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progression and reflection

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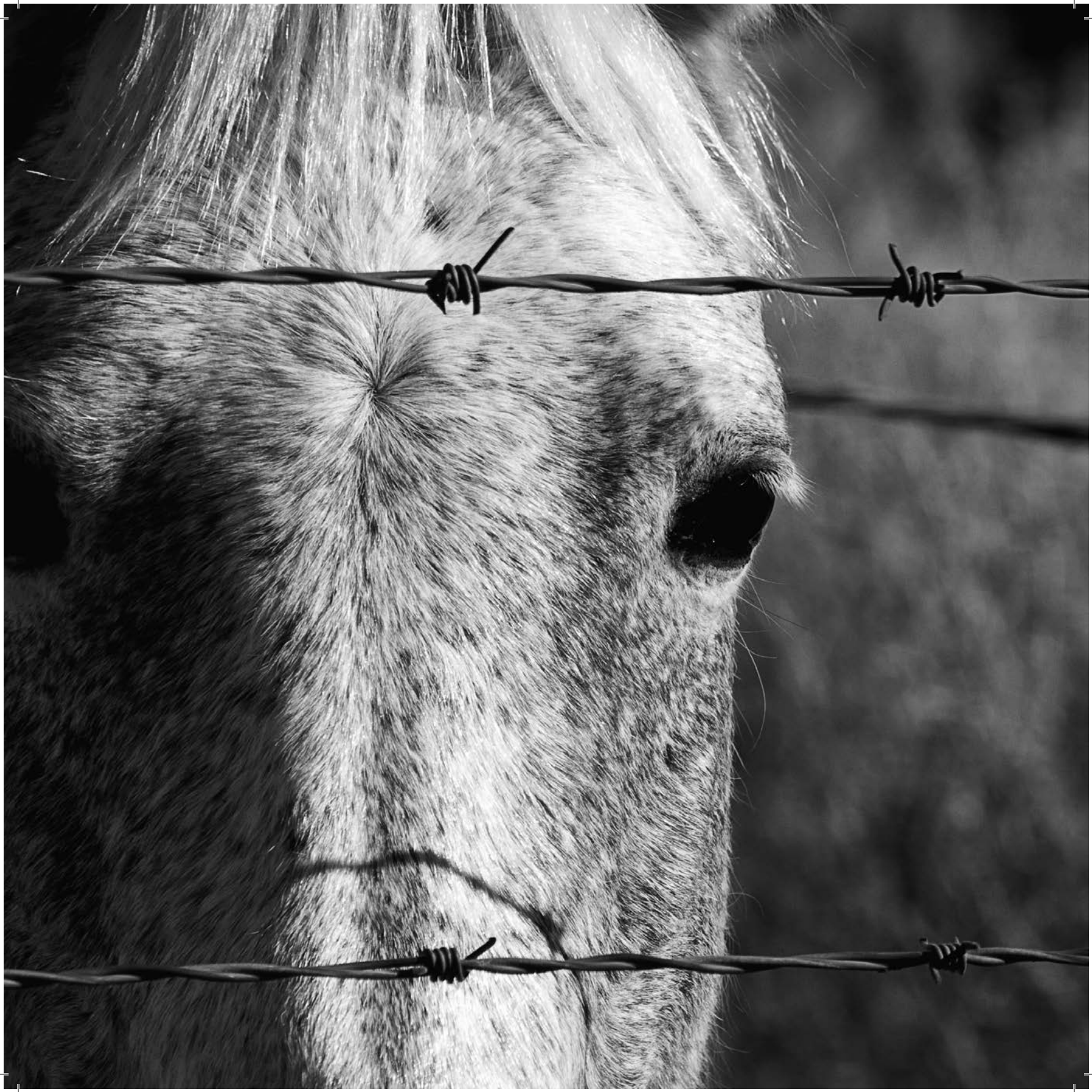
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letter from the editor

I am proud to present the twentieth edition of *The Lehigh Review: Progression and Reflection*. Assembling the journal was both a pleasure and a challenge, and it could not have been possible without the hard work of our staff, featured authors, artists and the help of our faculty supporters. Their efforts are prominent in this special twentieth anniversary edition.

Under the theme of *Progression and Reflection*, we continued to evolve our aesthetic language while celebrating *The Lehigh Review's* renowned past. Our goal was to reflect the history of the journal by including the best academic writing by Lehigh undergraduates from various fields of study while advancing our direction as respected university scholarly journal. We wanted to create an edition that elevates our readers' expectations of both the quality of articles and artwork as well as the aesthetics of future editions. This exceptional volume not only celebrates our twentieth mark of existence but also distinguishes the auspicious future of *The Lehigh Review*.



We hope these carefully selected essays

**Don't You Think
I'm Beautiful**
Kenny Barry

2012

Now in its twentieth publication, *The Lehigh Review* has firmly established itself as the University's leading undergraduate research journal. The past twenty years have witnessed the continual growth and transformation of *The Review*. From monochromatic covers and experimentations in humor to student art inserts and increasingly varied subject matter, *The Review* has undergone a persistent evolution. What remains constant, however, from volumes one through twenty, is the impressive quality of student work showcased in the journal. Throughout its many iterations, *The Lehigh Review* has remained dedicated to publishing work which demonstrates imagination, original insight and students' mastery of their crafts.



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The New York City garment workers' strike of 1909 was women laborers' first effort to organize, unionize and advocate for industrial democracy. Seeking fair wages, dependable work and an end to harsh conditions, women from various social backgrounds and ethnicities united behind this cause. These revolutionaries gained the attention of the press and labor leaders as well as the compassion of the public, laying the foundation for future labor achievements in the garment industry and for workers in the coming decade.

Untitled
(detail)
Sam Andersen

WOMEN AND UNIONISM:

How the Shirtwaist Makers Strike of 1909
Precipitated Female Organization and
Unionism in the Garment Industry

by Tierney Gallagher

The fall of 1909 brought together many complex social and industrial circumstances that, in their culmination, elicited a revolutionary response that has come to be known as the shirtwaist makers' strike of 1909. Unique to this strike were its participants, over 80% of whom were women, from different social classes, ethnic backgrounds and varying levels of industrial skill sets. When organized, these women produced a mass movement to challenge the conditions of labor, the controlling tactics of employers, and their rights as workers and in doing so, sought the promise of industrial democracy. On a larger scale, the shirtwaist makers and their allies transcended the divisions of class, ethnicity and traditional gender roles to advocate for the shared ideal of women's rights. For three months, thousands of garment workers, mostly Jewish and Italian immigrants, withstood cold, hunger, harassment and arrest and carried on their protest. Hoping to achieve better hours, better wages, dependable employments and union recognition, garment workers were bolstered by the support of socialist leaders, socialite and middle-class women and two prominent female labor unions. The success of this strike has been interpreted differently depending on the measure of success. Though it failed in gaining a closed shop garment industry, the shirtwaist maker's strike of 1909 made great strides in bettering the conditions of work in the garment industry: it united women workers in overcoming ethnic and class boundaries, effectively arming labor reformers and feminists with the support and experience to make meaningful change in the years to come.

