increased awareness alone is an important step in creating a critical museology that works with Native Americans, not against them.

Just as the hoarding of Native material culture by Western individuals and institutions is pregnant with political and social implications, the transfer of human remains or cultural materials from museum collections back to Native peoples brings with it a transfer of power. Not only is there an implicit admission of wrongdoing when Native remains or funerary objects are returned to Native groups, but the Native groups are then empowered to own, control, and use their material heritage. NAGPRA says nothing about how repatriated objects are to be handled, so a Native community has complete jurisdiction over what is done with repatriated materials. Once repatriated under NAGPRA, the same object that was once a “trophy” becomes a symbol of Native sovereignty and can be used to assert Native cultural self-determination through disposal, reburial⁴⁷, use in the creation of an exhibited counter-narrative, or ritual use.

Perhaps the most essential way that NAGPRA has helped to undermine the Western monopoly on representations of Native cultures is by requiring that museums talk with Native groups about the materials in their collections. Many of these mandatory discussions have blossomed into valuable dialogues in which museum professionals are able to learn from Native peoples about the history and cultural significance of objects in their collections and employ culturally appropriate ways to store and display these materials. Many of the relationships that have developed between tribes and museums as a result of NAGPRA have also led to the use of Native consultants during the curating process. This type of indigenous input helps prevent exhibits that paint Native Americans as the exotic “other” or as inferior and extinct peoples. Further, in explicitly empowering Native American groups and individuals to seek the repatriation of material culture, NAGPRA provides an incentive for museums to foster a spirit of cooperation and compromise with Native groups. Though NAGPRA only specifically changes the power relationships between Native Americans and archaeologists and museum professionals in regards to the ownership of objects, this shift alone makes it advantageous for museum professionals to consider Native perspectives and makes concessions in the realms of exhibition and representation. In this way, NAGPRA has also begun to undermine the use of exhibits about Native cultures as vehicles for the dissemination of colonialist agendas.

NAGPRA derives much of its theoretical potency from the decades of inappropriate and insensitive practices and attitudes that preceded its enactment. Though NAGPRA does a remarkable job of empowering Native Americans to control and create their cultural heritage, it does so without ever acknowledging the appalling circumstances that necessitated the legislation in the first place. NAGPRA is not simply an appeasement for pesky Indian rights activists or backhanded reparations, it is a long awaited response to a deep rooted and still-present problem. For this reason, NAGPRA’s challenge of the use of the museum and the ethnographic collection as tools of colonialism would be much more direct if the act included a preamble or explanatory section that acknowledged the grim history of cultural-colonialism in the United States⁴⁸.

Western exhibits and collection practices of Native American cultural materials have come a long way since cabinets of curiosity and grave robbers, but there is still much that needs to change. NAGPRA is a definitive step towards a critical museology equipped to identify and eliminate the residue of colonialism in exhibits and collection practices, but it is certainly not as effective as it could be. One “glaring example of the colonizing worldview”⁴⁹ within NAGPRA which prevents the act from best institutionalizing Native American control over Native cultural material is the “scientific study” exception of NAGPRA’s repatriation section⁵⁰. The exception reads that “the Federal agency or museum shall expeditiously return such items unless such items are indispensable for completion of a specific scientific study, the outcome of which would be of major benefit to the United States”⁵¹. This clause contradicts NAGPRA’s overall tone by affirming the supremacy of the Western belief in science over Native American beliefs about the

sanctity of the dead. Removing this exception would make NAGPRA a more cohesive and decisive statement in favor of Native cultural self-determination.

NAGPRA may only explicitly deal with issues of property law and ownership, but within the context of the historical treatment and exhibition of Native American collections, NAGPRA takes on much more meaning and significance. Though public sentiment and museum practices were changing well before 1990, NAGPRA is the first federal law to articulate that it is unacceptable for archaeologists, collectors, or museums to steal Native cultural heritage, defile Native belief systems, and monopolize Native material culture. Within the historical context of federally subsidized grave robbing expeditions and Native Americans displayed in museums like artifacts, NAGPRA can be seen not only as a bold challenge of the use of museums as tools of colonialism, but also as human rights legislation.

Amber Weekes is a junior in the College and a first year submatriculant in Anthropology.

¹ United States Congress. "Native American Graves Protection and Repatriation Act" (NAGPRA), 25 U.S.C. §§3001-3013. 1990a.

² United States Congress. *Congressional Record* 136, pt. 3 (October 26, 1990) at S17174. 1990b

³ US Congress 1990a: §§3004(b)

⁴ Brown, Michael F. *Who Owns Native Culture?*. Cambridge, Mass: Harvard University Press, pp. 17, 2003.

⁵ Simpson, Moira G. *Making Representations: Museums in the Post-Colonial Era*. (London; New York: Routledge, 1996) 192.

⁶ Simpson, 193.

⁷ Simpson, 193.

⁸ Simpson, 193.

⁹ Riding In, James. "Repatriation: A Pawnee's Perspective". *American Indian Quarterly* 20(2, Special Issue: Repatriation: An Interdisciplinary Dialogue): 238-250. 2003, pp. 245.

¹⁰ Thomas, Nicholas. *Entangled Objects: Exchange, Material Culture, and Colonialism in the Pacific*. (Cambridge, Mass: Harvard University Press, 1991) 181.

¹¹ Riding In, 2003.

¹² Classen, Constance and David Howes. "Museum as Sensescape". In Edwards, Elizabeth, Chris Gosden, and Ruth B. Phillips, eds. *Sensible Objects: Colonialism, Museums and Material Culture*. (NY, New York: Berg, 2006) 209.

¹³ Classen and Howes, 209.

¹⁴ Hooper-Greenhill, Eilean. *Museums and the Shaping of Knowledge*. (New York: Routledge, 1992) 168.

¹⁵ Lowenthal, David. "The Past is a Foreign Country". (Cambridge, Cambridge University Press, 1985) 185-259.

¹⁶ Rowlands, Michael. "The Power of Origins: Questions of Cultural Rights". In. Buchli, Victor, ed. *The Material Culture Reader*. (NY, New York: Berg) 110-112.

¹⁷ Karp, Ivan. "How Museums Define Other Cultures". *American Art* 5(1/2):10-15 (1991) 10.

¹⁸ Karp, 10.

¹⁹ Karp, 10.

²⁰ Cruikshank, J. "Oral Tradition and Material Culture. Multiplying meanings of "words" and "things"". In *Anthropology Today*, 8 (3):5-9, 1992.

²¹ Cruikshank, 6.

²² Cruikshank, 6.

²³ Allen, Ngapine. "Maori Vision and the imperialist gaze". In. Barringer, Tim and Tom Flynn, eds.

-
- “Colonialism and the Object”. (London and New York: Routledge) Pp. 144-152, 1998.
- ²⁴ Nason. “‘Our’ Indians: The Unidimensional Indian in the Disembodied Local Past”. In *The Changing Presentation of the American Indian*. National Museum of the American Indian (U.S.) (Washington, D.C; Seattle: National Museum of the American Indian; University of Washington Press, 2000) 40.
- ²⁵ Luke, Timothy. 2002. “Museum Politics”. (Minneapolis, MN: University of Minnesota Press) 2.
- ²⁶ Simpson, 35.
- ²⁷ Nason, 40.
- ²⁸ Karp, 11.
- ²⁹ Luke, 39.
- ³⁰ Pensley, D. S. *Native American Graves Protection and Repatriation Act (1990): Where the Native Voice is Missing*. *Wicazo Sa Review* 20 (2, Twentieth Anniversary Commemorative Issue):37-64, 2005, 46-47.
- ³¹ Trope, Jack F. And Walter R. Echo-Hawk. “The Native American Graves Protection and Repatriation Act: Background and Legislative History”. In. Mihesuah, Devon A, ed. *Repatriation Reader: Who Owns American Indian Remains?* (Lincoln: University of Nebraska Press, 2000) 126.
- ³² Rose, Jerome C., Thomas J. Green, and Victoria D. Green. Nagpra is Forever: Osteology and the Repatriation of Skeletons”. *Annual Review of Anthropology* 25:81-103, 1996. 83.
- ³³ Rose et al, 81.
- ³⁴ Riding In, 240.
- ³⁵ Riding In, 240.
- ³⁶ Echo-Hawk and Trope, 127.
- ³⁷ US Congress 1990b.
- ³⁸ Pensley, 39.
- ³⁹ LaVaque-Manty. “There are Indians in the Museum of Natural History”. *Wicazo Sa Review* 15, no. 1. (2000):7-11.
- ⁴⁰ Nason.
- ⁴¹ Nason, 38.
- ⁴² King, C. Richard. *Colonial Discourses, Collective Memories, and the Exhibition of Native American Cultures and Histories in the Contemporary United States*. (New York: Garland Pub, 1998) 5.
- ⁴³ Pensley.
- ⁴⁴ Trope and Echo-Hawk, 151.
- ⁴⁵ Trope and Echo-Hawk, 151.
- ⁴⁶ Trope and Echo-Hawk, 151.
- ⁴⁷ Weaver, Jace. Indian Presence with no Indians Present: NAGPRA and its Discontents. *Wicazo Sa Review* 12(2):13-30, 1996. 26.
- ⁴⁸ Pensley.
- ⁴⁹ Pensley, 52.
- ⁵⁰ Pensley.
- ⁵¹ USC 3005(b)



Caitlin Dardenne

Research

***Caitlin Dardenne** is a senior in the College and a submatriculant in Anthropology. Her senior thesis deals with scalping in the Americas post-contact. This image depicts the scalping of a pig using a stone tool and an historic technique. The pig was used as the human-analogue subject in the experiment in order to test the efficiency of recorded techniques.*

Birth Practices in Santiago Atitlán: An Evolving System

Sharon Her

Arthur Kleinman noted that “a model of medicine as a cultural system will be valuable if it can [. . .] provide a terminology that is not limited to biomedicine, but through which biomedicine can be related to other professional, as well as popular and folk, healing traditions.”¹ This view is especially important in terms of pregnancy and birth in the Tzutujil Maya community of Santiago Atitlán – a town of 20,000 people in the Western Highlands of Guatemala, in which biomedicine was only recently introduced to the community. In Atitlán, the popular and folk practice of using *comadronas*, or midwives, is a deeply rooted cultural tradition. This cultural system, and resultant medical system, is “a symbolic system built out of meanings, values, behavioral norms and the like,” which are consequently “attached to particular social relationships and institutional settings.”² With the increase in globalization that is creating new job opportunities in the community, exposing the Tzutujil Maya to new cultural influences and importing new products to the region, there is also an opening for the improvement of health outcomes with medical advancement. Already signs of institutional change are apparent, with the establishment of specific medical spaces, such as the local small-scale hospital, called the *Hospitalito*, and its local health center, the *Centro de Salud*, among others. However, the biomedical model that is being introduced to Santiago Atitlán must consider the traditional health system and values already in place in order to be culturally sensitive. While there are many ways for biomedicine to intervene in the health practices and the beliefs of communities, only some are considerate of deeply rooted indigenous values, and will therefore prove more effective in serving the Santiago Atitlán community.

In this paper, I will draw primarily from unpublished field notes collected in Santiago Atitlán, Guatemala in Summer 2008 by student researchers of the University of Pennsylvania’s Guatemala Health Initiative (GHI). Ten researchers conducted ethnographic fieldwork over the course of ten weeks, and their notes on participant-observation and semi-structured interviews were both coded using QSR NVIVO 8 software. GHI’s research aims in 2008 included understanding the culture surrounding pregnancy and birth among the Tzutujil Maya in order to evaluate how a culturally-sensitive maternal health intervention could take place in the community.

Although Santiago Atitlán’s practitioners for pregnancy and birth fall into two main groups – *comadronas* and biomedical doctors with assistants – those members of the community who supply advice to women regarding maternity and childbirth can be found in all social categories. Kleinman notes that “most health care systems contain three social arenas within which sickness is experienced and reacted to.”³ These consist of a) *the popular*, comprising “the family context of sickness and care” and including the “social network and community activities,” b) *the folk*, “consist[ing] of non-professional healing specialists,” and c) *the professional*, “consist[ing] of professional scientific medicine and professionalized indigenous healing traditions.”⁴ People in the popular category include mothers, cousins and friends who have had pregnancy experiences and often suggest a type of healer for a pregnant woman to go to, whether it is a *comadrona* or a

biomedical doctor. For example, one woman “chose the *comadrona* with the help of her mother,” while another “decided to [go] to the Hospitalito [. . .] because her husband’s sister-in-law had a baby [there], and it went well [,] so she recommended that [the] couple [go] there.”⁵ While the *comadronas* can be considered professional in that they are specialized and have specific knowledge about birth that allows them to help others, they belong to the folk arena in that they are local healers specializing in birth and motherhood. Here, the category of professional instead describes the medical community that “talk[s] about sickness in a sector-specific language of biological functions and behavior.”⁶ However, one scholar on childbirth suggests that “whatever the details of a given birthing system [,] its practitioners will tend to see it as the best way, the right way, indeed *the way* to bring a child into the world.”⁷ Thus, there is conflict when more than one system exists in a given community.

