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ABOUT THE LAMBDA JOURNAL

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LETTER FROM THE EDITOR

I am pleased to announce the completion of the 40th volume of the Lambda Alpha Journal, a publication of the Lambda Alpha National Anthropology Honors Society. This year’s volume presents seven papers with topics in biological, archaeological and cultural anthropology as well as 2 book reviews.

The current issue of the Lambda Alpha Journal is not only the 40th volume; it is also an anniversary issue. As we put the final touches on the journal this past August, we of the founding chapter of Lambda Alpha at Wichita State University who work on the Chapter and the Journal found ourselves in turmoil of unpreparedness caused by the passing of Dr. Lowell D. Holmes. Throughout the semester, the faculty and students at Wichita State University worked together with Dr. Holmes family to organize and stage a memorial celebration to the life of Dr. Holmes and his contributions to Anthropology. As the founder of Lambda Alpha and the Lambda Alpha Journal (formerly the Lambda Alpha Journal of Man), he together with a small number of colleagues envisioned the National Anthropology Honor Society. As his colleague and co-editor for several years in the late 1980s and early 1990s, I feel particularly humbled by his contributions and his enthusiasm for his profession, his colleagues, and his students. His contributions to Lambda Alpha and Journal is but one of so many, but they are, in effect, contributions which have touched so many, even more who may never have known of him personally. I encourage submission of book reviews.

This year’s journal concludes with an updated list of chapters and advisors, followed by a recognition of past award recipients of the National Scholarship Award competition and the National Dean’s List Scholarship. The Journal staff welcomes all of the recent chapters and all new members to the society. We also want to congratulate this year’s award winners and wish them success in their future endeavors. As a chapter sponsor and Journal Editor-In-Chief, I wish to extend my appreciation to all of the advisors and officers of the Lambda Alpha chapters across the nation. I would also like to thank the student editor, Mr. James Simmerman, and the student authors for their contributions to the completion of this volume.

Sincerely,

Peer H. Moore-Jansen
Editor-In-Chief
IN MEMORIUM: DR. LOWELL D. HOLMES

Dr. Lowell D. Holmes, professor emeritus at Wichita State University, passed away on August 31, 2010 at the age of 85, following an extended period of illness. Dr. Holmes, a distinguished sociocultural anthropologist, founded the Lambda Alpha National Anthropology Honor Society and the Lambda Alpha Journal. He pioneered research in anthropological gerontology and he carried out more than 40 years of ethnographic study of aging and culture change. He studied biological anthropology and archeology at the University of Wisconsin and he later earned his PhD from Northwestern University in 1956.

At Northwestern he undertook research in culture change and its impact on the aged in the Polynesia. In 1953 he went to Samoa where he studied the aged and culture-in-transition and his resulting dissertation was described by some of his committee members as “one of the finest studies we have on the South Pacific”. Dr. Holmes became and remained a renowned authority of South Pacific ethnography. During the late 1970s he had expanded his research interest to include the study of aging jazz musicians in New York City and Los Angeles, a niche that some of us can only dream of. He was an active write and author of books and papers in general anthropology, sociocultural and gerontological anthropology and culture history and museum science. He authored ten books, including a widely-used introductory anthropology text, a large number of referred and non-refereed articles and presentations. Dr. Holmes had a special interest in anthropological film. Throughout his career, in Samoa, or anywhere else on his anthropological journeys, he recorded and produced several films, indeed, his last film was finalized only shortly before his death.

Lowell D. Holmes began his academic career in 1956 as an assistant professor at Missouri Valley College only to move on to Wichita State in 1959. There he joined a combined sociology/anthropology department, where in 1966, he eventually founded an independent department of anthropology. During his 31 years in the department, he served for several years as chair. He was appointed to the faculty of the University Gerontology Center 1978 in which capacity he served for a number of years while remaining a professor in the anthropology department. In 1963 Lowell Holmes founded the anthropology museum. With the aid of a couple of motivated students, two-thousand dollars given to him by the then dean of the college of liberal arts and sciences, a few artifacts and other items, some of which had been discarded by another department on campus, he build a small educational museum facility within the anthropology department building. The museum, now relocated in the home of the department was subsequently renamed the Lowell D. Holmes Museum of Anthropology in his honor when he retired in 1990.

Students were clearly on his mind in everything he did. For his efforts, he was awarded several student recognition awards. In 1968, he together with a small number of colleagues and students founded Lambda Alpha National Collegiate Anthropology Honors Society. The original Alpha of Kansas charter of March 15, 1968 listing 29 charter members still hangs proudly in the anthropology department office. The then National president Darrell L. Casteel, and the National
Secretary, Mary Susan Colcher, are the two signers of the charter. In the more than 40 years of the existence of the society, the organization has grown chapters at universities, large and small, across the country. For many years, the organization has had a distinct undergraduate focus, offering scholarships to students recognized on university or college dean’s lists, and to graduating senior recognition and awards. Many a student has benefitted from annual awards or scholarship support toward their further education in anthropology and related fields. In 1968 he also established the Lambda Alpha Journal of Man, later renamed the Lambda Alpha Journal, and served as editor from 1968-90. With a few exceptions, the journal was published annually. Some volumes were actually comprised of a fall and spring issue. Later the journal moved to a single annual volume. In 1990-1991 he turned over the journal to the current editor although he continued to support the journal in any way he could. Although he had nothing to do with the subsequent transition of the Lambda Alpha Journal from volume 1 to the present to an electronic format, it is dedicated to him and his contributions to the journal.

His professional service extended beyond Lambda Alpha. Indeed, he served as President of the Central States Anthropological Society from 1972-1973. He served as faculty advisor for the student chapter of the NAACP in 1960, was a board member of the Urban League from 1966-1972, and served as research consultant to Urban League and Urban Renewal Agency projects on aged and minority housing in 1979. On and of campus, Lowell Holmes was a household name to students and faculty for many years. He was repeatedly recognized for his service and for his dedication to students and student learning in anthropology. In 1966, he was recognized for his teaching when he was awarded the Distinguished Teaching Award from Wichita State University. In 1968 he received the Kansas Board of Regents' Excellence in Teaching Award in 1968. Finally, just prior to his retirement in 1990, he received the National Distinguished Teaching Award from the National Association of Students of Anthropology.

In his private life, Lowell Holmes was a devoted sailor and saxophone player. He built 3 sailboats of his own, in addition to the acquisition of the Taupou, his 27-foot dream boat. He spent time in the family vacation home in Wisconsin and later in Florida. Both places were conducive to good sailing and to getting re-energized. Another side to him was the “younger” Lowell Holmes who played the saxophone professionally. He continued to play the saxophone throughout his life and he was regularly involved with the Wichita Jazz Festival, serving as a board member from 1980-88 and as emcee for the Festival's annual college jazz band competition. He was also a friend and a stalwart supporter of young faculty working their way toward tenure. He calmly and professionally advised, eased the anxious minds of those to become better professionals as they matured in their careers. He left his mark in the mortar and brick of the institution where he worked, all over Lambda Alpha and its foundation, in so many niches of the discipline of anthropology, and in the lives of many colleagues and students.

On October 23rd, the Department of Anthropology joined with his wife Ellen Holmes and his extended family in a celebration of Lowell Holmes’ life and in recognition of his outstanding accomplishments. Approximately one hundred students, faculty, friends, and family attended and paid their respects to this icon of anthropology.
The Haunting Erotics of Gastronomic Desire as Bodily Penetration

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The feeling of hope towards vegetables grows larger with each passing year. Numerous benefits are once again being recognized – even things unheard of in the past like vegetable’s anti-oxidation effect and food fiber’s importance have become widely known. On the other hand, forced produce, chemical fertilizers and drugs, genetic recombination (idenshikumikae), the safety of imported vegetables, and of course, even the global environment, direct our attention to problems and fears as well. – Itagi Toshitaka, Karada ni oishii: Yasai no benrichou (Delicious for the body: A useful book of vegetables)

Natto [fermented soybeans] is a really traditional Japanese food and considered to be a healthy food for Japanese. It is in our everyday meals . . . One day in high school my mother bought some natto and she said, “Did you know there is genetically engineered natto nowadays?” And I thought, “Oh what is that?” That was the first time I was interested in and had an impression of a genetically modified organism . . . I thought it was scary because I was never concerned with it before. I did not know what it was or how it was made . . . I was really glad my mother did not buy any. – Watanabe-san, a female college student in her early twenties, in a 2008 interview

To step out of my dormitory, tucked away in one of the many side streets around Waseda University, is to start a journey into the urban jungle of Tokyo. A sea of cement monoliths that frame the labyrinthine alleyways deflects the sunlight like a canopy of forest leaves. Black asphalt smoothed under the perpetual treading of feet and wheels covers the roads like undergrowth. Within my first few steps outside into this urban sprawl lies a signpost of what lurks beyond. Present the entirety of my time in Tokyo, a Japanese Communist Party campaign poster on the house across the street offers a simple slogan in large print - “Safe food from the land of Japan” (Anzen na shokuryou wo nihon no taichi kara). If as Nancy Munn (1992, 74) argues, objects physicalize networks of polarized cultural values or “qualisigns,” then the poster materializes the interconnected gastronomic values in Japan of safety and domestic produce at the same time as it reifies the linkage between risk and foreign produce. While the smaller print reveals an agenda specifically oriented toward trade issues – “Cost Security” and “Stop import liberalization” – the poster gestures toward the image of the numerous gastronomic threats from abroad (e.g. China) penetrating into Japan and Japanese bodies that preoccupied the thoughts my informants. Rice tainted with poisonous mold and pesticide residue.¹ Dumplings (gyouza)

¹ In September 2008 Mikasa Foods, an Osaka-based company, admitted to selling rice products made with tainted rice from foreign countries like China and Vietnam. The rice contained illegally high levels of pesticide residue and aflatoxin (a toxin produced from fungus) (Japan Times 2008b). This event spawned intense media coverage for months as indexed by how it warranted its own section, “Accidentally Contaminated Rice” (Jiko kome), on the news website, Aratanisu, which compares articles on similar topics from the three major Japanese newspapers Asahi Shimbun, Yomiuri Shimbun, and Nihon Keizai Shimbun.
contaminated with pesticide residue.\(^2\) Milk product with toxic industrial chemicals.\(^3\) Such events solidify the belief that the safety of food in Japan is in peril given how much of it does not come from domestic agriculture.\(^4\) As I pass this poster on my way to the main street, I cannot help but think about safe food and where I might stumble across it (or not).

To navigate the alleyways, roads, and buildings in the Tokyo metropolis where the “land of Japan” is covered in asphalt and concrete then is to simultaneously navigate potential gastronomic dangers in the everyday pursuit of food to eat. As Michel de Certeau (1984) argues, walking in the city involves an engagement with a social order constructed by systems of power - in this case, the domestic and foreign government agencies (e.g. Ministry of Agriculture, Forestry, and Fisheries [MAFF], Ministry of Health, Labor, and Welfare [MHLW], United States Department of Agriculture [USDA]), agribusinesses, and food industries that structures food consumption in everyday life in Japan.

In part, this entails a reliance on imported food and feed produced through biotechnology (i.e. genetic modification). In the ethnographic present, there are no domestic GM crops being grown for commercial sale in Japan. All GM crops being consumed are imported. While there are crops, such as GM rice, being grown for scientific research and development, these crops are restricted to monitored test plots and thus not available to be consumed as food and feed. Thus, in a USDA Foreign Agricultural Service GAIN (Global Agriculture Information Network) Report, Suguru Sato (2008, 2) reports that

Japan annually imports 16 million metric tons of corn and 4.2 million metric tons of soybeans valued at over $3 billion. Approximately two-thirds of the imported corn and three-quarters of the imported soybeans are ‘biotech’ [i.e. genetically modified]. Japan also imports billions of dollars worth of processed foods that contain biotech-derived oils, sugars, yeasts, enzymes, and other ingredients.

This makes Japan the world’s largest per capita importer of such food and feed, and the United States, from which Japan heavily relies upon for such imports, an intimate contributor to food consumption in Japan. In 2007, the 16.2 million metric tons of corn imported came from the United States, where it is estimated that 80 percent of the corn crop is comprised of genetically modified (hereafter, GM) varieties (Sato 2007, 3). This does not mean that 80 percent of all corn directly eaten by Japanese consumers is recombinant – only 30 percent of imported corn is used for human consumption and the Japanese food industry has typically paid a premium for segregated, “non-GMO” (genetically modified organism) corn for this purpose to avoid consumer backlash (Sato 2008, 3).

\(^2\) Several people suffered from food poisoning in Hyogo and Chiba Prefectures after consuming frozen gyoza imported from China by the Tokyo-based JT Foods Co. in January 2008. Police investigation later discovered that the gyoza contained residue of the unapproved pesticide, methamidophos (Japan Times 2008a).

\(^3\) In September 2008, four food products that used milk imported from China by the Osaka-based Marudai Food Co. were found to contain melamine, a toxic industrial chemical used in fire retardant materials (Japan Times 2008c).

\(^4\) As of 2006, Japan has one of the lowest food self-sufficiency rates based on calories among developed countries at only 39 percent (Nagata 2008).
However, these figures also do not suggest that no GM food is directly consumed by humans due to the labeling policy for GM food enacted in 2001. Food manufacturers must apply a label that declares its product is recombinant only if over 5 percent of the total weight of the food item consists of a GM ingredient; furthermore, oil derived from approved GM soy, canola, cottonseed, and corn are exempt. This enables, for example, an estimated 10 percent of soy sauce manufacturers to use GM meal without specifically labeling their product as such (4). Furthermore, in light of inflating global premiums for segregated, non-GM corn, the Japanese food industry is being forced to reconsider their former practice of using only non-GM corn for human consumption. In April 2008, several large Japanese cornstarch processors announced they would use GM corn in a limited amount of food items such as high fructose corn sweetener and beer (significantly, these are food items that would be exempt from labeling) (3). As global agricultural practice continues to shift toward the usage of GM crops, more and more Japanese companies will be forced to incorporate GM ingredients into food products whether due to finances or the simple material scarcity of non-GM crops. The material presence of GM food in Japan is thus ubiquitous and by all indications will only grow more so in the future.

And yet, I never once encountered a GM food item, or more precisely, one labeled and advertised as such in food venues such as my local supermarket. If GM food is figured as one of the gastronomic threats faced by Japanese consumers (which all of my informants believed, regardless of class), then it seemed to be a specter that haunted Japan, heard only in rumors and the media, but never knowingly encountered by consumers. One of the college students I interviewed, Suzuki-san, even went so far as to say that she had never eaten any GM food before (and later added, would not want to). Do Suzuki-san and I simply navigate around the city and food venues with such remarkable skill that we can avoid eating any GM food? In this chapter, I will demonstrate that this expert navigation of the food market is highly unlikely and instead is related to the problem of locating recombinant food in Japan. As such, I trace the contours of the gastronomic threat of GM food for Japanese consumers as a haunting absent presence that restructures the urban space of Tokyo. The nature of this polluting threat shapes how food products (e.g. strawberries, tomatoes, okra, and potatoes) are made gastronomically desirable in food venues such as my neighborhood Santoku supermarket. In this context, I will argue that the (im)possibility of conscious consumption of GM food by Japanese consumers should be understood by how consumers become interpelled (Althusser 2001 [1971]) within an intimate actor-network (Law 1992; Latour 2005) of entangled, mutually penetrating bodies premised in part upon the exclusion of GM food. However, issues of accessibility complicate the navigation of the urban city in search of desirable food, wherein class remains a significant roadblock.

The Haunting of Absent Presences

According to a survey by the Baiteku Jouhou Fukyuukai (Council for Biotechnology Information Japan) (2005, 8), the top reason cited by 62.1 percent of Japanese consumers in 2004

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5 The politics of labeling and food safety evaluation is analyzed further in Chapter 3.

6 The number of countries that plant “biotech” crops has steadily increased from six in 1996 to twenty-five in 2008. Between 2007 and 2008, the global area devoted to such crops increased by 9.4 percent from 114.3 million hectares to 125 million hectares. In 2008, the United States leads this trend as the largest producer at 62.5 million hectares, followed by Argentina at 21.0 million and Brazil at 15.8 million (James 2008, ix, xi).
for having a scary (*kowai*) and bad (*warui*) image of GM food was the expression, “Genetically modified food,” itself (“Idenshikumikae shokuhin” *to iu kotoba*). The sheer evocative power of this expression urges an examination of its linguistic construction and semiotic mapping. The Japanese word for genetic modification, “idenshikumikae,” can be broken down into “idenshi” (gene) and “kumikae(ru)” (to recombine, rearrange, make over again). The word focuses on the rearrangement of genes, a deviation from and disruption of an original genetic order. The disruption of this original order indexes a pollution of the pure moral order that signals danger (Douglas 2002 [1966]). The expression itself thus contains its own threat to a certain extent on a semantic level.

The same might be said though of the English term, “genetic modification,” which has a different nuance from “idenshikumikae” in Japan. This is not surprising given the difference in history, culture, and arrangement of signs between Japan and the English-speaking world. Furthermore, at least between Japan and the United States, there is a difference in food labeling practice (Japan requires labels for GM food, while the United States does not), which positions the two terms differently within everyday life (e.g. in terms of familiarity). Although both concepts refer to the disruption of a genetic order then, they are mapped with different associations that get drawn upon in, for example, activist critiques of GM food. For example, the Greenpeace USA campaign in the United States against GM food often references the image of Frankenstein’s Creature and deploys the term “Frankenfood.” In a campaign poster criticizing the cereal maker Kellogg’s for its use of GM grains (see Figure 1), Kellogg’s trademark Tony the Tiger is redesigned as FrankenTony, serving up an unappetizing bowl of green “Undetected! Unlabeled!” “Genetically Modified Frosted Fakes of ‘Corn.’”

One of the salient messages in this poster is that genetic modification presents a monstrous threat due to the tampering with nature (as the scientist, Victor Frankenstein, does in Mary Shelley (1998)’s 1818 classic, *Frankenstein*). The recombination of Tony the Tiger, marketed as a friend of children who offers them sweet cereal, with FrankenTony, portrayed as a deviant who offers children deceptively sweet, but polluted, frosted “fakes” of “corn,” demonstrates how genetic modification threatens the not only everyday gastronomy (starting every day with threatening food), but the lives of children in particular. It is significant though that this threat is conveyed through the ugly and distasteful appearance of Frankenstein’s Creature (and according to this specific Greenpeace campaign, Kellogg’s monster, FrankenTony). The threat becomes salient through the monster’s external form, which is undeniably scary.

In contrast, activist critique in Japan tends to focus on an insidious internal change and the deception of the external form. The mascot of the Greenpeace Japan anti-GMO ad campaign is a pod of three smiling peas, which all appear normal and decidedly cute – at first (Screenshot 1 in Figure 2). Gradually however, one pea begins to frown malevolently while horns sprout from its head (Screenshots 2 and 3), at which point “idenshikumikae” flashes beneath the pod (Screenshot 3). The moral of the story is that Japan does not need GM food (Screenshots 4 and 5).
In this ad campaign, GM food is portrayed as a metamorphosing demon that might pass as normal, unthreatening, and even cute, and thus the consumer might accidentally ingest without knowing. Malevolence emerges gradually in a slip from the natural to the monstrous, which troubles polarities like natural versus unnatural, real versus fake, and safe versus risky. The differing images employed by Greenpeace demonstrate that if the threat of GM food in the United States is configured as its clear danger and vivid unnaturalness, the threat of GM food in Japan is located in its problematic ambiguity and gradual emergence.

The nature of the threat in Japan shapes and is shaped by the presentation of food in supermarkets as the Japanese food industry is intimately aware of the negative backlash that can result from the stigmatized usage of GM ingredients and the connected desire for non-GM ingredients.
In fact, out of a fear of a consumer backlash, retailers, particularly large supermarket chains, demanded the food industry to supply non-biotech foods - even for products that do not have to be labeled, which in turn resulted in procurement of non-biotech raw ingredients by importers. In fact, in the past, many retailers use consumer concerns to their advantage by marketing store brand products as “safer” and “more natural” than those provided by their competitors. [Sato 2008, 18]

However, this has also lead to questionable practices that aim to generate consumer desire.

In 2004, Japan Fair Trade Commission (JFTC) conducted a survey for the labeling of eggs. A growing number of egg suppliers have started using labeling that make aesthetic or safety claims. After the survey, JFTC found that labeling such as, “No GMO corn or soymeal is used” and “clean feed - without postharvest pesticides in main feed ingredients” are misleading consumers about adherence to higher standards and/or actually quality. [Sato 2008, 12]

As these examples show, industry practice has been reconfigured vis-à-vis recombinant food to emphasize the purity, safety, and naturalness of food products, which entails a disavowal of genetic recombination. Since the institution of mandatory labeling of genetically recombinant products in 2001, this has resulted in consumers being left with only a trace of the presence of GMOs via phrases akin to that found on the ingredient list of a bag of Calbee potato chips I purchased at a local supermarket – “Potato (Not genetically modified)” (Jagaimo [Idenshikumikae denai]).

The repetition of seeing food in the supermarket labeled “Not genetically modified” proffers both an absence and a presence of genetically recombinant material. In a nation haunted with the possibility of GMOs given the heavy dependence on foreign imported crops like soy (recognized by many people I interviewed as one of the most widely grown GM crops in the world and in particular, the US), there is an impression of a vacuum where these goods, and by extension the space where they are being sold (e.g. a supermarket), have been sanitized. However, Derrida (1994) argues that the nature of the specter offers only an incomplete assurance as its partial and deferred presence produces a threat that cannot be temporally fixed.

At bottom, the spectre is the future, it is always to come, it presents itself only as that which could come or come back . . . Before knowing whether one can differentiate between the spectre of the past and the spectre of the future, of the past present and the future present, one must perhaps ask oneself whether the spectrality effect does not consist in undoing this opposition, or even this dialectic, between actual, effective presence and its other. [36]

The absent presence, or present absence, of the specter (in this case, GMOs) “never simply exists as such, but produces its effects only after the fact, in a repetition that becomes its own spectral origin” (Ivy 1995, 22). While the disavowal on the food label enables the construction of a pure, non-GMO space and time within the supermarket, it simultaneously renders other spaces and times suspect. For example, Ono-kun, a college student in his early twenties, believes that he must have eaten GM food before because “not all restaurants offer information about whether food is GM or not.” Tanaka-san, a hairdresser in her sixties, mentions that she does not like to eat at McDonalds because its products are not labeled with information about GMOs. As
Tanaka-san assumes that fast food venues would use cheap ingredients, she thinks the company must use GMOs, which are in her mind cheap in multiple ways (e.g. price, quality).

Time and space not explicitly marked with a disavowal are thus experienced with a haunting sensation, whereby the absent presence of recombinant food always threatens to (possibly) become presented and incorporated physically into Japanese bodies. For my informants, food scandals like those previously mentioned were foregrounded not only as contextual past events, but with the potential to be experienced with a renewed immediacy, a past that could repeat (in a recombinant fashion) in the present and into the future with embodied consequences. Goto-san, a Japanese-language lecturer in her fifties, worries about not only eating GM food in the present, but also about the long-term effects of such consumption on her body and the bodies of children who may unknowingly consume it over an extended period of time. According to Ogawa-kun, a disc jockey in his thirties, its cumulative effects might produce something akin to the pollen allergy (kafunsho) he believes he developed due to continuous exposure to pollen from cedar trees planted near Tokyo.

The potential incorporation of GM food also extends beyond the physical body to bodily practices, whereby GMOs threaten to become habituated and embodied. While no prefecture currently prohibits the planting of GM seeds, laws and guidelines regulating its planting in combination with local community pressure have effectively foreclosed the possibility. For example, in 2004 Miyai Yoshimasa planned on cultivating twelve tons of the government-approved Roundup Ready (i.e. herbicide resistant) variety of GM soybeans on his 4.6-hectare plot of farmland in Naganuma, Hokkaido. This would have been the first crop of GM soybeans grown on a full-scale in Japan. By October however, Miyai had given up his plans due to criticisms by local farmers and concerned consumers; as well as the threatened loss of state grants for the harvest (a loss of approximately ten million yen for Miyai), which would not have been accepted by the two nationwide agricultural cooperative associations (they do not deal in GM soybeans) (Tsuchiya 2004).

A common argument was that planting such seeds and selling such food would not only associate Miyai’s land with the negative affect of genetic modification, but also the whole region of Naganuma (a major soybean cultivation center in Japan) and its food brand through pollen drift. This sentiment is captured in the words of Miyata Isami, president of the Hokkaido Prefecture Union of Agricultural Cooperatives (JA Hokkaido Chuokai). “It would be a big problem if [the GM soybeans’] pollen crossbreeds with neighborhood soybeans, or if that kind of rumor spreads and damages sales of Hokkaido farm produce” (quoted in Tsuchiya 2004). Pollen grains carried by wind and insects from GM crops may fertilize and contaminate another non-GM field, eventually spreading and tarnishing a regional claim to domestic authenticity that assumes a non-GM product. This fear makes every pollen grain count, which can be seen in the contested calculus described by Tomiko Yamaguchi and Fumiaki Suda (2009) of a minimum isolation distance between GM and non-GM fields in Hokkaido.

According to the results of the 2006 GM rice field trials presented by one public research station, 301 out of 50,000 grains were gene transferred from GM crops at a distance of 26 m[eters] (the isolation distance determined by the central government’s regulations),

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while twelve grains were found gene-transferred at a distance of 300 m\text{[eters]} \textit{\textup{(the isolation distance in Hokkaido Prefecture)}}. The question became how to interpret the twelve grains that were gene transferred (Hokkaido Prefecture, 2007). Some interpreted these results as showing that the gene transfer is reasonably low, while others interpreted the gene-transfer as evidence of harm to the environment. [17]

While this isolation distance (as well as those for GM corn and sugar beets grown in Hokkaido) is already many times larger than those set by MAFF (Sato 2008, 14), twelve grains of pollen prove for some effectively twelve grains too many. As Miyata recognized, pit against produce that can disavow the use of genetic recombination, each grain would haunt Hokkaido farm produce in supermarkets with rumors of presence that would translate into avoidance and abjection within a network where postindustrial nature and gastronomic desire emerge in part through the assumption of pure, non-GM domestic produce and an absenting of foreign GM food.