The marks of immigration were dominant in the lives of many garment workers in the early twentieth century. The workforce was comprised predominantly of Jewish women migrants from Eastern

Europe. Upon their arrival they sought the comforts of a familiar community and were inclined to live and work amongst fellow Jews. Transition into an unfamiliar city and adjustment to the demanding conditions of industrial work were eased through the backing of ethnic environments. As Francoise Basch explains, "Familiar landmarks and human support cushioned the immigrants' head on collision with a foreign and hostile culture."¹ Upon their arrival to New York, immigrants flocked to the lower east side, where they lived in near-slum conditions in tenement houses. The characteristics of such dwellings included overcrowding, poor construction, and inadequate sanitary and safety conditions such as toilets, wash bins and fire escapes. Despite the dismal physical surroundings, neighborhoods were cultural centers, fostering shared values of the homeland and stability of common tradition.²

Such hardships of immigrant life often plunged families into the depths of poverty. In need of every financial contribution they could earn, Jewish and Italian immigrant women worked tirelessly for the benefit of their families.³ Whether to send back to the home country, or to put the next meal on the table, the need for money was never absent. Consequently, employees of the garment trade were driven workers. The burden of working to benefit their families proved to be a powerful incentive in tolerating the toils of industrial work. The mindset of an immigrant worker was also that of a vulnerable employee. When considering that these overworked garment makers were mainly female, the influence of family patriarchy contributed to the custom of subservience demonstrated by working immigrant women. Jewish women in particular were subject to cultural norms that expected obedience. They were excluded from religious practices and governed by their male kin, all the while managing domestic duties. It was not un-

common for Jewish women and girls to be involved in a small trade or business, selling goods or services to earn money to fund the education of men in the family. Selfless and hardworking, immigrant women saw themselves as part of a bigger system: that of their family, of their ethnic community and the industrial workforce. Evidence of this is reported by Basch, who states, "...married or unmarried, almost 90 percent [Jewish working women] in New York City turned over all of their wages to their families."⁴ The unique cultural traditions of immigrant women prepared them for the thankless, harsh work typical of the garment industry in 1909.

Aside from a shared culture, the majority of the garment strikes shared another unifying and dominant feature: being female. The gender stratification of the workforce put women workers in a subordinate position to their male employers. The garment industry exploited this tradition to a unique extreme. Women, especially immigrants, populated a workforce that employers viewed to be ignorant and powerless. Consequently managers took advantage of garment working women.⁵

Standards of labor and employment in 1909 focused obsessively on efficiency, the reduction of waste in production and maximizing profit. The conflict that arose between workers and employers in the New York garment industry derived from the incompatibility of workers' desired treatment and the goals of production. Industrial management favored production, however, and the garment workers paid the price. The garment industry, relatively new to manufacturing since the 1890s, functioned as a unique system that, in its practice, frustrated its employees.⁶ Seasonal labor, long hours, petty fines and the harassment of managers were the staples of this industry and so too the complaints of its workers. Melvyn Dubofsky expands on the complexities of the garment trade structure: "Diversity and instability

shaped all aspects of the garment industry. It had almost as many separate branches as individual shops. Men's clothing, women's clothing, fur garments, millinery, and men's caps and hats were the industry's major sub-trades...demand factors also affected the economic structure."⁷ Common though, among these divisions, was the drive for productivity and economy.

Arising out of concern for efficiency and frugality was the garment industry's utilization of sub-contracting. Sub-contracting in the garment trade consisted of a large manufacturer outsourcing aspects of production to a smaller manager and a team of workers. The subcontractor oversaw the work of his employees in accomplishing their specified task and did so with less capital, fewer workers and in a smaller space under his own direction. The original employer, therefore, profited, needing less space, fewer workers under direct supervision and less equipment and supplies. As a result, he accomplished production at a decreased personal expense.⁸ The gains of the employer, however, resulted in costs to the workers. The sub-contracting system passed the burden of cost on until it reached the defenseless workers. Employees were held responsible for funding their own supplies, such as needles and thread, and if accidental damage ruined a product or if equipment broke, the cost of the difference was deducted from their wages. They paid for privileges that modern society would assume to be essentials, such as renting the chairs they sat on, or paying to store personal possessions in a locker.⁹ So too, some subcontracting managers made deductions from pay for taking too long for a bathroom break, for lateness or socializing with colleagues. As Harry Best describes, "the evils of the system are readily apparent, all clustering about the circumstance that it permits the irresponsible sub-contractor to drive his help under the worst possible conditions to the last of their strength."¹⁰ As this practice

begins to indicate, the nature of garment making itself instigated and perpetuated worker discontent and consequently prompted thousands of women to rebel in opposition. Sub-contracting schemes, however, were not the sole source of employee complaints. Worker grievances were extensive and included unreliable work and the variability of wages.

The dependence on fashion trends and seasonal demands further complicated the garment industry. In the busy season, lasting four months of the year, women garment workers toiled from 8:00 a.m. to 6:00 p.m. six days of the week often augmented by hours of unpaid overtime.¹¹ It was standard for laborers to receive a half hour lunch break out of their ten-hour day, and they were frequently fined for additional breaks.¹² Other months, work was less dependable, amounting to three or four days a week with consequent layoffs. And still most garment workers could expect a month of unemployment, during which they received no pay. Even this routine of work varied within the trade; laborers with more or less skill working on different articles of clothing were subject to different expectations of employment and pay. Wages were distributed on a weekly, or on a per-piece basis, a decision that was largely arbitrary based on the sub-contracting manager.¹³ In respect to job stability and equality, the average garment worker in 1909 could not expect much. What she could count on though, was managerial discrimination and harassment, unfair wages, long hours and burdensome fines. It was these aggravations and hardships that served as an impetus for union membership among immigrant working women. Later, during the strike, the Women's Trade Union League (WTUL) and the International Ladies Garment Workers Union (ILGWU) would prove to be critical advocates for women's labor and the rights of garment workers.

The International Ladies Garment

Workers' Union was founded in 1900 but gained considerable popularity and a surge in membership towards the end of the decade. Prior to 1909, women had been tentative to organize themselves; they were accustomed to an inferior social status and compliance. A majority of females were also naïve; education for women was not highly valued among immigrant families, keeping women distant from the ideas of labor organization. Often between the ages of sixteen and twenty-five, most garment workers viewed employment as a short-term situation, anticipating instead the expectation of marriage that would draw them from the workforce. Perceived radicalism or advocating women's empowerment were not the traits that most husbands sought in prospective wives. Believing it would hurt their chances in seeking a marriage, many young girls were reluctant to join the labor movement.¹⁴ In recognizing the barriers to union membership, it is easier to understand what a great accomplishment the ILGWU in the 1909 strike was. In spite of familial discouragement, rising discontent pushed women garment workers to new extremes of self-determination that manifested itself in the growth of unions.