Nevertheless, both the interactions between *comadronas* and patients, and between doctors and patients, are somewhat scripted, whether by culture or by education, as they take place through biomedical intervention in the community. As Jordan notes, “childbirth is an intimate and complex transaction whose topic is physiological and whose language is cultural.”⁸ In the case of the *comadronas*, patient and practitioner expect the same things as dictated by tradition. For example, the midwives provide prenatal massages for the women to help them to relax, to feel the baby, and to change the orientation of the baby if the head is not downwards. Massages are sometimes also done post-birth. The massages are cited by several interviewees as a reason why *comadronas* are better than doctors, but are then cited by some as an example of the dangerous work the midwives do. In addition, midwives conduct home visits, whereas doctors require the patients to travel to the medical space, hospital or clinic, for check-ups. Kleinman notes that healing occurs when “there is a ‘fit’ between expectations, beliefs, behavior and evaluations of outcome.”⁹

As there is a traditional duty ascribed to the *comadronas*, which is part of the local culture, there is an expectation among the people of what type of interaction will occur. Although individual opinion varies, there are examples in the data where midwives are also described as being more personal: one woman, who has had birth experience with both types of birth attendant, explained that “the *comadrona*, in her experience, does a much better job” because she “always gave massages, whereas the doctor never did,” and that “the *comadrona* ask[ed] her lots of questions about how she felt and how the baby felt.”¹⁰ Other interviews mention rituals, such as the bathing ceremony. In this ceremony, the baby is washed with soap in a small tub of warm water with pink flower petals, towed off, dressed, and named.¹¹ *Comadronas* also know from experience what types of herbs and natural medicines will help the mother; in one interview, a midwife explained the ritual use of incense during birth, it “burn[s] so that the smoke goes in between the delivering woman’s legs,” a ritual “that ‘God helps receive the baby.’”¹² According to another interviewee, “the *comadrona* always prepares [the medicine], always natural. And if something’s wrong with her patient, then she can tell the patient to go to the doctor to receive other medicines, but without chemicals. [So the] medicine for the mother won’t cause a miscarriage.”¹³ It is unclear from the data whether the herbs supplied by the midwives are specific ones that are common among the practitioners themselves, or whether there is evidence of the herbs’ success, but it seems that many midwives have certain herbs that they know to use. Lastly, spiritual beliefs play a role in the lives of *comadronas* and their patients. Some *comadronas* are called

to the occupation through dreams, whereas others became midwives because they were successful at delivering their first time. Culturally, these dreams are seen as spiritual messages telling the women what they should do with their skills. One man “likes the *comadronas* much better than the hospital. He says they are very experienced. Not formally taught, but powerful because the women receive messages from God.”¹⁴

In stark contrast, other people prefer biomedical doctors and nurses for their specific training. Professionals in biomedicine are taught what to do through schooling that is regulated by an international standard and a shared scientific knowledge. This education then scripts their interactions with patients and strictly delineates what types of questions are asked, what symptoms to look for, and what treatments to proceed with. For example, during prenatal consults, the doctor conducts laboratory tests, ultrasounds, and provides prenatal vitamins.¹⁵ Another service includes “measur[ing] the circumference of the woman’s arm to assess if she is malnutrition[ed].”¹⁶ Women who decide to give birth with a *comadrona* often are encouraged to go the doctor anyway for check-ups, but those who prefer the hospital or clinics do so because the doctor “can give [. . .] medicine for the pain during labor” while *comadronas* cannot.¹⁷ Moreover, doctors are better equipped to handle emergencies during labor because they have access to more technology and medical techniques, such as the ability to perform a caesarean section, which were developed specifically to combat those problems. In light of this, many midwives bring their patients to the *Hospitalito* if they recognize an emergency. Therefore, in this context, “birth is overwhelmingly seen as a medical event” in which “technical competence [. . .] is defined as professional medical expertise.”¹⁸ As the patient is most likely not qualified to evaluate the professional’s ability, he or she “is expected to have confidence and trust in the physician.”¹⁹ This trust is expected in all situations; biomedical professionals, unlike the *comadronas* whose expertise is narrower, are associated with all types of care for many health problems, and can understandably be seen by some as more knowledgeable, even though midwives specialize in birth. As one doctor describes the medical system in Guatemala:

There are three levels of care. The first, which provides the most basic services, are the *Puestos de Salud*. The *Puestos de Salud* focus on preventing and controlling illness. Then, come the *Centros de Salud* which provide more services including educational programs. The third tier of healthcare includes hospitals which provide the highest level of care.²⁰

Other institutions present in Santiago Atitlán include *Rxiiin Tnamet* and *Prodesca*. In terms of pregnancy and birth, these various types of clinics provide information on family planning, in addition to providing methods of birth control such as “birth control pills, Depo-Provera injections, tubal ligation, IUD, and condoms”²¹ Further, some help deliver, while the hospital conducts surgeries. Because doctors treat a variety of issues, people may associate doctors with a sense of reliability and thus feel that doctors and nurses are safer as birth assistants. More data need to be collected to determine conclusively whether this is a perceived correlation. Ultimately, the doctors’ main advantage is having extensive biomedical expertise; while the *comadronas*’ main advantage is their traditional association and reputation as more natural.

Given these characteristics, perceptions concerning which birth practitioner is preferable vary greatly among members of the community, as do the reasons why people choose one over

the other. The main considerations illustrated by the data include cost, distance, education, level of comfort, culture, advice given by friends or family, gender of the birth assistant, and language. Many women interviewed who choose to give birth with a *comadrona* over a biomedical doctor cite money as a barrier to accessing services at the hospital and clinics. These women also mention that they like that the *comadronas* give massages, so cost does not seem to be the only deciding factor. It appears many women feel that if they can successfully deliver their babies with midwives and without complications, then there is no need to pay for hospital care, especially if the family is low on resources. However, many midwives also refer their patients to doctors for prenatal check-ups or bring their patients to the hospital in case of emergency. Regardless, many patients who receive check-ups do not deliver with the doctor, choosing to remain with the *comadrona*. Distance is also a central issue; the *comadrona* will visit the pregnant woman at her house and assist there during the birth, so the family will not need to worry about traveling to the hospital or clinic when labor begins. Travel also costs money, an added burden – especially if the family lives in a canton far from the *Hospitalito*, *Centro de Salud*, or *Rxün Tnamet* where doctors help deliver, it is much more convenient to have the *comadrona* come to them.

Jordan notes that “birthing systems overwhelmingly prescribe an appropriate place for giving birth” which can be “relatively marked and specialized,” such as a hospital bed, “or unmarked and within the woman’s normal sphere” in the home.²² She suggests that “whatever the stresses and anxieties of childbirth are for [the mother], having her child at home provides the kind of security that marks the event as a normal part of family life.”²³ This description contrasts with the medicalization of birth in the biomedical sphere, in which the process occurs in an unfamiliar but specialized space. Several interviewees echo this view, giving opinions such as “*comadronas* are comfortable and natural” and that “the only natural way to give birth is in the home.”²⁴

According to some of the doctors interviewed, another reason why people choose traditional healers is that “people turn to other beliefs when medicine does not cure them quickly.”²⁵ One interviewee describes how “most people now rely on the *Hospitalito* or pharmacies in town when they are sick,” but they do not understand “the difference, for example, between an infection which may need treatment and a virus which just needs time for the person to get well,” making the “job of doctors very difficult” when they cannot deliver what the patient expects.²⁶ Some people “don’t believe in medicine” altogether and “instead [. . .] go see *curanderos* [. . .] or ascribe to *brujería*,” or witchcraft.²⁷ Others still choose not to go to the hospital because “they don’t think it’s necessary.”²⁸ “These people [. . .] believe in God and believe that God decides everything about their health,” and so reason that ‘God made [them] sick’ or ‘God wants them to die.’”²⁹ Such beliefs reflect the indigenous culture and its traditional folk healers, the healers who were considered most knowledgeable and specialized before the influx of biomedicine. Many of the people in Santiago Atitlán have been using “medicinal plants” and herbs for generations, and many still seek out healers in the community.³⁰ These folk practitioners, Kleinman suggests, use the “popular cultural idiom” that is accepted in the community, so “indigenous folk healers do not disappear when modernization creates modern professional medical systems.”³¹ They are familiar to the local people and already a normal part of the social networks that comprise the popular or folk arena described by Kleinman. As one doctor said, “perhaps you grew up in a

neighborhood where the hospital was known, the doctor was known, then you're familiar with certain people," which "doesn't mean that [someone else] wouldn't be as capable to give services, but if you're familiar [with] certain people, you go there."³² Additionally, in accordance with the machismo present in the culture, the gender of the birth attendant is consequential. "Some men don't allow their wives to seek medical attention," or they "have to accompany their wives."³³ In other cases, "women feel uncomfortable with male doctors [as] usually there are no men in the room during a birth"; "birth is still a woman's thing,"³⁴ one interviewee stated.

Lastly, language and education prove to be large barriers for people seeking biomedical attention. Kleinman writes that "communication has shown itself to be a major determinant of patient compliance, satisfaction, and appropriate use of health facilities."³⁵ Whereas the *comadronas* are members of the indigenous community, most of the professionals are not; they are doctors, nurses, medical students, and volunteers from other parts of Guatemala or from other countries. Midwives are thus well versed in Tz'utujil, while the biomedical practitioners rely on translators or speak in Spanish to communicate with their patients. However, some practitioners have learned the language, and a small minority comes from the community. In general, patients have more difficulty understanding the doctors than the *comadronas*, and doctors sometimes do not describe what is happening altogether. For example, one woman described how "the nurses and doctors didn't tell her the diagnosis" for her daughter's symptoms, only telling her "that they had to operate on her."³⁶ People "worry that they won't be able to communicate with the doctors in the hospital because they [the patients] may only speak Tz'utujil."³⁷ Nevertheless, others praise the translators at the hospital. The language barrier also relates to the problems of illiteracy and the lack of education, which are both contributed to by poverty. People who are uneducated are less likely to understand the basic tenets of biomedicine because they have not been exposed to scientific knowledge and research. Without health education, they also are not aware of when they should seek help for symptoms. In one doctor's opinion, these people "are just not conscious or sensible when it [comes] to health."³⁸ He expressed his frustration at how some "patients threw away the pamphlets [about health] they were given," but this problem is inherently related to education. If the patients are illiterate, they do not read and probably do not speak Spanish, so they would "therefore have no use for a pamphlet," and this should be taken into consideration when communicating with them.³⁹ Nevertheless, with an increase in education for the younger generation, people are starting to understand the importance of treatment and are encouraging family members to seek it. Thus, a conflict between traditional and modern emerges; "what is necessarily, naturally and common-sensically appropriate in one system may be entirely inappropriate and without justification in another," and the community faces difficulties in integrating the two.⁴⁰

Furthermore, there are members of the community who criticize both the *comadrona* system and the biomedical system. One privately practicing doctor suggests that the caregivers at the hospital are "medical students and residents [who] work at the *Hospitalito* without proper knowledge [and] play with people's lives as they learn."⁴¹ Others interviewed also complained of the short duration that some doctors spend in the Santiago Atitlán community. These are sometimes specialists who come and spend a week seeing patients before moving on, and often, due to the limited time frame not all the patients receive the attention they require. Similarly,

many volunteers, nurses, and students who work at the *Hospitalito* are temporary; they rotate through periodically. These “professionals,” who may or may not have adequate training to perform the functions that they are required, gain a poor reputation among some in the community, regardless of whether the practitioners are good at what they do. People are worried that they become tools for the training of the medical students who come and go frequently. This may or may not be true, but it is a common perception as suggested by the data. Other perceptions include that the hospital staff has “no compassion for the people” or that there are not enough doctors.⁴² Also, because the doctors are on rotation, patients may not see the same doctor every time; although this may be a cause for concern, it is not brought up as a problem in the data.

As for the *comadronas*, the main perceptions are that their practices may not be sanitary and that they handle emergencies poorly. This could involve not recognizing a dangerous situation for the mother and child or refusing to bring a patient to the hospital for fear of losing pay. While midwives are improving the cleanliness of their practices, aided by the supplies given out at training sessions, they still employ practices that are unclean by biomedical standards. The home is a comfortable environment for most women, so improving the cleanliness of homes or at least the birthing room is a possible solution. However, in situations of poverty, it is hard to demand this type of standard. Most midwives and patients interviewed acknowledge that it is important to go to the hospital in case of emergency. Thus, both positive and negative views exist of both main categories of birth attendants.

Jordan notes that “at the present time, traditional birthing systems are beginning to change under the influence of Western medicine” and that “it is overwhelmingly the high-prestige medical model that provides the standard template for change.”⁴³ Similarly, changes in the “traditional way of life,” “the society’s subsistence base, [the] social structure, and political ideology” are also occurring.⁴⁴ In Santiago Atitlán, these changes are being implemented through the integration of biomedical concepts in traditional midwife practices as well as through institutional changes. The *Hospitalito*, *Centro de Salud*, and *Prodesca* implement *capacitaciones*, paid training sessions, in order to teach the midwives sanitary practice techniques and signs of complications during birth. For example, during one session, the topic was “Clean and Healthy Birth Practices”; nurses emphasized that a clean environment, clean tools, and washing hands were important for the *comadronas*.⁴⁵ Moreover, the session discussed how to be prepared and formulate an emergency plan when certain symptoms, such as retained placenta, shallow breathing, fever, or seeing a hand or foot first during birth, mean that the midwife should take her patient to the hospital. Other training topics include: “Signs and Symptoms of Danger,” “Characteristics of a good *comadrona*: What you need to learn, and what you need to teach,” “Complications During Pregnancy,” “The Cross of Death and Family Planning,” “Attention of the nurse,” “Prenatal Care,” “Fetal positions” “Complications During Birth,” and “Use of Comadrona Supplies.”⁴⁶ Biomedicine is clearly considered the standard for change.