Mary Douglas (2002 [1966]) argues that food taxonomies, such as that between GMO and non-GMO deployed by food labels, serve to maintain the social order and create a distinction between purity and pollution. The transgression of this boundary in turn signals danger and desire. If recombinant genes are absent presences that haunt food in Japan and must be constantly disavowed, then the divide between GMO and non-GMO is also rendered constantly suspect and vulnerable. The constant threat to this divide creates a continuous transgression of multiple boundaries (e.g. bodily, social, moral, genetic) by the sheer possibility of the threat’s materialization (whether now or in the future).

The parameters of the simultaneous fascination and repulsion produced through this continuous transgression can be seen within popular culture. While not explicitly mentioning genetic modification, a recent successful ad campaign created by the Japanese advertising company, Dentsu, draws upon the affect of the phenomenon through bean-dog hybrids called \textit{mameshiba}. Creatures with the body of a bean (\textit{mame}) and face of a dog (\textit{shiba inu}), mameshiba come in over twenty shapes and sizes (or rather, beans and dogs), such as \textit{Guriippishiha} (Green pea shiba), \textit{Kuromameshiba} (Black bean shiba), \textit{Piinasshiba} (Peanut shiba), and \textit{Edamameshiba} (Green soybean shiba). In the original commercials, from which over 60 products in various media forms have emerged, the scene typically begins in an everyday scenario where food is consumed, which is suddenly interrupted by the emergence of a mameshiba in the food.

For example, in the commercial featuring Edamameshiba, a businessman enters a pub where he has a beer and a side dish of green soybeans. As he picks up one of the pods and squeezes out a bean, a mameshiba emerges as if from a womb with a flourish. As the camera focuses on the round black eyes, round green face, and oval-shaped green ears, the viewer is introduced to the cute and disarmingly vulnerable visage of Edamameshiba (see Figure 3). At least until it queries in a childish tone with, “Hey, know what?” \textit{(Nee, shitteru?)}. Suddenly the view switches to the trembling face of the businessman, an enlarged drop of sweat on his forehead, and the cute, but suddenly unsettling face of the

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Figure 3. The recently emerged Edamameshiba stares back at the businessman from within its pod. Credit: © Dentsu Inc.
creature reflected in his glasses. He hesitantly inquires as to what the little bean-dog has to say, which is, “The inside of a kangaroo’s pouch is supposedly very stinky.” As the businessman places the whole pod (including Edamameshiba) back on the table, a wave of disgust rushes over him as symbolized by the descent of a shadow over the general scene. The scene ends as he rises to leave with a “Thank you for the meal” (*Gochisousama*), signaling the end of the meal, as well as his appetite. The commercial itself ends with Edamameshiba bouncing and giggling within the Chinese character for bean above an Internet address to learn more about these creatures.

Beyond the mere hybridity of the mameshiba, the parallel with GM food extends to the “affective labor” of the creature’s hail (Allison 2009). In both cases, the hail (i.e. “Hey, know what?” and “Not genetically modified”) interpellates in an Althussarian fashion the consumer into a particular gastronomic relationship with food. This relationship is characterized by the emergence of the threat of pollution, or “matter out of place,” whether of hybrid body parts or genes (Douglas 2002 [1966], 44). However, there are important differences that set mameshiba apart from GM food. While both evoke a troubling sense of disease and dis-ease, mameshiba embodies this threat as a cute, yet monstrous spectacle. The very embodied presence of the mameshiba is integral to its threat, which is incorporated into not only the local food setting (e.g. a pub) but also into language (e.g. Edamameshiba within the Chinese character for bean), and thus the Lacanian Symbolic Order of Japan itself. Mameshiba asserts itself as part of the world and when it asks “Hey, know what?” it is not only a question to the consumer of random trivia, but also an assertion of its physical presence. Recombinant food on the other hand, presented as only a possibility that is immediately disavowed through the ubiquitous “Not genetically modified” label, defers its entrance into the world ad infinitum. Its threat is disembodied and diffuse. Interpellated consumers can never know for sure where GM food exists, and thus how to navigate toward or away from them. Navigation of the urban city becomes a problem of maneuvering around targets that cannot be located within spaces that cannot be taken for granted as pure.

*The Erotics of Gastronomic Desire as Bodily Penetration*

A Santoku chain supermarket that lies along the main street leading to Takadanobaba station near my dormitory in Nishi Waseda constructs its gastronomic space with knowledge of
this navigational problem. As the consumer passes through from the streets into the air-conditioned space, there is a deluge of fluorescent light, staccato of pressed keys and beeps from cash registers, and glimmers of plastic packaging amongst shifting bodies rolling carts or holding plastic baskets. Somewhere between walking from my dormitory into the supermarket, the urban space becomes suffused with the promise of food I might not just safely eat, but savor and desire. This promise, I would argue, is generated by the organization and presentation of food within the supermarket space, which constructs a division between the supermarket and the rest of Japan. Shopping for groceries becomes figured as a departure from the gastronomic threats alluded to by the Communist Party campaign poster outside to gastronomic purity, safety, and desire within. If the outside city is filled with ambiguity as to what is good to eat, the supermarket and the food products within it attempt to convince the consumer that such is not the case in here.

The organization of this supermarket in some ways resembles a lab maze (sans rat) as shelves and refrigerators order space, at least initially, into interconnected aisles of related food products. From the left-side entrance, I will enter a route filled with prepared food like baked bread, fried chicken, lunch sets (obento), and sandwiches, which then splits into aisles of various processed and preserved food items (e.g. chips, candy, soy sauce, tea) and drinks. At night, there are frequently businessmen who meander through this entrance and amongst the prepared food, which they can heat for dinner in a microwave conveniently located beyond the cash registers on one of the tables used to bag groceries near the exit. From the right-side entrance (see Figure 5), I am initially ensconced in aisles of fruits and vegetables, lead past refrigerators with soy products like bean curd (toufu) and preserved vegetables, and further along the way, beef and various types of seafood. Past the seafood aisle, I can finally access the rest of the supermarket, which includes the numerous aisles of processed and preserved food that lie in its center. This entrance, usually filled with housewives (sometimes still in their aprons), is the one I take when I go grocery shopping.

As I make my way through the right-side entrance on a sunny afternoon in April 2009, I immediately notice a couple of fruit stands that lie to the left of the doorway. Vibrant red strawberries arranged just so in glistening plastic packaging and stacked in neat rows. Plump tomatoes that one sees as much as the carefully applied food labels which declare, “Delicious, safe [anzen], and healthy vegetables.” This claim is anchored by an overhead signboard that notes that the producer, Kennou Yasai, is located in Shizuoka Prefecture. The arrangements of these signs and the way they advertise their product demonstrates, as Theodore Bestor (2004, 147) observes, that “reassurances of safety and predictability are encoded in preferences for domestic products and in the reliance on ideal form as an index of both purity and culinary authenticity.” These strawberries and tomatoes offer to fulfill the Communist Party campaign slogan – “Safe food from the land of Japan.”
As the signboard and plastic packaging demonstrate though, this offer is reinforced not only through discourse, but also material practices and technology. In one of the wooden stands across from the tomatoes and strawberries are packages of okra with a small black and white pixilated square on their food labels (see Figure 6).

Designed by the Japanese company, Denso-Wave, in 1994 these squares are actually two-dimensional bar codes, or QR codes, now broadly used not only in vehicle manufacturing (its initial application), but also commercial tracking and advertisements. The QR code stores information, such as a website URL, which can be scanned with a cell phone camera to redirect the phone’s browser to a programmed URL. The QR code on one of the packages of okra for example, redirects my cell phone’s browser to the website of the producer, Mametarou, where I can learn about where the okra came from (Northern Kanto, centered around Saitama and Gunma prefectures), the agricultural production methods used (for more than three years, agrochemicals, herbicides, and chemical fertilizer have not been used in accordance with Japanese organic standards), biographical information on the producers (the primary members are the Suga father-son duo who have used “natural farming methods” [shizen nouhou] for over 60 years), and when other seasonal produce by Mametarou is available.

Beyond just providing more detailed information to the curious consumer relevant to the okra, the QR code “hardlinks” consumer, urban Tokyo, okra, farmers, and a rural farm in Northern Kanto together in a network. This technological practice gestures toward the postindustrial production of nature and food, which must deal with what Kalyanakrishnan Sivaramakrishnan and Ismael Vaccaro (2006, 303) describe as the postindustrial problem of nature. . . the problem of wilding and taming nature at the same time, and doing so for a growing human population, spread across different classes of society, for whom there are no stable referents for nature in their remembered past or in spatial proximity to their living environment.

The QR code generates these social relations between producer and consumer in virtual space, and thus act as what Anne Allison (2009, 100) calls “social prosthetics” in “an era of immaterial labor . . . an age when the family, the community, the (stable) workplace are dissolving both in fact and in their utility for capitalism.” As both nature and society dissolve as concrete entities into the concrete underfoot in the urban space, the affective power of the network the QR code coordinates derives in part from the stability it offers. For example, in linking a consumer in urban Tokyo with the Northern Kanto countryside, the QR code grounds the consumer within popular discourses of the authentic Japanese-ness of the rural countryside, where produce like tomatoes and okra are what they should be and should be what they are presented as – pure edible pleasure which is not just safe to eat, but good to eat. As gastronomic threats such as GM
food problematize epistemological categories of organic versus synthetic, safe versus risky, fake versus real, and natural versus unnatural, the food objects that can not only offer the stabilization of these taxonomies, but a clarity of what is good to eat, become desirable by contrast. This is evident in how a message from Mametarou on “the safety of domestic crops” (anzen na kokusan genryou) asserts its organic (and therefore non-recombinant) food is desirable:

Under the Suga family leadership that has achieved results for over 60 years with its natural farming methods, and with a dedication to seeds harvested personally, we will continue to produce delicious agricultural products that are not only ‘safe’ [anzen], but moreover ‘high-value food’ [eiyouka no takai].

With the Suga family at the helm, the implication is that the consumer should eat this food because they can rest assured that the food is clearly safe, natural, and of high-value. While the term “high-value” could be taken as ambiguous, it could also be seen as polysemous because it promises everything the consumer could want from food and more. Desirable food in this case offers not just a source of physical sustenance (which any food item, including a recombinant one, could potentially fulfill), but also an opportunity to demonstrate a commitment to virtuous food from the domestic land. That is, to shop for high-value food is to desire the virtuous, and thus the domestic and non-recombinant. This is clear in a response by Ogawa-kun when I ask why he would not want to serve imported GM food to his own children.

I strongly believe that parents have to be aware of the issues that might affect their children’s health or their future. That is the responsibility that comes with parenting . . . I think every parent should be aware of the dangers and possibilities that might affect . . . or haunt their kids.

In the same interview, his wife adds that she would not want their children to eat GM food and thus become the first experimental subjects. For the Ogawas, GM food contains possible dangers and unknowns that render it less a food than an experimental scientific object. This renders GM food antithetical to responsible parenting that would seek to protect children from harm. A good parent would pass by a GMO for non-recombinant, high-value domestic food.

Walking past the refrigerators that line the produce and meat aisle and into one of the center aisles near the cash registers with my cell phone in hand, I spot another QR code on a package of potato chips produced by the Tokyo-based Calbee Foods Company. A snap with my phone camera redirects the browser and my attention to the homepage of the company. Even more elaborate than the Mametarou website, the available information includes descriptions of the types of potatoes used in products, introductions to and messages from the Calbee factories, introductions to and messages from individual farmers that grow potatoes for Calbee in various prefectures, and descriptions of the land where the potatoes are grown (i.e. place name, population, land area, tourist information, and social history). For example, according to the website, 291,058 people live on 677.79 square kilometers in Hakodate City in Hokkaido Prefecture, where Irish cobbler potatoes [danshaku imo] were first cultivated in Japan in the early twentieth century by the baron, Kawada Ryoukichi. Hakodate City is part of the Oshima Subprefecture, where farmers like Nishitani Yukihiro labor to produce the potatoes for potato chips. Nishitani says the following in his personal message (Calbee Foods Co., Ltd.):
“The Producer’s Thoughts and Cares”

Since my father grew potatoes, I also began growing potatoes as his successor. Besides potatoes, I grow *azuki* beans and cabbage. In order to cultivate a lot of delicious potatoes and prevent disease, I am careful to use potato varieties resistant to disease as well as not repeatedly plant a field with the same crop each year. Furthermore, I work to raise the fertility of the land by spreading fertilizer and feed-use millet on the soil.

“A Message to the Customer”

These potatoes are made with all my effort [*isshoukenmei*] and love [*aijou*]. Please eat a lot and love the potato chips made from our potatoes.

“The Pride of the Producing Area”

In the summer, there is the Hakodate Port Festival. The fireworks are really pretty. You can even see these fireworks from the fields! The scenery is also nice. This is a really fine plot of land!

These are not just any potato chips, but chips created from potatoes that were carefully selected and grown with sweat and love by farmers like Nishitani. One can imagine that these chips are desirable because they have a story reflected in the smile of Nishitani as he stands on the same field where he can see fireworks exploding in the summer sky. That is, these chips are derived from potatoes imbued with the effort and love of real people in real places living real lives. Nishitani cultivates both a potato and a narrative the consumer can consume and love from the very “land of Japan” that eludes Japanese consumers in Tokyo.

These potatoes are produced through the foregrounding not of disembodied laboring hands as the metonym of capitalist production, but embodied hands with faces and names that can offer the consumer the intimacy that comes from the labor of the producer’s *kokoro* [heart, soul]. Similar to an *enka* performance, the hardlinked produce does the "work of intimacy-making . . . [which] involves creating the facade of a social relationship and making it believable" (Yano 2002, 78). The produce proffers an intimate actor-network of human and non-human actors that links the consumer, family farmers (e.g. the Sugas, Nishitani and his father), the countryside, an agricultural field, and the food itself. As a result, food is presented not as an isolated object, but rather as a link to the labor of particular people in a particular place living particular lives, as Nishitani’s profile demonstrates. These are people and places one can form a relationship with, and thus food one can and should trust. This network naturalizes a particular relationship between humans and their food premised upon the knowability of what will penetrate into the body's boundaries.

This could be called an erotics of gastronomic desire as what counts as good to eat results from the entanglement of bodies, human and non-human, that engender a social linkage through mutual penetration - the penetration of the voyeuristic consumer gaze into the lives and practices of farmers as well as the penetration of the farmers' produce into the consumer's body. In light of this gastronomic arrangement, imported GMOs are like foreign sexually transmitted diseases (STDs) that threaten to penetrate with undetectable stealth, and thus without the consumer’s knowledge, into the domestic entanglement of bodies. For example a large poster in Shibuya for the “STOP STDs” campaign features a picture of a pretty, skimpily clad female model that no
one would assume has a STD since she looks healthy and attractive. The implicit message within the ad is that anyone (or in the case of GMOs, any food) can potentially be a threat. Bodily penetration, whether by food or another body, is an act of both potential pleasure and danger to the body and must therefore be scrutinized and mediated. In this sense, what condoms are for the protection from STDs, food labels and QR codes are for eating safe (non-GM) food produced in Japan.

Genetically recombinant food is marginalized insofar as it is treated as a food that cannot be domesticated into Japan and Japanese bodies, at least without consequences. Searching through the Calbee website leads one to the “Food Science Diary” of the Calbee Research and Design Development Engineering Section, where factory workers write about everyday tasks involved in their jobs. Shokora, who flashes a friendly smile via her digital avatar, introduces herself in an entry dated August 19, 2008.

Hello, my name is Shokora. Come to think of it, I still have not introduced my job to everyone. At this time, I want to simply introduce with a bit of seriousness what I regularly do as part of my job. I wonder if the frozen gyoza incident is fresh in your memory? 8 With what standards does everyone choose food? Safety? Taste? Cost? At Calbee, we put a lot of effort into our safety checks so that people can feel at ease [anshin] as they eat snacks. My job is to check that Calbee products are not using genetically modified crops or mixing in raw materials that cause allergic reactions . . . As I am endeavoring everyday so everyone can enjoy their snack time from the bottom of their hearts, please eat our potato chips and other products [poteto chippusu toutou, yoroshiku onegai shimasu ne]! [Calbee Foods Co., Ltd. 2008]

Shokora works hard so that everyone can enjoy and feel at ease with Calbee potato chips, which she points out means that she must make sure that Calbee products do not contain GM crops (i.e. GM potato) or equally horrible raw materials that cause allergies. Calbee has standards just like everyone else – after all, it does not want another food crisis akin to the frozen dumpling incident to descend upon its consumers. With Shokora’s help, no problematic GMOs will make their way into a Japanese consumer’s body from eating Calbee products.

The Economics of Access and Roadblocks to Desirable Penetration

While Japanese consumers may desire to avoid GM food, their actual ability to navigate its gastronomic threat within the urban city is contingent upon their material circumstances. As the glass doors slide shut behind me, the last traces of cool air from the air-conditioning blown away by a passing car, I go over my receipt for the produce I purchased. As delicious (safe, and healthy!) as the Kennou tomato I purchased looked surrounded by signboards, food labels, and QR codes that espoused its virtues of gastronomic desirability, I cannot help but pause at the price of a single tomato of said kind – 306 yen.9 The glass doors to the supermarket and the postindustrial narrative of gastronomic desire it contained within suddenly looked more like a glass ceiling for the limited income of a college student like me.

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8 Shokora is referring to the aforementioned food scandal in 2008 involving imported frozen dumplings tainted with unapproved pesticide residue.

9 Approximately $3.12 in US dollars when I bought the tomato in April 2009.
Sanitized spaces exclude more than one kind of recombinant body – food commodities as well as people who cannot afford (at least occasionally) to not ingest and thus embody GM food. This is explicitly clear when I later visit a restaurant run by a consumer cooperative in Chiba. Connected to the cooperative store, the restaurant is small, but cozy with an open kitchen that lies adjacent to a few sparsely decorated wooden tables. As I trail in through the doors alongside activists, cooperative members, and a television camera crew, ready for a meal after walking through a nearby port in search of stray GM canola, I immediately notice a poster on a pillar next to the register that declares the restaurant in bold English, “NON-GMO.” Significantly, a short translation in Japanese of the English term (“NON-GMO means not GMO (Genetically Modified Organisms), or not idenshikumikae”) is written under the declaration in small font. The possibility of a recombinant presence in the immediate space is disavowed in such a way that it is rendered unintelligible to most Japanese, who would not only be unable to comprehend the English acronym by itself, but also the small Japanese translation that does not offer an explanation of what the term “idenshikumikae” means. The poster further notes that the restaurant uses “safe food” from the cooperative and as much as possible will not use GM ingredients, sanitizing the immediate space of an unexplained, but probably worth excluding (if only because the restaurant has deemed it so), recombinant presence.

As we talk over our non-GM lunches and discuss the potential health and ecological problems of GM food though, I cannot help but notice that our voices are the only ones to be heard in the restaurant. Our little group sits alone at our table before, during, and after our meal despite the time being a prime lunch hour. While there may be numerous reasons why the restaurant is empty on this particular day, the silence that permeates the room in between our words nonetheless feels pregnant with the multiple exclusions of GM food, people not part of the consumer cooperative, and people unable to afford the prices on the menu. I am welcomed as a guest of the cooperative, but as one of the canola event organizers pays for the group’s meal at the register, I know that on any other day I would have to pass up this restaurant for another within my income and status as a non-member.

To see and avoid the absented presence of GM food in food labels, QR codes, and restaurant posters is to therefore access a world of mediated bodily penetration, a network that not everyone can afford. Despite his concern over the possible effects on his body and the environment, Ono-kun asserts that “it might [have an] effect, but I believe I will not die of GMOs in a few years, so it is not the main point to consider, as opposed to price (and sometimes the place [where the food is made]).” While the concern over genetically recombinant food spans class (unlike in the US), which reflects in part its ubiquity in the public space, not everyone can afford to pay too much attention. Laughing over the ambivalence of his attitudes toward GMOs, Ono-kun offers, “maybe it is because I am a poor college student?!”. Recombinant bodies matter in a different manner when one cannot afford to shop for the gastronomically desirable, diffusing the promise of pleasure, safety, and naturalness if only a little into the asphalt and cement of the urban space.

10 The search I participated in alongside these concerned actors for stray GM canola dropped by transport trucks en route to a holding silo at a port in Chiba and the genetic testing of retrieved samples are the subjects of Chapter 4.
Conclusion

Walking around a city haunted by the absent presence of recombinant food is less about navigating around locatable material objects than through discursively purified lacunae. These gaps structure the navigation for food along a path heightened by both desire and danger because the spaces one travels through are always threatened by the possibility of future contamination. As Miyai found out when his plan to grow GM soybeans in Hokkaido came under fire, purity can unravel and stigma can be engendered even from a single grain of pollen, or a single rumor, floating in the wind. This is as much about the pollen grain taking root in agricultural fields as into the narrative of a non-recombinant intimate entanglement of penetrating bodies known as the “land of Japan.”

The problem with this narrative though is that the materiality of GM food, literally tons of imported GM crops, seems to melt into the air and get filtered out into the streets. The lacunae become more real than the food itself. Consumers like Suzuki-san can thus believe they have never eaten GM food because if the discourses they are being fed by food labels, QR codes, and posters are taken as true, then they are indeed not. The disjuncture between the discourses of absent presence and the ubiquitous material presence of GM food reveals how GM food cannot be taken for granted as a fixed concept. In the next chapter, I analyze the current food labeling law and government food safety evaluations to explore how definitional struggles over what counts as recombinant (and thus deserving of a food label or extra scientific analysis) produce material and semiotic trouble and naturalize GM food as specters.
Works Cited

Allison, Anne  

Althusser, Louis  

Baiteku Jouhou Fukyuukai (Council for Biotechnology Information Japan)  

Bestor, Theodore  

Calbee Foods Co., Ltd. Seisansha no PROFILE (Producer profile)  


Certeau, Michel de  

Derrida, Jacques  

Douglas, Mary  

Itagi, Toshitaka, ed.  

Ivy, Marilyn  

James, Clive  

*Japan Times*  
2008c  Melamine Found in Four Marudai Products. September 27.
<table>
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<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>Publisher/Source</th>
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What Made Us Human: Analysis of Richard Wrangham’s Cooking Hypothesis

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After the genus *Homo* split from Apes six to eight million years ago, there were several transformations within the hominid line, eventually creating modern humans. The evolution within the genus is a widely debated topic in relation to what caused these changes. Hominids over time showed an increase in brain size or cranial capacity, decrease in features that enabled climbing and overall smaller facial features. One popular school of thought to explain these changes is Man-the-Hunter, or the idea that humans evolved due to the physical necessities required to hunt and the biological ramifications of meat eating. However, that concept fails to address the significance of gathered foods, since hunting would not always yield a sufficient amount of calories.

Richard Wrangham, in his book “Catching Fire: How Cooking Made Us Human,” proposes a new hypothesis. His cooking hypothesis stems from the idea that the control of fire and the cooking of food lead to the creation of the modern human.

The core of Wrangham’s argument is based on the differences between eating raw food versus cooked food. Due to changes in chemical properties, cooked food consistently provides more energy because it is easier to digest. The extra energy saved can be utilized to increase development in other parts of the body. In the case of hominids, extra energy was used to fuel the brain, thus increasing brain size and the level of intelligence over time. The increased level of intelligence coincides with behavioral adaptations such as social structure and the beginnings of culture, essentially distinguishing humans from other species. By allowing a higher consumption of calories, cooked food also aided in growth and development of hominids. In turn, those that consistently consumed cooked food would have had a greater chance of survival and be favored in natural selection. Therefore, those better adapted would pass on their genes, creating an anatomy fit to the consumption of cooked food. Wrangham concludes that the transformations that lead to modern humans occurred due to the shift to a diet of cooked food and a reliance on the controlled use of fire.

Wrangham uses data from studies of people eating only raw food in order to compare effects of a raw diet versus a cooked diet on the human body (Koebnick et al., 1999). Common outcomes such as a decrease in BMI (Body Mass Index) and chronic energy deficiency are related to raw foodists. Although some may attribute this to a lack of meat, vegetarians prove it must be something else since they show no differences in body weight with meat eaters. The study also shows that a rate of fifty percent infertility was present among raw foodists, which would have detrimental effects among our hunter-gatherer ancestors since group survival is dependent on successful reproduction. Although some people have managed to survive in wild habitats on raw food, there are no reports of anyone’s long-term survival. This is because sufficient energy cannot be obtained from raw food, at least for an extended period of time. Overall, modern comparisons of humans on raw versus cooked food diets demonstrate why our ancestors who ate cooked food would have a greater chance of survival, thus making cooking a key factor in evolution.
Since ancestors on a diet of cooked food experienced various health benefits, natural selection would have favored those with anatomy more suitable to process cooked foods. Compared to other primates, hominids have considerably smaller features including: guts, jaws, teeth, stomachs, colons and intestines, which add up to an anatomy adjusted to the consumption of less food due to the high digestibility of cooked food. Based on studies where one group of animals is fed hard food and the other group soft food, Lieberman et al. (2004) focus on the effects food has on facial growth and determine that “masticating softer, more processed (cooked) foods while the animals are growing can lead to reduced facial growth in mammals with retracted molar rows (674).” Their study shows that despite increases in body size throughout the hominid line, human faces have become smaller due to the reduced amount of strain from chewing softer or cooked food.

Wrangham uses data from their experiment to support his cooking hypothesis and proves humans are anatomically adapted to eating cooked food. Factors of cooked food such as softness, high caloric density, low fiber content and high digestibility allow for these anatomical changes to occur because they increase the efficiency of digestion. That allows for a reduction in features that aid in chewing and digestion, providing extra energy for other metabolic activities. If humans evolved due to the increased consumption of meat, the mouth, teeth and jaws would have adapted differently due to the toughness and difficulty of processing raw meat. One can attribute our relatively small large intestine, less than sixty percent of expected mass based on body weight, to our inability to retain fiber. This inability means humans cannot utilize plant fiber as effectively as the great apes, meaning they must have obtained more calories from less food. In order to obtain necessary calories, a reliance on cooked food was a necessity. Simply, humans taste preferences alone support the idea that humans are adapted to cooked food. For most humans, primate foods taste bad due to the high amount of toxins. Fortunately, cooking destroys many of the toxins found in raw food. Also, we are not biologically resistant to toxins in raw meat, suggesting the evolutionary influence of cooked meat. Overall, our anatomy proves we have adapted to eating cooked food.