The ILGWU was at the forefront of labor organization in the garment industry; it was the primary force that best represented the employees and their needs in the garment industry. Structured as a semi-industrial union, it welcomed all clothing trade workers, without regard for nationality, skill set or branches of clothing production. Consequently, membership was diverse and represented many aspects of the industry. To manage this group, the International (as it was nicknamed) was arranged such that affiliates were segmented into local groups which were then organized dependent upon one's sector of trade or job/skill classification.¹⁵ It was the smaller locals, specifically those of the New York shirtwaist makers, which

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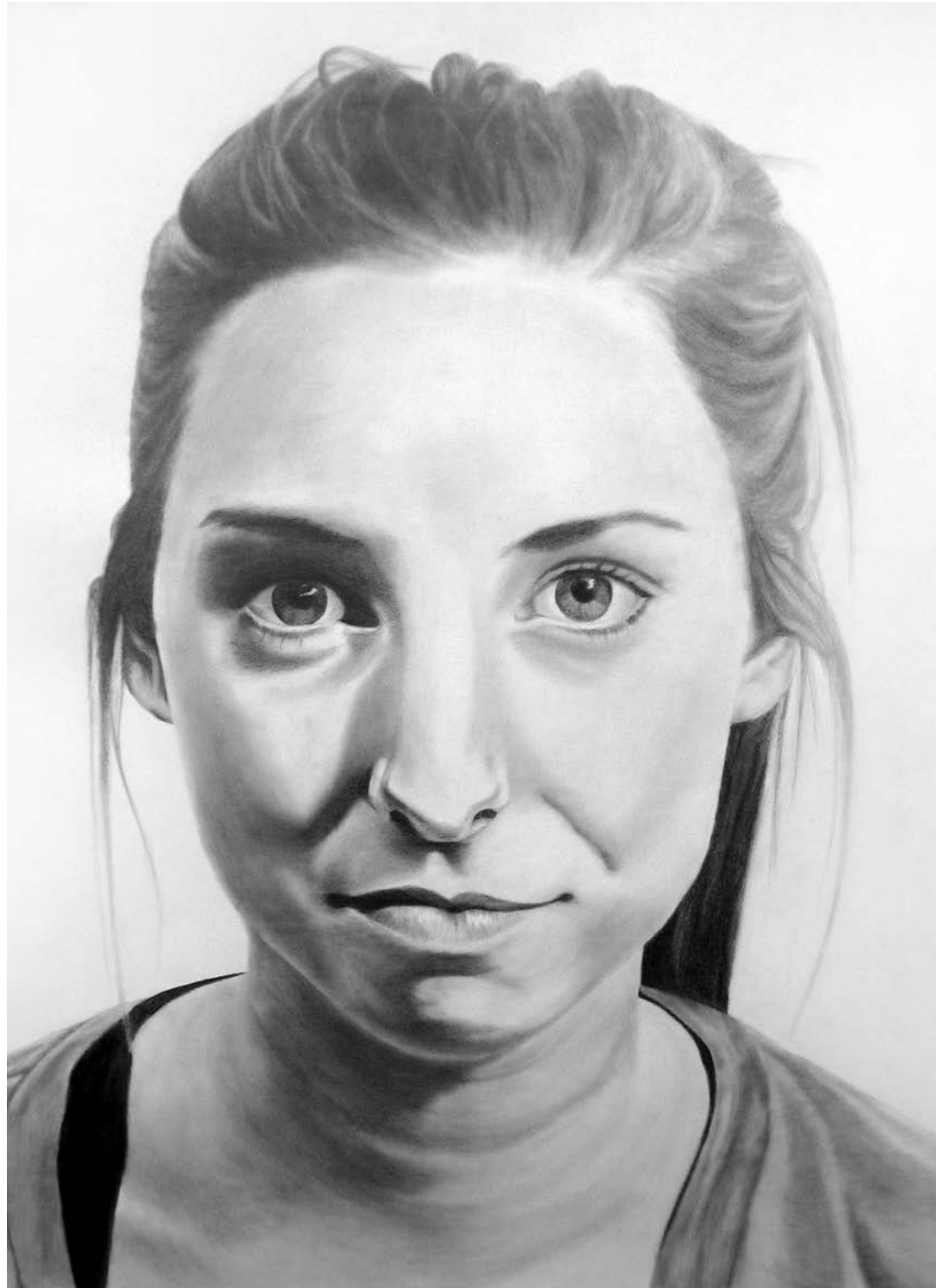
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Pencil, Chelsea Sheridan

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The leaders of Local 25, a New York branch of the ILGWU, embarked upon its crusade for greater union recognition in the fall of 1909. The impetus of this movement can be traced to the actions of the Triangle Shirtwaist Company in firing over 100 workers for their interest in union participation. Lorwin describes the conditions under which the lay-off occurred: "Some of the workers became irritated by the attitude of the company. They were also affected by the general restlessness of the trade. About a hundred or more began to discuss the idea of joining a union...a few days later the Triangle Waist Company singled out a number of workers whom it suspected of sympathy for the union and discharged them on the pretense of lack of work."¹⁶ The company, however, continued to run advertisements calling for laborers, a move that led Local 25 to proclaim a lockout and instigate a strike. The strike fizzled out with the realization that the

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companies were large firms and could hold out unaffected by the strike, but the ideas that fueled militant labor organizations were growing stronger and gaining notice.¹⁷ Attitudes of discontent and self-advocacy among workers spread quickly, catching the attention of the Women's Trade Union League. Capitalizing on the increased popularity of this mindset, the WTUL embarked upon fostering unity and preaching the appeal of organization to female garment workers. The aims of the league were to increase awareness for the suffering of unorganized women laborers and to bring together female workers into trade unions to help make policy decisions. They embarked on a partnership with the ILGWU behind the cause of women garment workers.¹⁸

Together the ILGWU and the WTUL stimulated interest in favor of organization. Non-working reformers heading the WTUL supplied funds, volunteers and means, garnering public compassion. Labor leaders and women's advocates were disappointed in the reaction to the Triangle shirtwaist strike, the company's dismissal of workers' needs and their treatment of the strikers. This event proved to be the metaphorical "straw that broke the camel's back." Incensed workers, suffering years of subjugation, began to contemplate the possibility of a general strike in the garment making industry. Local 25, with the encouragement of the WTUL, called a general meeting of union followers on October 21, 1909. Here, hundreds of women signed up for membership and leaders proposed the possibility of a strike. Word spread amongst garment workers that the impending strike would be backed by the WTUL, contributing to this massive growth of union membership. Planning, strategizing and tactics of the strike were formulated at this assembly. Orchestrated by the strike committee, a mass gathering was held November 22 where prominent labor leaders spoke and many women

workers shared their grievances against the industry.¹⁹ A passionate outburst from a young, Jewish immigrant prompted the strike: "I am a working girl, one of those who are on strike against intolerable conditions. I am tired of listening to speakers who talk in general terms. What we are here for is to decide whether we shall or shall not strike. I offer a resolution that a general strike shall be declared—now!"²⁰ Her proposal was met with roars of enthusiastic support, and the following morning of November 23, 1909, women garment workers walked out of their shops.