From the vantage point of the change agent, the lay midwives on whom most traditional systems rely for their functioning appear in need of training. This training typically consists of “upgrading” in the direction of biomedicine and not [. . .] of “continuing education workshops on indigenous obstetric skills.”⁴⁷ Jordan also notes that usually there is no reciprocal program to “sensitize medical personnel” to cultural practices and community perceptions.⁴⁸ The change

agents are mostly the doctors, nurses, medical students, and volunteers who have been educated elsewhere, whether in Guatemala or abroad, so they are less familiar with the values and traditions of the indigenous community. Thus, they thus teach in a manner that may not be effective; most of the midwives, if not all, have learned their trade through experience—by shadowing and doing—rather than through formal education. Jordan notes that “the abstract and formal methods by which modern training courses attempt to impart new skills to traditional midwives stand in fundamental contrast to the pragmatic and experiential methods of skill acquisition to which they are accustomed.”⁴⁹ One woman interviewed, a nurse and a midwife, believes that “the main reason *comadronas* don’t do what they are taught is because they’re too old and too accustomed to their way of delivering babies.”⁵⁰ For the older generation of midwives, the *capacitaciones* seem like a time to meet up with the other midwives and also a way to make a little bit of money. In this interview, she also mentions that usually a smaller number of midwives come to the clinic *capacitaciones* rather than the hospital ones because those “at the *Hospitalito* are strongly reinforced by a lot of the medical staff” in contrast to the few nurses running them at *Rxiin Tnamet*.⁵¹ She also cites the “payment difference between the clinic and the *Hospitalito*” as a possible reason, suggesting that the *comadronas* are more likely to go when attendance is strictly recorded and more money is offered as compensation for their time, reasons that have little to do with valuing biomedical knowledge.⁵² A doctor at the *Centro de Salud* points out that “they avoid making the trainings lecture-like because the older *comadronas* have a tendency to fall asleep.”⁵³ However, some data suggest that this is not entirely the case – sometimes even though the activities are more stimulating, they are ineffective. For example, during a training session on HIV, the *comadronas* were asked to classify images of actions as leading to HIV transmission or not, and while they had just learned the information, many of them had taped their pictures incorrectly. Nevertheless, this type of activity is still outside the realm of empirical training. The midwives are not practicing specific methods. As such, the *comadronas* may have difficulty retaining information because they are older, set in their ways, or having difficulty understanding what is happening during the *capacitaciones*.

In general, one of the main ideas that “the *Centro de Salud*, *Hospitalito*, *Prodesca*, and *Rxiin Tnamet* staff try to teach midwives [is] that their work is not a cultural[ly] unique job, but a health profession that many other people can perform.”⁵⁴ Theoretically, this suggests that “they’re not trying to impose biomedical practices [. . .] but that they just want to make the midwives more aware of safer ways to deliver a baby,” especially because maternal and infant mortality was identified by the community as an issue, but there is little education for the biomedical staff about midwife techniques.⁵⁵ Thus, the trainings, as described by the data, tend to give emphasis to biomedicine without discussion of traditional methods.

Institutional changes are also occurring in the types of medical spaces that are available to the people. A new center, CAP, specifically devoted to birth was established by the *Centro de Salud*, but whether it is successful in increasing the safety and sanitation of births is to be determined. One midwife said “she was happy [that] women were finally going to have a safe place to deliver their babies for free,” but she is unsure whether all the other midwives share her opinion.⁵⁶ At least some do. Another midwife, who is also a nurse, agreed adding that “all the *comadronas* will be able to go there and deliver babies too. Patients choose whether they want the *comadrona* or the doctor to deliver. If the *comadrona* delivers [,] she gets paid. If the doctor delivers the *comadrona*

doesn't get paid."⁵⁷ Here, conflict emerges again between the two categories of birth attendants; midwives are unlikely to bring their patients to the new birth center if there is a high possibility of them losing their pay to the biomedical doctors, who are already intruding upon their traditional job in the community. Subsequently, they are probably less inclined to perform their rituals and procedures in the presence of doctors who are their competition. As one interviewee noted:

The *comadrona* works for the woman but won't teach the doctors her medicine, because if the doctors learn, they'll earn more money than her. For this reason, *comadronas* don't want to give the recipe of their natural medicines to the doctors. So the result [is that they] wouldn't be able to earn anything and they would be poor.⁵⁸

Some midwives may also want to keep their secrets from other midwives, but this is not mentioned in the data. In a community where the majority of *comadronas* are older, they are hopefully passing their knowledge on to the younger generation of midwives, as many of those interviewed have said they are doing. Moreover, one doctor suggests that "from what [she] sees at the *comadrona capacitaciones*, most likely they won't like the idea of coming to [the] Centro de Salud to deliver."⁵⁹ In evaluating CAP, the opinions of the women giving birth should be given attention as well. As some women prefer the home environment, it is questionable whether they would agree to travel to the Centro de Salud to give birth, even in a space designed for them. Therefore, more data should be collected to examine this question.

With the above data, examples, and analyses in mind, the last question to consider is whether "the spread of the biomedical disease model in the popular culture is transforming the health-care-related beliefs and expectations of the sector."⁶⁰ First, it is important to note that the introduction of the biomedical model and its availability to the community has already changed beliefs, and there are now more possible providers than previously, when there were only *comadronas*. Now, the indigenous people have the opportunity to choose between the traditional and the modern scientific, though some are forced to pick based on certain factors such as cost and distance as described above. Jordan writes that "the implementation of scientific medicine constitutes an important part of all development programs," influencing beliefs in the folk sector and subsequently the popular sector.⁶¹ Some *comadronas* do utilize what they have learned from the medical community when they interact with patients. In one instance, a new mother asked whether the "belief [. . .] that, if you take a cold shower in the months after giving birth, you won't produce breast milk and your face will become swollen" was true.⁶² The midwife responded that it was not true; "when she worked in a hospital in Sololá, [. . .] they didn't have hot water [. . .] and the women produced ample breast milk and their faces did not swell."⁶³ However, it is unclear whether other midwives also pass on the information from their experiences with biomedical professionals; this is the only specific example in the data. There is a gradual effect on the community as information is passed from the professional to the folk to the popular arenas, but it is nevertheless difficult to change deeply rooted traditional beliefs. Consequently, Jordan suggests that "regardless of the kinds of policy decisions that finally have to be made, [. . .] the serious evaluation of medical practices according to the standards of the traditional system will sensitize medical personnel to the obstacles" that indigenous women have to overcome in seeking professional attention.⁶⁴ It remains to be seen whether the spread of scientific knowledge causes

more women and families to forgo the traditional, cultural use of *comadronas* as birth attendants in favor of the biomedical practitioners more recently introduced into the community, given all the reasons that they have for resisting the change at the present.

For all the above analyses, more research is needed to substantiate the claims presented. This paper mainly aims to summarize the current data concerning birthing systems and to suggest directions for future exploration. Most of the data used have been pulled from interviews with the healers themselves, the *comadronas* and doctors, and there is less specific information of popular opinion in terms of why they prefer one type of birth attendant to the other. It is also unclear which geographic locations and social classes are represented, as the data used were comprised mainly of excerpts, but it is logical to suggest that the lower classes, which are more economically restricted, have more difficulty overcoming the cost barrier of seeking medical treatment, while those who live farther from the *Hospitalito* and clinics find it more of a burden to go to the doctors. Research should be conducted to determine whether education correlates to an increased probability of choosing biomedicine as well as to clearly track the evolution in popular and folk belief with the spreading scientific knowledge in the community. In conclusion, the birthing system is currently a combination of the traditional and biomedical models, with patients choosing between them, but it appears to be moving towards a hybrid model; reducing the gap between the two will lead to further improvement of the current system.

Sharon Her is a junior in the College majoring in Anthropology and minoring in Fine Arts.

Sharon was a student researcher with the Guatemala Health Initiative in Summer 2008.

¹ Kleinman, Arthur, "Concepts and a Model for the Comparison of Medical Systems as Cultural Systems," Eds. Caroline Curren and Meg Stacey, *Concepts of Health, Illness and Disease*. New York, NY: Berg, 1986, 30.

² Kleinman, 31.

³ Kleinman, 33.

⁴ Kleinman, 33.

⁵ Behar, Emily. "05 julio c emily." Raw data. 05 July 2007.

⁶ Kleinman, 39.

⁷ Jordan, Brigitte. *Birth in four cultures : a crosscultural investigation of childbirth in Yucatan, Holland, Sweden, and the United States*. Montreal: Eden P Women's Publications, 1978, 2.

⁸ Jordan, 1.

⁹ Kleinman, 35.

¹⁰ Behar, Emily. "05 julio c emily." Raw data. 05 July 2007.

¹¹ McGuiness, Cara. "20 febrero b cara." Raw data. 20 February 2008.

¹² McGuiness, Cara. "05 julio cara." Raw data. 05 July 2007.

¹³ Behar, Emily. "TranscriptionSalvador emily." Raw data. Summer 2007.

¹⁴ Behar, Emily. "08 junio emily." Raw data. 08 June 2007.

¹⁵ Behar, Emily. "18 a 21 junio emily." Raw data. 18-21 June 2007.

¹⁶ McGuiness, Cara. "29 febrero b cara." Raw data. 29 February 2008.

¹⁷ Betancourt, Renee. "07 agosto betancourt." Raw data. 07 August 2008.

¹⁸ Jordan, 35.

¹⁹ Jordan, 35.

-
- ²⁰ Kosturakis, Alyssa. "02 julio kosturakis." Raw data. 02 July 2008.
- ²¹ Behar, Emily. "18 a 21 junio emily." Raw data. 18-21 June 2007.
- ²² Jordan, 47.
- ²³ Jordan, 48.
- ²⁴ Behar, Emily. "08 junio emily." Raw data. 08 June 2007.
- ²⁵ Betancourt, Renee. "31 julio betancourt." Raw data. 31 July 2008.
- ²⁶ Gunderson, Melissa. "09 junio gunderson." Raw data. 09 June 2008.
- ²⁷ Betancourt, Renee. "23 julio betancourt." Raw data. 23 July 2008.
- ²⁸ Betancourt, Renee. "23 julio betancourt." Raw data. 23 July 2008.
- ²⁹ Betancourt, Renee. "22 julio b betancourt." Raw data. 22 July 2008.
- ³⁰ Betancourt, Renee. "22 julio b betancourt." Raw data. 22 July 2008.
- ³¹ Kleinman, 39.
- ³² Jim. "21 julio jim." Raw data. 21 July 2007.
- ³³ Betancourt, Renee. "31 julio betancourt." Raw data. 31 July 2008.
- ³⁴ Lindsey. "14 junio Lindsey." Raw data. 14 June 2007.
- ³⁵ Kleinman, 37.
- ³⁶ Betancourt, Renee. "21 julio betancourt." Raw data. 21 July 2008.
- ³⁷ Betancourt, Renee. "18 julio a betancourt." Raw data. 18 July 2008.
- ³⁸ Monica. "20 julio monica." Raw data. 20 July 2007.
- ³⁹ Monica. "20 julio monica." Raw data. 20 July 2007.
- ⁴⁰ Kleinman, 35.
- ⁴¹ Gatti, Lisa. "09 junio thru 15 junio gatti." Raw data. 09-15 June 2008.
- ⁴² Sabrina. "02 a 06 junio sabrina." Raw data. 02-06 June 2007
- ⁴³ Jordan, 3.
- ⁴⁴ Jordan, 74.
- ⁴⁵ Behar, Emily. "14 junio group emily." Raw data. 14 June 2007.
- ⁴⁶ Sabrina. "23 julio sabrina." Raw data. 23 July 2007.
- ⁴⁷ Jordan, 79.
- ⁴⁸ Jordan, 81.
- ⁴⁹ Jordan, 80.
- ⁵⁰ Gradilla, Melissa. "09 julio gradilla." Raw data. 09 July 2008.
- ⁵¹ Gradilla, Melissa. "09 julio gradilla." Raw data. 09 July 2008.
- ⁵² Gradilla, Melissa. "09 julio gradilla." Raw data. 09 July 2008.
- ⁵³ Gradilla, Melissa. "10 julio gradilla." Raw data. 10 July 2008.
- ⁵⁴ Gradilla, Melissa. "10 julio gradilla." Raw data. 10 July 2008.
- ⁵⁵ Gradilla, Melissa. "10 julio gradilla." Raw data. 10 July 2008.
- ⁵⁶ Gradilla, Melissa. "08 julio gradilla." Raw data. 08 July 2008.
- ⁵⁷ Gradilla, Melissa. "09 julio gradilla." Raw data. 09 July 2008.
- ⁵⁸ Behar, Emily. "TranscriptionSalvador emily." Raw data. Summer 2007.
- ⁵⁹ Gradilla, Melissa. "10 julio gradilla." Raw data. 10 July 2008.
- ⁶⁰ Jordan, 39.
- ⁶¹ Jordan, 75.
- ⁶² McGuiness, Cara. "20 febrero b cara." Raw data. 20 February 2008.
- ⁶³ McGuiness, Cara. "20 febrero b cara." Raw data. 20 February 2008.
- ⁶⁴ Jordan, 81.



Cameron Hu



Damascus/Palmyra

Cameron Hu is a senior in the College majoring in *Near Eastern Languages and Civilizations*. Most recently, Cameron conducted ethnographic research in Dubai as part of an ongoing study on the political agency of built environments in the contemporary Middle East.

The Yoke and Its Significance in the Mesoamerican Ball Game

Leslie Arapi

Mesoamerican societies during the pre-Columbian era were marked by diversity, which was enhanced by culture and tradition. Cradling the most advanced urbanized civilizations in North America at the time, the cultivation of customs, rituals and religion were inevitable. Polytheism was a characteristic of the region where gods had a dual nature and rulers held both secular and religious roles.¹ In conjunction with religion, the complexity of Mesoamerican culture was marked by the symbolism depicted in the art and the construction of monumental architecture of these peoples.² One striking aspect of every day Mesoamerican society was the presence of ball courts. By the Late Middle Classic Period (7th century) the ball game grew in significance among the Mayans, a civilization located in the Yucatan Peninsula and modern-day Guatemala.³ An extraordinary archaeological find associated with the Mesoamerican ball game is the stone belt, providing insight to how the game was played. Through archaeological evidence, such as the discovery of a player's belt and the use of other related artifacts, the ubiquity of the Mesoamerican ball game is apparent, but it can be extrapolated that its emergence in Mayan culture served as a mechanism that held together religious, economic, social and political structures.