By studying the chemical processes involved in cooking, one can see that cooked food consistently provides more energy. This increased level of energy gained would have played a significant role in human evolution. Those that consumed cooked food would have had a greater chance of survival and thus a greater chance of passing on their genes. One way energy is gained is through increased digestibility, which is achieved by gelatinization and denaturation. Essentially, gelatinization is when starch granules are warmed up by water and begin to swell, the bonds weaken which loosens the structure and then gelatinizes. Denaturation is promoted by heat, acidity, sodium chloride and drying, which causes bonds to weaken and then open up. Also significant are the physical effects cooking has on food. Cooking is intended to increase the tenderness of food, which in turn allows for more rapid and complete digestion. When food is digested faster, less metabolic effort is required, resulting in energy gain. In conclusion, ancestors that regularly consumed cooked food would have experienced significant evolutionary benefits.

After establishing the benefits from a diet of cooked food, Wrangham turns his attention to when cooking first began. There are two ways to attempt to solve this: archaeological and biological evidence. Concrete archaeological evidence for the controlled use of fire is difficult to
discern, forcing one to look at other factors. Therefore, Wrangham relies on biological evidence to determine when it first emerges.

Major changes in diet would lead to rapid and obvious anatomical changes. Since cooked food provides more energy and survival benefits, its origins should coincide with times of large evolutionary changes within the hominid line. McHenry’s and Coffing’s study (2000) looks at the taxonomy of Hominids and the changes that occurred over time. Wrangham uses the data from this study in order to prove that cooking emerged between 1.9-1.8 million years ago during the transformation from *Homo habilis* to *Homo erectus*. Figures show that the largest transformation within the hominid line occurred in this time period, particularly in brain size; leading Wrangham to believe this is when cooking must have first emerged. Remains of *H. habilis* show similarities with australopithecines (ancestors from around 2.5 million years ago), such as small body size, relatively small hindlimbs and large forelimbs and more flexible feet, but their reduction in the masticatory system and their increased brain size classify them as members of the genus *Homo*. Transformations in forelimbs, shoulders and trunks, tooth size, femoral length, legs and the brain demonstrate that large changes occurred between *H. habilis* and *H. erectus*. Therefore, changes in the morphology from *H. habilis* to *H. erectus* where a large reduction in tooth size and a 42% increase in cranial capacity support the idea that cooking was the key factor in the evolution of *H. erectus*.

Anatomy in relation to climbing ability also supports that the controlled use of fire and cooked food explains the evolution from habiline to *H. erectus*. The first distinguishing feature is the size of the arm relative to the forearm. Fossil evidence shows that forelimbs dramatically decreased in size after *H. habilis*, suggesting a transformation in locomotion from climbing to bipedalism (McHenry and Coffing, 2000). *Australopithecus* and *H. habilis* retained climbing features in the shoulder and trunk, which are not present in later hominids. If hominids lost climbing ability after *H. habilis*, they would have no longer been able to climb a tree to find a safe spot to sleep, forcing the use of the ground. In order to see and scare away large predators of the time, the light provided from fire is essential. Hominids would not have been able to survive without the consistent use of fire to protect them. This marks an important behavioral adaptation, which is only possible with the consistent reliance on controlled fire.

One major aspect that distinguishes humans from other species is the high level of intelligence due to relatively large brains. Throughout evolution, cranial capacity has increased from 400 to 500 cc among australopithecines to 1,400 cc among modern humans (Aiello and Wheeler, 1995). The largest increase in size in the hominid line occurred in the transformation of *H. habilis* to *H. erectus*. Since brains are metabolically expensive organs, a common question has been how humans can afford or fuel such large brains. Aiello and Wheeler (1995) propose an “expensive-tissue hypothesis” based on the linkage between a high quality diet and the relative sizes of the brain and gut. Humans’ overall relative basal metabolic rate (BMR) shows no correlation with relative brain size, leading one to examine other factors. Aiello and Wheeler studied the relative mass of specific metabolically active organs in humans to determine if increased encephalization correlates with a reduction in one of those organs. Results show that the mass of the gastro-intestinal tract is only about 60% of the expected size for a similar sized primate. Overall, primates with smaller guts had larger brains and they attribute this to the fact that “a high-quality diet relaxes the metabolic constraints on encephalization by permitting a
relatively smaller gut, thereby reducing the considerable metabolic cost (Aiello and Wheeler, 208).” Therefore, the extra energy saved from a reduction in gut size is utilized to fuel the brain.

Although Aiello and Wheeler associate a high quality diet with the increased consumption of meat, Wrangham argues that the improved diet quality is from cooked food. There are two main factors that determine gut size: the amount and the digestibility of food one consumes. As previously stated, due to the chemical and physical properties of cooked food it is easier to digest than raw food, thus explaining why humans were able to have a reduction in gut size once they shifted to a diet of cooked foods. Although agreeing about the basic biological principles involved with the expensive-tissue hypothesis, Wrangham’s argument that major anatomical changes would occur with the introduction of cooked food makes more sense when considering the effects cooked food has on the body. The subsequent increases in brain size over time can be explained by the introduction of meat and improvements in cooking methods.

Cranial capacity continued to increase after the biggest transformation occurred from H. habilis to H. erectus. These changes can be attributed to improvements in cooking methods over time. The energetic quality of food would increase as methods became more sophisticated. Techniques such as earth ovens and containers would have allowed for increased consumption of cooked food. More efficient hunting techniques would have further increased caloric intake, converting into more energy for the brain. Overall, the extra energy from cooked food allowed for increased digestibility, which allowed humans to have smaller guts, transferring the left over energy to the brain and explaining why hominid’s cranial capacity continued to increase over time.

Along with the biological benefits humans achieved from cooked food such as larger brains, they also experienced changes in their use of time or the structure of their day. One important aspect is the amount of time one must spend chewing when eating raw food (Clutton-Brock and Harvey, 1977). Since amount of time spent chewing is related to body size among primates, estimations can be made as to how long humans would have to chew their food on a raw diet in order to consume sufficient calories. Conservative estimates determine that at least 42% of the day would be spent chewing, or just over five hours per twelve-hour period. This means that on a raw diet, the majority of time would be devoted to chewing, leaving little time for other activities such as hunting. The shift to cooked food allowed our ancestors to spend more time hunting and gathering, leading to the possibility of increased caloric intake due to extra time spent devoted to food collection. Essentially, this possibility created the division of labor.

A division of labor was created due to males being able to spend all day hunting without the fear of any success leading to starvation because they knew that at camp a cooked meal was awaiting them. If the food awaiting them were raw, hunting all day would not leave sufficient time to consume the necessary calories. Therefore, they divided tasks, where everyone was able to consume enough calories by some staying behind and cooking or gathering while others hunted. The combination of cooked food and higher intake of animal foods from more time spent hunting improved the quality of ancestors’ lives while at the same time creating a division of labor or economic social structure.

The concept of male-female bonding coincides with the division of labor. Marriage solves issues of who feeds whom and guarantees a food source for both husband and wife. Since
in most cases it is women’s role to cook, one can assume that women stayed at camp and cooked and gathered while men were out hunting. Women faced the fear of spending all day cooking only to have it stolen by someone stronger, whereas if men had an unsuccessful day of hunting they would have a day without food. Pair bonds solved both of these issues. Males would provide protection to females and ensure that no one stole from them and in turn females would provide a meal every night for their partner. When hunting was a success, the pair bond would share the food. This essentially created the human universal of a form of marriage, in this case as a purely economic benefit. Unlike other primates, humans were able to form a system of etiquette due to the increased level of intelligence and the role cooked food played.

The introduction of cooking transformed hominids into a very distinct and unique species from ape ancestors. One major difference is the longevity of human lives; we live a few decades longer than great apes. The introduction of controlled use of fire as a way to deter predators may have aided in this evolutionary adaptation. Cooked food aided in the growth and development of the young due to the higher energy value. Furthermore, issues of food shortages would not have affected humans in the same way as other primates since they were better adapted and able to store more energy in the body. The heat fire would have provided during cold nights allowed humans to have a reduction in body hair. This reduction would have helped with issues such as overheating in the desert environment and allowed for extended periods of running. Running is a significant contributor to survival, allowing humans access to more food sources and the chance to escape from predators. In order to cluster around the source of heat, a fire, social skills are required such as cooperation and communication. This led to the development of human’s emotional bonding and closeness. Overall, the distinguishing factors of modern humans from other primates coincide with the influence of cooked food and the controlled use of fire.

Wrangham successfully argues that the behavioral adaptation of cooking food and the consistent use of controlled fire led to the transformation of modern humans. The variety of sources he uses, from modern studies on raw-foodists to articles on the taxonomy of ancestors from millions of years ago, provides sufficient evidence to support his hypothesis. By examining these various aspects of the argument, he leaves the reader with little doubt of the importance of cooked food in the evolution of modern humans. Without a diet of cooked food, humans would not have reached the level of intelligence we are at today, which allows for the unique and diverse cultures of the world today.
Works Cited

Aiello, Leslie C., and Peter Wheeler

Clutton-Brock, T.H., and P. H. Harvey

Koebnick, C., C. Strassner, I. Hoffmann, and C. Leitzmann


McHenry, Henry M., and Katherine Coffing

Wrangham, Richard
Sexual Violence Against Women in Shoujo Manga

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It is the first day of high school and you are a young girl on the cusp of adulthood. This is an important time in your life, new experiences are abound and your body is changing. Perhaps this is the first time you’ve really considered finding love, getting into a relationship with a boy. It might be a difficult time in your life as you have to deal with new types of stress, but love, real romantic love, could be just around the corner. When you round that corner though, what you find is a tall, good-looking boy who proceeds to pin you to the wall and forcibly kiss you. Even if you cry and resist, your first kiss is gone. This isn’t how love is supposed to go, but the boy is cute, and he might be a bit possessive, a bit aggressive, but he really seems to love you. Sure, he might enjoy feeling you up, humiliating you in public, but this is love, you are in love. You might also be starring in a shoujo manga.

Before I get into a discussion of what constitutes a shoujo manga, and the issue of sexual violence within the genre, it is important to outline the critical issues at play within this paper. Indeed, shoujo manga is only one of the topics to be addressed, and although it is the original topic and basis for the research I conducted, it is only part of the story. This paper will not only examine the issue of sexual violence, but also the process that led to writing this paper. The process itself becomes important as this research was conducted under the banner of two separate disciplines, English Studies and Anthropology. The methodology I used during my research, how I have presented this research in various settings, and how I came to understand my struggle to deal with this material arose from the interplay between these two disciplines. Throw in a bit of the avant-garde discourse, and you have the foundation from which this paper is built.

In order to ensure proper understanding of the terminology that will be used within this paper, I must first address the issue of manga. Simply put, manga\textsuperscript{11} are Japanese comics. Although newspaper “funnies” do exist, manga often refers to the narrative style, similar to American narrative comics such as Superman. As a medium, manga constitutes a form of mass media. Though most use the term mass media to refer to television or newspaper, the relation to manga is not so far-fetched, and is integral in relation to the issues of sexual violence at the center of this paper. Approximately 20% of all printed material in Japan is manga, accounting for over 4 billion dollars every year (Pink). Not only is manga a widespread and popular medium in its own right, it also serves as the basis for other media. Most commonly, manga are adapted into television shows, either live action or anime (cartoons). Most manga are published in manga magazines, which run every week or every month, and are sold in convenience stores. As Daniel Pink remarks in his article on the manga industry, “In many parts of Tokyo, you can't walk more than two or three blocks without encountering comics.” This highlights the availability of manga within Japan.

\textsuperscript{11} The term manga is the Japanese word used to refer to any comic material, not just the narrative form I have used for this research.
In their article on multimodality in comic book literacy, Adam Swartz and Elaine Rubinstein-Ávila highlight five “spheres” of manga (44). I refer to these spheres as genres, and instead argue that there are six. The division of these six genres relates to sex and age, though within this paper only one particular genre is of important I will outline the others for the sake of discussion. The kodomo genre, which is the sixth genre ignored by Swartz and Rubinstein-Ávila, is also the first introduction to manga for most Japanese children. It is a non-gendered genre targeted at children below the age of ten. Perhaps the most famous kodomo manga is Doraemon, which although created long ago became a national image and is still a popular image in more recent manga. After kodomo, shounen and shoujo become the center of attention, targeted at young boys and girls respectively. Shounen is the most popular genre both within Japan and abroad. These stories “appeal to boys and men by stressing values such as friendship, perseverance, and winning” (44). Even within America, famous shounen manga such as Dragonball Z are well known from their anime counterparts. Shoujo, on the other hand, is less well known abroad, and even within Japan caters to a far small audience. As the target of this study, I will delve into the issues within the shoujo genre, both in terms of content and the issues of the target audience later in this paper. The final two genres that fit into this system are seinen and josei. Although similar to shounen and shoujo these two genres target an older audience, usually above the age of twenty. The final genre is not really a genre, though it is included in most discussions, including Swartz and Rubinstein-Ávila’s article. Ero manga is derived from the word erotic, and refers to the wide variety of pornographic manga printed in Japan. These six genres divide up the medium of manga, and through this division mark the various distinctions in target audiences.

As mentioned previously, one of the issues within this paper is how to deal with manga. This is an issue on multiple levels, stemming not only from my place within the anthropology department, but also as an academic. From the above discussion, it is obvious that manga is a popular form of media with a wide range of audiences. This places manga within the sphere of what is generally referred to as popular culture. The study of popular culture is perhaps most related to the field of cultural studies, and with this in mind one might automatically assume a set of methodologies for approaching the material. As John Storey notes in his introduction to Culture Theory and Popular Culture: A Reader, “The problem is this: cultural studies has never had one distinct method of approach to its object of study” (x). This was the beginning of the second issue within this paper: how do I study manga? Although I inevitably found a way to approach this material, this realization introduced a new conflict, the issue of popular culture as exotic.

In order to justify this project, I had to come to terms with the basic criticism of not only popular culture in general, but specifically manga within academia. Even though I might get some leeway within the field of English Studies, I was also attempting to deal with this project in terms of anthropology. As a professor of mine explained, paraphrased, “it’s cool because they’re comics.” As an academic, this was one thing I could not allow, my research could not be justified just because no one else knew what I was talking about and it looked “cool.” I realized I had placed myself in the center of a controversy, a conflict between the institution of the academy and the institution of the popular, and these were indeed two separate things. Although popular culture studies have grown, it is still a field that is perhaps considered unconventional. It was quite fitting that this issue should arise from a foundation based in the avant-garde, a discourse dealing not only with the issue of power, but also the issue of the minority. Institution
is also a major target for the avant-garde, for it is the institution that attempts to frame the avant-garde, the so-called “death of the avant-garde” as proclaimed by scholars within the field. One might imagine then that this was enough to justify a project that by its nature exists in a space between institutions, between the popular and the academic, between English Studies and anthropology.

With so many discourses surrounding this topic, at least one would be able to justify a project that I found myself increasingly having to justify. As it turns out, my answer was only found after I had finished my research, presented it once, and realized that the justification came from the results and the struggle. There was no way to explain the project until after I had already finished it; even the avant-garde is not too fond of the popular as I found out. So, why does it matter? Why does a project studying a form of popular culture in another society, targeted at a specific minority audience, and dealing with sexual violence matter to us academics here in the United States? The answer, as I have said, will come at the end, after the research has been explained, and the methodology analyzed.

**Anthropological Study**

The core of this project became the actual study I conducted. Although it was only part of the whole methodology that I inevitably used to address the issue of sexual violence in shoujo manga, the study became the focal point for many of my efforts, and many of my problems. Anthropology as a discipline, especially within the work of an ethnography, often relies on the use of data, survey, and analysis in order to come to a conclusion or to present an issue. Since this project was designed to address the use of sexual violence in shoujo manga, one of my first tasks was to actually show a pattern of sexual violence within the genre. Using a single case would hardly constitute the mass media issue I was suggesting as my hypothesis at the beginning of this project. Although, from my experience with the medium, I knew such a pattern existed, without actual data I wouldn’t be able to formulate an effective argument. Thus, one of the first stages of this project was to collect enough data to make my claim.

**Methodology**

In order to look at sexual violence, I had to first decide what exactly constituted an act of sexual violence within the context of shoujo manga. At the beginning of the project, I began by dividing the issue into one of violence and sexual violence, distinguishing between the two based off the context of the situation. Sexual violence became centered on the male character’s intent, often for pleasure, rather than violence, which related more to anger or control. In reality, this distinction was complicated, and although I maintained the focus on sexual violence I ended up not using the data on violence, though I will include it within this paper as a comparative point.

While looking at sexual violence, the issue of consent became the most important. Since not all sexual acts within the manga might be nonconsensual, especially as a series progressed, I only included data on sexual acts where the female character did not give visible consent, which might include resistance or lack of response. The latter arose in cases where the female character

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12 According to the anthropologist Conrad Kottak, an ethnography “provides an account of a particular community, society, or culture. During ethnographic field work, the ethnographer gathers data, which he or she organizes, describes, analyzes and interprets to build and present that account” (3).
might just give up, or play dead, a case that arose in some specific manga. As well, from the original distinction between sexual violence and other violence, the issue of intent, specifically the intent of the male character also became a distinguishing factor in determining if an act constituted sexual violence. Since some stories were premised on the idea of accidental romance, cases where the male character did not expressly act were not counted as instances of sexual violence. Along with these distinctions, I divided up instances of sexual violence into light and heavy acts. These were primarily based on an idea of social threat, how an act would be perceived within a social setting. Something like an unthreatening hug, holding hands, or even slight acts of voyeurism, such as flipping up a skirt would constitute a light act of sexual violence. On the other hand, heavy acts would often be something more threatening and inappropriate within a social setting, including forced kissing, molestation, and rape.

A final distinction within the study actually involved determining what manga to examine. Since shoujo and josei have similar art styles, and are even exchangeable at times, I relied on knowledge of the origin of each series studied. In this way, I only included manga series that originated in shoujo magazines such as Sho-Comi, Hana to Yume, etc. Although it is often best to get a random sample for mathematical studies such as this, due to limitations I ended up deciding to focus on series that were easily accessible. The final sample number was twenty series, most of which were completed series rather than ones that were still ongoing. For those that were ongoing, I read as many chapters as possible given availability and time constraints.

Data

The total sample size was twenty different series, constituting 103 chapters overall and 3,695 pages. A chapter ranged from between 20 and 50 pages depending on whether the original source was a monthly or weekly publication, and how long the series had been going. Overall, I counted 61 instances of sexual violence and 46 instances of other violence. This was divided up into 38 cases of light sexual violence and 23 cases of heavy sexual violence. These numbers suggest a high prevalence of light sexual violence, which although might seem contrary to my hypothesis, mark an important pattern I will note in the conclusion of this study. When looking at the rate of occurrence overall, the data suggests approximately one scene of sexual violence every 60.57 pages, and one scene of other violence every 80.33 pages. This rate does not take into account series without any instances of sexual violence. If I remove the series without any scenes of sexual violence, eight of the twenty series, the rate of sexual violence within shoujo manga that have sexual violence is one scene of sexual violence every 46.77 pages. This reveals the skew in the data with respect to the series without any scenes of sexual violence. As well, of the twenty series surveyed, only twelve had scenes of sexual violence, or 60% of the series surveyed contained sexual violence. Below are graphs examining the spread of the data and analysis of different variables.
Looking at the above graphs, there are several patterns that appear. In regards to Graph 1, the three major peaks are Hana to Yume, Lala DX, and Sho-Comi. This coincides with the number of series taken from each magazine; three series were taken from the first two, and two series, including a longer one, from Sho-Comi. In particular, Sho-Comi was named “the number one manga magazine that should not be read by children” by the Japanese PTA, highlighting the high ratio of sexual acts within many of the series contained within (Comi-Press). Considering the above graph outlines only two such series, and contains the highest rate of heavy sexual violence this assessment might well be correct. In terms of publishers, Graph 2, both Hakusensha and Shogakukan comprised over half the titles within the sample, which is reflected in the number of instances reported in relation to the two publishers. Rather than suggesting that these two publishers focus on material that contains sexual violence, it might be more appropriate to relate this graph to the number of series, and magazine, each publishes.

The final graph encompasses the data collected, reflecting the occurrence of sexual violence as it related to each of the series within the sample. Of particular note are Bloody Kiss and Kyou Koi Hajimemasu. Bloody Kiss contained not only the highest number of instances of sexual violence, but also the highest rate of occurrence, one scene every seventeen pages. This can be contributed to the small size of the series, only six chapters, and the actual storyline, which involved vampires. The sexualization of the vampire bite drastically increased the number of instances of sexual violence according to the definition used for this study. Kyou Koi Hajimemasu is notable as it was published in Sho-Comi, and was the longest series used for this study, twenty-two chapters were read. Although the number of instances overall was high, the length was a contributing factor to this. A final note is the series Yokujyou Climax, which only had instances of heavy sexual violence. Only five chapters were read, although the series itself encompasses forty-seven chapters in total. Due to time constraints, more data was not collected, but the use of sexual violence within this series seemed to be perhaps the highest out of all the series surveyed.

Conclusion

This study hints at a pattern of sexual violence in shoujo manga, supporting the original hypothesis. 60% of the sample had at least one scene of sexual violence, and some series had numerous instances of sexual violence. Even though this study does offer some evidence there are also some critical issues that arose, and go so far as to question whether or not this data is usable. The first problem is the small sample size. Considering the large number of shoujo series available, a limited sample does not truly reflect the actual state of the genre. A larger sample would have suggested a different rate of occurrence, and many of the series used in this study were less than ten chapters in length. This leaves a whole for longer series, which might include a longer development for the relationship and thus more acts of sexual violence. A second major issue came from how the instances of sexual violence were counted. The scenes of sexual violence were only counted once per scene, regardless of how many pages were used to show the action. In the case of an involved rape scene, this could count for four of five pages per act, drastically changing the rate of occurrence. What is apparent from this research, however, is the often casual ease at which violence is introduced, and then accepted without critical attention. The violence becomes commonplace, unnoticeable within the landscape of the manga, and thus does not receive appropriate attention. This study suggests that the pattern of sexual violence in shoujo manga is quite real.
A key idea within anthropology allows this data to be expanded to address not only the basic issue of sexual violence in shoujo manga, but also the sexual violence in Japanese culture. The focus on culture in anthropology is one of the keys to this project, moving it beyond just manga to deal with the issue of how a culture teaches children. As Conrad Kottak explains in his textbook on cultural anthropology, “enculturation is the process by which a child learns his or her culture” (41). The learning process is often passive, a child learns from watching how adults or other children interact, and especially in Westernized societies, through interfacing with the mass media. In Japan, as I have said before, manga is a form of mass media, and shoujo manga is targeted at young girls who are still learning about their culture. Even more than that, the young girls in question are going through puberty, a time when their bodies start to change, and many of the readers might be interested in finding their first love. As the data suggests, the love they read about, that they are enculturated to include acts of sexual violence by romantic partners. This suggests an acceptance of sexual violence within the larger context of Japanese culture, and one might expect to see a high rate of domestic violence, which would coincide with this assessment.

According to at least a few surveys conducted in the past twenty years, domestic violence in Japan is indeed an issue. Rita Weingourt, et. al. examines several of these past surveys as well as conducting a new one in her article “Domestic violence and women’s mental health in Japan.” It is commonly accepted amongst many anthropologists that women in Japan often have a lower status than men, a reflection of a traditional ideology that appreciates women as good wives and mothers rather than equal partners in the family. Even today, Japanese women are expected to be humble, passive, and polite, an ideology that breeds a culture of silence. The use of sexual violence within shoujo manga reinforces this idea. The girls in shoujo manga do not talk about the sexual violence that occurs, it is not reported, and is even accepted within the context of the relationship. Weingourt’s recent survey found that 67% of the women surveyed reported some form of domestic violence, physical, sexual, or mental. Perhaps more telling than this, the survey in question only had a response rate of 27%, meaning that only 27% of the women surveyed responded. This reflects not only a high rate of sexual violence, but also a lack of response from those surveyed, supporting the idea that Japanese women are being enculturated to accept sexual violence and keep quiet about it. Anthropology allows us to look at manga as a tool of enculturation, reflecting a broader cultural issue, but this alone does not fully allow the sexual violence in shoujo manga to be explained.

Reading the Manga – Textual Analysis

As I mentioned within the introduction, this project became as much about the process to find a methodology and disciplinary space as the actual topic of violence in shoujo manga. The previous section highlights what was part of my answer, an anthropological study to prove a pattern existed. With that pattern in mind, I now had to find a way to explain it. This is part of that explanation, an analysis of manga as a text.

Within the field of English Studies, the second discipline used as the framework for this project, the methodology of reading a text, applying theory, and using the analysis to make a claim about the text is at the core of the discipline. The act of close reading is one of the first methods an English student learns, and though it serves a purpose, in this case close reading a shoujo manga might bring up too many issues. Indeed, in order to maintain the focus on sexual violence I realized I had to actually look at the scenes where sexual violence occurred. How is
the violence depicted and why? Using my background in feminist theory, I knew applying feminist theory, with a sprinkling of the queer would perhaps find an answer, but it wasn’t enough. This is where I finally found a space for the avant-garde.

It might seem strange to think this project came out of the avant-garde, especially since finding a space for the avant-garde within what was becoming a very traditional paper was difficult. Indeed, this project for at least the majority of its existence was thoroughly trapped within the confines of a one discipline approach. It wasn’t until I thought of how to present my analysis in a meaningful way, how to explain the issue of sexual violence beyond the data, that the avant-garde offered me the necessary tools. The blending of disciplines and institutions is right along with the struggle of the minority, the relationship between those in power and those struggling to find power. These concepts allowed me to look at the issue of sexual violence outside of the cultural lens I had been using, and examine it from the theoretical perspective. Following in the tradition of English Studies, I decided to analyze four scenes from a particular series, namely *Yokujyou Climax* by Ayane Ukyou. These four scenes highlight the particular issue of sexual violence and the theoretical concerns that arose during my research. The pages are included at the end of this paper for reference.

The first image was taken from the very first chapter of the series, often the longest as it serves as the introduction of the characters and basic plot. This scene in particular occurs right after the female protagonist was forcibly grabbed and kiss by the male character, who serves as her romantic partner throughout the series. The image reveals several important aspects of the scenario, specifically the expression of possession, the use of money as a means of that possession as well as the sexual connotations from the stolen kiss, and the obvious difference in power between the male and female characters. Echoing sentiments from both feminist theory and the avant-garde discourse, this scene is designed to express the lesser status of the female character, who is the protagonist, and the dominant status of the male character. The male character is wealthy, physically powerful, sexually alluring, and obviously in control of the situation. The female protagonist on the other hand is poor, unable to resist, and through her expression unable to mentally comprehend the situation she is in. This scene seems to play into the male fantasy, the powerful masculine character and the weak, accepting female character. It is important, however, to remember that “shoujo manga [is] a genre for women, by women, and about women” (Ogi 784). The targeted audience and the majority of the readers are women, so the idea of male fantasy should not necessarily be in play.