Within only a few days, 15,000 shirtwaist and garment workers were out of shop, flocking instead to the union offices of Local 25. Inundated with thousands of new conscripts, the non-working leaders, embarked on their campaign for public support.²¹ The WTUL's non-working volunteers consisted of reform-minded middle class women who were dedicated to aiding working class women, whom they viewed as their "industrial sisters" in the struggle for equality in labor conditions. Strategic decisions were made in efforts to harness public sympathy for the workers; it became imperative that the girls of the industry remain the prominent face of the strike, participating in the pickets and protests. In conjunction with picketing and protesting, the WTUL women organized strikers on the basis of shop and ethnic/linguistic background, prepared strategies against resistance and worked with union branches to develop their own unique demands.²²

The most obstinate form of resistance was found in the Associated Dress and Waist Manufactured Association, which refused to concede to worker demands. The immediate concerns of garment workers, as recorded by the WTUL secretary Helen Marot included "abolition of the subcontracting system, payment of wages once a week, a fifty-two-hour work week, the limitation of overtime both in the

week and per day, equal distribution of work between seasonal fluctuations and payment for materials and supplies needed."²³ What the large manufactures were determined to refuse, however, was the long-term objective of union recognition, or the union control over hiring and working conditions. Comprised of thirty to forty large companies, the Association developed in response to the strike. They employed strikebreakers, called in police to contain picketers, relocated their factories or subcontracted their business to smaller companies. Unable to hold out from the strike, non-Associated small businesses employers compromised to strikers early on, many of whom returned back to work with better conditions.²⁴ This proclivity towards subcontracting destabilized the general strike, as it allowed manufactures to continue production without its labor force. Consequently, the strike wore on for weeks. Sustained by their unity and militancy, the striking women garment workers were able to withstand the various hardships the striking conditions presented them.

The women of the strike were primarily immigrants—55 % Russian and Eastern Europe Jews, 35% Italian and 7% native born Americans—bolstered by their inherent sense of community and camaraderie. Additionally, the Russian Jewish women proved to be prime candidates for strikers. With the history of mistreatment and discrimination influencing attitudes, they identified with the social inequality and were uniquely motivated to overcome it. Their contribution to the strike gave the movement another name in history, the "uprising of the 20,000" referring to Jewish women protesters. In enduring protests, picketing and harassment the garment workers were aided by their experience in domesticity, work that valued devotion, loyalty, self-sacrifice and patience. Women naturally, then, were exemplary strikers whose strength did not go unnoticed.



Democracy in Japan has its roots in the international environment, rather than processes endogenous to the country itself. Prior to the 1850s, Japan's feudal system was both shut off from the international environment and self-sustaining. Over the next several decades, however, Japanese elites initiated an intense period of modernization in response to Western imperialism, unintentionally opening the country to liberal ideas. Although Japan slid back into authoritarianism in the 1930s, the American occupation thoroughly transformed its society and completed the country's transition to democracy.

Untitled
(detail)
Kathryn Stevens

DEMOCRACY IN JAPAN:

From Meiji to MacArthur

by Jacob Kennon

Introduction

The transformation of Japan from an authoritarian imperialist to a democratic pacifist in world affairs is one of the most remarkable transitions of the last century. Until the middle of the nineteenth century Japanese society was utterly feudal, agricultural and decentralized. Although a military shogun exercised a certain degree of direct control over a host of vassals and an emperor was at least a nominal supreme ruler, most Japanese had little exposure to the world outside the land they rented and farmed. For such a closed, traditional society to radically transform itself into the modernized, industrial war machine which burst into Asia at the start of the twentieth century was a stunning accomplishment. Political and social upheaval underpinned this modernization at every turn and for a time produced stirrings of democracy in the wider current of authoritarianism.

Although it is tempting to explain the Japanese experience with democracy prior to 1945 through a simple lens of modernization theory or other factors internal to Japanese society, those explanations fall short.¹ Japan's feudal system was quite stable prior to the 1850s, when Western gunboat diplomacy finally forced the country to open its borders to foreign trade. It was only in response to the overwhelming threat that the West's modern arms and organization posed to the nation's integrity that Japanese elites instigated what Barrington Moore Jr. appropriately termed a "revolution from above."² Without an external impetus for change, and an external environment from which to draw new ideas and technology, Japan was unlikely to have experienced anything remotely close to the modernization and social unrest it went through in the seventy years prior to the start of what Japanese call the Fifteen-Year War (WWII). Moreover, the country certainly would not have democ-

ratized in the wake of its devastating defeat in that war without the all-important presence of U.S. occupation forces and the total restructuring of Japanese society they crafted. In this paper I argue that Japan's relationship with its external environment drove each of the country's democratic transitions: the Meiji Restoration of 1868-1912, the development of "Taisho Democracy" in the interwar years, the lapse into authoritarianism in the 1930s and the post-war consolidation.

The Transition From Feudalism

Japan's transition from feudalism can be broadly understood through a constructivist, ideational diffusion model along the lines proposed by Weyland, wherein domestic actors import external institutional structures and social norms they find appealing. These foreign structures, however, are sometimes misunderstood by the importers or not well-suited for superimposition over their society. Frequently, there are unintended knock-on effects with negative outcomes.³ Although Weyland focuses on the Latin American experience of importing democratic institutions explicitly, the core point of his analysis rings true for the Japanese experiment in the latter half of the nineteenth century: foreign institutional structures did not work as intended because domestic prerequisites were absent. Japanese elites sought to import the elements of Western primacy without upsetting Japan's internal power structure but did not pick and choose among them. As a consequence, over time they not only imported industrialization and armament but notions of liberalism and democracy. These notions were only planted in the nineteenth century, however; it took decades for the social foundations, such as political liberties and the moderation of conflict, to develop organically. Throughout this early modern period (1868-1912) Japan experienced a slow, steady erosion of the old order caused

by constant self-exposure to Western ideas.