Through the use of various sources of archaeological evidence, one could get the closest first hand account of how the ball game was played. There are many primary accounts of Spanish chronicles that describe the ball game. Also, there is evidence from pre-Columbian stone sculptures, clay figurines, and figurine groups which reveal that the game is played in two teams.⁴ On each of these teams there were an equal amount of players, ranging from one to eleven players. Players had a specific position on which side of the field to play, indicated by the whether their gear was worn on the right or left side of their body. From the figurines, the body postures indicate how the game was played. The game used a heavy rubber ball, about the size of a beach ball, in which the goal was to make sure the ball bounced off of one player to another and a point was given if the ball hit the floor of the opposing team.⁵ The players wore loincloths, pants made out of buckskin to protect their hips, and gloves to protect their hands. Some of the equipment that was worn during a competition included handstones, stone yokes, *palmas* and thin stone heads (*hachas*) that could be attached to the yoke. Handstones were light and easily manipulated and believed to have been used to maintain balance when diving to bump the ball.⁶

One of the most salient artifacts associated with the ball game is a stone belt, also named a yoke by the Spanish. A yoke is generally u-shaped and made out of various stone, such as diorite, basalt or other fine stones.⁷ Depending on the stone used to make the belt, it could give the belt a burnt orange color. Usually yokes are decorated with detailed carvings on the outer surface. For example, a face could be carved into the front of the belt, with scroll patterns along the sides. These belts remarkably fit around a person's waist fairly well. The purpose of wearing a yoke during the game is believed to have been to add more weight on the player in order to hit the large, heavy ball with a greater force. This force would propel the ball at a higher velocity and longer range. The function of these stone belts can be paralleled to the Puerto Rican stone "collars" which were worn during the ball game.⁸ By comparing similar artifacts of other cultures, archaeologists can make a good predication as to how the object was actually used in Mesoamerica. Also through experimental archaeology, archaeologists have put on the belt and simulated its use to test different functions of the belt.⁹

The purposes of a stone belt are debatable among anthropologists and archaeologists. The main focus of this disagreement is whether or not the actual stone belt was worn during a match, or is an imitation of what was really used. One piece of evidence to support the stone yoke use during the match is an effigy vessel in the Museum of American Indian.¹⁰ The figure

carved on the vessel is wearing a heavy belt around the waist on its right side, the same form as an opened, u-shaped stone yoke. The cross section: thick at the top, thin at the bottom and cut off squarely are characteristic of most stone yokes.¹¹ This carving on the vessel is believed by Ekholm¹² to be a perfect match to an actual stone belt, thus further proving the theory's validity. Other evidence in favor of this argument are two small figurine fragments from the Huasteca that also seem to be wearing stone yokes. These sculptures are just a few of many that indicate the use of stone belts during the ball game. In contrast to this point of view, it is commonly debated that the massive stone are just ceremonial imitations of the stone yokes worn during the game since the stone yokes are massively heavy.¹³ This is contradicted by the pottery and carvings found which depict the stone yolks used in play. There are other theories that explain the yoke's use, but are less probable. One hypothesis is that yoke was used in human sacrifice, and put around one's neck to immobilize and make unconscious.¹⁴ Another explanation is that yokes were "mortuary crowns," because in one site a skeleton was found with a yoke place around its skull.¹⁵ Depending upon what context the yoke is found in, the theory of its function will vary. In general, the predominant view among scholars is agreed to be that the stone belt was used during the ball game.

Although the discovery of the stone belt is a substantial archaeological find, of even greater significance is belt's role in Mesoamerican society. The Mesoamerican ball game specifically played multiple roles during the height of Mayan prosperity, and is thus necessary to use other evidence to understand the belt's importance. During the Middle Classic period the Mayans experienced a rise in interregional activity and status due to the increase in interactions between other Mesoamerican cultures and creation of Teotihuacan, one of the Maya's most complex cities. This gradual shift of power to the Mayans parallels the rise of ball game, as well as ball court art and architecture. The Maya were broken up into a city-states and the ball game maintained a connection between these regions, fostering networks of trade.¹⁶ Kaminaljuyu is an archaeological site of a Mayan town that eventually flourished into "small civic center" because a ball court was built next to a chief's house.¹⁷ This site is an example of how although Teotihuacan was the center of Mayan society it was not the *only* symbol of authority due to the addition of a ball court in Kaminaljuyu. This site exemplifies the direct relationship between ball courts and status. Through its religious implications, the Mesoamerican ball game proves its cultural significance in its origins in the myth about a duel between the celestial and underworld gods. In summary, the myth involves a ball game duel in which the celestial gods, First Fathers, are defeated by the underworld, but the Hero twins get their revenge, reestablishing celestial order once again. This myth is found in the Mayan book of mythology *Popol Vuh*, one of the few texts to survive from the Classic Mayan Period.¹⁸

Through the analysis of the stone belt that is associated with Mesoamerican society, the complexity of their culture and tradition is conveyed. The archaeological context in which is examined defines its exact use in the lives of Mesoamericans. The most accepted theory is that the yoke was used during the ball game, but others believe it to be a mere imitation of the actual belt used in the game. Other scholars view the stone belt as a sacrificial element, in contrast to others who believe it to have been used in burial. It is evident that the application of various archaeological techniques and models will bring forth different views on the object's use. Nonetheless, by accepting the prevalent view it is clear that the association of the yoke to the ball game provides insight to the complexity of the game and how it influences Mesoamerica through the example of the Maya.

Leslie Arapi is a junior in the College majoring in Anthropology, with a concentration in Human Biology, and minoring in Consumer Psychology. This paper was written for Introduction to Archaeology, taught by Dr. Harold Dibble. The objective of the paper was to choose an artifact in the Penn Museum, research the artifact, and speculate about the artifact's archaeological significance.



¹ Burkholer, Mark A. and Lyman Johnson L. *Colonial Latin America*. (New York: Oxford University Press, 2008), 3.

²Burkholer, 3.

³ Cohodas, Marvin. "The Symbolism and Ritual Function of the Middle Classic Ball Game in Mesoamerica." *American Indian Quarterly* 2, (1995): 100.

⁴ De Borhegyi, Stephan F. *American Antiquity* 30, (1964): 84-85.

⁵ De Borhegyi, 85.

⁶ Morse, Mike. "Sport as a Model for Cultural Interaction: The Class Maya Ball Game." *Journal of Sport and Social Issues* 16, no. 1 (1992): 41.

⁷ Ekholm, Gordon. "The Probable Use of Mexican Stone Yokes." *American Anthropologist, New Series* 48, no. 4 (1946): 594.

⁸ de Borhegyi 1964, vol. 30:85

⁹ de Borhegyi 1964, vol. 30:85

¹⁰ Ekholm, 594.

¹¹ Ekholm, 593.

¹² Ekholm, 594.

¹³ Morse, 40.

¹⁴ Ekholm, 593.

¹⁵ Ekholm, 59.

¹⁶ Morse, 34.

¹⁷ Morse, 36.

¹⁸ Morse, 36.

Diaspora as Politics, Culture, Commodity, Contrast

Brandi M. Waters and Jacqueline Chaudry

Introduction to Diaspora

In our favorite reading of the semester, “Other Germans: Black Germans and the Politics of Race, Gender and Memory in the Third Reich,” Tina Campt writes that “the foundational notion of *diaspora* is the forced dispersal or displacement of a people.”¹ One definition, in concordance with Campt’s definition, describes Diaspora as the “scattering of language, culture, or people: a dispersion of a people, language, or culture that was formerly concentrated in one place.”² The definition includes the examples of the Jewish Diaspora occurring after the Babylonians conquered their kingdom in the 6th century and the African Diaspora, which is typically remembered as the colonial objective of capturing, enslaving, and shipping millions of people throughout the Americas. While the meaning of “Diaspora” inherently implies a fragmentation, a separation, and the rupture of the unity of kingdoms that were once home to so many people, the term “African Diaspora” has also come to represent the complete opposite. It is the manifestation of intangible spaces where the descendants of Africa come together. It is the body of languages we speak - our daily utterance that reminds us of the colonization of the histories and cultures of the great African continent. It is the brownness of our skin (or the lack thereof). It is the rhythm that makes us dance to a beat we’ve never heard yet inexplicably recognize. It is the reason we call ourselves Black, and the reason we can simultaneously call ourselves everything else. Essentially, while “Diaspora” may imply scattering, and some may envision it as the space of unification, we argue that it means *contrast*, because in reality, it represents both.

In this project, we interviewed three undergraduate students at the University of Pennsylvania who hail from Africa, the United States and Latin America. Our initial goal was not to understand the textbook definition of Diaspora, rather to understand where Diaspora exists and what it actually means to those people who see themselves as a part of it. If the African Diaspora exists as a symbiotic functioning of contrasts, what experiences shape those contrasts? As far as the “community” is concerned, why are some people automatically included and others of “questionable” membership? Why are some music styles labeled “Afro-centric” while others (also with Black origins) not? Why are certain ideologies, lifestyles, and cultural forms ranked as “more Black” than others?

Although we realize that interviewing a small sample of three undergraduate students could in no way holistically reflect all opinions on the definition of “Diaspora,” we attempted to remove ourselves, our opinions, and our experiences from the interviews and to let the subjects speak. Presenting the conclusions we found based on these three lives, and the definition that arises from their collective dialogue, we present Diaspora as “contrast.” We pay particular attention to the multifaceted contrasts present in “feeling Black” as an individual, versus simply feeling connected to Black culture, and how these two sentiments fit into the requirements for membership to the African Diaspora. We investigate three separate concepts of “Diaspora as contrast”: differing perceptions of Diasporic communities, America as the icon of the Diaspora, and different roles hip hop plays in youth Diasporic culture.

One of the most intriguing themes we found was the importance of self-identification and cultural belonging as prerequisites for membership in the African Diaspora. While identifying as Black and actually “feeling” Black culturally may not come as a surprise as components of the definition of Diaspora, the ways in which these sentiments were manifested during the interviews are completely contradictory. For example, on the surface our subjects were a Dominican who

doesn't necessarily feel Black, a Nigerian who cannot envision himself as anything other than Black, and an African American student who feels Black but does not completely understand why. The beauty of having subjects of such diverse ethnic backgrounds was that we could really get at the questions Camppt inquires of her readers in *Other Germans*. As modern members of the African Diaspora with seemingly diverging national histories, where do our paths, interests, and aims converge and digress? Where and why do Brent Edwards' instances of *décollage* occur? While sitting all three interviewees in the same room and asking them what they have in common, besides responding that they were all Penn students, they may not have all said they were Black, nor that they all belong to the Diaspora. However based on their responses, they do situate themselves and each other into this Diasporic community.

The interviews reveal that even the statement, "You're part of the African Diaspora so you must be Black" isn't so simple anymore because Blackness is constructed differently all over the world and continues to evolve. For example, many African Americans hold fastidiously to the "one drop rule"; nearly everyone with "one drop" of African ancestry is Black or belonging to the Diaspora in their eyes. Despite this understanding, many will see a Black man who dresses in a preppy fashion and listens exclusively to U2 and call him "white." Clearly the requirements have changed. As the descendants of African slaves continue to grow, evolve, mix racially and acquire independent national and ethnic identities, the black line of demarcation begins to fade. Perhaps because one can't determine race or ethnicity through phenotypic characteristics, a certain indeterminable amount of cultural awareness is necessary for membership to an ethnic group. Hence, knowing who Martin Luther King, Jr. was may award one point for Blackness yet sporting natural hair, being an Africana studies major, and watching *Family Matters* or *Living Single* could potentially award three more points.

Our Generation Y subjects affirm these changing qualifications across the board. One freshman, born in the Dominican Republic but now resides in New York, was asked how she would define "membership" in the African Diaspora. She responded as follows, "I think as long as they have the mentality. If you consider yourself Black, that you have the connection, then you are apart of it." Another student, a sophomore born and raised in Los Angeles, California agreed. She stated, "I think if you identify with the culture. Regardless of where you live..." Finally, when another freshman, born in Lagos, Nigeria and educated in England, was asked about how he defined the African Diaspora, he responded, "Anyone who believes that they are from Africa." Years ago a visibly Black person could not escape discrimination for not "feeling Black" that day, and a white person could not play on the basketball court with the Black kids just because she felt "connected to the culture." But skin color and naming often complicate this feeling of connectedness. One freshman includes a dose of reality to his idea of racial identification by adding, "It's so easy to judge by color rather than origin. I pre-judge." The sophomore comments on her discomfort with the ambiguity of the term "African American." She states:

"I have a problem with the term African American. It's different for people who are like, Haitian, and know where they come from and so when they're born here they say they are Haitian American, but I can't identify what the specific connections are. We (African Americans) don't have a language...I mean I don't know."

These interviews have shown that one does not need to have 300 reasons explaining why they consider themselves Black in order to fit into the Diaspora. As a matter of fact, it is enough not even to consider oneself Black and yet have a place in the Diaspora, as long as one feels a connection. For example, one freshman feels as though she belongs to a nation whose history is part and parcel of the Diaspora, but does not "feel Black" because of what it means to be Black in the Dominican Republic, and because of the cultural icons that are typically associated with Black people in America. She frequently discusses Blacks and Hispanics as two separate groups,

implying that she may not see herself as an Afro-Latino or does not view Hispanic as a possible ethnic subset under the racial classification of Black. She states, “It’s weird to come here and have people say ‘You’re not Spanish’. It’s weird to come here and have people say I’m American.” Finally, when I asked her why she felt herself to be a part of the African Diaspora she responded, “I think because of the things we (Dominicans) do, the African cultural associations, even if there are differences, everything is so close together.”

In light of the concept of Diaspora as contrast, the interviews displayed three themes that represent examples of this dichotomy. Perspectives from our African American and African informants affirmed the existence of a Diasporic community but also questioned the rationale of a unified community based on multilayered terms (i.e Africa, African American, Black, Hispanic, etc.). Continuing with this idea, the second theme understands the Diasporic culture as an extension of American culture. The international popularity of African American hip hop deems it a transnational and dominant representation of Black culture separate from American culture. Finally more deeply into hip hop, it begins to represent a token of American culture in communities of the Diaspora, but at the same time it deposits a specific Diasporic culture (African American culture) in places where the Diaspora already exists.

Perceptions of Diasporic Communities

Understanding Diaspora as a community as well as a sharing of differences, two participants expressed a doubt of a “sense” of Diasporas and “community” in the United States and in Africa because of an absence of shared characteristics. Within their own communities, both in the United States and Africa, the two felt there were distinct differences that can be viewed through the lens of contact with other cultures. One participant expresses her dissatisfaction with the term African American stating:

Do you consider yourself to be American?