In fact, this conflicting message is difficult to address. From a feminist perspective, this scene does seem to fall in line what is generally considered stereotypical male dominance, and even more the idea of the male gaze. This first image, however, does offer an alternative reading, one that takes into account the female readership. It is based, however, on a somewhat controversial idea, the idea of eroticism for women. It is common to assume that pornography is strictly for men, and in fact much has been written on this subject. Even so, shoujo comics, and this scene in particular suggest a type of female pornography, though obviously not so explicit. The male character, though displaying aggressive traits, is also designed to be appealing, an ideal construction of a male character whereas the female protagonist is more on the side of normal. This is a reverse of what one might consider the male fantasy, a normal boy and a very attractive female. Even the difference in power can be read in favor of the female protagonist, she is able to attract such an idealized male character, even though her own standing is far lower. While
this might be an alternative reading, it still seems to construct the female character’s worth, at least at this point, entirely based on her attractiveness.

The second image is also taken from the first chapter; it highlights the further interaction between what has now become the romantic couple for the story. It is important to note that the previously unknown male character is in fact a well-known, and popular, boy from the protagonist’s school, and more important the one who owns the land she lives on. This further extends the power aspect of their relationship, in a way he controls everything in her life. What’s more, at this point, even her mother approves of the male character, leaving the female protagonist with few options. Although this seems to continue the male dominance discussed previously, the alternative reading from the female gaze also begins to gain more credence. It should be noted that this image highlights female pleasure rather than male pleasure, something that is common across many of the series examined. Even though this pleasure is being derived from an aggressive, even sexually violent act, the female character is shown as at least unintentionally enjoying it. Though this alternative reading does offer an interesting explanation behind the sexual violence within shoujo manga, it is still overwhelmingly accepting of the male aggressor.

The third scene, from much later in the series, is perhaps not related to this study at all, but is an anomaly in itself. When dealing with sexual violence within shoujo manga, and understanding not only the cultural issue, but also how the text itself is constructed, the idea of the readership is obviously important. The alternative reading of this series I have suggested allows for some enjoyment from the female reader as she considers the male character, though aggressive, as a sexual object. In this scene, however, the male character is removed, and the female body is further sexualized for the reader’s pleasure. This scene involves two female characters, one of which is fondling the other’s breasts. I cannot, at least not within this discussion entirely explain this, and the fact that it occurs in other shoujo manga, and within the shounen genre as well, is puzzling. At least within the framework of shounen, where the male gaze is in play, this type of scene becomes a very clear play of voyeurism by the male reader into a private female space, and eroticizes this space. With the female reader, however, the pleasure derived from this scene is difficult for me, as a male reader, to truly understand. Even with a background in feminist theory, I cannot find a way to explain this scene except as an expression of male fantasy, targeted at female readers. Whether or not I can be satisfied by this assessment is debatable, but of all the examples I have given so far, this one in particular seems to suggest an inherent aspect of male ideology being targeted at women. The female reader is thus experiencing a scene derived from the aforementioned enculturation, a direct display of the male fantasy within Japanese culture as a whole.

The final scene is at the end of the series, and though not an act of sexual violence, it is perhaps the best example of the change in the relationship, highlighting both the alternative reading and the very issue of this paper. The final scene obviously changes the power relations for the couple; the female protagonist has gained some dominance over the male character, exploiting his weakness by taking his glasses, and making demands. Even though this suggests a redistribution of power, it also follows along with the general acceptance of sexual violence within the relationship. Rather than breaking up over the abuse earlier in the series, the couple is now firmly “in love” and the sexual violence has now become a part of their romantic relationship. Even though the power within the relationship may have changed, the original acts
of sexual violence are also a part of it, and even within the very next page the male character is once again pinning the female protagonist down, though she is the one desiring this. The female reader is thus allowed to witness the final scene of romance, playing into her fantasy, while at the same time reinforcing culture ideals of behavior.

This close analysis of a shoujo manga reveals not only the acceptance of sexual violence within the text, but also an alternative reading designed to focus on the female gaze. Although it might seem a bit strange, since the male gaze is often the focus of feminist theory, within shoujo manga it is not necessarily surprising. Even though female characters are portrayed as passive at times, and support the male dominated ideology of the culture, the male characters are even more sexualized, exposed, and voyeuristically shown to the female readers. The ideal masculinity fashioned within shoujo manga is another topic entirely, but it plays into the female reader’s fantasy. Shoujo manga is indeed a genre that attempts to appeal to girls, which especially in Japan have a minority status. With limited political and individual power, shoujo manga becomes a form of resistance to the male cultural hegemony, attempting instead to offer images for women, to offer a place for women. The shoujo industry is dominated by women, giving them a place of power and cultivating new generations of skilled artists. While manga authors (mangaka) are traditionally a male profession, shoujo manga allows girls to have a way to compete on equal footing. Even with this, however, the male dominance that so pervades Japanese culture finds an outlet in shoujo manga in scenes of sexual violence and images that seem to appeal to an absent male gaze. This examination of the text allows us to understand how shoujo manga functions as a medium in general, the images and ideology that are present, as well as the theoretical concerns we as academics should consider when looking at manga.

The Combined Methodology

At least half of the answer should now be apparent; the issue of sexual violence in shoujo manga is complex, and was not easy to approach, but through applying various disciplines I was able to discuss how the sexual violence works within the culture, and within the medium itself. This is the first half of the answer, and admittedly the majority half, but it doesn’t really justify this project. Even with my anthropological study and close reading of the text, I was only able to really address the issue of sexual violence within shoujo manga, it still wasn’t enough for me to fully justify this project. After all, the study of popular culture is not a field of itself throughout the academic world, and even though there are journals dedicated to the field very few departments of popular culture exist. So, even with the project done, I still had to find a way to justify, not only to my peers, but to myself. The full answer, as it turns out, was not just the combined methodology I used to understand my material, but also the very struggle I had gone through in order to write this paper.

First, though, I should properly explain why using just one discipline was not sufficient. Anthropology and English Studies both deal with culture, the latter mostly through text, so it might not be so surprising that I ended up using both disciplines to understand my material. Why not just use one though? This question has two answers: I did use just one and this project isn’t about just one.

I have as of now given two separate presentations on this material. The first was at an anthropology conference, the second targeted at English majors. It would be a mistake to say that either group really was able to experience the full project. When I presented this as an
anthropological project, there was no close reading, I didn’t attempt to analyze and explain the actions within the text in terms of feminist theory. It was, as this very paper shows, the anthropological side of my research. The same goes for the English presentation, which didn’t include an analysis of the data or discussion of the pattern, but rather the use of theory and analysis. These two separate presentations mean that it was possible to separate this project into two parts, a failure on my part, but at the same time neither presentation really revealed the full extent of this project: the data, the reading, and the interdisciplinary struggle.

Each discipline has its own limits, and at least for anthropology the limits have to do with what anthropologists like to study. In the words of Anne Allison, a cultural anthropologist who has done research on Japanese popular culture:

I am faced with a major and unwieldy task. I also feel that there are few, if any, models I can follow. I am dealing with a place that does not fit easily or cleanly (as perhaps no place does these days) into any one theoretical or ethnographic paradigm. Japan is non-Western but no longer ‘traditional’; it is at a late stage of capitalism but in a form that is recognized by many to be culturally ‘Japanese’; sexuality assumes patterns here in sites as different as the family and mass culture; and gender relations are incredibly complex in ways both real and phantasmic. (xxiii)

This echoes my very own issues of studying shoujo manga within the field of anthropology, there is little place for it, and little to go by. Many cultural anthropologist prefer more traditional societies, the Balinese in Indonesia or the Gebusi from Papua New Guinea. Looking at a modernized nation, and looking at popular culture in general, is no simple matter within traditional anthropology. Even within English Studies though, culture is an issue. It isn’t, however, the same issue as within anthropology. Culture in English comes from the fact that the text, which is the center of all English Studies, is cultural by nature, and so the study of the text reflects the study of culture. It is, however, only capable of going so far. The methodology of English Studies often has little to do with mathematical calculation, and even with some cultural studies included, it is a different discipline from anthropology. In other words, restrained to only one discipline, much of this project would have been lost, and through my experiences has been.

As I said, this project does not deal with just one discipline, the interplay between English and anthropology was a key concern, especially as the avant-garde comes into play. This project arose from the avant-garde, even if it involved material that really has no place within the field. Mass culture, popular culture, these are things that have little to do with the innovative, antagonistic, and tight knit avant-garde. So, how does this project inevitably come back to the avant-garde? It is true that issues of power and the minority status of women play into the general discourse of the avant-garde, but more than that this very project, this very segment of this paper, is avant-garde. The study of shoujo manga is not something that is being done, not in anthropology or English Studies. Even if there are some other scholars out there interested in the field, I consider myself a member of the vanguard for the study of Japanese popular culture. There are few of us, we lack a specific place, a unified methodology to approach our subject, but we continue to struggle to point out the value and issues within Japanese popular culture. It is against the academy, which places popular culture outside the accepted topics of study, against the strict definition of a discipline, for this project is both anthropological and based in English Studies. Indeed, this project became not just about the
research, but my position as a scholar, and the struggle I had to go through to get this project recognized and to accept it as academic. It was something of a personal struggle, a struggle against people saying “So what?”. This project is at the forefront of interdisciplinary work because it recognizes that understanding the struggle of being interdisciplinary requires an analysis of the process, a recognition of the frameless, even liminal space this project has to occupy. This paper is a way to express that struggle, a paper that is conventional, and yet through this conventionality is able to cross borders, to bridge gaps between disciplines. It is a paper that is both an anthropology paper and English Studies paper, and a Japanese popular culture paper.

Even though this paper is concluding, the project itself is not put down so simply. The issue of sexual violence is on that continues to present an issue. The data collected is far from complete, and although the pattern is indeed noticeable, it is tempered by the most important, perhaps even founding concept within anthropology. As a feminist scholar, one who lives in the United States, how much of this critique of shoujo manga is derived from my own ethnocentric view. My belief, as an American, that women should not learn to be submissive and accept violence colors this project, but it is a belief that I think applies to Japanese culture as well. Shoujo manga, although it continues to present images of sexual violence against women, is a medium that expresses the freedom and power of women. It is a form of media for women, and that in itself suggests that my ethnocentric view might not be entirely off. The change is gradual, and as long as women remain a minority within Japanese culture I doubt we will see any change within shoujo manga. Mass media is a tool of enculturation, and children learn how to live in their society based off of what they learn through the various tools of enculturation. The sexual violence in shoujo manga is a complex issue, and difficult to sum up in a single paragraph.

Even more complex is the very struggle of this project, the struggle to study Japanese popular culture. Although it wasn’t my intention in the beginning, this struggle became a centerpiece within this project, and this project became more than just a study of sexual violence in shoujo manga. It is an example of the struggle to work outside the normative framework of the academic, to open up the boundaries between disciplines and strive to find a methodology that is able to explain something that many people might not understand, or even realize exists. I was able to justify this project in the end because I couldn’t justify it in the beginning. There was no answer in the beginning, there was no issue. Only through realizing the failure at nearly every stage of the project, and then finding a way to make it succeed was I able to really understand what I was doing. It is a project about violence, sexual violence, violence against normal research and presentation, violence against the academic limits of single disciplinary work. I formed an amalgamated discourse, one that brought in a variety of other disciplines; and through this I found a way to talk about something I couldn’t talk about in any other way.
Works Cited

Allison, Anne

Comi-Press

Kottak, Conrad

Pink, Daniel

Ogi, Fusami

Schwartz, Adam, and Eliane Rubinstein-Ávila

Storey, John

Ukyou, Ayane

Weingourt, Rita, et al.
On the Line in the Motor City: Narratives of Latina Auto Worker Culture

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Latina auto workers are an unrecognized population within the U.S. auto industry. This study gives voice to them by using personal accounts of their struggles working on an assembly line while raising a family. I discuss the shared vision of the American Dream of Latinas and explore how their desire for the American Dream is made all the more difficult by lifelong marginalization and the challenge of cultural assimilation. In particular, I explore the settlement patterns of Latino families to Michigan, their personal experiences navigating the auto factory workplace and the effects of their role as an auto worker on their family. To gain a broader understanding of the experiences of Latinas working in the auto industry I also look at their perceptions of their own childhood experiences. Studying their interactions with others in the auto factory and exploring factors effecting the raising of their children will illustrate the complexity of their everyday lives.

Introduction

Why did Latinas enter the auto industry to work in factories? How did Latinas navigate auto industry factory life? How are Latinas coping with the auto industry crisis today? How could Latinas have enjoyed a job where they worked eight to ten hours a day, five days a week, for 30 years, making car parts on an assembly line?

Latina auto workers are an unrecognized population within the U.S. auto industry. This study gives voice to a group of overlooked workers by using personal accounts as told by Latina auto workers – a voice that expresses their struggles working on an assembly line while raising a family. I will discuss the shared vision of the American Dream of Latinas. They desire a job that provides a good, stable income for themselves and their children to have a better childhood than their own – a childhood in which there is no racial discrimination, a better education, ample opportunity, and a feeling of community belonging. However, their desire for the American Dream is made all the more difficult by lifelong marginalization and the challenge of cultural assimilation.

For this ethnographic study I chose to research the lives of Latina auto workers in Southeastern Michigan. I initially started out collecting research data with the intention of looking at the effects of the current auto industry crisis on Michigan male and female auto workers and their families. Shortly after my field research began, my interest shifted to the lives of Latinas in the auto industry. In particular, I wanted to (1) explore the settlement patterns of their families to Michigan, (2) understand their personal experiences navigating the auto factory workplace, and (3) examine the effects of their role as an auto worker on their families. To gain a broader understanding of the experiences of Latinas working in the auto industry, it is necessary to look at their conditions and perceptions of their own childhood experiences.
Studying their interactions with others in the auto factory and exploring factors effecting the raising of their children will illustrate the complexity of their everyday lives.

**Literature Review**

*Latino Emigration*

A historical analysis of how and why Latinos migrated to Michigan begins in the early 1900s. As a result of a labor shortage created by World War I, more Mexican workers were allowed into the United States from 1917 to 1918 (Triplett, 2004). During the 1920s and 30s, many Latinos began working as agricultural workers. They were recruited from the Southwest for seasonal harvest work (Rosenbaum, 1997, Badillo, 2003). The streams of migrant Latino workers had three main jumping off points: California, Texas, and Florida. Migrant workers that streamed to Michigan were primarily from cities like San Antonio and Austin, Texas. A large Michigan-based sugar beet company heavily recruited Latinos because of a sudden shortage of labor resources (Rosenbaum, 1997, Badillo, 2003). Some migrant families eventually “settled out” (Lindborg & Ovando, 1977). This meant that they settled in near areas where they had previously worked in the fields. These workers moved into manufacturing jobs, many finding work with automobile subcontractors supplying parts to the U.S. auto industry (Badillo, 2003). Many began filtering into Michigan cities including Detroit. The movement of migrant workers into the automotive factories of Michigan was to be the beginning of Latino family traditions of lifelong work in the auto industry.

Up until the mid-1980s, almost 40% of all U.S. auto employment was located in Michigan (Broman, Carpentier-Alting, Hamilton, Hoffman, & Thomas, 1990) and the foundation of the American auto industry is the auto worker. Auto plants up to the 1990s operated production assembly lines with manpower instead of automated machines. The few automated machines that were in the plant were operated by people. Primary assembly and production of automobiles was accomplished by the hands of people. This workforce was not made up of just men. Historical research revealed that in 1917 the General Motors Automotive company built an aircraft facility in Detroit, Michigan and began supplying military aircraft to the U.S. government for World War I. Female factory workers were hired to stain wooden propellers for airplanes. This was the earliest recorded example of women working in an automotive production facility (Davis, 1999).

The recent economic crisis has severely affected the state of Michigan and more significantly auto industry workers, and its long-term effects, though unknowable, are likely to be severe. This prediction is consistent with previous research on the unemployment effects of auto plant closures on the social well being of auto workers in Michigan. A 1987 study examined the mental health of Michigan auto workers who were facing loss of jobs due to plant closings and found that male and female auto workers of various ethnic backgrounds had physical and mental health problems related to the stress of job loss (Broman, Carpentier-Alting, Hamilton, Hoffman & Renner, 1990). Decades of economic fluctuation within the industry would prove challenging for auto workers and be especially hard on Latina auto workers. This paper makes a major contribution to the minuscule bibliography extant for Latina auto workers.
Context

Michigan: Home of the Motor City

For the purposes of this paper and to maintain confidentiality of those Latinas who participated in this study, I will use pseudonyms for the names of cities, auto plants and participants.

City of Briarwood

I conducted this study in southeastern Michigan. Field work centered around two small Midwestern cities: Briarwood and Riverwood, Michigan. The U.S. Census Bureau reports Briarwood’s 2007 population as 21,867, with demographic estimates of 84.3% white, 13% Latino, 4.7% African American, and 0.3% Asian (see figure 1).

City of Riverwood

The U. S. Census Bureau only had 2000 population statistics for Riverwood, Michigan. They reported a total population of 8,574 with demographic estimates of 95.8% white, 4.4% Latino, Asian 0.7%, and 0.2% African American (see figure 2).

Michigan has a total population of 10,094,027. Demographic data shows 79.6% are white, 3.9% are Latino, and 14.1% are African American. The two main categories of industries in Michigan are (1) educational services/health care/social assistance at 21.8% and (2) manufacturing (includes auto industry) at 19%. There were originally two General Motors automotive plants in which all of the research participants were employed. The Lake Forest plant, located in Riverwood, first opened in 1965 and later closed in 1987. This plant employed approximately 5,000 auto workers at peak production periods. The second plant is located in Toledo, Ohio which is less than 13 miles from the Briarwood and Riverwood area. The Inglewood plant, first opened in 1957, is still in operation. The majority of Inglewood plant employees are laid off with only a skeleton crew currently working.

Latinas interviewed for this study were auto workers between the ages of 50 and 77. Their employment status ranged from temporarily laid off, retired, and permanently disabled.

Methods

Focus Group

Several anthropological methods were used for this study. First a focus group was conducted to gain insight into the lives of the target population. This would allow me to discover any unknown issues and/or patterns among the population. There are terms that auto workers use when working in a plant and the focus group helped define the “native language” spoken in this workplace. My key participant, who is also my mother, worked in an auto plant for 15 years before finally leaving to go to college. She aided in participant recruitment for this study. Recruitment through “snowball effect” resulted in eight Latinas participating in the focus group (see figure 3).
**Semi-Structured Interviews**

A second type of method was the use of semi-structured interviews. This provided the most data to analyze for this study. Six questions were asked during the interviews which ranged in time from one hour to two hours in length. Participants were interviewed in their homes and interviews were audio recorded for later analysis.

**Archival Research**

An important part of this study involved historical documents. I collected personal photographs from the Latina participants. These photographs reflected social moments from their work experience such as friendly gatherings or special events. One participant provided a monthly General Motors newsletter from her plant which contained a retirement photo of her and other retiring workers that year (see figure 4).

Another source of archival research was the local newspaper. Research participant Martha, gave me a newspaper she had saved from 1987 which showed a front page article about the Riverwood auto plant closing and the potential economic crisis it would have on the local community. The front page story had a large photo (see figure 5) showing Martha and other auto workers walking a picket line to demonstrate their support for the workers of the plant.

**Results**

**Seasonal Workers — Stepping Out**

Several participants explained that they and their parents had been migrant workers. I discovered that numerous Latinas in this study were from migrant families who traveled between Texas and Michigan. Latinos use a “word of mouth” method to communicate within the cultural community. It’s common for someone say, “I heard” when referring to the way in which they learned about something. This was one of the ways that Latinos learned about work in Michigan. Latino workers would come to Michigan during the growing season or warmer months and then afterwards go back to Texas. At first Latino workers came alone from Texas but later sent for or came with their families. Migrant workers considered women and children additional hands to help the financial stability of the family. More than any other head of family, the migrant worker is dependent on the earnings of his wife and minor children (Schaffer, 1959). Young children would go to school during the day and then be expected to work in the fields after school and on weekends. Leonore, who is a temporarily laid off auto worker from the Inglewood plant recalls her childhood experience, “I would go to school and then after school I would go to work. We had nine in the family so we had to work!” (Leonore, personal communication, July 24, 2009). This lifestyle had negative effects on children because as the picking season ended, children would be pulled out of school in the middle of the year because the family would move back to Texas.

Some Latino families eventually stayed in Michigan by “stepping out” from the traditional migrations of seasonal agricultural workers, settling near the fields where they had worked in Michigan (Lindborg & Ovando, 1977; Rosenbaum, 1997; Badillo, 2003). These men were able to gain entry into small local manufacturing plants. A primary reason for Latinos to “settle out” was so their children could receive a better education. Even though Latinos came to Michigan seeking a better life for their families, they were not able to escape discrimination and
some families still needed their children to work in the fields. Many Latina mothers found this uprooting of the family every season to be extremely hard. Research participant, Martha describes her childhood experience:

Mom got tired of migrating from Texas to Michigan. It was a difficult trip every year for everyone. The lack of money and the physical and emotional toll it took was overwhelming. She wanted to settle in Riverwood and convinced my dad to look for employment. (Martha, personal communication, July, 25 2009)

The growth of the auto industry in Michigan created more work opportunities. Auto manufacturing jobs provided higher than average wages and excellent health benefits which were viewed by Latinos as highly desirable jobs. During the early 60s, a number of auto manufacturing plants were built in Southeastern and many now grown Latino male children of settled out migrant families began working in these plants. I learned that many of the Latina research participants were just graduating high school during this time or had just started their own family. They were encouraged by family and friends to try and obtain jobs in the auto industry because of the high pay and benefits. Mary recalls her experience in leaving migrant farm work and obtaining her first auto factory job:

I was mainly a farm worker. That's what my family was. So you see I was the first one that got away from that. So I came here at the age of 17 or 18. From there when I got married I went to work at the Lake Forest plant. Everybody knew everybody. Little by little everybody started getting factory jobs, bettering themselves and the younger ones were getting an education. (Mary, personal communication, July, 23 2009)

*Latina Labor*

As their migrant parents did in the past, Latinas used word of mouth to gain entry into the auto industry. Mary recounts how she learned about openings at the auto plant:

Word of mouth I think. I've been friends with Esther and I’ve known Esther longer than anybody else. Me and Esther go back to 1965 and we were working in the tomato cannery in Adrian. And Esther was still in high school then. Then Esther graduated and went to work at the Lake Forest plant. And I think she was the one that told me about all them. Then I started working there. (Mary, personal communication, July, 23 2009)

Eva describes how she learned about job openings at the Lake Forest auto plant:

I don't know if it was your mom or dad that was there and they told me that they were hiring, anyway I got in there and I was supposed to have a job, a sewing job or job putting buttons on a seats something but I ended up doing some other job and I did it for 90 days. (Eva, personal communication, July, 19 2009)

Following the family tradition of helping their husbands by earning a living, Consuela recalls her motivation for seeking work in the auto plant:
I knew that was the best place [Lake Forest plant] to work around here, so I thought that if I'm going to go out and work and help my husband I’m going to work some place right and make money. So I went out there and put my application over there. I got hired in 1972. We went in at 5:00 at night and we worked till 3:30 in the morning. We were working 10 hours a day. But boy when I got my first check I couldn't believe it, and they were only paying us, like $3.80 an hour but we were doing a lot of overtime. We worked Saturdays too. My first check was way, way big, I was in shock! I thought man, I've never made this kind of money! That was a very good wage, a very good wage! I was making more money than my husband was making. (Consuela, personal communication, July, 23 2009)

The experience of gaining entry into auto plants was not difficult for Latinas. However once they became employed, they soon learned that earning a high wage comes with a high price. They experienced physical and emotional stresses that effected the raising of their own family.

For some Latinas understanding and dealing with the auto plant work structure was easy and for others it was more challenging

**Comparing the Auto Plant to a Community with Social Structure**

In its simplest form an auto production plant can be described as a community with social structure. This community has overseers, class systems, rules, and cultural norms for its citizens the auto workers. Auto manufacturing companies created and encouraged alienated labor: a combination of Taylorist division of labor and assembly line style production (Milkman 1997, p 43). The Taylor System is a theory of management that analyzes production methods for frequent improvements. The system produces a high level of control over employee work activities. Assembly lines create a monotonous, uncomfortable, and extremely boring work environment. Alienated labor is beneficial to a company’s profit margin because efficiency increases production and reduces overhead. Management pushes workers to make a certain quota every hour. The more a worker can produce during their shift, will increase company profits. However this can be detrimental to the worker both physically and mentally. Social structure within the plant is created and maintained by negotiations between the auto company and the United Auto Workers (UAW) union. The UAW represents the interests of hourly auto workers and negotiates new contracts between workers and the auto company. Contracts include rules on work practices such as attendance standards, internal or external employee transfers and discipline procedures for workers just to name a few. It is the responsibility of the foreman to run departments according to company policy while at the same time making sure workers follow contract rules. Auto plant production expectations can cause both physical and emotional stress on hourly workers. Female workers seemed to suffer more significantly then male workers in the plant due to the type of jobs women did. Women worked on sewing machines and men worked stocking and checking finished product.