Japanese elites in the 1850s and 60s struggled to decide whether or not to import western technology and models of military organization to counter the existential threat posed by the imperial powers. An inter-elite struggle over this issue pitted a coalition of feudal lords against the shogun, the last ruler of the Tokugawa regime which had been in power continuously since it unified the country in 1600. The central regime opposed building a national military. Arming the peasants would allow them be used by fiefs to challenge the government's authority, and the peasants themselves could rebel as well. Both outcomes were expected to severely destabilize the feudal structure. The opposition, while keenly aware of the possibility of peasant revolts, felt that it was a necessary risk given that the alternative to modernization was to succumb to western dominance. In 1868, after a civil war and under the pretense of restoring power to the imperial throne and its occupant, the emperor Meiji, the modernizers defeated the ancient regime, marking the start of what came to be known as the Meiji Restoration. The fiefs they did not defeat directly they bought out, in essence striking the kind of pacts one would expect to see in an O'Donnell-Schmitter-style transition.⁴ As it consolidated and gained bargaining leverage, the new regime gradually renegotiated these pacts with the last representatives of the old order, who ceased to have an effect on politics after a final spasm in the Satsuma Rebellion of 1877.⁵

The new regime immediately initiated a modernization campaign, seeking to secure Japan's place as a sovereign state in the international order, while preserving as much of the old feudal structure as possible. The elites' modernization program had unintended consequences, however. Economic development was imported wholesale and imposed on society—the

overwhelmingly rural population began to move into the cities to labor in industry and the old, static social order came under stress. Imported economic reforms brought with them the same social stresses western countries faced when they underwent their own industrializations. The concentration of people in the cities redefined how social classes interacted with

interest in foreign ideas was an influx of the classic liberal texts of the enlightenment. The works of Mill, Locke, Spencer, Bentham and Rousseau were translated and began to circulate widely among both wealthy rural circles and the urban elite, giving rise to the Freedom and Popular Rights movement, which in 1880 gathered a quarter-million signatures demanding

was the equivalent of England's House of Lords, its seats filled by elites with hereditary status. This political arrangement allowed for the formation of the first opposition party, the Liberals, around the turn of the century, which promptly began passing bills in the lower chamber to remove all remaining restrictions on freedom of association and assembly. The efforts went nowhere, however: the upper chamber could see the serious challenges to aristocratic power those measures would possess if allowed to snowball and exercised a de facto veto over further political reform through legislation.⁸

These reforms and others, which can be seen as incremental steps in the process of democratization, were able to take root in Japanese society for a variety of reasons. First, notions such as parliaments, and freedoms of association and assembly offered both prescriptive concreteness and plausibility; newly minted Japanese liberals traveled to the West and saw that the ideas were more than just theory, they could work in practice, and all that was required was a clear-cut set of rules. Second, ordinary Japanese were increasingly literate, and the advent of newspapers offered a means for rapidly transmitting new ideas across society. Third, the basic content of these reforms was universalist—ideas such as individual liberty made no pretense of being solely for Western peoples.

From 1889 to the end of the Meiji era in 1912, Japan could reasonably fit into Hale's conceptualization of a "hybrid regime," one which is neither fully authoritarian nor democratic, but is relatively stable.⁹ While a parliament with an active opposition existed, important decisions were still made at the executive and cabinet levels. Moreover, participation in the democratic process was reserved for just a small subset of the population, only a few hundred thousand citizens out of tens of millions.¹⁰ To the extent that there was real political competition, it was confined to infight-

All barriers to associational life were removed and, in a radical change, the hereditary status system was abolished and all Japanese became equal before the law.

each other and a public sphere independent of the state began to develop, containing new social groupings with their own preferences. Japanese oligarchs inadvertently fed this growth by importing liberal social and legal norms, assuming them to be a core part of the Western recipe for success. All barriers to associational life were removed and, in a radical change, the hereditary status system was abolished and all Japanese became equal before the law. Commercial societies, educational academies, and common interest groups cropped up and began to give at least the well-to-do strata of society a social identity which was no longer tied up in the old feudal structures. Newspapers, which had never developed under the Tokugawa regime, exploded, and by 1889 there were 647 in print, 164 of which covered current events, including, critically, politics. Debating societies sprang up, the most prominent of which, the Meirokusha (Sixth Year of Meiji Society), counted among its members civil servants as well as members of the growing urban civil society and published a periodical widely read by the intelligentsia. One result of the elite's newfound

the creation of a national assembly.⁶

Japanese elites had difficulty separating out western industrialization from the liberal norms with which it tended to come packaged. Where they saw the physical means needed to challenge western preeminence, growing business interests saw parliamentary political processes which could allow their voices to be heard in ruling circles, and a burgeoning labor movement saw the possibility of unionization as a counterweight to the squalid conditions in factories and cities. The Meiji constitution, crafted by imperial advisers and enacted by the Emperor in 1889 as a "gift to the people," was a response to this growing pressure, despite the concept of a state organized by a written constitution being itself a Western concept. The constitution gave in to bourgeois demands for representation in government by creating the Diet (parliament) in which outsiders could gain seats and be heard, while still reserving the bulk of decision making authority for the Emperor and his cabinet.⁷ Moreover, the Diet was divided into two chambers, only one of which was filled via elections (by a small subset of wealthy males). The other

ing among elites and was not sufficient to warrant classifying Japan as democratic; however, given the open presence of liberal ideas in the public discourse of the time, it would also be inaccurate to describe the regime as purely authoritarian. It was a hybrid system and a relatively long-lived one at that.

Taisho Democracy And Its Reversal

The period 1918-31, known as the Taisho Democracy, marked Japan's most robust democratic experiment prior to the post-war Occupation. Industrialization had spawned a growing labor movement which pressed its demands for rights and reform through the Diet, and a growing population, itself a byproduct of modernization, required immense resources to sustain. As a country with very little arable land, minerals, and other raw materials, Japan increasingly had to look beyond its borders for critical resources and began to come into conflict with its better-endowed neighbors. Wars against China (1894-5)

Japan's modernization can be seen as an induced response to the threat of western power, and the organization of the modern state was a parallel development.

and Russia (1904-5), coupled with the annexation of Korea (1910) placed tremendous demands on industrial production and imposed harsh conditions on the working class, but also began to change the character of the state itself. By necessity the state had to become more authoritarian in its organization, and this militarism spilt out into the domestic arena. Organized labor posed a threat to the state's war making capacity, particularly when its strikes and protests disrupted production, so as events like the massive

Rice Riots of 1918 became increasingly common in the 1920s, the government began to crack down and impose ever stricter controls on society.¹¹

Mark Pietrzyk, summarizing Otto Hintze, presents an applicable model for understanding this period of Japanese democratization.¹² The model explains the process of democratization as a struggle between authoritarian and associational principles of organization, where the former governs the military realm and the latter civil society relationships. "An executive authority and a supporting military-security bureaucracy are created by society for purposes of successful war-making. The executive authority must of necessity employ hierarchical and coercive methods in order to mobilize and lead for war..." writes Pietrzyk. "At the same time, members of society may have relations with each other with minimal intervention by the state."¹³ According to Pietrzyk, a country can only move towards democracy if the associational principle of organization is predominant in its social

relations. Internal conditions, such as the presence and credibility of democratic ideas, the intensity of national unity, level of economic development, the presence of an independent bourgeoisie, a large middle class, or previous experience with democracy have all been shown to strengthen associational ties and pave the way for democratization. Pietrzyk argues, however, that the critical permissive condition is an external one: a country can only democratize if it is at peace with its neighbors. The extent to which the authoritarian principle

is strengthened vis-a-vis the associational is directly linked to the level of demands placed on the state to defend the integrity of the country. The more frequently the state is at war, the more likely it is to become centralized, militarized and coercive in its character.