“I consider myself American. I do because this is where I was born and this is where I’ve lived for my entire life. Therefore I’m American. My whole issue I guess... I mean I know that my descendents are from African and I feel like I do but in terms of... I just feel like I’m American but I don’t know what the specific association is. I don’t know what city in what part of Africa my descendents came from. I mean I know that they came from Africa but it’s general. I wouldn’t say that I’m African. I would say I descend from African culture and from the continent. I guess my culture is Black American.”

What does it mean to be American?

Chloe: I feel like it depends on the person. In theory America was supposed to be, you know, we left England because we’re oppressed here. Then starting in the thirties more immigrants came in so in theory we’re supposed to be this multicultural melting pot, in theory. The idea is to come here and be successful but in that’s all theory. I mean there are issues with that.

Do you think it’s culture?

“I wouldn’t say it’s culture because there are so many ideals and cultures like capitalism, coming from the bottom success stories but that is not culture. My personal culture isn’t... I mean I identify with being middle class and I want to be successful and get a job and make money. In terms of culture what kind of music, how I was raised that is based on African American ideals. I have a problem with the term African American. Its different for people who are like Haitian and know where they come form and so they were born here so they are Haitian American but I can’t identify what the specific

connections are. We don't have a language. If you're African Americans I guess it comes from Southern ideals but can you say that is your culture. I mean I don't know."

When asked if she was American, the participant immediately said yes but as she progresses she becomes uncomfortable with the term African American. She believes that identifying as African American comes with a specific connotation that you are African and you understand your specific genealogical lineage to a country within Africa. She feels this is a façade for those who identify as African American, as there is no way to trace one's specific genealogy in Africa. There is a break in the connection between Africa and African Americans. The term "African American" attempts to rectify this disassociation, but the informants seem to question if all those who use the term African American are aware of the way this connection is being mended. She believes that to have a specific culture, African Americans should have distinct cultural markers, for example, a "language," and differences that are not adopted from the surrounding American culture or that contrast with the dominant culture as "African American ideals". Though the participant finds problematic the usage of the term "African American", she does believe that African American traditions have shaped her while growing up. She also admits to what she believes represents Black culture in the United States early in the interview. This suggests that she envisions the Diasporic community within America to be one that includes those who are of African descent and are united by their culture even though there are many differences within the community itself. She also speculates as to whether these differences arise from the unique historical trajectories of Afro-Diasporic groups or if they are simply reactions in contrast with "American" culture- if the Diasporic groups in fact share anything other than skin color.

Another participant discusses the use of the term "African," embarking from the meaning derived when African nations and cultural groups employ it to understand themselves and thus communicate their collective identities to each other as well as to non-African audiences.

How do you define the African Diaspora?

"Anyone who believes that they are from Africa. If you look it up in the dictionary it means people who are of African descent. But it's hard for me to see people who are outside of Africa... I still see them as Africans. The color transcends Africa. Like for me the white people who lived in Zimbabwe but they called themselves Africans. But I didn't believe they were Africans. I mean I guess it's not their fault that they weren't oppressed. But I just saw that there was so much racism there. There are so many measures of counter-racism. Like I don't like the fact that they call people that."

Do you think diaspora is within people or is it cultural forms?

"Yes, definitely. Culture wise I would say that yes. I consider African Americans apart of the Diaspora. It's so hard for me... it's so easy to judge by color rather than origin. I pre-judge. I think being Black is apart of the Diaspora."

Who do you consider as being apart of the Diaspora?

(First participant) "I think if you identify with the culture. Regardless of where you live like in Jamaica or wherever but if you have the same cultural connections. Music, food, upbringing are apart of culture. It stems from tradition."

(Second participant) "If someone who describes the Nigerian culture like which tribe but if you step back can you mash them together? It's almost as if people who live in Nigeria who live outside of Nigeria are in the same brotherhood. You can definitely tell the different racial backgrounds. Do you think Arabian, tall, slim, fair featured with different types of hair would be considered apart of the same country? We would consider a

Ghanaian probably more than a Somalian. It's tradition. You can talk about Africans but in truth they are quite different."

The second participant seems to share the discomfort in ambiguity of the terms "African" and "African American." He believes in the idea of an African Diaspora but immediately connects the idea of membership in the African Diaspora as relating to skin color. He does not view the white citizens of Zimbabwe as being African because of their skin color and the assumption that they were not oppressed. This connection between skin color and oppression is what shapes the African Diaspora for this participant. He also expresses questions of doubt concerning the unity of Africans. He is Nigerian and believes that in non-African spaces there exists a transcending commonality between himself and a Somalian for example, but that this connection breaks in part when he compares his cultural group to those of other African nations. He highlights the main difference as the physical appearance of Somalians, believing they look more like Arabs. He highlights that if the term "African" is used it should be recognized that it represents a collective of different unique cultures within the continent. Therefore, although some people find their place in the African Diaspora solidified by their skin color and history of oppression, they do not share in a unified "African culture" that connects them specifically to those who live in the continent. Such a unified culture does not exist.

The participants' qualms about the usage of such terms as "African" and "African American" suggest a Diasporic community in America that initiates with skin color, bonds itself with a history of oppression, and is comprised of descendents of Africans (or African citizens themselves).

America, the African Diaspora

With the two perceptions of Africa and African Americans, the participants continued to talk about their visions for the future of the African Diaspora. When one was asked about the future of the African Diaspora he immediately assumed that we spoke only of the future of Afro-descendants in the United States, and did not consider the Diaspora's global presence. Later, when asked about his assumption, speaking of the African Diaspora solely as it pertains to the United States, he said that he felt one could not be talked about without starting with the other.

Do you have a vision for the future of this African Diaspora community?

"Yes. I don't know if I have an end vision. I can't see people being fully accepted. Even me if I speak a certain way at home I won't be accepted. In America I think it has to be becoming American even if you have to give up your quest for history. If you keep thinking about your personal (African) history you distance yourself from America."

You seem to be talking about African Americans. Not the Diaspora in America but the Diaspora as a whole including other countries. What is your vision for that?

"Oh you don't mean here in America. But you can't really discuss the future of the Diaspora without talking about America, eh. I mean if you're going to have a future for the Diaspora it would be here."

The participant's first thought when hearing "Diaspora" is associated with the idea of African Americans. As an international student hailing both from Nigeria and England, his association of the African Diaspora with only that of the United States and not in other countries interestingly suggests a general view of the United States as the international home of the concept of Diaspora, rather than Africa, "the motherland." When asked to re-evaluate his answer within an international context and not simply the United States the participant still believes that the

discussion of the future of an African Diaspora lies in America. He continues to assert that in America, African Americans or members of the African Diaspora above all must accept and assimilate into American culture. Over all, based on his personal experiences, this participant's view implies that the future of the African Diaspora lies in American culture.

Youth Diasporic Culture, Rap Music

As American culture was born out of the melting pot of many cultures worldwide, it is often viewed through a globally transcendent lens, one that is indicative of global influences but not necessarily representative of them. If the African Diaspora is seen as American culture this invites the idea that African Diaspora culture is transcending national and cultural traditions of countries worldwide. One form, particularly in youth culture, that transcends nationalism and cultures worldwide is rap music and hip-hop culture. This form is discussed among all three interviewees as something that they listen to and identify with.

In what context do you listen to music?

(Participant): I listen to old Samba and bachata at home. I just got into the hip-hop now because I didn't have MTV and VH1 before.

Do you think you go to parties where hip-hop is being played?

(Participant): Yes, because the only other option to party with is rock and it's hard to party to rock. I used to do the bachata all the time but I kind of like salsa if I could do it.

This participant discusses the music she listens to now as not being a result of the music her parents played while she was at home or even as a result of her being in an African American community at the University of Pennsylvania. She discusses her music choice of hip-hop as a result of her ability to view MTV and VH1 or popular American music television. It has also become a choice because of the popularity of hip-hop with youth on the University of Pennsylvania's campus. The ideas of partying and having a good time dancing are seen as synonymous with playing hip hop music. The two other participants shared many of these sentiments.

What types of music do you like and in what context?

(Participant 1): I like rap and hip-hop. Partying, I like hip-hop and techno. I like classical music when I'm trying to concentrate and do work. I like Nigerian music at any time. To put me to sleep Alicia Keys. I always liked Talib Kweli, Common and Mos Def.

(Participant 2): When I'm working I listen to jazz but I can't work with lyrics. If I'm doing whatever jazz is my chill music.

Do you think the majority of music you listen to is Black music?

(Participant 2): Yeah, I would say so.

(Participant 1): I don't know. Rock music is interesting. I like salsa. I don't know. I like Sting.

So like classic rock?

(Participant 1): Yeah.

So like U2?

(Participant 1): Yeah.

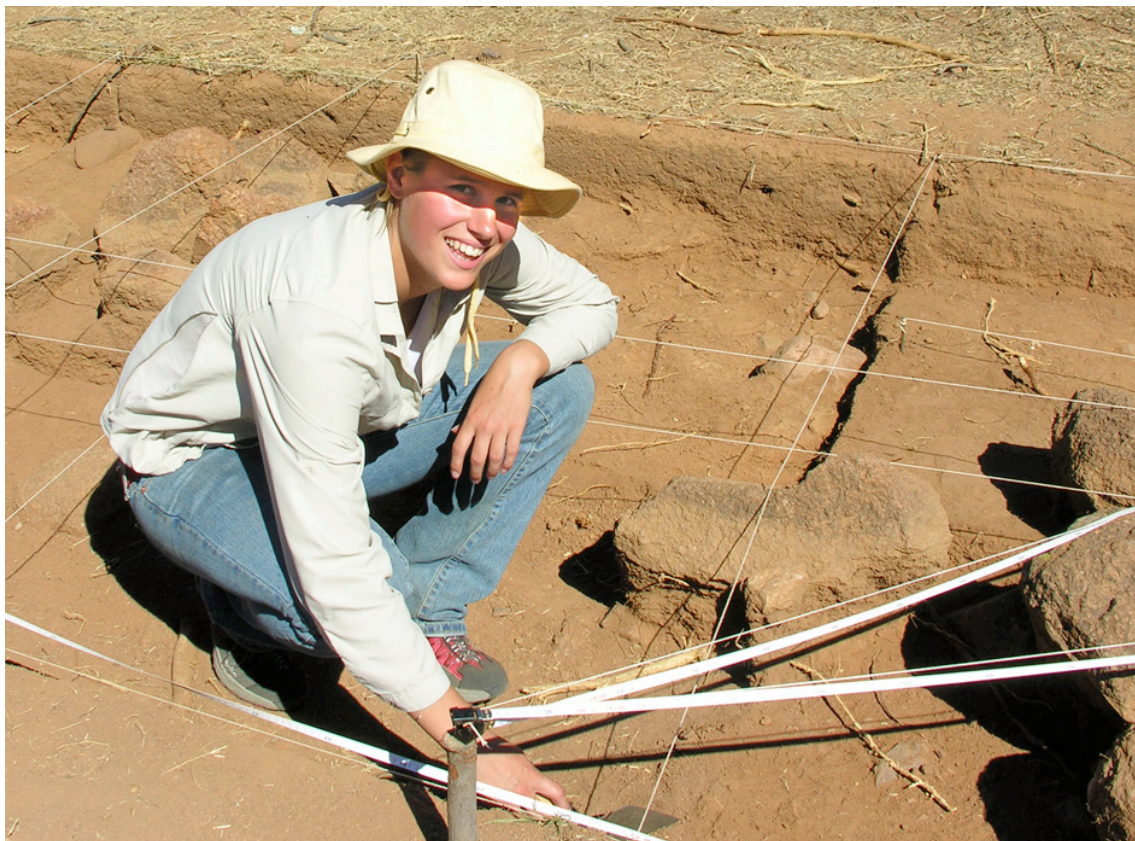
Is house music in Nigeria popular?

(Participant 1): House music among the younger generation and like rap is popular.

The second participant enjoys jazz as well as rap and hip hop, and the majority of the music she listens to can be classified as “Black music”. One element that can be taken away from these conversations is the global impact of African American hip-hop culture on the rest of the members of the Diaspora. It’s interesting to attempt to investigate what aspects of “American” culture come from “African Diasporic culture”, as well as what elements of “Diasporic culture” can be traced to African cultures. The constant lending and borrowing of African American culture with other Diasporic cultural groups (i.e. rap in Nigeria or reggaeton music in Puerto Rico) provokes the question as to whether these cultures are assimilating towards each other (at least in the aspect of music) and questions who has the upper hand in this exchange. What does this mean for the future of the African Diaspora?

Our research shows that Diaspora exists in many forms, and communication and cooperation between member groups requires actively working through the untranslatable patches. The interviews reveal that racial self-identification and a personal connection toward the Diaspora work hand in hand in describing the people who comprise this community. We see Diaspora everywhere. The Diaspora adorns an African American home with Kente cloth, and explains why African Americans speak English. Diaspora is danced in the Colombian national *cumbia*, and is spoken in the *Palenquero* creole language of the people of Palenque de San Basilio. Diaspora supports Marcus Garvey’s international movement and encourages the political alliances between the Congressional Black Caucus and Afro-Colombian land rights activists. The Diaspora is a contrast. While our research indicates that one must feel a “connection” in order to be part of the African Diaspora, that connection does not require that one identify as Black.

Brandi M. Waters is a junior in the College double majoring in Anthropology and Latin American and Latino Studies with a minor in African Studies. **Jacqueline Chaudry** is also a junior in the College.



Nina Johnson

Penn in Botswana

Nina Johnson is a senior in the College majoring in Philosophy. In this image, Nina is excavating at the University of Botswana Ranaka Field School, located 80 kilometers southwest of Gaborone, Botswana in July 2008. The site featured Middle Stone Age and Iron Age material.