An important issue that was raised by the Latina participants was the long-term health effects on their bodies as a result of years of repetitive factory work. Socorro describes her physical condition:
The affects of the job on the body was especially with the arms. Pulling and twitching our hands and fingers because of the sewing. Now I have foot problems and arm problems. Sometimes my hands go numb. A lot of impact on our bodies! Some people would endure the pain rather than go to the doctor or hospital. Employees have different kinds of insurance which meant their office visits might be more than others. (Socorro, personal communication, July 24, 2009)

Overseers in the factory are referred to as foremen or supervisors and management is referred to as “the front” by workers. Plant social structure created a class system of power and control which at times was central to many disagreements between workers and foremen. The relationship between the foreman and hourly worker seemed to be fluid in that it is subject to change when outside factors are introduced. For example an increase of part orders for a plant affects production goals. Each department has a foreman assigned to oversee workers. Foremen have daily production goals they must meet for their shift. In order for a foreman to meet his daily production goal his workers must work quickly without stopping the sewing line and put out good pieces. Factors such as an injured worker, a slow worker or bad assembly work could cause production goals to be missed. Bad work also referred to as a “bad piece”, requires a worker to take apart the piece and then put it back together thus slowing production. Pressure and stress put on foremen to meet production goals by management significantly affects their attitude and supervision of workers. Employee injuries are downplayed by foremen and management without consideration of the physical or mental well being of the employee. If a worker is off the line because of illness or injury, production goals are not met. Socorro explains about the first time she was injured on the job:

I remember the first time I sewed my finger. I couldn’t get my finger out because I was on a 300 model machine and that one you couldn’t make it go backwards to put the needle back up. I had to wait for the mechanic to get me out! He had to disassemble the machine and the belt so that he could make it go up. So meanwhile I'm stuck there with my hand in the machine and I was real nervous and I wanted to cry! It [the needle] went a couple of times through my finger and I couldn't get my hand out. There were holes all the way through! So I had to go to medical and all they did was give you a shot for infection and they gave me pain pills! They put ice on it and told me to come back the next day and they would put ice on and that was it! (Socorro, personal communication, July 24, 2009)

Workers experienced not only physical injuries but emotional distress from management control. Foremen used the threat of being fired as a form of control over workers. It’s my opinion based on the interviews I conducted that some workers succumbed to the threats more than others. I attribute this partly to the personality type of the worker. When asked about how she felt while working in the plant, Raquel explained her feelings:

I was scared to death to leave my area, because it's like if you do something wrong you might get fired! Some supervisors would say things like, “You better not be taking a long break or you can get fired.” They would threaten
you. I was real cautious about that and I was terrified to take long breaks. (Raquel,
personal communication, July 22, 2009)

During participant observation while interviewing Raquel, I noted that she seemed to be a
soft-spoken, nice person. She spoke about helping others whenever she could and discussed her
challenges with frequently being taken advantage of. Workers like Raquel were apt to suffer
more from the pressure and threats of management than others.

Stress of Plant Closures

Economic downturn within the auto industry results in frequent lay-offs and periodic
plant closures. When an auto plant closes, workers are sometimes able to transfer to another
plant location. These plants are close by or sometimes in another state. Plant closures are hard on
female workers raising a family. Latina workers experience significant affects including marital
stress, finding daycare for their children or moving them to a new city. Socorro recalls how she
felt during the time her plant announced it was closing and the situation with her marriage at that
time:

Well I tell you that was very hard, I didn't know what to do because at that
time I was thinking of getting out of my marriage because my husband was
drinking too much and it was getting more and more on my nerves because he
was drinking. It caused a lot of problems because here I am thinking about getting
out my marriage and I won’t have a job, what can do! The only one I had to worry
about was my daughter and she was only about nine or ten. My other ones were
older. I thought if I go to another state who’s going to take care my daughter, if I
go to Grand Rapids who’s going to take care of my daughter. It would be a
stranger, I was scared! It caused me a lot of stress, I was so stressed through those
months trying to figure out what to do! I worried about my daughter, she was
depending on me and I didn't want to just put her with a stranger. (Socorro,
personal communication, July 24, 2009)

A significant amount of stress results between workers inside the auto plant. When new
workers transfer in from a closed plant, existing workers can be cruel and make the work
environment for new workers unpleasant. Socorro describes a confrontation she had with a new
female foreman when her plant closed and she was forced to transfer to a new plant:

We had problems even with the foremen, they didn't want us. I remember
I ended up on the assembly line and of course we [friends from other plant] all
look for each other, so we would all ask if things were going okay, if you were
fine. We would stop and talk when we could on our breaks to our friends. And
then the foreman called me to her desk one time and she said, “Listen! You better
stop your talking.” And I said, “Why, what am I doing wrong?” She said, “I see,
every time I turn around there's somebody over there talking to you.” And I said,
“So.” She said, “So I don't want anybody talking to you.” I said, “Show me on
my contract right now that I can’t have anybody talk to me, I also want you to
show me where I'm putting out bad parts for you, which I'm not! Am I stopping
the line, NO I’m not! So you know what, get me my committee man [union
representative] I’m not going to put up with your crap!” And she looked at me
because everybody was terrified and my friend Emma said, “Aww you're in trouble now!” I said, “I don't care and people are not going to stop talking. She has no reason, if I'm not putting bad parts off the line! She has no reason.” So I called the committee man and I told him, so he went over and got on her case. After that she kind of became my friend and she gave me a setup job! Which all I had to do was relieve three people and that was it and make sure they had parts. (Socorro, personal communication, July 24, 2009)

There were other common situations that could cause stress for women working in the auto plants. The Lake Forest plant had a reputation of being a “Peyton Place” in which many of the Latina participants described as a place where a lot of people were cheating on each other. Socorro recalls a situation when asked about promiscuity in the plant:

There was a lot of hanky-panky going on there! Even the foremen had a lot of the gals there [that] they were going out with. In fact back in ‘69 or ’70, there was a foreman who was flirting with girls big time and making it hard on them. In fact I knew this girl that a foreman was after and she said, “No I won’t go out with you.” And before you knew it she got fired, he found a reason to fire her! I told her to go to a lawyer because we knew the reason she got fired was because she wouldn't go out with him, but she never did. There was a lot of sexual-harassment! (Socorro, personal communication, July 24, 2009)

Effects on Family

Latinas experienced a high amount of stress when they were not able to work a day time work shift to be home for their children. A major contributor to their ability to hold a day shift was the amount of “seniority” they had. Seniority is based on the date you were eligible to join the union. A person was eligible to become a union member when they had worked more than 90 days consecutively and were had been laid off longer than they had previously worked. Many of the Latinas in this study were not able to work a day shift because they had low seniority. Leonore recounts how this affected her children:

Well I tell you that was very hard, I didn't know what to do because at that time I was thinking of getting out of my marriage because my husband was drinking too much and it was getting more and more on my nerves because he was drinking. It caused a lot of problems because here I am thinking about getting out my marriage and I won’t have a job what can do! The only one I had to worry about was my daughter and she was only about nine or 10. My other ones were older. I thought if I go out of state who’s going to take care my daughter, if I go to Grand Rapids whose going to take care my daughter, it would be a stranger, I was scared. It caused me a lot of stress, I was so stressed through those months trying to figure out what to do! I worried about my daughter she was depending on me and I didn't want to just put her with a stranger. (Leonore, personal communication, July 24, 2009)
This study focuses on stressful events Latinas faced in the work place, however there were also happy and enjoyable experiences as well. Future literature resulting from this research will examine friendships and coping strategies by Latinas in the auto industry workplace.

Discussion

My Migrant Family

My paternal grandmother was from Brownsville, Texas and my grandfather was from Austin, Texas. They migrated to Michigan with their family. My grandfather “stepped out” by obtaining a job in a small engine manufacturing plant in Riverwood. This enabled them to settle in the Riverwood area and raise their young family. My maternal grandfather brought his family up from Texas as seasonal workers and he later settled in the Briarwood area after finding a manufacturing job. Unfortunately I never met my maternal grandmother because she died of Leukemia when my mother as eleven years old. She picked in the fields as a migrant worker up until her death at the age of 49.

My Legacy as an “Almost” Latina Auto Worker

Imagine a place in the United States where in the local high school there are only three Latino students in the entire school? Imagine that this same school does not have any African American or Asian students either. With the influx of people coming to the U.S. over the last several decades this seems almost impossible to imagine. For me it was a reality. I grew up in a small town in Michigan that was made up of white, middle class people. My paternal and maternal grandparents migrated from Texas and Mexico to Michigan as migrant farm workers looking for a better life for their families. My parents were born in the U.S. but still needed to work in the fields to help their families get by. I remember being taken to the tomato fields as a child with my mother and paternal grandmother while they worked to make a few dollars per bushel of picked tomatoes.

Needless to say I had quite a different childhood compared to the other kids in school. For as long as I could remember I was always treated differently in Michigan. I was never encouraged by the school counselors that I could or should go to college and do something great with my life. I remember my white friends talking about college prep courses and advice the counselors gave them, but I didn’t have that support from the school. It was assumed I would get a job in a local factory and work there until retirement age because that seemed to be the only choice we had as Latinos in that town. My parents were auto workers at the local automobile plant and they were always worried about getting laid off. Even though my parents suffered frequently with potential strikes, layoffs or plant closure, my father wanted and expected me to work at his automotive plant as soon as I graduated high school. The auto worker tradition was strong in my family. My father believed that manufacturing work helped his parents to move from the poverty of migrant work to a better life when they settled in Michigan. He created an even better life for his own family by gaining entry into the auto manufacturing industry. However I felt in my heart that I could do something more meaningful with my life which created a strong need for me to figure out how I could get out of Michigan and avoid the fate of being an auto worker. Seven days after I graduated from high school, I boarded a plane to Los Angeles and never looked back. The first 18 years of my life story were deeply interconnected with the auto industry and as a result my research interest is on Michigan auto workers. I didn’t
want to be a prisoner of prosperity like my parents. I didn’t want to experience the ever changing economic roller coaster of the auto industry. I wanted something better for my life. My parents chose the auto industry as career paths because they didn’t want to work in the fields like their parents did for most of their lives. So like my parents, I looked at them and chose to do what I thought was better. To seek a different work career rather than work “on the line.”

**Future Research Goals**

The lack of information on female auto laborers, particularly on Latino populations, contributes to the inability to effectively address their many enduring issues. This is especially pertinent given to significant U.S. Latino trends - population growth rate and increasing socioeconomic disparity. I attempt to provide historical data which will show young Latinos that their ancestors have progressed and moved into better economic standing. It's important for Latinos today to know that their families, especially their mothers have progressed. This will hopefully empower and inspire them.

In order for governmental agencies to begin recovery plans, having a better understanding of the population can increase the success of future support programs such as employment re-training, mental health counseling and social services. I hope to encourage a process of development and change which will call for greater communication among Latinos themselves. This will strengthen their ability to help each other by discussing common needs and interests as well as assist researchers in social program development to aid with the economic crisis that Michigan and the auto industry is facing. My goal is to take this research on Latina auto workers and tie it into the community. Increasing awareness of Latino history and culture will help provide a greater context for people to better understand Latino issues.

**U.S. Census Bureau - 2007 Race and Ethnicity Statistics for Briarwood, MI**

- **White** - 84.3%
- **Latino/Hispanic** - 13%
- **African American** - 4.7%
- **Asian** - 0.3%

*Figure 1. Race and ethnicity for Briarwood, Michigan*
U.S. Census Bureau - 2000 Race and Ethnicity Statistics for Riverwood, MI

- White - 95.8%
- Latino/Hispanic - 4.4%
- African American - 0.2%
- Asian - 0.1%

Figure 2. Race and ethnicity for Riverwood, Michigan

Figure 3. Latina focus group, July 17, 2009
Figure 4. Mary (far left) celebrating her 30 year retirement with other retirees.

Figure 5. Martha (second from left) demonstrating against the closure of her plant in 1987.
Works Cited


Hart, R. 1987 *Daily telegram newspaper photo*.


In this era of advanced modern medicine, researchers and public health practitioners have the tools at their disposal to drastically reduce the burden of cervical cancer in the U.S. and around the globe. With the advent of two vaccines that protect women from certain strains of Human Papillomavirus (HPV) that are known to cause cervical cancer and genital warts, health professionals can ensure that the decline in cervical cancer cases and deaths, which has already reduced drastically since systematic screening measures were adopted in the 1960s, continues well into the future. Yet the high cost of these vaccines means that those in need of preventive medicine the most, those in developing nations, are once again excluded from the benefits that advanced medicine can bring. Recent investigation into low-cost, yet effective cervical cancer screening strategies have revealed promising alternatives to the traditional Pap test, such as visual inspection with acetic acid (VIA), which is cost-effective and linked to reductions in cervical cancer morbidity and mortality in several developing settings. Coupled with educational campaigns that aim to spread awareness on cervical cancer prevention and the importance of continual screening, this innovative screening method designed for low-resource settings may be able to even the playing field between wealthier countries and developing countries in the fight against cervical cancer.

Around the world each year, an estimated 493,000 women will be diagnosed with cervical cancer, of which, approximately 274,000 women will succumb. Cervical cancer is ultimately a story of health disparity; over 80% of these cases and deaths occur in developing countries, such as India, Bangladesh, Thailand, and many countries in sub-Saharan Africa (Palanuwong, 2007). The release of a new vaccine that protects women from four strains of HPV, two of which cause approximately 70% of all cases of cervical cancer, has the promise to drastically reduce the burden of cervical cancer in countries that can afford the price (Saslow et al., 2007). The vaccine, commercially marketed under the name Gardasil®, has been shown to have a nearly 100% efficacy rate against the strains it protects against and is currently being administered to girls aged 9-26 in the U.S. Just this past October 2009 in the U.S., Gardasil was approved for use in males aged 9-26 for protection against two HPV strains that cause genital warts, and another rival vaccine, Cervarix®, was FDA approved for protection against the two most common HPV strains implicated in the development of cervical cancer (Associated Press, 2009). The high cost of these vaccines (around $120 per dose), is prohibitive for implementation in low-resource settings; indeed, according to the WHO, India currently has no vaccination recommendations or plans for implementation, and there are no statistics available showing coverage among Indian women (WHO, 2009). Even without the high cost of vaccination, screening measures will still be necessary in the next few decades for those women who were out of the age range for vaccination and for those women already infected with HPV, in which case the HPV vaccine is likely ineffective.

The most tragic part of this savage inequity is that cervical cancer is almost entirely preventable with appropriate screening measures. The disparities in access to screening is seen
in the recent statistic stating that 75% of women in developed countries have undergone some type of screening in the past five years, compared to just 5% in the developing world (Tsu & Levin, 2008). Specifically for India, among rural populations, a sector that traditionally lacks preventive care, screening coverage only reaches 2.3% of the general female population aged 18-69 (WHO, 2009). Part of the problem lies in financial constraints in developing countries, in addition to limited human resources, competing health needs, and undeveloped infrastructure and the logistical capacity to develop a nationwide cervical cancer screening program. Furthermore, cervical screening faces multiple socioeconomic and cultural barriers, such as embarrassment during a cervical examination, limited financial resources to afford the exam or travel to the examination site, and fear of being told one has cancer or a sexually transmitted infection (STI), among others. Yet Tsu & Levin (2008) cite critical reasons for the importance of cervical cancer screening despite these obstacles. Women play a critical role in the well-being of their families, as they are often centrally involved in managing household matters, such as food security and wage earning. Families that suffer the loss of a mother or other young woman suffer emotionally and financially, and in some cases, the death of a female caregiver and provider can be outright devastating for a family’s survival. Fortunately, innovative cervical screening methods designed specifically for low-resource settings may prevent these tragic losses.

Cervical cytology, including the traditional Pap smear exam most widely-used in developed countries, is expensive and oftentimes too logistically complex for wide implementation in developing settings. In its place, VIA has been shown to be cost-effective and easy to administer in resource-poor settings (Ahmed, Ashrafunnessa, & Rahman, 2008; Basu et al., 2006; Goldie, Kuhn, Denny, Pollack, & Wright, 2001; Mandelblatt et al., 2002; Palanuwong, 2007; Wiwanitkit, 2009).

In VIA testing, a fresh solution of 3-5% acetic acid is applied to the cervix. If abnormal or pre-cancerous cells are present, they will turn white within a few minutes of acid exposure. This test requires minimum laboratory equipment, as acetic acid is readily available, and it can be administered by a variety of healthcare professionals, not limited to physicians. More importantly, VIA has been shown to be up to 90% effective in diagnosing precancerous cervical lesions (Ahmed et al., 2008). Another benefit to VIA screening is that a woman receives a diagnosis immediately after the examination, allowing for treatment in the same visit. This is crucial in that a second trip to the clinic for treatment will be unnecessary, preventing losses due to not following up the results from an abnormal test.

A safe and effective treatment option in low-resource settings following an abnormal VIA result is cryotherapy. In this procedure, any abnormal cervical tissue or precancerous lesions are killed by freezing. According to the Alliance for Cervical Cancer Prevention, cryotherapy cure rates can reach 85% or greater if administered correctly (Alliance for Cervical Cancer Prevention, 2007). Cryotherapy can also protect against future development of cervical dysplasia in women with a current HPV infection. Given the low morbidity associated with this procedure and the above-mentioned protective function, the treatment of women with false-positive VIA screening results is acceptable, given its subjective diagnostic nature; however, this does not take into account the possibly long-lasting mental turmoil of being told one has precancerous lesions, which some women may consider synonymous with cancer. Importantly, single-visit VIA screening followed by treatment, where appropriate, just once in a woman’s
lifetime between the ages of 35-40, can lead to a 22-32% reduction in incidence of cervical cancer at about $50 U.S. per year of life saved (Basu & Chowdhury, 2009).

In light of this evidence, a proposal to implement a VIA screening implementation program coupled with immediate treatment with cryotherapy using a single-visit approach follows. The setting will be the rural Dindigul district in Tamil Nadu state, South India, as this area currently has a high burden of cervical cancer and recent research in another rural area of India suggests that this method of screening will face limited socioeconomic or cultural barriers for implementation (Basu et al., 2006; Swaminathan et al., 2009). Currently, India carries approximately a quarter of the burden of cervical cancer in the world with 132,082 new cases each year and 74,118 deaths, making this setting appropriate for a public health intervention (WHO, 2009). The program will include an educational component based off of results from Perkins et al. (2007) who implemented a community-based education program to improve local knowledge regarding cervical cancer screening and to increase screening among at-risk women. Training and monitoring and evaluation will also be part of the program. Next follows several case-studies that examine the cost-effectiveness of VIA screening methods versus other alternatives and the successes of pilot VIA programs implemented in different developing nations. A look at educational components of the program and local attitudes and acceptance of this screening method in another rural region of India will follow.

Goldie et al. (2009) assessed the cost-effectiveness of different cervical cancer screening strategies using a mathematical model and a hypothetical cohort of South African women who had never before been screened for cervical cancer. Among the methods they examined were traditional cytology screening, HPV DNA testing, and VIA. They estimated years of life saved (YLS) and cost per YLS. For a 35 year-old woman who had never previously been screened, one VIA screening visit followed by same-visit cryotherapy reduced the incidence of cervical cancer by 26% and increased life expectancy by 0.84 months. This strategy was most effective in women in their mid-to-late 30s. This method had a price tag of $50 U.S. per woman. The authors determined that a one-visit strategy (diagnose and treat simultaneously) was more cost-effective than 2 and 3-visit strategies. The authors conclude that for resource-poor countries where cost-effectiveness boundaries are low, a single lifetime screen for women around age 35 with VIA, followed immediately with appropriate treatment may be the best option.

A population-based simulation model was the method of choice in a cost-effectiveness study conducted by Mandelblatt et al. in 2002. Thailand was the country of choice due to its high cervical cancer incidence and mortality. The authors tested 7 different screening strategies with 6 different screening frequencies for each, making a total of 42 possible combinations for screening. Among these options, the authors examined VIA coupled with immediate cryotherapy treatment for abnormal results. Similar to Goldie et al., the authors of this study concluded that the most cost-effective method that they examined was VIA screening followed by immediate treatment. Among all the methods examined, screening 35-55 year old women once per 5 years with VIA coupled with immediate treatment saved the most lives at the lowest cost. They estimated that the entire annual cost for a screening program that covers all Thai women would cost $0.79 per woman per year, or $4.7 million total each year.

Continuing on with the Thai theme, Palanuwong (2007) conducted a cross-sectional study looking at whether or not the VIA single-visit approach (VIA/SVA) would increase access to cervical cancer prevention services among Thai women from five low-resource provinces. The
results showed that in all five provinces, screening coverage increased significantly in the first year after the program began. Table 2, below, shows the effects on screening coverage before and after program implementation. The high spike in coverage soon after the program was implemented indicates the general acceptance of this screening technique among Thai women. In terms of cost savings, for every VIA/SVA visit substituted for a Pap smear, $7.33 U.S. was saved, which means a total savings of $362,300 U.S. in the first year following the implementation of the VIA/SVA program.

Table 2. Comparisons of screening coverage of women aged 36–60 between the year before and the first year of the visual inspection by acetic acid/single-visit approach implementation

<table>
<thead>
<tr>
<th>Province</th>
<th>Before implementation</th>
<th>The first year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total visits</td>
<td>New visits†</td>
</tr>
<tr>
<td>Roi et</td>
<td>11,755</td>
<td>8,734</td>
</tr>
<tr>
<td>Nongb ei</td>
<td>5,993</td>
<td>5,747</td>
</tr>
<tr>
<td>Yaso thorn</td>
<td>4,476</td>
<td>4,315</td>
</tr>
<tr>
<td>Surat thani</td>
<td>3,756</td>
<td>3,756</td>
</tr>
<tr>
<td>Ammarath cheon</td>
<td>4,483</td>
<td>4,326</td>
</tr>
<tr>
<td>Total</td>
<td>30,686</td>
<td>26,878</td>
</tr>
</tbody>
</table>

†The new visits of the year before implementation were estimated using percentage repetition of Pap smear, as shown in Table 3.

Cervical cancer is the most common reproductive cancer among women in Bangladesh, comprising 22-29% of all female cancers in the country. Recently a screening program that involved VIA and cryotherapy was introduced in the country in order to combat this disease (Ahmed et al., 2008). This study importantly assessed the attitudes towards cervical screening before the program was implemented in the pilot districts. After finding that 84% of the women interviewed were interested in cervical screening and that healthcare providers were willing to provide cervical screening, the pilot program was implemented in 16 districts. By June 2008, 44 districts had started the program, and the goal for 2010 is to reach all 64 districts in Bangladesh. This program provided the appropriate training for service professionals that would administer the VIA test, as well as the equipment needed for VIA screening and cryotherapy treatment. Figure 1, below, shows the success of the program in the rising number of VIA visits from 2004-2007. The authors conclude that despite the initial success of the program, several issues still remain, including the false-positives from VIA testing given its subjective nature and the continued training and skill development of service providers. In addition, an effective and comprehensive monitoring program was needed to accurately measure the program’s progress. This article does not comment on the cost-effectiveness of this strategy compared to other strategies or the sustainability of such a program in the long-term, both of which are necessary in evaluating the usefulness of any health intervention.

The proposal presented here will incorporate an educational campaign similar to the successful radio and educational program implemented in three communities in Honduras, another country with a high incidence of cervical cancer (four times that of the U.S.) (Perkins, Langrish, Stern, & Simon, 2007). In these communities, radio listening is high, as most families own a battery-powered radio and nearby are two local radio stations. During hour-long broadcasts on these stations, the importance of cervical cancer screening was emphasized, as well as when a woman should go in for screening. These hour-long broadcasts were supplemented with short radio messages that reinforced the more important points regarding cervical cancer screening. Surveys before and after these radio broadcasts revealed that knowledge regarding the topic increased following the program. Table 2, below, shows these significant results. The authors also concluded that screening behaviors also increased subsequent to the radio broadcast among women aged 30 and over, as seen in Table 3, below. The proportion of women who had not been screened in the past two years increased from 30% before the radio program to 65% afterwards. The program also included a 45-minute lecture training component of community nurses. The results from the study indicated that there was a significant gain in knowledge following this training, and that nurses retained much of this knowledge when surveyed again two years later. The authors conclude from the success of this program that media sources may be useful intervention targets for women in developing countries at-risk for cervical cancer and in need of screening measures.

Evidence from Basu et al. (2006) suggests that implementation of a long term cervical screening and treatment program will be generally well-tolerated among women in a rural region of India. This study implemented a VIA screening program among age-eligible women in Bengal, India, and the authors importantly assessed satisfaction with the program among treated women through follow-up interviews shortly (median time 22 days) after the initial screening. The proposal presented here will use the results from these satisfaction interviews in order to improve certain aspects of the Dindigul program.

The program implemented between 2003 and 2004 in Bengal, India was highly successful (Basu et al., 2006). A total of 2,184 women were screened during the program, of which 247 (11.3%) women had a positive VIA result. These women were then offered colposcopy services in the same sitting. Fortunately, no woman presented with invasive cervical cancer, but 46 women were diagnosed with cervical intra-epithelial neoplasias (CIN 1-3), which may have progressed to cervical cancer if not detected through screening, highlighting the importance of screening in saving lives. Tables 3, 4, and 5, below, highlight the findings from the satisfaction survey component of the study. Overall, 64.7% of women included in the study were satisfied with the service, and 5.6% were very satisfied. Approximately 24.3% said they were somewhat satisfied but improvements were needed. Table 6, below, lists the most common suggestions provided for improving the services. Notably, the women included in the study expected treatment for other medical problems at the time of their screening, and this must be addressed in order to achieve success. Other reasons for the program’s success were the accessibility and affordability of the screening.

The Dindigul district in Tamil Nadu state in South India was chosen for the screening program because of the high burden of cervical cancer in the district and the surrounding region. The Chennai cancer registry reports the highest crude incidence rate of cervical cancer, at 24.2 cases per 100,000 persons, than all other reporting cancer registries in India. Dindigul district, like Chennai, is located in Tamil Nadu state in South India, and has high rates of cervical cancer that are stratified by education level (Swaminathan et al., 2009). The authors of the Swaminathan et al. study determined an inverse relationship between cancer incidence and level of education, as illustrated in Table 3, below. Disregarding the highest education level rates because of inadequate sample size, one can still see that women with no education were at higher risks for developing cervical cancer than a woman with some education. This is most likely explained by the fact that uneducated women do not learn of preventive health measures, such as
screening, and they often do not have the financial resources to access these services as more educated women are able to. This association with education level also signifies that an educational component as part of a screening program could potentially add great value to the program. The Basu et al. (2006) study, cited above, concluded that the VIA screening coupled with immediate treatment was well-tolerated in the rural setting of Bengal, India, which suggests similar satisfaction may be obtained in Dindigul district, where approximately 700,000 of the 973,000 workers in the district are rural workers (“District Profile,” 2008).