This model fits Taisho Japan well. During the Meiji Restoration and the early part of the twentieth century Japan had remained relatively at peace with its neighbors (with the exception of the conflicts noted above). As a consequence, domestic forces unleashed by modernization and the diffusion of liberal western ideas were given room to take root and began pushing the government to democratize. Over time, however, the pendulum began to swing the other direction.

The Development Of The State

The origins of the Japanese state as it exists today can be traced back to the late Meiji era, the end of the nineteenth century, and are best understood through the lens of Porter's War and the Rise of the Nation-State.¹⁴ Japan's modernization can be seen as an induced response to the threat of western power, and the organization of the modern state was a parallel development. According to Porter, we should expect to see countries go through roughly three phases in response to the threat of war.¹⁵ First, a kind of "proto-nationalism" takes hold, causing previously disparate groups within the nation to begin to see themselves as part of a larger, unified polity. They begin to form a distinct national identity to contrast themselves with their potential enemies. The state begins to take on a modern form in response to demands for the institutions and bureaucracy required to wage war on a large scale. Second, military service (required or voluntary) integrates geographically dispersed members of society and further reinforces nationalist sentiment. In many cases there is a call to serve a higher purpose, such as

the French Revolution's cry for *Liberté, égalité, fraternité*. In Porter's final phase, nationalism boils over into aggression and the phenomenon of Total War takes hold.¹⁶ This model goes a long way towards explaining the development of the heavily centralized Japanese government which eventually planted the seeds of its own demise in the 1930s.

Prior to the Meiji Restoration, the Tokugawa regime was remarkably stable and ran Japan by devolving most responsibilities to the feudal lords under its

influence. With virtually no contact with the outside world, there was no need to create the level of government bureaucracy required to field a modern army. Once it became evident that without thorough modernization the country would soon be overrun by the West, the elites who came to power in 1868 embarked on the task of creating a state capable of meeting the challenge. Throughout the Meiji period the new state solidified, tying the once disparate fiefs together into a Japan with a single national identity in opposition to that of

the West. For a time, this emerging state was able to both gather authority in the central government even as it let some of it go into the hands of parliament, especially in the Taisho era. As the organizational pressure of waging Total War abroad grew, however, the state came to dominate both the economy and civil society and an erosion of democracy took place up through the 1945 surrender.

Smith provides one framework for understanding the driver of this Japanese expansionism when he describes

Hands, Tom McMurtrie



the economic order that emerged during the 1930s as neomercantilist. The giant industrial and financial conglomerates (zaibatsu) which evolved as Japan industrialized became increasingly interwoven with the state and relied on it to open up foreign markets. The impressive economic performance of this arrangement provided a way for the conservative ruling elite to

bark on a war of conquest and accomplish that goal reform and democratization.¹⁹ The American initiatives in the early phase of the Occupation can be seen as direct intellectual descendents of Wilsonianism coupled with New Deal era pragmatism. At the core of Wilsonian theory is the proposition that the most legitimate governments in the eyes of both domestic and

liberals, socialists, and communists who opposed the ascendance of authoritarianism in the 1930s. Lack of historical insight notwithstanding, however, McArthur and his circle were confident on the basics of what they thought had to be done to produce enduring democracy: every person who ran or profited from the war was to be purged from public life and the societal interests which had pushed for expansion in the first place were to be eliminated. The Occupation assumed that as long as these actors and interests existed, democracy had little chance of taking hold in the long run.

First and foremost, blame for the war fell on the military, and a series of tribunals were convened as soon as the war ended. These trials were an integral part of the demilitarization of Japanese society. As the Americans saw it, they removed, quite literally, the most egregious offenders from the social equation. When the victor's justice was said and done, 5,700 so-called Class B/C "war criminals," a new term at the time, were indicted, of whom roughly 920 were executed and 475 received life sentences.²² Of the top-level Class A criminals sentenced in the Tokyo trial (widely regarded as a showcase, despite meticulous attention to procedural detail on part of the prosecution), seven were hanged, sixteen imprisoned for life, and five died in prison; however, many more were either paroled, or later granted clemency after the occupation ended.²³ In addition to purging most of the top military and civilian leadership, the Occupation eliminated the basic war material of the armed forces, destroying munitions, planes, tanks, and weapons on a huge scale.²⁴

Second on the American reform agenda was the economy. The landlord class, which had been a key constituency aligned with the old regime, was explicitly targeted through an "agrarian land reform" policy and within a few years had been almost entirely disposed of its holdings, creating

Reformers in the occupation believed that if they could bring Japan into the democratic club it would not only make the region more secure but would be a noble thing unto itself.

claim legitimacy, even as it defended "what appeared to be an increasingly autarchic domestic economy."¹⁷ Domestic liberals, while they gained a measure of decision making power via the parliament throughout the Taisho era were too weakly organized to effectively shape public opinion or balance against the overwhelming influence of the state and military in domestic politics. Despite their inability to pull the country back from the warpath, however, the liberals were hardly a fringe voice and openly criticized the conservative ruling establishment. Smith notes that as late as 1936, one party received a plurality of the vote campaigning on the slogan, "Will it be parliamentary democracy or fascism?"¹⁸

The Initial Phase Of Occupation

With its defeat and unconditional surrender in the fall of 1945, Japan offered itself up to the mercy of its American occupiers. What followed was one of the most audacious attempts at societal transformation ever made by a victor in war. The American Occupation forces under General McArthur were explicit in their goal: pacify Japan so that it would never again em-

international audiences are those which derive their authority from the consent of the governed. An international order comprised of such democratic states and supported by a liberal economic regime, collective security, and mutual respect for the self-determination of peoples will be inherently peaceful. In such an order, any state which violates the sovereignty of another necessarily commits an illegitimate, economically damaging, and militarily foolish act.²⁰ Reformers in the occupation believed that if they could bring Japan into the democratic club it would not only make the region more secure but would be a noble thing unto itself.

The idea of democratizing Japan from without, while idealistic, was not an utterly far-fetched proposition. As discussed above, the country had at least modest prior experience with democracy, a fact which seems to have eluded the many contemporary American "experts" on the Japan who were skeptical of the Occupation's enterprise.²¹ Democracy in the interwar years served as an important historical reference point for domestic Japanese actors, some of whom included the very

a huge class of small farmers on its former estates which were presumed be more receptive to democratic governance.²⁵ In addition, a policy of “deconcentration” was targeted at the family-owned zaibatsu holding companies, which the Americans regarded as war profiteers and a primary interest group opposed to democratization. By the end of the war, the top ten zaibatsu had gained control of almost half the capital in the mining, machinery, shipbuilding and chemical industries; half of the capital in the banking sector; and sixty percent of both the insurance and shipping industries.²⁶ These industrial-political elites had every reason to be actively opposed to democratization in the aftermath of the war. The political freedoms of speech, and assembly the Occupation put in place immediately granted immense legitimacy and political cover to the conglomerates’ domestic opponents: a unionization movement, radical and moderate socialist parties, and, most threatening, a newly-legal and resurgent Japanese Communist Party. All three had origins dating back to the era of Taisho Democracy and were either actively supported by