The Global Diffusion of Manufactured Cigarettes: An Analysis of Eastern Emulation

Madeleine Kronovet

*Why is it that among the female sex the women who lead blameless, regular lives are the least frequently addicted to smoking?*² – Tolstoi³

In the past three decades, cigarette dependency in less-developed nations has intensified. About 82 percent of the world's 1.1 billion smokers reside in low-income nations.⁴ From 1970-1990, cigarette consumption increased by 64 percent in middle to low-income nations, while decreasing by nine percent in the wealthiest countries.⁵ Nevertheless, these statistics are unrepresentative of female-smoking trends worldwide. Even though rates of smoking in developing countries are increasing, only nine percent of females in these nations smoke. Conversely, twenty-two percent of females in developed nations smoke.⁶ Although smoking rates have recently declined in developed nations, usage has standardized between male and female residents. And despite the fact that there remains a substantial disparity between the smoking habits of both sexes in middle-income countries, female cigarette consumption is becoming more widespread. Furthermore, due to trade liberalization, urbanization, increased GDPs, and an international push towards gender equality, health experts foresee potential for increased usage. It is estimated that by 2025, worldwide smoking rates of females will increase from eight to twenty percent.⁷ Whereas rates of female smoking in developed nations has steadily decreased in the past thirty years as a result of policy change and health education, diffused access to cigarettes and a loosening of social mores has facilitated a statistical surge of female tobacco consumption in moderate-and low-income countries.

This paper analyzes the determinants of reduced tobacco use in the West, collated with data that provides insight into the upward trend of female smoking in developing nations. I begin with a brief historical review of tobacco in American history, touching upon the commercial aspects of cigarette manufacturing and the industry's flagrant use of symbolism. I continue with an analysis of the factors leading to a decrease in Western smoking and theorize as to why middle-income nations in the East have recently experienced the reverse: a rise in female tobacco consumption. The essay concludes with an investigation into the global influence of Western smoking habits, the role of globalization in determining tobacco trends, and the reasoning behind increased rates of female smoking in previously communist nations.

Since its onset into consumer culture in the 1500s, tobacco has been a contentious commodity. Tobacco found its way into alternative culture as a direct result of Europe's mercantile presence in North America. Before the formation of the highly lucrative Triangle Trade, nicotine usage was limited to "tobacco-houses" and sold prescription-only.⁸ Nevertheless, it remained present in Anglophone culture, though was described as a "morally depraved, corrupt" act well into the 1600s.⁹ A female of that era wouldn't have been seen with a cigarette in her hands.

In fact, the issue of women's smoking didn't emerge until the late 1800s. In the 1880s, Americans overwhelmingly chewed tobacco.¹⁰ It was not until Buchanan "Buck" Duke from Durham, North Carolina began to market his form of hand-rolled cigarettes that smoking became popular. The more-feminized version of the cigar prompted criticism almost immediately. A New York City health reformer was reported as saying that ladies who smoked were "aping the silly ways of some pseudo-accomplished foreigners."¹¹ By 1900, four states had passed legislation

banning the distribution of cigarette products.¹² From its onset, the United States government saw cigarette smoking as an objectionable act.

It was not until World War I that cigarettes became an accepted part of American culture. Before the U.S. entered WWI, the government viewed cigarette smoking as immoral and wasteful; they modified their convictions during the war. Cigarettes were sanctioned as rations for soldiers due to cheap manufacturing and distribution costs, rumored ability to suppress appetite, and perceived association to the allied French. In addition, tobacco “calms the frightened, sedates the wounded, energizes the weary, and distracts the bored.”¹³ The government spent \$80 million on tobacco products – eighty percent of it used to buy cigarettes – between April 7, 1917 and May 1919.¹⁴ The YMCA, which initially prohibited smoking in its facilities, became one of the biggest overseas distributors of cigarettes. Along with other humanitarian organizations, The American Red Cross gave away more than one billion cigarettes during the war. In the span of two years, cigarettes became a token of American patriotism.

America experienced a proliferation in cigarette consumption following the defeat of the Central Powers in Europe. While smoking became commonplace practice for men, a woman’s right to inhale remained controversial. Nevertheless, the female market constituted the fastest growing division of the cigarette industry post-1920. Similar to contemporary reports, the *Magazine of Wall Street* anticipated that the tobacco industry would profit from women well into the future. The industry caught on, and in 1927, Philip Morris advertised its new Marlboro brand with the slogan “Mild as May.”¹⁵ Likewise, Lucky Strikes juxtaposed its cigarette branding with the weight-loss catchphrase “Reach for a Lucky Instead of a Sweet.” Its market share tripled. Lucky Strikes became the best-selling brand for two years.¹⁶ As suffragettes fought for the right to vote, the tobacco industry capitalized on the struggle and marketed cigarettes as “torches of freedom.”¹⁷

Unfortunately, cigarettes did little to substantially aid the fight for equality. Instead, their prevalence led to a series of negative public health issues. Most significantly, elevated levels of smoking directly resulted in an exorbitant amount of new lung cancer cases. The 1940 U.S. Bureau of Census reported that the rates of lung cancer soared 36 percent from 1934 to 1938. Nevertheless, this did little to halt the spread of tobacco use. Physicians and medical associations distanced themselves from tobacco reformers. Forty years later, four out of ten Americans – the highest per capita level of consumption – identified themselves as cigarette smokers.¹⁸ It was not until the 1964 surgeon general’s warning that smoking caused lung cancer in men that smoking patterns declined.¹⁹ Since the mid-1970s, widespread tobacco usage has gradually declined.

Nevertheless, tobacco companies have successfully integrated cigarettes into the fabric of everyday life. By the mid-to late-1900s, smoking was a common habit for men and women alike. On average, thirty percent of American females smoked throughout the latter part of the 20th century.²⁰ Although outspoken critics have condemned tobacco usage since its commercial onset, the industry has skirted strict policy reform for over a century by providing the federal and state governments with tax revenue. Without government interference, companies freely marketed their product to the public (packaged image included). The tobacco industry targeted women by exploiting their struggle for equality (embodied by Virginia Slims advertising campaign “You’ve come a long way, baby”) and by branding cigarettes as a mark of femininity.²¹ They effectively marketed tobacco as both a feminine prop and a weapon of emancipation. Furthermore, this technique was not limited to the United States. In the 1990s, a brand dubbed “Ms.” emerged in India and China.²² As the percentage of female smokers dipped from 30 percent in 1979 to 23 percent in 1990, the Western tobacco industry directed greater focus to Asian and Eastern European markets.

The modern anti-tobacco campaign has triumphed in the past two decades by combating smoking on two fronts. It has curbed tobacco consumption in the U.S. with an effective collaboration of public policy measures and an increased outlay of antismoking education. In addition, anti-tobacco organizations devote extensive resources to publicizing the negative effects

of passive smoking (i.e. second-hand smoke) and to exposing and combating the corrupt strength of industry manipulation.

Furthermore, it is cost-effective to invest in antismoking measures. Tobacco addiction decreases worker productivity and increases government healthcare costs. A 2008 study from Centers for Disease and Control estimated that smoking is responsible for \$96.8 billion in productivity loss annually and an additional \$96 billion on healthcare expenditure. In comparison, government sponsored tobacco control programs amounted to \$595 million in 2007.²³ Numerous local and state governments across the U.S. have responded to recent antismoking data by enacting smoking bans in restaurants, bars, and hospitals. Various European nations have followed suit: Britain, France, and Ireland all banned smoking in public places.²⁴ Although studies remain inconclusive as to whether bans overwhelmingly curb smoking, they have reduced rates of harmful carbon monoxide and alleviated the pervasive threat of passive smoking. As smoking becomes more of an inconvenience, the total number of cigarettes smoked per day has decreased.²⁵ Above all, policy-based restrictions have altered the perceived notion of smoking from the “norm” to “taboo.”

While cigarettes transitioned to illegitimacy in the West, tobacco companies sought out previously unfamiliar markets to compensate for loss revenue. Even before the collapse of the Soviet Union, tobacco giants like Philip Morris and R.J. Reynolds instated manufacturing agreements with the declining communist giant.²⁶ The trade liberalization policies of the past twenty years in the Former Soviet Union, China, and Africa further facilitated big tobacco’s objectives. Being that tobacco wasn’t a foreign product to these populations, but a state-controlled commodity, the freeing of markets was ideal for the industry. Transnational tobacco rapidly invested money into the East and systematically purchased state-controlled tobacco companies. By the mid-1990s, 50% of plastic bags and billboards in Moscow displayed tobacco advertisements.²⁷ Furthermore, research conducted by BAT indicated that a standardized approach to product marketing was just as effective as an adapted, local method in the Former Soviet Union (FSU).²⁸ BAT was able to implement Western marketing techniques halfway across the globe.

Similar to Buck Duke’s conjectures of the late 1800s, BAT reported that women represented an untapped market in the East.²⁹ BAT and other transnational tobacco companies took advantage of the Eastern Bloc’s developing taste for capitalist culture and beckoned consumers with taglines like “Test the West.”³⁰ In Hungary, the industry presented women with a brand named “Lady’s First”(sic).³¹ Countries that traditionally discourage female smoking, like Hong Kong and India, have also seen their fair share of gendered advertising. Ads for “MS Special Filter” feature women in ostentatious Western clothing and jewels. Capri brand promotes individuality – which has customarily been a Western concern – with the slogan: “Be you.” The image of the modern, emancipated Western female is pervasive throughout tobacco advertisements.

Companies like Philip Morris and BAT have been successful at influencing women. In the former East Germany, rates of young female smokers have doubled.³² In China, smoking rates among men peak at 60%, though only three to seven percent of women smoke. Nonetheless, the rate of young female smokers has already begun to increase since 2004.³³ Moreover, China’s smoking population comprises 30% of the worldwide total. In Poland, big tobacco has inundated the public with Marlboro ads featuring a female sporting pearls and a cowboy hat.³⁴ In a similar fashion to the 20th century American advertising, tobacco companies portray female ambition and attach gendered associations onto their products in Eastern Europe and Asia.

For the past century, the tobacco industry has toyed with the concept of feminine identity. While it banks on selling straight-packaged masculinity to men, it advertises cigarettes to women in a contradictory manner. For example, the now-infamous Lucky Strikes’ ad featuring a feminine athlete was both a reference to women’s insecurities towards weight and a publicizing of female athleticism. In addition, tobacco advertising is especially effective when directed at a target

audience that is “unclear, unequal, or unrewarded.”³⁵ Women, adolescents, minorities, and populations of the developing world are particularly prone to cigarette use.

The World Health Organization estimates that female smokers will triple in numbers by the next generation.³⁶ If the prevalence of smoking continues to transition from rich to poorer nations at the current rate, tobacco-related deaths will increase from three million to ten million annually.³⁷ This sharp spike in projected deaths is linked to high fertility rates in the developing world, heightened rates of female smoking, longer life expectancy, and overall increase in human population. Furthermore, research has shown that, health-wise, females sacrifice more than males. Smoking not only affects fertility, but also decreases a woman’s life expectancy by 14.1 years.³⁸ The presence of transnational tobacco directly affects rates of rate of cancer and cardiovascular disease. Furthermore, citizens of less-developed countries are more prone to tobacco’s negative health effects, with arguably less access to healthcare and educational resources. As America and Britain experienced a slew of disease following widespread tobacco use in the 1990s, China and the FSU are likely to see an increase in tobacco-related illnesses.

Traditionally across cultures, tobacco use was a form of masculine expression. It was not until women fought for suffrage that smoking became an acceptable female practice. Lucky Strikes and Durham opportunistically understood that marketing cigarettes as a symbols of liberation would not only speak directly to females, but also double their numbers of potential consumers. Tobacco companies utilized a similar marketing design in the East. With the collapse of the Soviet Union and China’s reliance economic on trade liberalization, transnational tobacco acquired new outlets for product promotion. As Eastern Europe and China transitioned to a capitalist financial market, male-smoking rates initially increased, followed by a spike in female usage.

In accordance with the tobacco diffusion model, men are the innovators of a population and more apt to embrace new ideas and novel technologies.³⁹ Once men incorporate a new product into their lifestyles, a second wave of people – often persons of “lower status” and women – adopt it too. Pampel suggests that Eastern acceptance of manufactured tobacco exemplifies product diffusion through a population. In addition, higher status individuals are the first to respond to the publicizing of tobacco’s negative effects. Statistically, high status individuals are the first to quit smoking, even as a population experiences an increase in the number of female smokers.⁴⁰ At this stage of diffusion, female smokers will parallel men in increased cigarette consumption. Although still prominent, the gap is decreasing between male and female smoking rates as manufactured tobacco diffuses across Eastern markets.

For over seventy-five years, the image of a lit cigarette was pictured throughout the pages of fashion magazines, featured in innumerable Hollywood movies, and plastered on city billboards. A cigarette was the 20th century prop of “cool.” The thin cylinder of rolled tobacco promoted an image that transcended physical merchandise. Additionally, because cigarettes are inherently a product of indulgence, the industry marketed tobacco in a way that conveyed luxury but masked its gratuitous nature. Furthermore, companies allied themselves with women’s social movements, including the suffragettes of the 1920s and campaigns for greater autonomy in developing countries. The sheer determination of tobacco industrialists is demonstrated by their irreverence for, and concurrent capitalization of, issues present in the public arena.

Tobacco marketing campaigns have achieved enormous success by capitalizing on Western values. To target men and women alike, the industry correlated cigarettes smoking to a basic freedom *and* the freedom to chose. It fabricated the notion that smoking is a basic human right and that brand selection is a privilege for those living in a liberalized market. This scheme finds its roots in capitalism: citizens shop freely under capitalism, but view certain brands as congruent or incongruent to their perceived identities. Modernization not only allows for an over-abundance of choice,, but an over-emphasis on it. Societies accepted foreign brands of cigarettes as an alternative to less commercialized state-controlled options.