The screening program in Dindigul district will begin with initial training and education of local healthcare workers in the region on VIA screening methods and cryotherapy treatment. Female nurses will be provided with the most training, in order to reduce the embarrassment associated with having a pelvic examination performed by a male stranger. Nurses and other healthcare workers will be taught how to diagnose cervical neoplasias; however, some subjectivity will inevitably remain, but past studies cited above suggest that this is still a viable alternative to Pap testing or no screening method at all. Since the effectiveness of cryotherapy diminishes with increasing lesion size, all neoplasias that cover 75% or more of the cervix will forego cryotherapy and be referred for alternative treatment (Tsu & Pollack, 2005). One limitation of VIA is that with increasing age, it becomes progressively more difficult to view the area being examined, or the squamocolumnar junction (SCJ), and Pap smear testing should be used on older women to prevent misdiagnoses (Palanuwong, 2007). After the training and teaching of the nurses and healthcare workers, funds for the program will be used to ensure that treatment will be free for all participating women and that there are enough clinics or screening centers in the district to prevent issues of inaccessibility. To address other health needs, women that attend screening at the clinics and screening centers will also have the chance to be treated for other medical conditions, which will hopefully prevent the dissatisfaction found in the previous study in Bengal where women were disappointed that medical treatment for other ailments was not available at the time of the screening. In addition, counseling provided by the workers providing the screening services is needed to ensure that screened women understand the results of their test, when they should report back for another test, and how to protect oneself from HPV and other STIs. In the case of women undergoing cryotherapy treatment, counseling is especially needed to alert these women that safe sex practices, such as condom use or preferably abstinence, need to be followed after treatment for a short time, as the freezing treatment may temporarily be associated with an increased risk of STI infection; a study looking
into this association is currently underway in South Africa with HIV/AIDS, the results of which will affect program policy in Dindigul if an association is found (Tsu & Pollack, 2005).

The educational component to the general public will follow the methods employed in Perkins et al. (2007) in Honduras. If research on the ground suggests that most families at all socioeconomic levels have battery powered radios and that radio is an important means of information dissemination in the district, then frequent radio broadcasts could potentially be a viable strategy for educating the public on the importance of cervical cancer screening. The program implementers would work closely with radio broadcasters and establish a working contract that specifies the length and frequency of these broadcasts.

The third part of the program will involve monitoring and evaluation. Every woman that is screened will receive a card to leave feedback on and to rate her comfort and satisfaction of the screening and treatment, if applicable. These cards will be critically evaluated, and changes will be made accordingly to better accommodate the needs and preferences of the women being screened. Measures will be put in place to monitor the impact of the program over time to ensure that the VIA/SVA and treatment with cryotherapy is indeed alleviating the burden of cervical cancer disease over time. This would ideally involve a centralized reporting bureau or office that keeps track of the total number of women screened, outcomes of the screenings, and treatment outcomes, if applicable. This would require clear lines of communication between the screening centers and the reporting office and the creation of a uniform system of reporting between the different screening sites.

As the evidence cited above from previous case studies suggests, the VIA/SVA with screening and treatment in one visit has the potential to significantly reduce the burden of cervical cancer in low-resource settings if administered correctly, while remaining cost-effective for countries with limited healthcare budgets. Educational components of health interventions and appropriate training of nurses and other healthcare workers is an essential part of any successful health program. By training mostly female nurses and providing affordable and easy access to treatment centers as well as additional medical treatment for other health conditions if solicited, this program will remain sensitive to the cultural and socioeconomic characteristics of the intervention population. With a well-managed monitoring and evaluation system in place, public health officials will be able to keep track of the progress the program makes in alleviating the burden of cervical cancer and be able to make improvements from the feedback.

While VIA screening and cryotherapy treatment methods are far from flawless, the most recent evidence available suggests that these strategies are the most viable and cost-effective for implementation in resource-poor settings. Improvements in VIA screening, such as creating a more objective diagnostic measure, should continually be sought even after the program is implemented. In time, better diagnostic and screening measures will be discovered and can replace VIA screening when the evidence suggests better alternative methods are out there. Hopefully, the HPV vaccines will become more affordable for developing nations in time, and national immunization programs will cover all eligible women. Until that time comes, however, the screening and treatment methods discussed in this proposal have the opportunity to save thousands of lives from a disease that is almost 100% preventable if appropriate measures are taken. Importantly, this program will provide developing nations the opportunity to even the playing field and end the health disparities that still persist to this day.
Works Cited

Ahmed, T., Ashrafunnessa, & Rahman, J.
2008 Development of a visual inspection programme for cervical cancer prevention in Bangladesh. Reprod Health Matters, 16(32), 78-85. doi: 10.1016/S0968-8080(08)32419-7

Alliance for Cervical Cancer Prevention

Associated Press

Basu, P., & Chowdhury, D.

2006 Cervical screening by visual inspection with acetic acid (VIA) is well accepted by women--results from a community-based study in rural India. Asian Pac J Cancer Prev, 7(4), 604-608.

District Profile--2008, Dindigul District

Goldie, S. J., Kuhn, L., Denny, L., Pollack, A., & Wright, T. C.


Palanuwong, B.


Tsu, V. D., & Levin, C. E.

Tsu, V. D., & Pollack, A. E.

World Health Organization (WHO), HPV Information Centre

Wiwanitkit, V.
2009 Screening for cervical cancer: which common technique is the most cost-effective choice? Asian Pac J Cancer Prev, 10(3), 531-532.
Historical archaeology is a relatively new specialty within the realm of archaeology, and is still struggling to fulfill its full potential as a credible field of study. For many of its formative years, historical archaeology was termed “atheoretical,” simply a presentation of historical facts developed by documentary research based upon the archaeological record (Johnson 1999: 150; Orser 1996: 12). However, as the field has grown and developed, historical archaeologists are becoming more open to the idea of possessing their own theoretical perspectives and assumptions without having to rely on other subfields of archaeology for acceptance or shared theories (Wilkie 2005: 338). This paper is a broad survey of the development of historical archaeologists’ ideas regarding the birth and development of the field, as well as the purpose, the theory, and the scope of historical archaeology.

In the 1930s, historical archaeology was born. At the time it was considered a triumph primarily for the field of history. Its birth came about when the federal government developed an interest in the conservation of national historic sites in the United States. Soon the government passed a series of legislative acts requiring a degree of expertise in both excavation and interpretation of artifacts that were to be collected during archaeological investigations at historical sites; this was done in order to provide the best opportunity for success in preserving the nation’s history (Little 2007: 24-25; Orser 2001: 622). This mandatory level of expertise also allowed for more efficient excavations. The premise was that someone trained in both fields—history and archaeology—would be better equipped to determine where sites were most and least likely to be found and also to understand the functions of the exposed sites or features when excavating within their realm of knowledge (Hume 1968: 17).

Following the acts of legislation enacted by the government, the field of historical archaeology grew increasingly popular. However, at the same time a battle between the fields of history and archaeology erupted (Orser 1996: 11). Practitioners were experiencing a sort of identity crisis: historians were digging and archaeologists were reading—it was all very traumatic (Johnson 1999: 154). In addition, prehistoric archaeology balked at the emergence of historical archaeology, deeming the efforts and abilities of this new field unscientific and trivial, confusing and obscuring the definition and focus of historical archaeology. New questions emerged: when exactly does “history” delineate from “prehistory,” and what does a historical archaeologist study in contrast to a prehistoric archaeologist? This confusion among the ranks of those practicing historical archaeology led to the period of atheoretical study (Orser 1996: 11). The dynamics of the history-archaeology debate and the confusion concerning the definition and purpose of historical archaeology led to the theoretical perspectives that formulate the nucleus of historical archaeological theory today. However, the very spirit of the field seeks to encourage nonconformity and new ideas (Orser 2001: 625).
First, what is the definition of historical archaeology? In short, historical archaeology is the efficient utilization of all possible remains of material culture to reconstruct and better understand how the modern world developed into its present state. As Little (2007: 20, 59) explains, material culture used in this context refers to

...all things that are somehow influenced by the culture that created them. Therefore it not only includes objects excavated from below ground, but also written and printed documents, artwork, gardens, landscapes, the built environment of structures and streets, and objects that survive in public and private collections.

These nuances of material culture are explored with the goal of establishing a dialogue between the past and present that will help in planning “a considered and intentional future” (Little 2007: 20, 59; Orser 2008: 184).

Now that we know how it is defined in general terms, we can look at what historical archaeology is in terms of practice. Orser (1996) presents three potential approaches to historical archaeology: “a study of a time period,” “a research method,” or “a study of the modern world” (Orser 1996: 23). Viewing historical archaeology as the study of a time period would result in the study of all time from the end of “prehistory” to the present. History’s starting place within the realm of historical archaeology could be defined by multiple events: the emergence of written records or the spread of Europe—about 1492. As a research method, historical archaeology would focus on preparing for archaeological excavation by intensive study of texts and documents until sufficient familiarity or expertise is achieved (Hume 1968: 24). The use of historical archaeology as the study of the modern world is a multidisciplinary, holistic look at the spread of European influence—beginning in the fifteenth century—and the social, economic, political and cognitive evolution that has resulted in what is known as the developed, “modern” world (Johnson 1999: 150; Lightfoot 1995: 199). This approach looks at the spread of European culture, what sparked the spread, and how the spread affected and continues to affect the world on a global scale. This knowledge comes by careful examination of a wide range of material culture brought to light by excavation or research (Little 2007: 14; Orser 1996: 24-26, 2008: 183-184; Wilkie 2005: 340). The majority of historical archaeologists use something similar to this third approach.

Building upon our new knowledge that historical archaeology is the comprehensive study of all possible material culture in the scheme of understanding the modern world, we can examine historical archaeology for itself, its premises and perspectives. There are numerous ways in which a historical archaeologist can apply theory in the practice of his trade. In fact, Andrén (1998) proposed a five-fold multidisciplinary module for historical archaeology, each premise belonging to a specialty or field of study in itself, furthering the interdisciplinary character of historical archaeology.

First, in the field of aesthetics, “historicizing styles” is one component of historical archaeology. This involves acquiring a depth of knowledge in artwork, art pieces, styles and types, which gives the archaeologist the background needed to create new art. Aesthetic historical archaeology places its emphasis on actual material objects rather than on the
documentary resources and enables not only inspiration for new art, but also restoration opportunities and reconstructions (Andrén 1998: 108-110).

Philology and archaeology create a historical archaeology that focuses on textual concepts. The goal is to be able to locate, excavate and translate historic texts from past cultures. In this way the historical archaeologist not only studies the texts to gain knowledge himself/herself, but also makes the text available for the general public. In regard to linguistic aspects, the historical archaeologist is able to use the discovered texts in comparisons and to serve as reference points in the mapping of linguistic chronologies (Andrén 1998: 113-114).

Another concept presented by Andrén (1998) includes the attempt to establish knowledge of artifact histories, accomplished by the use of anthropological and ethnographic means. Also, the study of analogies would be relevant and helpful in archaeological discourse in order to draw conclusions and establish hypotheses (Andrén 1998: 127, 131). Finally, using history in conjunction with material objects—whether a book, a garden or a monument—allows historical archaeology to build upon the knowledge gathered from documentary or material sources to provide a more comprehensive knowledge and better understanding of the past (Andrén 1998: 120-121).

For a large part, the bulk of historical archaeological theory builds upon this last premise—combining history and the study of material objects to create a comprehensive, multidisciplinary wealth of knowledge. The function of this theory is to act as blinders—to help concentrate on the most important bits of information gathered and ignore the irrelevant, to aid in understanding and comprehension of the information as the pieces relate to one another, and finally to help “transform information into knowledge” (Hegmon 2003: 213). To apply “theory” to historical archaeology, we gather information from the archaeological record, documentary, or other material sources. We examine our archaeological findings in the context of information found in documentary sources, then formulate linking arguments or hypotheses to build upon the historical foundation (Orser 2008: 184, 1996: 8-9, 17).

When we can successfully apply theory to historical archaeology, the possibilities are endless. Orser (2001) outlines some of the distinct research opportunities within the reach of a historical archaeologist. Due to the interplay between textual or documentary sources and the archaeological record, historical archaeologists have a rare opportunity to observe the bias or subjectivity of recorded history. In such a way, historical archaeology, while relying heavily on “modern” history, still serves as a critique of the discipline. Capitalism is much studied in this vein along with other ideas of politics and resistance (Orser 2001: 625).

Another important research interest is “trans-temporal study of broad cultural trends and processes” (Orser 2001: 625). This is related to the idea of longue durée of the Annales School—study of the long-term processes, such as in geography or climate (Johnson 1999: 151). The researcher should perform these studies on a global level. When executing such investigations, the temporal starting point should be placed at the date of the site being studied, but research should be carried out “bidirectionally”—both back in time and forward in time from the site’s starting point—creating a timeline in context for the site, enabling full understanding of
the changes that had to occur to both create and destroy the site being excavated (Orser 2008: 187).

The third research opportunity outlined involves what is termed as “particularistic” archaeology—when emphasis is placed on a specific place (Orser 2001: 626). Today this is one of the most common forms of research carried out in historical archaeology. Cultural resource management (CRM) is one manifestation of this research—the archaeologist is tasked to excavate a site of some importance or relevance (Orser 2001: 626). However, this form of research has its origin early in the field of historical archaeology. Most other types of archaeology have what is referred to as a “heroic age” and American historical archaeologists felt that the field of historical archaeology needed a heroic age—when sites of great importance should be excavated—to garner goodwill and publicity for the field. The “heroic age” of historical archaeology included excavations of the homes and properties of the elites of United States’ history (Orser 2001: 622).

Historical archaeology has come a long way from being the “stepchild” of archaeological method and theory, though some camps do not yet accept it completely. However, the future of historical archaeology is looking bright. Recent developments in the field have encouraged a more anthropological basis. Already a multidisciplinary field, a strengthened focus on anthropological methods would make historical archaeology the single most diverse, holistic, and cross-cultural approach to the study of the past, its cultures, and its evolution.

With an anthropological approach, historical archaeology could find ways to examine ideas and experiences such as acculturation, spatial use, religion and theories of magic, and much more (Orser 2001: 623). Also, areas of overlap with prehistory would be possible, perhaps leading to the incorporation of a temporal continuum with a deepened understanding of social and cultural evolution. One such area is referred to as “contact archaeology” which studies the impact of European influence on indigenous cultures. Lightfoot (1995) supports this possibility, saying:

Culture contact studies may revitalize holistic anthropological approaches that consider multiple lines of evidence from ethnohistorical accounts, ethnographic observations, linguistic data, native oral traditions, archaeological materials and biological remains (Lightfoot 1995: 199).

Historical archaeology is proving to be an exciting and increasingly popular field of work and study. Despite getting off to a rough start in the 1930s, historical archaeology has managed to reconcile the two disciplines of history and archaeology to form a framework of theoretical perspectives carried out by a workforce of knowledgeable and expert historians and archaeologists. The scope of historical archaeology encompasses the study of the modern world and its development, beginning in the fifteenth century with the spread of European influence. Several specializations within the field of historical archaeology have emerged. The most widely accepted are those that relate to American colonization, Americanist archaeology, and the more specialized focus incorporating Marxist thought, Marxist archaeology. In general, the basis of historical archaeological theory relies on the incorporation of material culture from archaeological sources with historical accounts and material resources to form a comprehensive,
multidisciplinary, historic narrative with laudable temporal depth. With perseverance and continued research, further incorporation of anthropological methods will extend the reach of historical archaeology into unprecedented realms, answer more questions, and provide even more avenues of inquiry into study of the modern world and her history.
Works Cited

Andrén, Anders.

Hegmon, Michelle.

Hume, Ivor Noël.

Johnson, Matthew

Lightfoot, Kent G.

Little, Barbara J.
2007 Historical Archaeology: Why the Past Matters. Left Coast Press, Inc., Walnut Creek, California.

Orser, Charles E., Jr.


Wilkie, Laurie A.
Part I: Description of the Berserkr

The modern popular conception of the Viking warrior is one of a murderous savage, clad in animal skins, howling into battle. This conception probably owes more to literary tradition than to historical fact: it reflects not the ordinary Scandinavian warriors, but rather a special group of fighters known as berserks or berserkers.


The berserker is closely associated in many respects with the god Óðinn. Adam of Bremen in describing the Allfather says, "Wodan — id est furor" or "Wodan — that means fury." The name Óðinn derives from the Old Norse odur or óðr. This is related to the German wut, "rage, fury," and to the Gothic wods, "possessed" (Georges Dumézil. The Destiny of the Warrior. Chicago, Univ. of Chicago Press. 1969. p. 36). This certainly brings to mind the madness associated with the berserker, and other Óðinnic qualities are seen to be possessed by the berserk. Ynglingasaga recounts that Óðinn could shape-shift into the form of a bird, fish, or wild animal (Snorri Sturluson, p. 10).

The berserker, too, was often said to change into bestial form, or at least to assume the ferocious qualities of the wolf or bear. Kveldulfr in Egils Saga Skallagrimssonar was spoken of as a shapechanger (Hermann Palsson and Paul Edwards, trans. Egil's Saga. NY: Penguin. 1976. p. 21), and Hrolf's Saga tells of the hero Bjarki, who takes on the shape of a bear in battle:

Men saw that a great bear went before King Hrolf's men, keeping always near the king. He slew more men with his forepaws than any five of the king's champions. Blades and weapons glanced off him, and he brought down both men and horses in King Hjorvard's forces, and everything which came in his path he crushed to death with his teeth, so that panic and terror swept through King


Dumézil refers to this phenomenon as the *hamingja* ("spirit" or "soul") or *fylgja* ("spirit form") of the berserker, which may appear in animal form in dreams or in visions, as well as in reality (Georges Dumézil. *Gods of the Ancient Northmen*. Los Angeles: Univ. of California Press. 1973. p. 142).

Another Óðinnic quality possessed by the berserk is a magical immunity to weapons. In *Havamál*, Óðinn speaks of spells used to induce this immunity:

A third song I know, if sore need should come of a spell to stay my foes; When I sing that song, which shall blunt their swords, nor their weapons nor staves can wound .... An eleventh I know, if haply I lead my old comrades out to war, I sing 'neath the shields, and they fare forth mightily; safe into battle, safe out of battle, and safe return from the strife. (Lee M. Hollander, trans. *Poetic Edda*. Austin. Univ. of Texas Press. 1962. pp. 44-45)

[Þat kann ek it þriðja ef mér verðr þörf mikil hapts við mina heiptmögú eggjar ek deyfi minna andskota bitat þeim vápn né velir .... Þat kann ek it ellipta ef ek skal til orrostu leiða langvini undir randir ek gel en þeir með ríki fara heilir hildar til]
The berserk was sometimes inherently possessed of this immunity, or performed spells to induce it, or even had special powers to blunt weapons by his gaze. Many tales say of their berserkers, "no weapon could bite them" or "iron could not bite into him." This immunity to weapons may also have been connected with the animal-skin garments worn by the berserk. As we saw above, while in animal form, "blades and weapons glanced off" Böðvarr Bjarki. Similarly, Vatnsdæla Saga says that "those berserks who were called ulfhédna had wolf shirts for mail-coats" (Ellis-Davidson, "Shape Changing," p. 133) [...peir berserkir, er Ulfhédnar váru kallaðir; þeir höfðu vargstakka fyrir brynjur... (Einar Ól. Sveinsson, Vatnsdoela saga, Íslenzk fornrit 8. Reykjavík: Hið íslenzka fornritaféla g. 1939. pp. 24-25.)]. This concept of immunity may have evolved from the berserker's rage, during which the berserk might receive wounds, but due to his state of frenzy take no note of them until the madness passed from him. A warrior who continued fighting while bearing mortal wounds would surely have been a terrifying opponent.

It is likely that the berserk was actually a member of the cult of Óðinn. The practices of such a cult would have been a secret of the group's initiates, although the Byzantine emperor Constantine VII refers in his Book of Ceremonies to a "Gothic Dance" performed by members of his Varangian guard, who took part wearing animal skins and masks: this may have been connected with berserker rites (Hilda R. Ellis-Davidson. Pagan Scandinavia. NY: Frederick A. Praeger. 1967. p. 100). This type of costumed dance is also seen in figures from Swedish helmet plates, scabbard ornaments, and bracteates which depict human figures with the heads of bears or wolves, dressed in animal skins but having human hands and feet. These figures often carry spears or swords, and are depicted as running or dancing. One plate from Torslunda, Sweden, may show the figure of Óðinn dancing with such a bear figure.

Warriors Dressed in Animal Skins and Masks
Left: Helmet Plate from Torslunda. Right: Bracteate Fragment from Gutenstein.
Other ritual practices attributed to berserks may represent the initiation of the young warrior into a band of berserkers. Such bands are mentioned in the sagas, oftentimes numbering twelve warriors. Another common feature of these bands is the name of the leader, which is often Björn or a variant, meaning "bear." The form of this initiation is a battle, either real or simulated, with a bear or other fearsome adversary. Grettirs Saga tells of a situation of this sort, when a man named Björn throws Grettir's cloak into the den of a bear. Grettir slays the bear, recovers his cloak, and returns with the bear's paw as a token of his victory (Fox and Palsson, pp. 62-67). Böðvarr Bjarki has a protégé, Hjalti, who undergoes a simulated encounter as his initiation in Hrólf's Saga. Böðvar first slays a dragon-like beast, then sets its skin up on a frame. Hjalti then "attacks" the beast and symbolically kills it before witnesses, earning his place among the warriors (Jones, pp. 282-285). Bronze helmet plates from locations in Sweden and designs upon the Sutton Hoo purse lid seem to show examples of these initiatory encounters, where a human figure is seen grappling with one, or often two, bear-like animals (Margaret A. Arent. "The Heroic Pattern: Old German Helmets, Beowulf and Grettissaga." in Old Norse Literature and Mythology. ed. Edgar C. Polomé. Austin, Univ. of Texas Press. 1969. pp. 133-139).


The physical appearance of the berserk was one calculated to present an image of terror. Dumézil draws parallels between the berserk and the tribe of Harii mentioned in Tacitus' Germania who used not only "natural ferocity" but also dyed their bodies to cause panic and terror in their enemies, just as the berserk combined his fearsome reputation with animal skin dress to suggest the terrifying metamorphosis of the shape changer (Dumézil, Destiny of the Warrior, p. 141). Indeed, berserkers had much in common with those thought to be werewolves. Ulfr, a retired berserker, is mentioned in this light in Egils saga Skallagrímsonar:

But every day, as it drew towards evening, he would grow so ill-tempered that no-one could speak to him, and it wasn't long before he would go to bed. There was talk about his being a shape-changer, and people called him Kveld-Ulfr ["Evening Wolf"] (Palsson and Edwards, Egil's Saga, p.21).

[En dag hvern, er at kvelldi kom. Þá gerðiz hann styggur, sva at fáir menn máttu ordum við hann koma; var hann kveldsvæfur. Þat var mál manna, at hann veri miök hamrammr. Hann var kalladr Kveldúlfr. (Snorri Sturluson. Egils Saga. ed. Grímur Jónsson Thorkelin. Arnamagnæanske stiftelse. 1809. p. 3)]

In the sagas, berserks are often described as being fantastically ugly, often being mistaken for trolls, as were Skallagrím and his kinsmen in *Egils saga Skallagrímsönar* (Palsson and Edwards, *Egil's Saga*, p. 66). Egill himself is described as being "black-haired and as ugly as his father" (*Ibid.*, p. 79) [...*at han mundi verda mjög liótr ok likr fedr sinum, svantr á hárs lit.* (Snorri Sturluson. *Egils Saga*, p. 147)], and at a feast in the court of the English king Æthelstan, Egill is said to have made such terrible faces that Æthelstan was forced to give him a gold ring to make him stop:

His eyes were black and his eyebrows joined in the middle. He refused to touch a drink even though people were serving him, and did nothing but pull his eyebrows up and down, now this one, now the other. (Palsson and Edwards, *Egil's Saga*, pp. 128-129).

[...*Egill var svarteygr ok skolbrúnn. Ecki villdi han drecka, þó at honum veri borit, en ymsum hleypti han brúnunum ofan eda upp.* (Snorri Sturluson. *Egils Saga*, p. 305.)]

In *Örvar-Odd's Saga*, the berserk Ögmundr Eyþjófsbani is similarly described as having a horrible appearance:

He had black hair, a thick tuft of it hanging down over his face where the forelock should have been, and nothing could be seen of his face except the teeth and eyes.... for size and ugliness they were more like monsters than like men (Paul Edwards and Hermann Palsson, trans. *Arrow-Odd: A Medieval Novel*. NY: New York Univ. Press. 1970. p 37).

[...*hann var svartr á hárslit, ok hekk flóki svartr mikill ofan fyrrur andliti, þat er topprinn skyldi heita. Allr ver hann ok svartr í andliti nem augu ok tenn.... þeir víru líkari trúllum en mönnnum fyrrur vaxtar sakir ok allrar illzkú.* (Richard C. Boer, ed. Örvar-Odds Saga. Leiden: E.J. Brill. 1888. p. 91)].

**Part II: Going Berserk — a Description of the Berserkergang**

The actual fit or madness the berserk experienced was known as berserkergang. This condition is described as follows:

This fury, which was called berserkergang, occurred not only in the heat of battle, but also during laborious work. Men who were thus seized performed things which otherwise seemed impossible for human power. This condition is said to have begun with shivering, chattering of the teeth, and chill in the body, and then the face swelled and changed its color. With this was connected a great
hot-headedness, which at last gave over into a great rage, under which they howled as wild animals, bit the edge of their shields, and cut down everything they met without discriminating between friend or foe. When this condition ceased, a great dulling of the mind and feeble-ness followed, which could last for one or several days (Fabing, p. 234).

Hrólf's Saga speaks similarly of King Hálfdan's berserks:

On these giants fell sometimes such a fury that they could not control themselves, but killed men or cattle, whatever came in their way and did not take care of itself. While this fury lasted they were afraid of nothing, but when it left them they were so powerless that they did not have half of their strength, and were as feeble as if they had just come out of bed from a sickness. This fury lasted about one day (Ibid.).

During the berserkergang, the berserk seemed to lose all human reason, a condition in which he could not distinguish between friend and enemy, and which was marked by animalistic screaming. In Örvar-Odd's Saga, Odd remarks upon hearing a group of berserkers, "Sometimes I seem to hear a bull bellowing or a dog howling, and sometimes it's like people screaming" (Edwards and Palsson, Arrow-Odd, p. 40) [Mér þykkir stundum sem griðungar gelli eða hundar ýlí, en stundum er, sem grenjat sé, eða veiztu nökcura menn... (Boer, Örvar-Odds Saga, p. 97)].