With the formal adoption of the constitution in 1947, Japan, at least on paper, transitioned to full democracy.

the American reformers, as was the case with the labor movement, or were at least not initially seen as a threat in the case of the latter two.²⁷ Over time, however, the tolerance of the Americans for the radicalism of these movements grew thin, a point to be returned to below, and for a variety of other reasons a cozier relationship developed between the occupying forces, the zaibatsu, and the remnants of the conservative political establishment. By the time the Occupation ended, only a handful of

the immense number of zaibatsu originally targeted for breakup actually ended up being disintegrated.²⁸

Conspicuously absent from the American reform agenda was the Japanese state itself, specifically the bureaucracy. Since the Meiji era the central bureaucracy had played a major role in Japanese life, managing everything from near-universal education, to infrastructure, to economic planning. By the time of the American occupation, it was an interest group unto itself and could reasonably have been accused of helping to perpetrate the war. The Occupation forces, however, one did not conceptualize the bureaucracy as an actor in society. Working from an American administrative tradition predicated on the ideal of purely technical, command and control systems of management, U.S. personnel had no basis in experience for understanding the central role and initiative the bureaucracy had taken in Japan’s earlier development. Rather, they saw it as a tool wielded by other interests, such as the emperor, military, zaibatsu, and now the occupiers. By the time Japan formally regained its sovereignty after the Occu-

franchise to include all men and women, established a clearly defined bicameral parliament which appointed the prime minister, and wrote into law a renunciation of Japan’s sovereign right to wage war (the world-unique Article 9). The only vestige of the Meiji constitution of 1889 was the Emperor himself, who was relegated to a ceremonial role in the state. Despite much backroom protest debate from the highest officials of the nominal Japanese government, the constitution was translated into Japanese virtually verbatim from its original English with only a few minor amendments permitted.³⁰ With the formal adoption of the constitution in 1947, Japan, at least on paper, transitioned to full democracy.

The Occupation’s “Reverse Course”

An important theoretical lens through which to view the Occupation, both in its initial and later phase, lies in the transitions framework presented by O’Donnell and Schmitter. In their model, one common route to democracy lies through defeat in an international conflict followed by occupation by a country which is itself a political democracy. A factor which enhances the odds of a successful transition is the presence of what they refer to as a “preauthoritarian legacy,” meaning the remnants of old institutions, political parties, civil society groups, and others who can help revive a prior political system. Factors which push against a successful transition to democracy include interest groups willing to launch coups against a new government, and existence of past “scores to settle” between competing factions.³¹ O’Donnell and Schmitter cite other possible countervailing factors, but those shed less light on the Japanese case than the ones mentioned. Critical, however, is their conceptualization of “pact-making” among interest groups jockeying for position during an uncertain transition.³²

pation, the bureaucracy had grown substantially in relative power vis-à-vis other domestic groups and was set to regain its guiding role in society.²⁹

The crowning achievement of the Occupation was without a doubt the newly drafted Japanese constitution. Written by McArthur and a close circle of advisors, it included virtually every democratic safeguard and political freedom ever conceived of in the West. Among many things, the constitution expanded the



Bridge, Tom McMurtrie

As discussed above, immediately upon the arrival of the occupiers Japan's preauthoritarian legacy was revived by leftist social and labor movements eager to exercise long repressed political voices and push for representation. With the U.S. pushing a democratization agenda and actively gutting the military complex, there was little to stand in their way. Japan faced a somewhat unique situation in that there was not the slightest chance of an anti-democratic coup taking place on the Americans' watch, so while the extent to which the

country would be forced to democratize was anyone's guess, it became clear to most actors early on that the political system was opening up. With conservatives in all areas (political, military, economic) in retreat and revived preauthoritarian, pro-democratic groups in the wings, Japan's democratic consolidation seemed all but certain in the Occupation's early years.

By 1948, however, the situation was beginning to change. The breakdown of the victorious alliance and the emergence of the Soviet Union as a rival to the United

States began to push aside Wilsonian aspirations for the dawn of a peaceful, democratic era in East Asia. For a number of reasons, the Occupation embarked on a "reverse course," drastically scaling down the economic "deconcentration" program which was set to break up the zaibatsu en masse and backpedaling on political liberties. First, influential American policymakers, notably Under Secretary of the Army William H. Draper, Jr., began to question the wisdom of tearing down Japan's industrial economy and war-making

capacity in the face of the mounting Soviet threat. The U.S. was not only spending massive quantities of money aiding Japan while simultaneously threatening its core industries with dismemberment, but was suddenly finding itself in need of a strong East Asian bulwark against communism. Second, the outbreak of the Korean war abruptly created enormous demand for Japanese industrial goods, at once infusing cash into the zaibatsu and making them a lynchpin in the American war effort.³³ Finally, on the domestic front, ongoing demonstrations and strikes (reminiscent of Japan's experience during World War I) by unions and leftists of all stripes, including communist, pressured by the slow pace of the post-war recovery prior to the Korean conflict, began act more militantly and draw the ire of the authorities. A cycle ensued, wherein each new level of radicalism on the left further alienated the Americans, who then cranked up repression and became more sympathetic to the remaining civilian old guard.³⁴

As the Occupation wore on in these later years, the Americans began to be-

reform for an industrialized, if cartelized, Japan capable of anchoring East Asian security; second, the Occupation authorities quietly allowed the rehabilitation of the old-guard conservative politicians in exchange for the assurance that Japan would not succumb to domestic social movements and drift into the communist bloc. The end result was Japan which democratized only part way, retaining a sound, liberal constitution up to the present, but never developing the kind of robust political competition characterized by frequent turnovers of power. Up until the 1990s, a single conservative party, the Democratic Party of Japan (DPJ) was in government continuously. It would not be an exaggeration to say, then, that perhaps the most enduring Occupation legacy in Japan is that of polyarchy; a small political and economic elite cycles its members through power continuously within the confines of an otherwise thoroughly liberal constitution.