Additionally, formerly communist nations looked towards America as they transitioned to a free market system. For the average Eastern European and Chinese citizen, access to American culture was limited to movies, music, and the occasional fashion magazine. By implanting itself directly into Eastern lifestyle, tobacco industry introduced an additional 1.5 billion people to the American stereotype via tobacco advertisements. These ads portrayed Americans as laid-back individuals who sported cowboy hats and as people who lived lavish lifestyles and flaunted big smiles. These ads were not only deceptive, but also a form of “‘white supremacist racism’ by linking prosperity, leisure and prestige to the imagery associated with smoking.”⁴¹ Smokers emulated Western lifestyle and subscribed to the individualizing value of free enterprise. Cigarettes wedged themselves between concepts of leisure, reward, and the core American operating system of hard work.

The commercial success of transnational tobacco is a symptom of globalization. Due to the existence of a “global community,” the industry exposed consumers to the similar stimuli. Tobacco companies advertised their product under the pretense that the media has bridged a common culture, shared common experience, and enabled the sale of common products.⁴² Due to a “convergence of culture,” transnational tobacco easily transitioned from Western to Eastern markets.⁴³ In this sense, public health is hampered by globalization. Although globalization increases mutual awareness between nations (and the potential for global anti-tobacco movements), it also expedites the objective of transnational tobacco companies.

It should also be noted that men and women respond to antismoking campaigns differently. That said, men and women also experience smoking differently. Women have reported that they find solace in smoking; it’s a dependable mechanism for calming anxieties and fears.⁴⁴ Furthermore, being that women have been historically marginalized, cigarettes surface as means to restore identity. Unfortunately, cigarettes do little to substantiate a real sense of selfhood. “Cigarettes offer momentary resolution of the conflicts in women’s experiences.”⁴⁵ Instead, manufactured associations serve as a distraction from the actual issue of feminine development. “If identity is derived from commodities and images provided by the media, attention is deflected from a more valuable source of identity, namely the historical precedents and the immediate politics of...circumstance.”⁴⁶ To complicate matters further, studies have shown that women thrive off inter-communal networks. The social aspects of smoking are especially appealing to females.⁴⁷ If gender equality is progressing in developing nations, females may relish in their liberation over cigarettes and conversation.

To effectively curb cigarette use, Chinese and Russian anti-tobacco organizations can look to the West as recourse. Their effective forms of antismoking measure have decreased smoking levels in women by 15 percent in the past thirty years.⁴⁸ In addition, published findings indicate that level of female cigarette consumption is correlated to the presence of the tobacco industry.⁴⁹ Therefore, if antismoking organizations can prevent further infiltration of the industry and tarnish the image of tobacco before cigarettes reach women through societal diffusion, they may be able to significantly reduce female rates of smoking.

Madeleine Kronovet is a junior in the College majoring in Anthropology and minoring in Psychology.

- ¹ Campt, Tina M. 2004. "Diaspora Space, Ethnographic Space-Writing History Between the Lines." In *Other Germans: Black Germans and the Politics of Race, Gender and Memory in the Third Reich*, pp.171.
- ² http://encarta.msn.com/dictionary_/Diaspora.html).
- ³ Tolstoi, L. "The Ethics of Wine-Drinking and Tobacco Smoking." *Contemporary Review*, 59, (1891): 179.
- ⁴ Sorensen, G., Gupta, P.C., and Pednekar, M.S. "Social Disparities in Tobacco Use in Mumbai, India: The Roles of Occupation, Education, and Gender." *American Journal of Public Health* 95, (2005): 1003–8.
- ⁵ *World Health Organization* (WHO). "Tobacco or Health: A Global Status Report". Geneva: World Health Organization, 1997.
- ⁶ Mackay, J. "The global tobacco epidemic. The next 25 years." *Public Health Reports*. 113, no. 1, (1998): 14-21.
<<http://www.pubmedcentral.nih.gov/pagerender.fcgi?artid=1308363&pageindex=6#page>>.
- ⁷ Mackay, J. and Eriksen, M. "The Tobacco Atlas". Geneva: World Health Organization, (2002): 17.
- ⁸ Greaves, Lorraine. *Smoke Screen: Women's Smoking and Social Control*. (London: Scarlet Press, 1996), 15.
- ⁹ Corti, E. *A History of Smoking*. (London: George Harrup, 1931), 58.
- ¹⁰ Tate, Cassandra. 1999. *Cigarette Wars: The Triumph of 'the Little White Slaver'*. (New York: Oxford University Press, 1999), 11.
- ¹¹ Tate, 12.
- ¹² Tate, 13.
- ¹³ Tate, 67.
- ¹⁴ Tate, 75.
- ¹⁵ Wakefield, M. Morley, C., Horan, J K., and K M Cummings. "The cigarette pack as image: new evidence from tobacco industry documents." *Tobacco Control* 11, no. 1, (2002): 75.
- ¹⁶ Amos, Amanda, and Margaretha Huglund. "From social taboo to torch of freedom: the marketing of cigarettes to women." *Tobacco Control* 9, (2000): 4.
<<http://tobaccocontrol.bmj.com/cgi/reprint/9/1/3>>.
- ¹⁷ Amos, 5.
- ¹⁸ Tate, 120.
- ¹⁹ Mackay, Eriksen.
- ²⁰ Mackay, Eriksen.
- ²¹ Zucker, Alyssa., Stewart, A., Pomerleau C., and Carol Boyd. "Resisting gendered smoking pressures: critical consciousness as a correlate of women's smoking status." *Sex Roles: A Journal of Research*, (2005): 3.
<http://findarticles.com/p/articles/mi_m2294/is_34_53/ai_n16083882/pg_1?tag=rtBody;coll>.
- ²² Zucker, 3.
- ²³ CDC, 2007.
- ²⁴ Mackay, Eriksen.
- ²⁵ Neighmond, Patti. "Smoking Bans Help People Quit, Research Shows." NPR, 25 October 2007.
<<http://www.npr.org/templates/story/story.php?storyId=15610995>>.
- ²⁶ Gilmore, A B., and M McKee. "Moving East: how the transnational tobacco industry gained entry to the emerging markets of the former Soviet Union— part I: establishing cigarette imports." *Tobacco Control*. 13, (2004): 144.
<<http://tobaccocontrol.bmj.com/cgi/reprint/13/2/143>>.
- ²⁷ Gilmore, 148.
- ²⁸ British American Tobacco. "New tobacco markets." 13/12/1991. Guildford Depository. BAT.
- ²⁹ British American Tobacco.
- ³⁰ British American Tobacco.

-
- ³¹ Amos, 5.
- ³² Amos, 5.
- ³³ Gilmore, 145.
- ³⁴ Hafez, N. and PM Ling. "How Philip Morris built Marlboro into a global brand for young adults: implications for international tobacco control." *Tobacco Control*. 14, (2005): 226. <<http://tobaccocontrol.bmj.com/cgi/reprint/14/4/262>>.
- ³⁵ Greaves, 30.
- ³⁶ Greaves, 29.
- ³⁷ World Health Organization.
- ³⁸ Peto R., and Lopez AD. "Global tobacco mortality." Paper presented at the 10th World Conference on Tobacco or Health; 1997. Aug 24-28; Beijing, China.
- ³⁹ World Health Organization.
- ⁴⁰ Pampel, F. "Cigarette Diffusion and Sex Differences in Smoking." *Journal of Health and Social Behavior*, 42, no. 4, (2001): 404.
- ⁴¹ Pampel, F. "Global Patterns and Determinants of Sex Differences in Smoking." *International Journal of Comparative Sociology* 47, no. 6, (2006): 469. <<http://cos.sagepub.com/cgi/reprint/47/6/466>>.
- ⁴² Chapman, S., and Wong Wai Leng. "Tobacco Control in the Third World: A Resource Atlas." Penang, Malaysia: International Organization of Consumer Unions, (1990): 97.
- ⁴³ Hafez, N. and PM Ling. "How Philip Morris built Marlboro into a global brand for young adults: implications for international tobacco control." *Tobacco Control*. 14, (2005): 267. <<http://tobaccocontrol.bmj.com/cgi/reprint/14/4/262>>.
- ⁴⁴ Hafez, 267.
- ⁴⁵ Greaves, 33.
- ⁴⁶ Greaves, 107.
- ⁴⁷ Greaves, 199.
- ⁴⁸ Mackay, Eriksen.
- ⁴⁹ Pampel, 466.



Brandi Waters

Nomkhubulwane

Brandi Waters is a junior in the College majoring in Anthropology and Latin American and Latino Studies, and minoring in African Studies. This image depicts the Festival of *Nomkhubulwane*, or the celebration of the Zulu goddess of fertility, nature and rain. In Summer 2007, Brandi studied in KwaZulu-Natal, South Africa with the Fulbright-Hays Intensive Intermediate-Advanced Zulu Program.

Globalization's Effect on Human Information Processing: Globalized Digital Networks and Horizontal Information Processing

Tony Wang

Introduction

In July of 2008, Nicolas Carr of the *Atlantic* wrote an influential article entitled, "Is Google Making Us Stupid?" The predominant consideration of this ironically long article is the "deterioration" of human information processing caused by growth of information technology. The main culprit responsible for this downward trend is the Net, whose operating philosophy mandates the continual expansion of information accessibility, the reducibility of information to small bits, and the encouragement of constant consumption and generation of information. The epitome of this operating philosophy is Twitter, an extremely popular social networking website whose entire premise is based on users submitting updates about their life of no more than 140 characters (this sentence is longer than 140 characters).

In true McLuhan style, Carr contends that the Net "remaps" our neural circuitry to emulate the very medium with which we access information. We are able to process more information in a shorter amount of time, but at the cost of being prevented from focusing on long pieces of prose for sustained periods of time: "Immersing myself in a book or a lengthy article used to be easy.... That's rarely the case anymore. Now my concentration often starts to drift after two or three pages."¹

Carr drives the nail in the quick when he bemoans our decreasing capacity to focus on long pieces of information and our tendency to spend only a marginal amount of time on a single piece of information before moving onto the next. His observations beg the following questions: If our cognition is changing, then what major factor is contributing to this change, what effect does it have on society, and exactly how is cognition changing?

To explore this question, we will first follow our main lead of the Net as a cause of change in human cognition by considering how the Net has ephemeralized. Next, we will consider how the ephemeralization of the net has created a hyper-reality of the "instantly available," how human cognition has changed with regards to information processing, and how that hyper-reality could be considered a cause of change in human cognition. The paper will then critically explore this hypothesis and conclude that it is insufficient to explain the observed changes in human cognition. The paper then presents the notion of globalization and the globalized digital network as an alternate hypothesis and shows how its effects on our awareness of current events is a cause of the observed trend in our cognition. The present paper then verifies the key assumption of the globalized digital network hypothesis. Finally, the paper concludes by discussing the significance of the findings.

Ephemeralization of the Net

Ephemeralization is a term coined by famous inventor Buckminster Fuller to denote technology's ability to enable humans to accomplish more with less. As technology evolves, so does the productivity of the present technology. The evolution of transportation is an excellent example demonstrating the power of ephemeralization. With each technological progression, the time needed to reach a certain distance decreased. Certainly, today's cruise ship can travel around the world much faster and with much greater ease and comfort than the galleons of Magellan's voyage.

The same applies to information transmission. Prior to the industrial revolution, most mail was delivered via couriers on horseback; nowadays, we can communicate internationally using an online connection via fiber optic cables. If we compare the rate of information

transmission from then to now, in just two hundred years, the rate has increase around 100 billion times.² Coupled with search engines like Google, our ability to find information has radically improved. We can now access information at rates unimaginable to our ancestors three or even two generations ago.

As with all communication systems, consumption and generation of information are reciprocal. If we can now access the information online faster than before, we will want to generate more information as well. Thus, the process of ephemeralization is self-strengthening. Historian Alvin Toffler affirms this effect stating that “the greater efficiency of institutions and technologies not only leads to greater output of goods and services, but also to a faster rate of further innovation, as new ideas are generated, developed, tested and communicated with less effort, while ever more time and energy becomes available to invest in research and development.”³ The improved efficiency of information transmission has lead to more efficient means of information generation. With websites like YouTube, Facebook, and Wikipedia, the Net has adapted to increased demand for information generation, thus further ephemeralizing the Net’s information system capabilities. UC Berkeley conducted a three-year study from 2000 to 2003 to study information generation. The final report entitled “How Much Information?”⁴ found that in 2002, the world produced 5 exabytes of unique information in stored media (such as print, film, magnetic, and optical storage devices). As large as that amount seems, it pales in comparison to the 18 exabytes of unique information generated through electronic channels. To better conceptualize the vast size of this amount of information, the report states that 18 exabytes is equivalent to the amount of information found in the Library of Congress times 133,200. Furthermore, the amount of unique information generated annually has doubled over the three years of 2000 to 2003.

The Hyper-reality of the “Instantly Available” Hypothesis and Changes in Human Information Processing

It would hardly be an understatement to call the amount of information currently found online an “information flood.” The ephemeralization of the Net has clearly acted as a driving force in improving the accessibility of information found online, condensing information into terse bits, and encouraging the constant consumption and generation of information. Since the net contains an ineffable amount of readily accessible, never degrading, and typically digestible information and since so many of us rely on it, we are misled to believe that the Net allows us to find any kind of information whenever we want. I call this misperception the hyper-reality of the “instantly available” whereby individuals over-rely on the Net as an omnipotent source of information. We falsely believe that the Net is an always accessible, omnipotent source of knowledge that we can tap into to find information, so long as one can think of the correct keywords to type into Google.

One could contend that because we falsely perceive the Internet as a nearly limitless source of information that we can always access, we use the Internet in a way that fundamentally changes the manner in which we process information. We now spend less time critically interpreting information online and synthesizing it (vertically processing information) and more time simply reading it at surface value to generate awareness (horizontally processing information). We rapidly tab through websites and stop just to read the titles of the page and maybe the first few sentences of the article before we get the gist of the page then move onto the next piece of information. We do so because it takes less time to consume information in a shallow manner so that we can spend more time browsing the Net to find even more information to consume. This horizontal form of information processing stems from the misperception that we can always return to the information once we discover it and that as long as we remember what the article is about and how to retrieve it, we don’t actually need to critically read the information and store it into our memory. After all, if the Internet will always contain that information, what’s the point of wasting our “memory space” on rote memorization of data when we can expand

our intelligence by using our memory to remember where the Internet has stored that information on its memory?