This lack of awareness is clearly seen in Egils saga Skallagrímsonar, when the berserkergang came upon Egill's father, Skallagrímr, as he played a ball game with his son and another young boy:

Skallagrím grew so powerful that he picked Thord up bodily and dashed him down so hard that every bone in his body was broken and he died on the spot. Then Skallagrím grabbed Egill. (Palsson and Edwards, Egil's Saga, pp. 94-95)

[En um kvelldit eptir sólarfall þá tók þeim Agli verr at gánga, gerdiz Grímr þá sva sterkr, at han greip upp Þórd ok keyrdi nídr sva hart at han lamdiz allr, ok fëkk hann þegar bana. Sidan greip han til Egils. (Snorri Sturluson. Egils Saga, p. 192)]

Egill was saved by a servant woman, who was slain herself before Skallagrím came out of his fit, but had she not intervened, Skallagrím would certainly have killed his own son.

Another characteristic of berserkergang was the great strength showed by the berserk. This strength was sometimes expressed in the sagas by describing the berserker as a giant or as a troll. The berserker was thought not only to have assumed the ferocity of an animal, but also to have acquired the strength of the bear. In token of this, the berserk might assume a "bear name," that is, a name containing the element björn or biörn, such as Gerbjörn, Gunbjörn, Arinbjörn, Esbjörn or Þorbjörn (Saxo Grammaticus. The History of the Danes. trans. Peter Fisher. Totowa NJ: Rowman and Littlefield. 1979. Vol II, p. 95). Bjarki, whose name means "Little Bear," was said to actually take the shape of the bear in combat.
To gain this bear-like strength, the berserk might drink the blood of a bear or wolf (*Ibid.*, p. 45):

Straight away bring your throat to its steaming blood and devour the feast of its body with ravenous jaws. Then new force will enter your frame, an unlooked-for vigor will come to your muscles, accumulation of solid strength soak through every sinew" (Saxo, *The History of the Danes*, Vol. I, p. 25).


The aftermath of the berserkergang was characterized by complete physical disability. *Egils saga Skallagrímssonar* says:

What people say about shape-changers or those who go into berserk fits is this: that as long as they're in the frenzy they're so strong that nothing is too much for them, but as soon as they're out of it they become much weaker than normal. That's how it was with Kveldulfr; as soon as the frenzy left him he felt so worn out by the battle he'd been fighting, and grew so weak as a result of it all that he had to take to his bed (Palsson and Edwards, *Egil's Saga*, p. 72).

[Svá er sagt, at þeim mönnum veri farit er hamrammir voro, eda þeim er berserksgángr var á, at medan þat var framit, þá voro þeir sva sterkir, at ecki hellz vit þeim, enn fyrst er af var gengit þá voro þeir ómátkari en at vanda. Kvelldúlfr var ok sva, at þá er af honum geck hamremmin. Þá kendi han mædi af sókn þeirri er han hafdi veitt, ok var han þá af öllu saman ómáttigr, svo at han lagðiz í reckiu, en byrr bar þá i haf út. (Snorri Sturluson. Egils Saga, p. 125.)]

A common technique used by saga heroes to overcome berserks was to catch them after their madness had left them, as Hjalmar and Arrow-Odd do in *Hverar Saga*, and slay the berserkers while they lay in their enfeebled state after their fury (Christopher Tolkein, trans. *The Saga of King Heidrek the Wise*. NY: Thomas Nelson & Sons. 1960. pp. 5-7).

**Part III: The Role of the Berserker in Viking Society**

The berserker's place in society was limited by the terror and violence that was associated with berserkergang. As superb warriors, they were due admiration. However, their tendency to turn indiscriminately upon their friends while the madness was upon them went squarely against the heroic ethic, which demanded loyalty and fidelity to one's friends. The berserk skirted the classification of *niðingr*, one who was the lowest of men and the object of hate and scorn. An eleventh-century monument raised in Söderby in Uppland, Sweden in memory of a brother reads: "And Sassur killed him and did the deed of a *niðingr* — he betrayed his comrade" (Foote
and Wilson, p. 426) [U954†, Söderby, Uppland, *En Sassurr drap hann ok gerði niðingsverk, sveik félagu sinn.*]

The primary role of the berserk was as a warrior attacked to a king’s army. Both King Harald and King Hálfdan had berserker shock-troops. Aside from their military value, the berserker's ties to Óðinn would have been welcome in a royal army, since Óðinn also had a particular association with rulership, being venerated in Anglo-Saxon England as the ancestor of chieftains, and throughout the North as god of kings and protector of their royal power (Dumézil, *Gods of the Ancient Northmen*, p. 26). Outside of this role, however, the berserker became the stock villain of the sagas, typified as murderous, stupid brutes, or as one modern critic has it, "a predatory group of brawlers and killers who disrupted the peace of the Viking community repeatedly" (Fabing, p. 232). Saxo Grammaticus speaks of such a band in his *Gesta Danorum*:

> The young warriors would harry and pillage the neighborhood, and frequently spilt great quantities of blood. They considered it manly and proper to devastate homes, cut down cattle, rifle everything and take away vast hauls of booty, burn to the ground houses they had sacked, and butcher men and women indiscriminately" (Saxo, *The History of the Danes*, Vol. I, p. 163).

> [At iuvenes latrocinio viciniam incessere soliti magnas saepe strages edebant. Populari penates, armenta sternere, diripere omnia, ingentem agere praedam, spoliatas rebus aedes exurere, mares passim cum feminis obturare probatatis loco duc tum est. (Saxo Grammaticus. *Gesta Danorum*, http://www2.kb.dk/elib/lit//dan/saxo/lat/or.dsr/6/2/index.htm)]

In addition to their warlike activities within their communities, berserkers are characterized by their sexual excesses, carrying off wives, daughters and betrothed maids who then must be rescued by the heroes of the sagas. Saxo was particularly upset by this behavior:

> So outrageous and unrestrained were their ways that they ravished other men's wives and daughters; they seemed to have outlawed chastity and driven it to the brothel. Nor did they stop at married women but also debauched the beds of virgins. No man's bridal-chamber was safe; scarcely any place in the land was free from the imprints of their lust (Saxo, *The History of the Danes*, Vol. I, p. 118).

> [Adeo enim insolenter se indomiteque gesserunt, ut, constupratis aliorum nuptis ac filiabus, proscripsisse pudicitiam atque in prostibulum relegasse viderentur. Corruptis quoque matronarum fucris, ne toris quidem virginalibus abstinebant. Suus nullum thalamus securitate donabat, nec quisquam fere patriae locus luxuriae eorum vestigiis vacuus erat. (Saxo Grammaticus. *Gesta Danorum*, http://www2.kb.dk/elib/lit//dan/saxo/lat/or.dsr/5/1/index.htm)]

It was no doubt due to these excesses of the berserker that resulted in their demise. In 1015 King Erik outlawed berserks, along with hólmganga or duels (Fabing, p. 235): it had become a common practice for a berserker to challenge men of property to hólmgang, and upon
slaying the unfortunate victim, to take possession of his goods, wealth, and women. This was a difficult tactic to counter, since a man so challenged had to appear, have a champion fight for him, or else be named niðingr and coward. Egils saga Skallagrímsonar records one such encounter:

There's a man called Ljot, a berserker and duel-fighter, hated by everyone. He came here and asked to marry my daughter, but we gave him a short answer and said no to his offer. After that Ljot challenged my son Frideir to single combat, so he has to go and fight the duel tomorrow on the isle of Valdero" (Palsson and Edwards, Egil's Saga, p. 169).

[Madr heitir Liótr hinn bleiki, han er berserkr ok hólmgöngumadr. Han er óþocka sæll. Han kom her ok bad dótur minnar, en vèr suórudum honum skiótt ok syniðum honum ráðsins. Siðan skoraði han til hólmgöngu á Frideir son minn, ok skal á morgin koma til hólmsins í ey þá, er Vörl heitir. (Snorri Sturluson, Egils saga, p. 484).]

In 1123, the Icelandic Christian Law stated, "If someone goes berserk, he is punished with lesser outlawry and the men who are present are also banished if they do not bind him." Lesser outlawry (fjorbaugsgarðr) was a sentence of three years' banishment from the country. Berserkergang was thus classed with other heathen and magical practices, all unacceptable in a Christian society (Foote and Wilson, p. 285). Certainly where berserkers were associated with the cult of Óðinn, and such spellcasting as was associated with their immunity to weapons or shape-changing, this activity would appropriately be classed as "heathen and magical." By the twelfth century, the berserker with his Óðinnic religion, animalistic appearance, his inhuman frenzy upon the battlefield, and terrorism within the Scandinavian community disappeared. The berserk, like his patron deity Óðinn, was forced to yield to the dissolution of pagan society and the advent of the White Christ.

**Part IV: Grendel and Berserkergang**

(All Old English is from Frederick Klaeber's edition of Beowulf and the Fight at Finnsburg. 3rd ed. Lexington MA: D.C. Heath & Co., 1950. All translations to modern English and any mistakes therein are my own.)

A central assumption made about Beowulf is the monstrous nature of Grendel. This conception is so deeply rooted that modern translators often strain over words that in other contexts clearly describe men, glossing them to fit their understanding of Grendel. An example of this is given by O'Keefe:

The word aglæca is an instance of an unfortunate glossing which seriously affects the interpretation of the text. The word is used twenty times in Beowulf, chiefly, as Klaeber notes, for Grendel and the dragon. Yet aglæca is also used for Beowulf and Sigemund. Klaeber's solution to the problem of one word's describing two sets of characters is to gloss aglæca as "wretch, monster, demon, fiend" when it refers to Grendel and the dragon and as "warrior, hero" when it
refers to Beowulf and Sigemund. Building such a distinction into the glossing of the word completely ignores the possibility that the poet has deliberately chosen to use the same word to describe two sets of characters; as Dobbie notes in his edition of Beowulf, in the historical period of Old English the word need have been no more specific that "formidable [one]. (Katherine O'Brien O'Keefe, "Beowulf, Lines 702b-836: Transformations and the Limits of the Human," in Texas Studies in Literature and Language 23 [1981]: pp. 484-485.)

O'Keefe goes on to deal with Grendel as a monster undergoing a transformation to a likeness of a man. However, the Beowulf poet who had such rich Scandinavian source materials available to him more than likely intended to depict a man undergoing a transformation to a monstrous likeness: such a motif was readily available in the bersark, the berserker encountered so frequently in the Old Norse sagas. Upon examining the character of Grendel, clear parallels to these fearsome warriors become evident.

As has been discussed above, the primary characteristics of the berserk are:

1. association with animals, including shape-shifting abilities;
2. terrifying appearance;
3. immunity to weapons via spells or the wearing of (magically) protective animal skins;
4. berserker rage, including turning purple in the face, loss of human reason, acquisition of enormous strength and animal behavior (killing and howling), followed by profound bodily weakness and disability;
5. rejection by the community due to excesses of violence.

It can be demonstrated that Grendel, rather than being an inhuman monster, exhibits the characteristics of the human berserk.

Grendel's approaches to Heorot occur at night, in a misty, dark landscape as suggestive of dreams as of night-time. In lines 702b-714, Grendel undergoes a transformation (O'Keefe, p. 487). Initially, he is described as scriðan sceadu-genga, a gliding shadow-walker: he seems almost to be an incorporeal spirit. As Grendel draws closer to the hall, and to the impending battle with Beowulf, he "solidifies," becoming a manscaða, an evil-doer (l. 712) who gongan (l. 711 and wod (l. 714), moving as a corporeal being. This progression brings to mind the hamingja or fylgia, the symbolic animal shape or spirit that the berserker possessed. Boðvarr Bjarki fought for King Hrólf in bear-form, sending forth his spirit while his body remained motionless in camp. Landnámabók tells of two "shapestrong" men, Stórólfr and Dufþak, who have quarreled over grazing rights:

One evening about sunset a man with the gift of second sight saw a great bear go out from Hvál and a bull from Dufþak 's farm, and they met at Stórólfrvellr and fought furiously, and the bear had the best of it. (Hilda R. Ellis-Davidson, "Shape Changing in the Old Norse Sagas" in Animals in Folklore. eds. J.R. Porter and W.M.S. Russell. Totowa, NJ: Rowman and Littlefield. 1978).
This was another instance when the spirit form is seen as a bear, and in this case, the other as a bull. That these apparitions partake of an incorporeal nature is clear, because it requires a man with "second sight" to perceive them. And yet, at some point they have taken on form and substance for:

In the morning a hollow could be seen in the place where they had met, as though the earth had been turned over, and this is now called Oldugrof. (Hilda R. Ellis-Davidson, "Shape Changing in the Old Norse Sagas")

The terror associated with Grendel is also due to his horrifying appearance. He is called þyrse (l. 426) and eoten (l. 761) for he is a giant in size. From his eyes comes a horrible light, like a flame (him of eagumstod ligge gelicost leoth unfægr, ll. 726b-727). Grendel's hand is like some animal's paw, having claws instead of finger-nails [foran æghwylc wæs stiðra nægla gehwylc style gelicost, hæþenes handsporu hilderinces eglu unheoru, ll. 984b-987a]. Although Grendel's visage is never described, when Beowulf returns from the mere with Grendel's severed head:

Then by the hair, over the floor, was borne
Grendel's head; there men drank,
it was fearful for the earls and their queen with them,
a terrible sight the men looked upon.)

Grendel's head is a terrible sight, and frightening to the people of Heorot even in death.

Another characteristic Grendel shares with the berserk is his immunity to weapons. When Beowulf's men try to come to their leader's aid as he grapples with Grendel, they find their swords to be useless:

Then by the hair, over the floor, was borne
Grendel's head; there men drank,
it was fearful for the earls and their queen with them,
a terrible sight the men looked upon.)

Grendel's head is a terrible sight, and frightening to the people of Heorot even in death.
ond on healfa gehwone heawan þohton, 
sawle secan: þone syn-scaðan
ænig ofer eorþan irenna cyst, 
guð-billa nan gretan holde,
ac he sige-wæpnum forsworen hædfde, 
ecga gehwylcre. (ll. 798-805a)

(They did not know when they entered the fight; 
hard-minded men, battle-warriors 
on every side, they meant to hew him, 
to seek his soul: by none of the best iron 
in the world, by no war sword 
could the evil-doer be touched, 
the victory weapons he made useless by a spell, 
every sword-edge."

Even when Beowulf has torn Grendel's arm from its socket, the arm retains Grendel's weapon immunity:

... aeghwylc gecwæð
 þæt him heardra nan hrinan wolde
 iren ær-god þæt ðæs ahlæcan
 blodge beadu-folme onberan wolde
(II. 987b-990)

(... Each one said
that no hard thing would touch it,
no good iron of old times would harm
the bloody battle-hand of the enemy.)

Grendel, in his attacks, exhibits the characteristics of berserker gang. He is swollen with rage [ða he gebolgen wæs, l. 723b], angry [yrre-mod, l. 726a], an angry spirit [gæst yrre, l. 2073b], like the berserk whose face swelled and changed in color, and was taken in hot-headedness and great rage. As he makes his final foray upon Heorot, Grendel is represented as a thinking being (O'Keefe, p. 487) [mynte, l. 712 and gesohte, l. 717], but as the rage comes upon him he seemingly loses his human reason to purely animal behavior. Like a ravening wolf or man-eating bear, Grendel feeds upon human flesh:

Ne þæt se aglæca yldan þohte, 
ac he gefeng hraðe forman side 
slepende rinc, slat unwearnnum
bat banlocan, blod edrum dranc,
synsnædum swealh; sona hæfde
unlyfügendes eal gefeormod,
fet ond folma. (ll. 739-745a)

(Nor did the combatant think to delay but he quickly caught the first time a sleeping man, greedily tore him, bit the joint, drank the blood streams, swallowed huge morsels; he immediately ate the dead man all up feet and hands.)

Once the fight with Beowulf has begun, Grendel continues his animal behavior, howling in berserk fashion:

... Sweg up astag
niwe geneahhe; Norð-Denum stod
atelic egesa, anra gehwylcum
para þe of wealle wop gehyrdon,
gryre-leoð galan Godes andsacan
sige-leasne sang, sar wanigean
helle hefton. (ll. 782b-788a)

(... The sound rose up very strange; The North Danes endured dreadful terror, each one there on the wall heard the weeping, the terrible song sung by God's adversary, a victory-less song, bewailing the wounds of hell's captive.)

During the battle, Grendel possesses great strength. While he is not yet so strong as Beowulf, who "has the strength of thirty men in his hand grip," Grendel is yet powerful enough to carry fifteen men away at once:

Ponne he Hroðgares heorð-geneatas
sloch on sweofote slæpende fræt
folces Denigea fyflyne men,
and oðer swylc ut offerede
laðlicu lac. (ll. 1580-1584a)

(Then Hrothgar's hearth companions ate them sleeping, of the Danish people fifteen men, another fifteen likewise he carried off-
a hateful gift.)
Beowulf himself is aware of the enormous might of Grendel, which was nearly as great as his own:

\begin{align*}
  \text{\textit{Ic hine ne mihte}} & \quad \text{\textit{pa Metod nolde,}} \\
  \text{\textit{ganges getwæman,}} & \quad \text{\textit{no ic him þaes georne ætfealh,}} \\
  \text{\textit{feorh-geniðlan:}} & \quad \text{\textit{wæs to fore-mihtig}} \\
  \text{\textit{feond on feðe}} & \quad \text{(ll. 967-970a)}
\end{align*}

(I could not keep him, the Creator did not wish it, from an early departure, not firmly enough did I welcome him: too powerful was the foe in his going.)

Grendel's strength is shown more dramatically as he enters Heorot. He merely seems to touch the hall door, which bursts under the strength of his hands:

\begin{align*}
  \text{\textit{Duru sona onarn}} & \quad \text{\textit{syþðan he hire folmum æthran;}} \\
  \text{\textit{fyrbendum fæst,}} & \quad \text{\textit{ða he gebolgen wæs,}} \\
  \text{\textit{onbræd pa bealohydig}} & \quad \text{(ll. 721b-724a)} \\
  \text{\textit{recedes muthan.}} & \quad \text{\textit{recedes muthan.}}
\end{align*}

(... the door immediately sprang open when he touched it with his hands swollen with anger, he tore open the hall's mouth.)

While it is supposedly physically impossible for Grendel to experience the berserker's typical post-frenzy physical weakness since he has received his mortal wound, the Beowulf poet ironically describes Grendel as "war-weary" [\textit{guð-werigne}, l. 1586a] and "lying at rest" [\textit{on ræste}, l. 1585b] as a berserk would normally do after a battle, even though Grendel is said to be dead of the wounds he received at Beowulf's hands. It is interesting to note in this context that Beowulf, having just dispatched Grendel's mother, does not take his war-trophy from her body: rather, it is Grendel's head that he severs. This is an odd action, for Hrothgar and the Danes have celebrated Beowulf's victory over Grendel already with feasting and gift-giving. There seems no call to bring back further proof of the Geat's victory over Grendel. Furthermore, when Beowulf cuts off Grendel's head, blood flows forth in great enough quantity to stain the waters of the lake:

\begin{align*}
  \text{\textit{Sona þæt gesawon}} & \quad \text{\textit{snottre ceorlas}} \\
  \text{\textit{þa ðe mid Hroðgare}} & \quad \text{\textit{on holm wilton,}} \\
  \text{\textit{þæt wæs yð-geblond}} & \quad \text{\textit{eal gemenged,}} \\
  \text{\textit{brim blode fah}} & \quad \text{(ll. 1591-1594a)}
\end{align*}
(Immediately it was seen by the wise earls who were with Hrothgar that the waves were all tainted and roiled: blood stained the water.)

More than a full day has passed since he has fled from Heorot, yet Grendel's supposedly lifeless body pours forth blood when it is decapitated. One is forced to wonder if Grendel was in fact dead, or merely in a death-like slumber, experiencing the weakness that follows the berserkergang.

Another discrepancy here harks back to Grendel's weapon immunity. While Grendel is fighting Beowulf, he is proof against steel (ll. 798-805), and even the next morning his severed hand retains this resistance (ll. 987-990), yet Beowulf is easily able to lop Grendel's head off as he lies on raest. This seems to suggest that Grendel's magical protection existed before he became guð-werigne, and extended even to his hand after it was severed from his body, but once he reached his lair and let his rage fall from him, so too ended the weapons immunity. Beowulf would have had a very good reason to cleave Grendel's head, if his enemy were yet alive and merely experiencing the normal infirmity that follows berserkergang, and it would not be unreasonable to expect this to result in a copious flow of blood. Again, in the sagas, it is a standard practice to dispatch the berserk while he lies helpless after his fit, and this would seem to be Beowulf's course of action as well.

Grendel is also easily identified with the berserk as "a predatory brawler and killer who disrupts the peace of the community repeatedly;" as a man separated from society by his excesses of violence. Certainly Grendel does not fulfill the role of a loyal retainer to Hrothgar, and is in fact actually at war with the king:

\[
\begin{align*}
\text{...} & \quad \text{þætte Grendel wan} \\
\text{hwile wið Hroðgar} & \quad \text{hete-niðas weg} \\
\text{fyrene ond fæhðe} & \quad \text{fela missera} \\
\text{singale sæce} & \quad \text{(ll. 151b-154a)}
\end{align*}
\]

\[
\begin{align*}
\text{...} & \quad \text{Grendel had fought} \\
\text{a long time with Hrothgar, driven by hate,} & \quad \text{for many a season} \\
\text{he carried out.}
\end{align*}
\]

The laws of Ine and Alfred suggest that Grendel's trespasses against Hrothgar were compounded by his murders in the hall. Not only does Grendel decimate Hrothgar's retainers, but violence in the hall seems to have been regarded as high treason, an offence against the king's peace, in Anglo-Saxon society:

If anyone fights in the king's house, he shall forfeit all his property, and it shall be for the king to decide whether he shall be put to death or not. (Law of Ine

If anyone fights or draws his weapon in the king's hall, it shall be for the king to decide whether he shall be put to death or permitted to live, in case the king is willing to forgive him (Law of Alfred 7, *Ibid*).

The violent nature of Grendel's nighttime raids is vividly described by the poet (ll. 120b-125, 134b-137, 739-745a). Each time Grendel has found men in the hall, he has murdered them, up to thirty men at a time (ll. 122b-123a, 1580-1584a). It is not enough that Grendel slays his victims: he dismembers and devours them as well (ll. 739-745a), thus Grendel might well be described as a far worse butcher than the bersars disparaged by Saxo Grammaticus. Like Saxo's berserks, Grendel pillages Heorot, but Grendel's booty is not in wealth or in goods, but rather is a commodity specifically forbidden by Hrothgar — the lives of men (ll. 71b-73).

Thus it may be seen that the Beowulf poet's depiction of Grendel coincides closely with the characteristics of the berserk: Grendel seems to possess a spirit form; he undergoes transformation during his attacks on Heorot; Grendel's appearance is horrifying; Grendel seems to have shapeshifting abilities, being described with words commonly used for men in one place, yet possessing an animal-like claw during his attacks; Grendel possesses the berserker's famed weapons immunity; during his attacks, Grendel shows the signs of the berserker rage, including swelling and rage; after battle, Grendel falls into an extreme exhaustion or war-weariness; and finally, Grendel is set apart from the society of the Danes by his violence against that society. Grendel is a complex character, one with many facets. Seeking to understand the Scandinavian motifs such as that of the berserker which inform some of these facets is a necessary and invaluable quest, for it sheds light on the character, and helps in deriving further meaning from the poem.
Bibliography


Danielli, Mary. "Initiation Ceremonial from Old Norse Literature." Folklore 56 (1945), pp. 229-45.


Samnordisk runtextdatabas (Rundata 2.5). http://www.nordiska.uu.se/forskn/samnord.htm


Book Reviews

Coming of Age in Second Life: An Anthropologist Explores the Virtually Human
Tom Boellstorff, 2008, Princeton University Press

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Coming of Age in Second Life: An Anthropologist Explores the Virtually Human takes a fresh look at anthropological approaches and the pertinence of such to the study of on-line communication, entertainment and socialization. It is also an attempt and challenge for the field to develop new methods and theory, encounters and explorations in the digital age, similar to the original works of Malinowski and Margaret Mead, upon which he draws parallels. Boellstorff’s methodological discipline and examination of second life serves to fashion an ethnography which captures the imagination and makes virtual worlds accessible for the lay reader as well as provide foundational work for internet ethnography in terms of theoretical challenges of the virtual human, presence, agency, social organization and community. He sets forth the argument of the relevance and importance of such a study for the cultural anthropologist to consider the new worlds created and occupied by humans as locations for study. Boellstorff explores the “virtually human” through two levels of analysis, first through the “post-human” which he argues is essentially human and the “almost human” as on-line worlds provide a new place for altered sociality, agency and identity.

Part one of the book “Setting the Virtual” (3-86) concentrates on the importance of studying the virtual, including the growing use of gaming, internet mediated communication, networking and socialization. Additionally the author incorporates the necessity of anthropological approaches to internet ethnography, the ways in which this approach is useful for understanding virtual worlds and their relation to modern globalized culture. Boellstorff, delineates his object of study, the particularities of gaming in respect to virtual communities and their place in relation to the creation of “worlds” of which participants are “residents.” In the sense of progression of gaming over time from text-based single player games to massively multi-player on-line role playing games, he provides an excellent summary of the history of the technology and illustrates the ways in which it has been incorporated into his own daily life and the everyday lives of on-line residents. As well, he incorporates the ways in which this history has impacted the development of the “virtual human” through the use of computer technology in daily contexts. For the author, the integration of new media outlets and computer technologies as part of culture contributes to aspects of being human, similar to culture as typically understood as being created by humans. Boellstorff makes a compelling argument for the position that in experiencing the virtual we are human.

Section two ”Culture of Virtual worlds” (87-179)explores the daily processes of Second Life, The triviality and the exotic, including the ambiguous aspects of virtual place juxtaposed against the concreteness of time for residents in actuality, which is of importance for many actual and virtual anthropologists is of particular concern for Boellstorff. He tackles personhood, the
creation of individual identity and alternative identities through the formation of the avatar as well as the agency of such creativity in terms of the abilities of individuals to be social actors as a means to fulfill psychological needs. In order to understand the agency of the avatar as a competent social actor, he draws on the abilities of individuals who have psychological impairments (e.g. autism) to socialize and establish relationships in virtual worlds, the function of text-based communication as opposed to vocal capabilities and the on-going debates of differing kinds of communication within Second Life, the importance of visualization in experiencing and encountering virtual worlds and its economy in terms of creativity.