The University College London published a study in January 2008 called “Information Behavior of the Researcher of the Future,” that affirms such effects that the hyper-reality of the “instantly available” have had on the “Google generation.” The report’s findings demonstrate new patterns of information consumption than what is normally done for traditional print sources of information. While gathering information from newspapers and books require slow, careful reading—what is commonly referred to as “deep reading”—information consumption for our current generation on the Internet follows a pattern of “horizontal information seeking.” In this new form of information consumption, readers will “view just one or two pages from an academic site and then ‘bounce’ out, perhaps never to return. The figures are instructive: around 60 per cent of e-journal users view no more than three pages and a majority [of people] (up to 65 per cent) never return.” Furthermore, the study confirms that the average time a person spends on each page of information is far shorter than with traditional print sources, so short that the readers have to be skimming the paper rather than actually reading the paper “in the traditional sense,” and that an average person spends as much time looking for an article than actually reading them. Internet users believe that since the information will always be online, they can come back whenever they want. For the average Internet user, the most important task while surfing online is to become aware of the information out there so they can retrieve the information when necessary when in reality, most users never return to the article again.

Furthermore, this trend of reduced depth in information processing has also spilled into traditional prints. Professor Bauerlein of Emory University wrote in his book, *The Dumbest Generation: How the Digital Age Stupefies Young Americans and Jeopardizes Our Future (Or, Don't Trust Anyone Under 30)*, that the Net creates a mental paradigm of “information retrieval, not knowledge formation” for those who grew up with the internet as a staple part of life.

The hyper-reality of the “instantly available” created by the ephemeralization of the Net suggests several key trends in our processing of information. While we can now consume more sources of information, we spend less time critically reading the information and more time absorbing key statements of information as suggested by topic sentences and article titles. The reason for this change in information processing is a result of our compulsion to collect and “read” the vast amount of information available on the Internet in a timely fashion. The only way for Internet readers to actually consume all this information is to power read: sacrifice careful reading for quick skims of key points in the article.

Weakness of the Hyper-reality Hypothesis and Introduction of the Globalization Hypothesis

While the ephemeralization of the Net has created a hyper-reality of the “instantly available”, it is inadequate to pinpoint ephemeralization as a root cause in the change of our human cognition towards reducing attention to vertical integration of knowledge and increased prioritization of horizontal information processing. The hyper-reality of the “instantly available” does not fully explain why Internet users are choosing to consume information horizontally.

While it is true that users are horizontally consuming information at far greater rates than ever before at the cost of reduced vertical consumption of information, and that such habits are even manifesting itself in the manner with which we generate information (such as the fact that many of us would prefer to use the number “2” instead of the word “to” when the difference of just one character is insignificant), the reason for this trend in human cognition is not the hyper-reality of the “instantly available” nor the ephemeralization of information. Just because information is easier to access and generate does not provide the impetus for users to forsake critical reading to become more aware of the information content available on the Net. Furthermore, the effect of the hyper-reality of the “instantly available” should actually create a desire for users to horizontally and *vertically* process information. Since the hyper-reality creates

the false perception that the Net contains any information desire so long as we can find it, we would engage in horizontal information processing to quickly become aware of the information we needed, to find then engage in vertical information processing, and to critically consume the pieces of information relevant.

However, this is not the case. Individuals are completely forgoing vertical information processing and becoming knowledge dilettantes, as if some force is compelling us to focus our energies on being more aware of the information around us at the cost of actually understanding it. Thus, the current trend in human information processing suggests that something else is at the root of this change in our cognition. In fact, the ephemeralization of the Net seems to be a partial byproduct of our increased prioritization of horizontal information processing. As we desire to become more aware of the world around us, we demand more unique information to be generated and we demand increased accessibility to it. Therefore, the hyper-reality of the “instantly available” is actually an effect of this trend in human cognition and not a cause.

As such, it seems that Carr fails to identify the actual cause of the trend in consideration, instead pinpointing a symptom. However, as with pathology, the better we understand the symptom, the better and more easily we can discover the cause. If the symptom is a tendency towards horizontal information processing that causes us to become over-dependent on the internet because it is the easiest way to access information, thereby creating a hyper-reality of the “instantly available,” then there must a force that causes us to want to become more aware of the world around us- that force is globalization.

The Globalized Digital Network and its Effects on Awareness

Globalization is the process of connecting individuals, organizational entities, and cities to the international community. By bypassing national boundaries, globalization allows individuals from around the world that would normally never intersect to interact. By connecting cultures, companies, and people from around the world together, globalization acts as network multiplier, creating new networks and increasing the density of preexisting ones. However, given the geographic distance that would act as a constraint to any physical interaction amongst the members of these networks, interactions by the members of a network created by globalization occur on the Net. Thus, globalization has created what Saskia Sassen called a “digital network” – a network of like-minded individuals who interact solely online and almost never physically interact. Since such digital networks are not formed with the expectation of ultimately meeting physically, such digital networks are formed on the premise of information exchange. As Sassen coined this term prior to the popularization of social networking sites, it is appropriate to distinguish between local digital networks that augment preexisting networks, such as Facebook and Myspace, and global digital networks that form entirely new networks.

What is important to note about the effect globalization has had in the creation of globalized digital networks is that interactions that occur within such networks do not follow the patterns of traditional interactions. While interactions between two agents in a traditional sense would be based on the premise of cultivating and improving a sense of friendship between the two, the interactions of members of a globalized digital network are centered around information generation and exchange. Let us consider several types of globalized digital networks to expand on the claim that globalized digital networks are based upon the premise of information exchange.

Internet forums are online communities of users who post questions, discussion topics, and relevant information based around a theme or point of interest. Users do not join the forum to better understand the other users but to discuss a topic or theme. As a result, Internet forum users do not necessarily feel restrained from “bashing” and “flaming” the posts of other users when they disagree about a comment because the Internet forum’s purpose is to discuss and exchange information, not to foster friendships. This of course does not necessarily preclude

friendship amongst online users and forums based on developing friendships, but the primary focus, and indeed the *raison d'être*, of globalized digital networks such as the Internet forum, is one of information exchange amongst the users.

Then there are digital networks such as Wikipedia and YouTube that are information generation platforms that enable users to share information by generating it. While Wikipedia focuses on information exchange of factual topics and YouTube is a video uploading platform that focuses on information exchange in the form of visual multimedia, both sites are digital networks that have formed on the premise of information exchange.

And let us not forget file-sharing networks. While most of the time, such sharing of information is illegal due to copyright laws, a very large underground digital network has been formed by users with the purpose of sharing of movies, TV series, and other digital media content.

While this list is by no means exhaustive – in fact, it goes on and on and encompasses a variety of online platforms such as WordPress, Twitter, Flickr, and Blogspot – it substantiates the claim that digital networks created by globalization are information exchange orientated.

An indirect effect of being a member of the globalized digital network is that our perception of what it means to become aware has changed. No longer is having an understanding of domestic affairs and international issues with regards to domestic politics considered being well-versed in current affairs. If one did not read about the Russian invasion of Georgia in 2008 or see it on the news, then one could not be considered informed of current events. No longer is a diner who only eats American food considered sophisticated. Rather, a diner must experience foods such the wild dog in China, the poisonous puffer fish of Japan, or Aztec chocolate from Mexico to be a sophisticated fine diner. No longer can a person who doesn't know the hottest movie on Bollywood be considered a top rate movie critic.

The globalization of social networks has increased the amount of unique information previously inaccessible to many individuals. Information about cultural foods, tendencies, and holidays are now easily accessible; information about the current affairs of the world are just a click away on Google News; information about cults, the occult, and cult movies are easily found online. It is not just information generation and accessibility that has increased on the Net, it is also the amount of unique information previously inaccessible and exclusive that has also vastly increased on the Net.

Thus, we find the main problem in the hypothesis of the hyper-reality of the “instantly available”- it fails to address to change in the quality of the information found online as well. The societal standards of being “aware” of the world around us have toughened as the quality and uniqueness of information accessible to us have increased. The amount of knowledge one must have to be considered “aware” is much higher than before. Thus, individuals use the internet more and more as a way to quickly find information and become more aware of the world around them while sacrificing time vertically processing such information. This enables them to digest more unique information because the standards for being “aware” are higher than before.

It seems that the mavens of Malcom Gladwell's *Tipping Point* have their work cut out for them.

Why Being Aware Matters and Why We Still Can't Vertically Process Information

The hypothesis that human cognition is shifting from a prioritization of vertical information processing to horizontal information processing because we must spend more time horizontally processing information to stay “aware” of the world around us is dependent on the assumption that being aware matters. After all, even if the standards for being aware are higher, it doesn't matter if we don't care about being “aware.”

The Journal of Advertising Research conducted a research study in December of 2007 that found that for most individuals, the average number of topics of interest that a person constantly followed and wanted to be well aware of was 11 topics of interest—more than half of all the possible areas of interest on the list (Smith). These topics of interest are extremely broad and include topics such as “music”, “electronics”, “money and investing”, and “video games”. Furthermore, around 65% of the subjects in the study state that being aware is important because their peers ask them for information about their area of interest. For the average person, being aware of the world around us is important because it strengthens out connections with peers. With 11 areas of focus and the increasing standards for being “aware” caused by globalized digital networks, the amount of information a person must be aware of to be considered “aware” has greatly increased.

While we find it extremely important to be aware of the world around us and while the amount of information needed to be considered “aware” has greatly increased, the amount of information our brain can retain has remained the same. Torkel Klingberg, a professor of cognitive neuroscience at the Karolinska Institutet in Sweden, writes in his book *The Overflowing Brain: Information Overload and the Limits of Working Memory*, how despite the fact that the amount of information we must process is increasing, the amount of information our brain can actually process is not changing. This limitation in our information processing capacity is the constraint that causes us to subconsciously prioritize horizontal information processing over vertical information processing so that we can continue to stay “aware” in the face of higher standards of awareness driven by the increasing volume and accessibility of *unique* information generated by the globalized digital network.

Conclusions

When we collect all the pieces of the puzzle and connect them in this fashion, we see that globalization is the cause of the change in human cognition. More specifically, globalization changes the manner in which we process information to become more predominantly focused on horizontal information processing. This change in cognition then acts as an impetus for the Net to further ephemeralize so that it is easier for us to find and generate the unique information we crave. This change also creates a hyper-reality of “instant availability” because of our overdependence on the Net as an ultimate source of information and further strengthens our habits of digesting information in a quick, shallow manner and generating information carelessly so that we can spend more time consuming and generating more information.

Identifying the cause in the shift of our information processing from vertical to horizontal is important. However, it is also of importance to consider the impacts of the effect itself. Carr sees this trend as negative, warning that as we continue to rely on the Net for information “it is our own intelligence that flattens into artificial intelligence.” Bauerlein takes on a more critical stance, as evidenced by the very title of his book, *The Dumbest Generation*. On the completely opposite side of the spectrum, Don Tapscott of “*grown up digital: how the net generation is changing your world*” contends that this trend is proof that the “Google Generation” can better multitask and that the intelligence of the generation is in no way deteriorating, rather it is actually being augmented by the Net. Both arguments are partially correct and incorrect and both argue their stance with great zeal—though Tapscott’s novel as a whole seem to pander more to the electronics industry and their products than serve as an actual piece of academic prose.

That being said, where does globalization fit into this formula? While globalization is a root cause in the change of our cognition from prioritization of vertical to horizontal information processing, it does not seem practical to try to tackle this issue by changing globalization. Indeed, this shift in cognition is a negative externality of globalization and alone does not outweigh the positive effects of globalization. Furthermore, it is nearly impossible to change globalization in a manner that we lower society’s standards of awareness because that would mean the elimination

of globalized digital networks. Considering such factors, we must live with this negative externality. Nevertheless, we can still try to actively change our cognition for the better through conscious efforts. Carr notes that “the human brain is almost infinitely malleable” for both children and adults. If globalization has changed out cognition to the way it is now because the mind is malleable, then it is certainly malleable enough to go the other way—or a completely new direction.

It is important to retain the critical thinking skills tarnished by the current state of information processing tendencies. Without such skills, we would eventually (d)evolve into the humans of MT Anderson’s *Feed*, individuals permanently connected to the internet through a microchip, always having the information on hand but never critically thinking for themselves. We can avoid this tragedy while still cultivating the vast benefits of technology by actively fostering positive habits in younger generations. Schools and parents should instill positive habits in information processing by focusing on tasks that require vertical processing of information.

Memorizing facts alone do not make one smarter. The Internet’s ability to ephemeralize information accessibility when complemented by one’s ability to synthesize information synergizes human intelligence to a new level. However, to use the Internet without augmenting it with critical thinking skills is a slippery slope. For better or for worse, globalization has altered our cognition. With that knowledge, however, we can actively change our method of information processing to better adapt to the status quo. And it is that ability to adapt to new situations that will propel us to greater heights.

Tony Wang is a freshman in Wharton concentrating in Operations and Information Management.

¹ Nicholas Carr, "Is Google Making Us Stupid?" *The Atlantic*, (2008).

² Francis Heylighen, *Accelerating Socio-Technological Evolution: from ephemeralization and stigmergy to the global brain*. Vrije Universiteit in Brussels.

³ Alvin Toffler, *Future Shock*. New York: Random House, 1970.

⁴ Peter Lyman and Hal R Varian, *How Much Information?* Berkeley: Regents of the University of California, 2003.



Hannah Lau

Laikipia, Kenya

***Hannah Lau** is a senior in the College majoring in Anthropology. In this image, Hannah surveys Clifford Boma Site, at Mpala Wildlife Foundation Ranch in Laikipia, Kenya. This work was part of Dr. Kathleen Ryan's NSF-funded research on the introduction of pastoralism to the Laikipia region.*