In section three “The Age of Techne” (203-237), the idea of “creationist capital” is introduced. Boellstorff explores the underlying cultural logic of the need to create through Western worldviews and forwards his argument that “…creationist capitalism unites production and consumption.” The social actors within Second Life are framed as the creators and inhabitants of the world in which they reside, not simply inhabitants of a virtual world created by a capitalist enterprise. Boellstorff pays particular attention to the ownership residents feel towards the world, through their concern with changes to the program by Linden Labs and struggles for power and control over programming.

This well-written book is an intriguing look at the impact of on-line gaming and industry in a globalized modern world. Boellstorff’s focus on the potential of ethnography for the exploration and understanding of on-line worlds in general and the world of gaming in particular is well argued and problematized, which challenges readers at many levels, methodologically and theoretically. His goals for this book are to provide an encounter with virtual worlds and communities in an ethnographic format as to move forward theoretical understandings of virtual communities, which can be challenging due to their complexity and conceptual limitations of time and place as well as presence and agency. While Boellstorff fully acknowledges the corporate nature of Second Life as created by Linden Labs, he downplays this aspect as well as the difficulty in separating the actual from the virtual in conceptual terms. For a perspective that goes beyond the corporate nature of on-line gaming and recognizes Second Life as a world in its own right, with resident creators, Boellstorff seeks and is fairly successful in gaining the point of view of the avatar, the communities which they create and develop as well as their presence, and the theoretical problems this can create within the virtual world. Boellstorff’s methodological discipline in this regard is rarely compromised; however, without fail, the actual often creeps into the world of the virtual, particularly in his analysis of presence and intimacy, in which he explores the gap between actual and virtual humans.

I would recommend this book to both undergraduate and graduate level students. For the undergraduate, I think is provides an opportunity to see the relevance of anthropological method and theory in the conceptualization and impact of new media and technology on human practices. As well, for the graduate student, this book provides conceptual challenges in both method and theory.
**Cholera: The Biography**
Christopher Hamlin, 2009, Oxford University Press

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The author, Christopher Hamlin, is a historian: Professor of History and of History and Philosophy of Science at the University of Notre Dame. It is not surprising, therefore, that this book has the look and feel of a history book. However, this book is not the history of an event or even of a disease; it is the history of Cholera as a personified agent that brought fear, violent illness and death, and cultural and public health reform. Analyzing and reviewing “Cholera” essentially as a living entity is what makes the title “biography” appropriate.

The author uses a prologue and six chapters spread over 300 pages to discuss, analyze and interpret Cholera from nearly every angle imaginable. He begins by explaining why the Cholera story begins long before the first officially recorded epidemic in the early 1800’s. Cholera began its life simply as a term used to describe a general malaise involving the intestinal tract that was rarely fatal. The deadly version appears to arrive on the world scene quite suddenly, and Hamlin discusses the way history shows that this caused much confusion: Is the source the same agent as the earlier Cholera, only more virulent, or is it a new agent? Where did this virulent version of Cholera come from? Did it come from India? These questions seem unanswerable, as the agent of the early Cholera is not known and the “Out of India” theory is surrounded by debate. Hamlin indicates that this theory began merely because it was convenient and that it was racially motivated, rather than based on solid scientific research and factual information.

The source of much of the confusion was public fear. The spread of Cholera was rapid and the cause of infection was unknown for decades, leading to many misconceptions and rumors. Because they were often the hardest hit (likely because of their use of public wells), the poor were blamed for bringing Cholera to a community. For a time, it was believed that lifestyle choices alone brought Cholera. Later it was rumored that worrying about infection actually caused infection. It took years before it was understood that Cholera was brought about by an infective agent; that agent began as “miasmas” found in the air, and then as an agent found in water contaminated by bodily waste. Eventually, after years of competitive world-wide research by the field’s most revered scientists, that agent was identified and given a name: Vibrio Cholerae.

According to Hamlin, lack of knowledge regarding infection also led to difficulties in diagnosing Cholera. Symptoms suffered by patients world-wide were recorded using different terminology, and it often took a deadly epidemic to convince the community that they were indeed suffering from a Cholera outbreak, and not just wide-spread intestinal illness. The number of people infected by Cholera is approximated, and is based on inaccurate diagnoses and late reporting, along with fear of reporting. The reporting of Cholera was ambiguous at best, both in timing and in numbers. A report of an epidemic that came too early may turn to panic and may be based on incorrect diagnosing. A report that comes too late, however, would lead to many
more unnecessary deaths. After an epidemic has swept through a community, the number infected may have been inflated to appear more desperate for aid or understated in an attempt to deny an epidemic has hit that region. Varying treatments were employed across time and space; some successful treatments were forgotten by the next outbreak, or were criticized by other physicians that were using, testing or experimenting with different techniques. Distrust in government and medical officials, and in their motivations, led to resistance to changes in sanitation on the part of the general public.

The result of confusion that ultimately led to understanding, and the far reaching effects of fatal Cholera, was change. The medical field altered the way diseases and ailing patients were treated. Scientific research advanced in methods of discovery and virulence. Sanitation, both public (including hospitals) and private, was brought to a whole new, safer level. Trade policies and foreign relations were affected in varying ways in different regions of the world, all as a result of the desire to prevent the spread of disease. Local government policies on public health changed to reflect their increased responsibility to protect its citizens.

To supplement his discussions, Hamlin includes several illustrations that help to paint a visual picture of the time period. The examples of paintings and posters used for propaganda or education bring fear of Cholera into reality for the reader. Also included are a helpful glossary, index and thorough list of suggested further readings.

Informal comments are peppered throughout the book, and were an appreciated break from the muddy flow I found through the majority of Hamlin’s discussions. The information and arguments contained in the book are brilliant however, and would be valuable to any person desiring a comprehensive look at Cholera across time, space and identity. From an Anthropological perspective, there is not much in the way of a traditional cultural study; however it is, in a way, a review of the peoples affected by Cholera. Medical Anthropologists especially would likely find this book to be interesting and informative.
12th Annual
Lambda Alpha Symposium
Wichita State University

Abstracts
107 Devlin Hall
April 24, 2010

Sponsored by Alpha Chapter of Kansas, the
WSU Department of Anthropology and
WSU-SGA
Teresa Click, *Anthropology and Journalism: The Trial of Scott Roeder and the Dynamics of On-line News Events*

The US Evangelical movement’s lucrative use of media and the court system since the 1980’s to litigate morality issues such prayer in the public schools and abortion has gained global attention with the state of Kansas at the epicenter of this awareness. This paper examines the American Evangelical movement, ideology of American secularism and the experience of internet news events, including the use of on-line web logs in conjunction with news articles. The internet news event at hand is the trial of Scott Roeder, who walked into Reformation Lutheran Church in Wichita, Kansas on Pentecost Sunday in 2009 and killed Dr. George Tiller, a figure around whom much of the religious abortion debate has been centered. This paper employs holistic anthropological approaches to the production of news and its audiences as receivers and producers of information and knowledge. The case of Kansas vs. Roeder combines cultural elements of religion, politics and concepts of humanness central in the US Evangelical movement and court system. It provides an opportunity to study the influence of this event on the varying religious and national identities of the community, taking a look at the ways in which internet news events construct individual and community identities.

Sarah Kidder, *The Paint Creek Site, McPherson County, Kansas*

The Paint Creek Site, in central Kansas, is a protohistoric Wichita site with a vast array of stone, bone, shell, pottery, and European artifacts that have not been fully analyzed. Since the initial excavations done by Udden in the 1880s, much of the site has been left to relic hunters. Wedel (1959) classified this site into the Great Bend Aspect and Little River Focus based on his brief analysis done in the 1930s of the ceramics and the unique location of the site. In this paper, I will provide a brief background of the site and display a few examples of the material remains that I will be further analyzing in the coming months. The ultimate goal of this research will be to perform a complete analysis of the recently acquired collections and develop a database of the collections. This database will be a useful tool for cross comparisons with other materials and sites, and provide a deeper knowledge of the peoples that lived in the Great Bend Aspect and Little River Focus sites between the fifteenth and the eighteenth century.


Sex determination by means of visual assessment of the human skull is important because it can aid in the reconstruction of the population structures and behavior of past populations. Whereas alternative methods for observing and recording sexual dimorphism qualitatively, visual assessment of the skull is more common because skulls are better preserved in the archaeological context and because the method is relatively fast and easy. One alternative method attempted to weight qualitative cranial traits based on how reliable they are in sex estimation. The present study uses a similar method to determine whether or not using weights significantly influences the number of individuals correctly classified for sex. To address this method further, a total of 400 adult human crania and mandibles were analyzed from the
Hamann-Todd Collection at the Cleveland Museum of Natural History in Cleveland, Ohio. The present study first determined what traits are significantly sexually dimorphic; namely, the mastoid process, glabella, superior orbital margin, temporal lines, mandible, and gonial eversion. Traits that did not show a significant degree of morphological variation between the sexes were the nuchal line and external occipital protuberance. It was also determined that weighting traits does not significantly influence the number of individuals that are correctly classified. There was not a significant difference between the right and left mastoid length measurements, nor was there a statistical significance between the overall sex score received when considering the right or left mastoid process and superior orbital margin. Certain traits did appear to show different degrees of sexual dimorphism when looking at group affiliation, but the statistical significance behind this variation will be explored at a later date.


Substantiation of the published hypothesis that the HIV-Resistance Gene, involving a mutation of the gene for the CCR5 protein, arose as a result of pressures from the Bubonic Plague in 14th Century Europe can be attained by incorporating sociocultural aspects in the historical study of the gene and disease epidemics. A review of the AIDS epidemic, its history and its cause—HIV—is necessary to understand the CCR5-Δ32 gene mutation and its effects on immunology. The theories surrounding the appearance of the gene are compared with a review of other diseases that have also been postulated as spurring the CCR5-Δ32 mutation. No reference to cultural or environmental factors is observed in the literature. Based on the biocultural study and subsequent model that has been used to understand malaria in Africa, a study comparing the biological data that has been collected along with historical data of the medical, settlement and mating practices in cultures across Europe is suggested. The employment of such a model to explain the existence and appearance of the HIV-resistance gene would be useful in the treatment of HIV, AIDS and other diseases, the prediction of HIV-resistant individuals, and the understanding of the effect of epidemics on human evolution.

Sean Murray, *Anti-Social Personality Disorder: Worldview of Exploitation and Power*

Personality and culture have long been studied in anthropology. There are, however, people with “personality disorders”. Personality disordered people possess a unique, and often dysfunctional, worldview. Worldview is a people’s fundamental assumptions about the world: how people think, feel and understand the world around them including their place in it and their relationships to others. People are social beings. American prisons and jails are full of people with what mental health professionals refer to as ‘anti-social’. What, then, about those people who are labeled ‘anti-social’ in American society? What is anti-social personality disorder in the context of American culture if it is to be defined as a mental illness? An ‘anti-social’ worldview will be discussed. Drawing on the work of Clay and Carole Robarchek, the ‘anti-social’ worldview and the worldview of the Waorani of Ecuador will also be compared specifically in terms of power and control over others and the environment at large.
Karie Ann Railing, *The Effects of Basic Climate Control on Skeletal Remains: A Study Using Dual-Energy X-Ray Absorptiometry*

Double energy x-ray absorptiometry (DEXA) is a machine that accurately estimates the bone mineral density found in skeletal material. Usage of this machine for modern day purposes includes testing for osteopenia and osteoporosis in elderly and arthritic people. We can use this technique for the same purpose only testing it on skeletal remains found in other archaeological areas rather than living individuals. To test this theory I have conducted an experiment on freshly slaughtered cow legs. I first found the correct tissue substitute needed to run the DEXA machine, and ran baseline scans. I then treated the bones in different temperature settings and rescanned the bones to find any irregularities. I then compare and contrast the different scans to see if in a different setting the bone mass density changes. Results will show us how to treat bones from a certain population to where we can accurately study the effects of osteopenia and osteoporosis in a given culture.

James Simmerman, *Malaria in sub-Saharan Africa*

The global distribution of wealth has created echelons of socioeconomic stability with regard to healthcare availability. High- and middle-income countries enjoy greater access to healthcare technology while low-income countries, plagued by aspects of modernization and politics, lack the buffers that lessen mortality from common disease. Diseases easily cured and treated in developed countries continue to be pervasive in low-income countries. Malaria, a plasmodium parasite, is responsible for 1 million deaths annually in sub-Saharan Africa, with an infection rate of 10% annually. Eradicated in the developed world, malaria can be controlled and prevented inexpensively. However, due to poverty, political unrest, and demographic changes, malaria has persisted. Increased urbanization, agricultural irrigation, and migration exacerbate circumstances conducive to spreading the disease while prevention efforts encounter cultural resistance, economic barriers, and political corruption. Thus, the malaria situation in many malaria-endemic countries, particularly in sub-Saharan Africa, remains unaddressed while multiple factors work to worsen the burden. This examination of malaria highlights the emphasis of economics as a key feature in the control and treatment of malaria and presents the cultural and behavioral impacts of globalization, urbanization, agricultural practices, and traditional behaviors and practices and how they can influence (or even thwart) efforts to improve the malaria situation in the region. This problem illustrates the power of the environment over human culture and our never-ending quest to overcome or dominate it.

Jennifer Ledford, *Cultural Reconstruction from the Dentition of an Eastern European Skeletal Sample*

Conducting research on the dental wear patterns of a past population can provide insight into pertinent cultural information about that particular society that otherwise might be historically lost. This project is designed to ascertain to what degree wear patterns provide insight into sexual dimorphism and age differences among diet and health of an historical archaeological population. Data for this particular study was collected over a four week period in
Drawsko, Poland during mortuary archaeological excavations conducted on a cemetery dating from 1660 to 1810. The data was collected on the dentition of twenty-six adults and thirty-five juveniles from both the 2008 and 2009 field schools held there. Research questions have been formatted in order to discover whether there are prominent differences of dental wear patterns present between age and sex categories, and the different burial locations throughout the cemetery.


Until now, both the historical and contemporary construction of concepts of Westernization versus Traditionalism in Korean religion has lacked a clear theoretical framework surrounding the dialog. I suggest that the Evangelical nature of Christianity in Korea, as well as the tension and conflicts that have developed between this and other religions, are a continuation of traditional dynamics created to allow for negotiations of identity and aims. By examining the ways in which religions and power structures have interacted in the past, a clear link can be made that informs and contextualizes the contemporary religious scene in Korea. To gain a better grasp of ongoing dialogs, scholars of religion must establish a more thorough separation between Westernization, modernization, and religion from a singular whole and an understanding of these within specified contexts. With this framework as a base, we can gleam deeper understandings from the growing religious tensions, viewing them beyond religious intolerance and, rather, as a very real debate on distinct spheres.

Breanne Lasorso, A Study in Taphonomy: A Qualitative Analysis of Rodent Gnawmarks on Animal Long Bone

In the field of Physical Anthropology there has been very little study of the specific role of rodent gnawing in the process of Taphonomy. A study of this particular subject could prove valuable not only to physical anthropologists but to archeologists as well. This study has been created for three purposes. The primary role of the study is to create a repeatable method by which skeletal elements may be exposed to rodent gnawing while minimizing the effects of other animal influences. It is essential that the study be repeatable in order to gain further specific information on the subject. The second purpose of the experiment is to create a standardized scale by which rodent gnaw marks may be evaluated. This would allow rodent gnawing damage to be described in a more universally understandable fashion. The third role of this experiment was to determine if there was any pattern to the observed rodent gnawing on 14 White-tailed Deer long bones. The skeletal elements were exposed for two months in the Fall of 2009 at the WSUBAL using the method created. They were then removed, photographed, cleaned, and then evaluated using the standardized scale. The skeletal elements were then examined for specific common gnawing trends which were documented and photographed. This study supports the new method, introduces a standardized scale by which rodent gnawing may be evaluated, discovers some evidence to support the possibility of rodent gnaw patterns on long bones, and provides evidence that further research on a larger scale should be done to determine exact rodent gnaw patterns over particular periods of skeletal exposure.
Mike Sirico, *Scraper Morphology: An Analysis of Two Multicomponent Sites*

This presentation is based on archaeological material which will become the core of a Masters project proposal. The project is intended as a descriptive analysis of stone scrapers from the Stauffer collection, W.S.U.. Two multicomponent sites are represented here, 14LY402 and 14LY424, both located within Lyon Co., Kansas. The cultural sequence for each site ranges from the Archaic into the Historic period. After an introductory description of the sites, their locales, and cultural affiliations, a brief overview will be given of scrapers as a tool category and previous scraper studies. This will be followed by an explanation of the major goal of this project, which involves the determination of scraper types according to morphology. A secondary goal, the macroscopic examination of use-wear patterns associated with scraper types, will also be covered. Some initial results from the analysis, as well as possible implications for regional archaeology in general, will be provided to round out the discussion.

Julie K. Wasinger, *A Look at the Biological and Cultural Aspects through Examination of the Historical, Contemporary and Future Perspective*

Eugenics has posed both a biological and a cultural problem for society since Francis Galton first utilized the word in 1883. Biologically, eugenics provides the avenue of justification to deny the act of reproduction for those deemed unfit. Culturally, the victims of eugenics were likely to be those lowest on the ladder of social hierarchy. Concerns have always plagued the field, with the main one for science being how to determine who is fit and who is not. The fear culturally is the justification for eugenics and its effects on society.

To define these questions and answers we must understand what the term means to both science and society. Science defines eugenics as the act of artificial selection in both quantitative and qualitative improvement of human offspring. Historically, humanity used it to promote increased birth rates among the elite, while discouraging the growing numbers of the lower classes. Hitler adopted eugenics in an extreme manner during his reign by using the mask of eugenics to sterilize hundreds of thousands of people and put to death many more, to promote breeding between those most fit.

Through research of available literature, it was found that eugenics was widely accepted until the mid 1940’s when it fell out of favor. The subject has again moved to the forefront of world news under the umbrella of such terms as cloning and germline engineering. The current outlook on eugenics suggests that further research is needed to determine whether it is justified or not. The long-term affects of biological and cultural changes due to eugenics should be foremost in any upcoming research.

Emily Jones, *Mortuary Practices*

There are many different kinds of mortuary practices and by looking into these one can get a glimpse into the past. In specific relation to mortuary practices there is mummification. There are unintentional and (possibly) intentional practices of mummification that reveal information about a given culture at a specific time in the past. With the analyses of different
books about mummification: embalming (Egyptians, Chinchorro, Chachapoya and Guanche), ice (Otzi the Iceman and Juanita), and desert and caves (Takla Makan, Lemon Grove Mummies and Cherilaya). After looking at the analyses of all the data, it is easy to see how studying these well preserved corpses can provide one with a vision into the past. One can see what kinds of jewelry and clothing that they wore, what kinds of hairstyles were popular, as well as the weapons and tools they used. In other cases one can study rituals and religious beliefs that a certain culture practiced. Many cultures have used mummification intentionally to preserve the bodies, while other mummies have been products of the environment. Nevertheless, these mummified bodies are windows into the past that are usually lost by the passage of time. Many different fields of study have used these mortuary practices as way of painting a picture of the past so the world can have a better understanding of antiquity.

Juan Argueta, Rachael Sebastian, Does It Belong There? A Cognitive Approach on a Taxonomical Debate

This is a starting point to examine the debate between the single-species and multiple-species hypothesis from a cognitive standpoint. This debate exists due to the limiting factors such as lack of number of specimens/complete craniums, and no access to DNA samples. Although largely overlooked, the role of cognitive frameworks should be accounted for in this debate; as it impacts results.

We interdigitate data from several studies that examine the taxonomy of certain members of the sub-tribe Hominina with a cognitive analysis by using some principles derived from various cognitive studies. These principles identify the continuum (fossil record), the sensory perception (observations of specimens), cognitive framework (methods of analysis) and our categorical perceptions (classifications/taxonomies) to explain why the studies are inconclusive.

We do not invalidate this debate, but instead introduce a new factor amongst many into this taxonomic deliberation and bring forth the affect our minds can have on our seemingly objective studies.

In short, empirical science is subject to interpretation, which depends upon the cognitive framework at play. The results of studies are determined by the initial ground rules, such as the definition of species, what landmarks and features are biologically meaningful and how much variation is statistically significant. These elements determine how we segment the natural continuums that stimulate our sensory receptors. These segmentations lead to our arbitrarily created perceptual categories which determine how we classify and divide up the fossil record.

Derek Norrick, Human Implications of a Behavioral Study on the Interaction of the Chytrid Fungus, Batrachochytrium dendrobatidis, and nitrate toxicity on Xenopus laevis.

Ecological anthropology seeks to observe human-environmental relationships and how a population exerts pressures on the local environment, which then exerts influence over the population. Since the world’s population continues to increase dramatically, man’s impact on the environment is a growing concern. Anthropogenic factors have resulted in a perfect storm from agricultural pollution, trade in animal research, and warming climate, have aggravated the delicate balance of disease spread on the world’s amphibians. Research in nitrate pollution is
well documented in amphibians and has been strongly correlated to endocrine disruption in both amphibians and humans. However, an interaction between an emerging amphibian chytrid pathogen, *Batrachochytrium dendrobatidis*, has not been well documented. This chytrid fungus has been suggested to have spread through pregnancy testing in women beginning in the 1930s through the 1970s and has spawned an expansive industry in *Xenopus laevis*, or African Clawed Frog, in the medical and biological research to present. *Xenopus laevis* has been found to harbor the Bd pathogen as far back as the 1930s in museum specimens. With the global increase in temperature, the chytrid fungus is now able to invade regions previously too cold for colonization. In this study, we use *Xenopus laevis*, the suggested vector of *Batrachochytrium dendrobatidis*, to test our hypothesis: we propose the added stress of agricultural nitrate use in developed countries has a detrimental effect on amphibians which decreases overall tolerance and immune response to Bd. Understanding this impact on nitrate and Bd on *Xenopus* is a look into the future impacts on human populations.

**Meghan Voisin, The Role of Nutrition in Human Adaptation**

Nutrition plays a crucial role in the environmental stresses present and inflicted on human populations. In order for these populations to maintain their fitness in a particular environment, selection pressures for the adaptation to this environment via the adoption of advantageous traits and genotypes must be achieved. This paper explores several aspects of the development of biological adaptations, as well as the behavioural and social mechanisms inherent within these adaptations, including a general history of nutritional adaptation, adaptations to various factors of malnutrition and nutrient deficiencies. The hypotheses and advantages surrounding the emergence of lactose tolerance within the adult human will be discussed, as well as the role of nutrition in the geographic-specific environmental stresses of hypoxia, thermal stress and disease. The debate of finite terminology associated with adaptation versus accommodation will also be explored and critically examined. It is argued here that nutrition plays a vital role in the selection for advantageous genotypes which not only enable a human population to survive, but also to maintain fitness.

**Jack Dettenwanger, The Biocultural Impact of Maize Agriculture in Africa.**

The story of maize in Africa is a complex tale of migration, human activity, biological adaptation, and unanticipated consequences. From its earliest introduction, maize has changed the face of African populations, altered subsistence patterns and diets, affected structures of political power and economy, been used as a tool of both oppression and liberation, and influenced the spread of disease. As one of the world's dominant food crops, maize is the subject of countless studies. However, the biocultural impact of maize agriculture in Africa has, until recently, received little attention. This paper will attempt to illustrate some of the many biological, environmental, and cultural effects maize agriculture has had upon Africa. To achieve this, four African countries (Ghana, Zimbabwe, Zambia, and Ethiopia) will come under the purview of this paper. These cases show the adaptive changes wrought by the increasing utilization of maize in its new African environment.
Jonathan Burrow-Branine, *The Reinterpretation of American Kinship within the Gay Community*

This paper will look at the different ways in which kinship is conceptualized within the context of the modern gay community in American society. Material presented here will show that the concept of family—whether straight or gay—is a very fluid term, although it is fluid within the constraints of the culture being discussed. Furthermore, though categories such as kin and fictive kinship are good analytical categories to begin with, they are deconstructed in the context of everyday life. Therefore, focus will be on how studies of gay kinship have served as a critique of the traditional anthropological study of kinship in general and kinship in American culture in particular. Moreover, this paper will discuss the political and social context of the trend of coupling and how this has changed formulations of gay kinship. Finally, examples of how kinship and their symbols are reworked within the framework of the gay subculture will be offered.

Jessica Dunne, *The Effects of Sand, Vinegar, and Salt on Skeletal Material and Soft Tissue*

The Wichita State University Biological Anthropology Laboratory (WSUBAL) is a compact and excessively used space. It is utilized daily by both student and professor. It houses various skeletal collections and provides space for students to learn, experiment, and assist each other in academic endeavors. Space can be a particularly difficult issue to overcome in the case of preparing osteological material for storage. Currently, boiling skeletal material to remove soft tissue appears to be the most effective way to prepare specimens for analysis and storage. Two other methods frequently used are flesh eating insects or the burying of specimens for a length of time. The WSU-BAL has the capability to use both boiling and burying methods, however in the case of some specimens these methods are not used. Another issue with the preparation and storage of osteological material is specimens that exhibit a greasy and/or sticky consistency over the surface of the remains. These individual issues with osteological preparation prompted several experiments beginning in the fall of 2007 to the spring of 2010. In this presentation, methods, preliminary results, and experimental error will be discussed. Unexpected results and suggestions for future research will also be presented.

Janaki Mead, *Beyond Procreation: Sexual and Socio-sexual behaviors in primates*

Sexuality in primates is commonly measured by researchers as the reproductive success of a species. Primates utilize the full spectrum of sexual strategies to ensure a healthy population such as monogamy, polygamy and multi-male/multi-female family structures. Yet there are many sexual behaviors that fall outside of mating strategies. Masturbation and Socio-sexual play are often seen in very young individuals and are considered part of normal social development. Isosexual behaviors such as mounting are associated with greeting and hierarchical maintenance. Homosexual and facultative homosexual behaviors are common in many primate species. These behaviors go beyond procreation and species survival. They are an integral part of socialization in complex primate societies.
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The National Executive Office will offer a $4000 annual base award for the National Lambda Alpha Scholarship. The National Lambda Alpha Scholarship is awarded to a graduating senior majoring in Anthropology. These are limited and closed competitions. A well qualified candidate has a reasonable chance to win. In order to insure a quality set of candidates, potential applicants will be allowed to join the honorary but must be accepted by their chapter and paid up before the application deadline. Each chapter may nominate only one candidate per award.

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