Conclusion

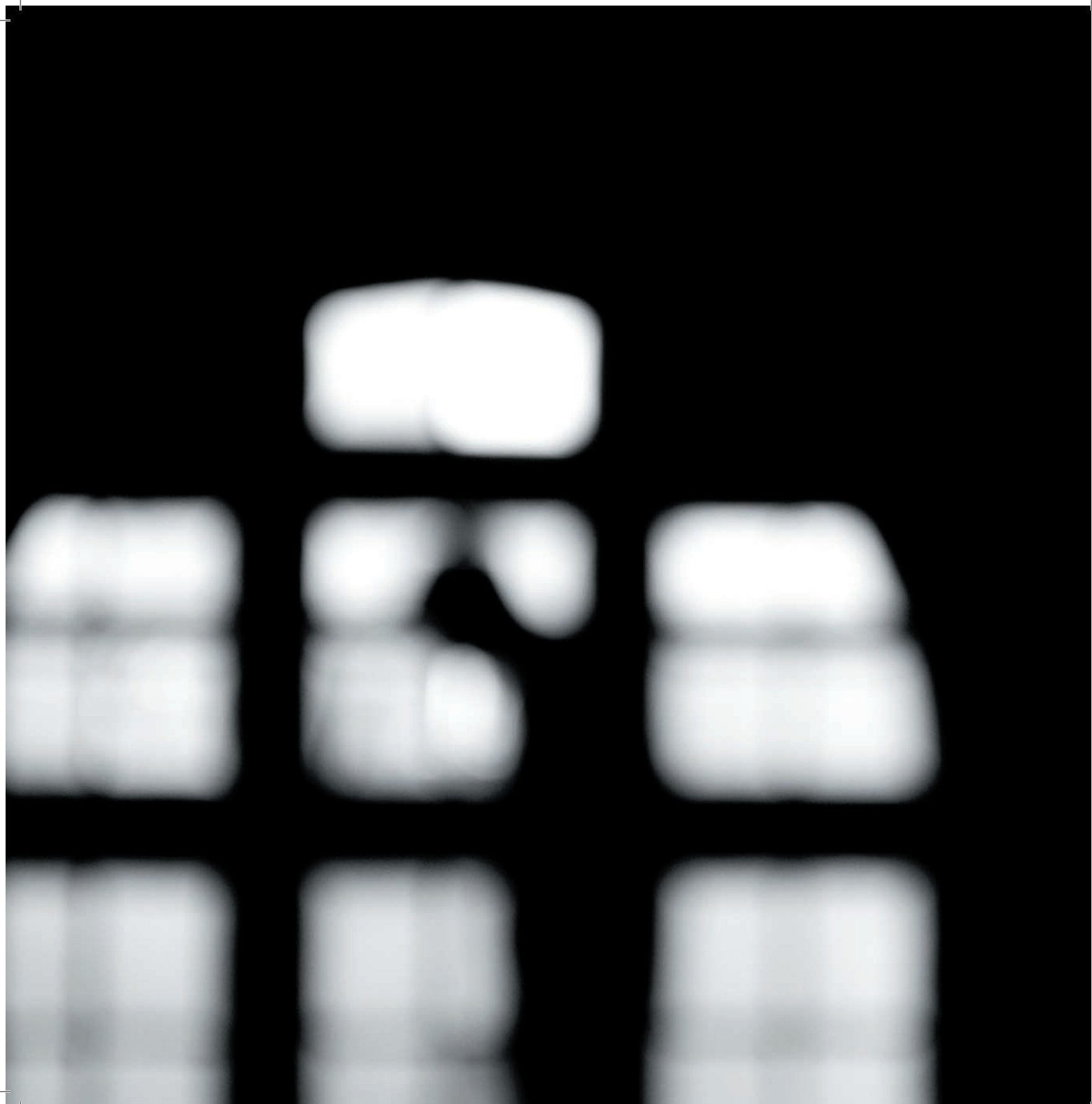
Japan's modern experience with democ-

political liberties in the interwar years being major milestones. The pressures of war forged the efficient, bureaucratized state still present today, while at the same time producing a backslide into totalitarianism in the 1930s as the democracy's key permissive condition, peace, was removed. The American Occupation explicitly engaged in a democratization process and was quite successful, but the realities of real politick at the dawn of the Cold War necessitated a return of sovereignty to some of the very actors responsible for the horrors of World War II. Japan today, while certainly worthy of being called a democracy, possesses a political system characterized by polyarchy and a clear lack of institutionalized political competition.

Japan today, while certainly worthy of being called a democracy, possesses a political system characterized by polyarchy and a clear lack of institutionalized political competition.

have increasingly like just another interest group in the country. Yes, ultimate decision making power still rested at the point of their guns, but the desire to extricate themselves from running the country put them in the position of having to cut deals (make pacts) with other actors that would have been inconceivable in 1945. The final arrangements can be characterized succinctly: first, the U.S. traded economic

racy has been defined at all stages by the country's relationship with external forces. From its initial opening at the point of a gun in the mid-nineteenth century, to its induced "revolution from above" in the Meiji era, Japan was playing catch up to the West. As it modernized and domestic forces began to push for democracy, the old order started to slowly erode, with the Meiji Constitution, and the expansion of



*The United States is suffering
a crisis that is unavoidable
under the current system.
When two thirds of released
prisoners return to prison
within three years, the
criminal justice system
must be questioned. This
paper examines crucial
components of the problem,
including: the ideology behind
imprisonment; biological
factors of criminals; the
fallacy of trusted evidence;
corruption amongst those
in charge; and the role of
lawyers. Clearly, the United
States criminal justice system
contains inherent flaws and
is in dire need of radical
restructuring.*



FLAWED BY DESIGN

by Erika Peters

Lady in the
Attic (1)
(detail)
Kenny Barry

"[J]ustice miscarries everyday, by doing precisely what we ask it to."¹

Ask a resident of white suburbia if the United States Criminal Justice System is fair and righteous. More likely than not, s/he will commend the integrity of the system. Ask one of the 1,613,740 Americans incarcerated in a federal or state prison the same question and you are bound to elicit a contradictory response.² These are the individuals that serve on the other side, as subordinates of the acclaimed system. Some will tell you they are innocent, they are mistakenly there and the wrong person has been convicted. Others will argue their case is special, that the court overlooked their unique circumstances and that there are better alternatives to prison. Finally, an enlightened few will indicate that by its very nature, the system creates a unilateral trajectory towards injustice. Through this perspective, the United States Criminal Justice System is flawed by design and fundamentally miscarries justice, to varying degrees, on a regular basis. A key imperfection of the criminal justice system is the value it places on a punishment-oriented ideology over that of prevention and rehabilitation. The system does not seek to aid criminals in self-improvement nor assist them in becoming more lawful citizens; it merely operates as a means of "deterrence and incapacitation."³ This current approach asserts that the cure for crime is to "increase the costs of criminal activity" in an effort to dissuade illegal behavior.⁴ Therefore, the threat of punishment is viewed as the sole means to control human conduct. While detained in over-capacitated prison systems, many inmates report sexual assault and irreparable emotional damage that ultimately causes violent and antisocial behavior upon reentry to society. In this process families are also affected, as chil-

dren are left without parent-figures or role models, and the remaining parents struggle alone. Massive imprisonment is causing more problems in the long run.⁵ But once punishment is administered, will a criminal forever be discouraged and cured? According to recidivism statistics, sixty-six percent of released prisoners find themselves behind bars within three years.⁶ This establishes that incarceration is not fulfilling its goal to cure criminals. In addition to the anguish caused by the prison environment, a large amount of criminals suffer from previously existing psychological disorders that may have attributed to their convicted offence. Studies support this, as "neuroscience is showing us that a great many crimes are committed out of compulsion—the offenders couldn't help it."⁷ If criminals are impaired by biological factors out of their control, they need medical and remedial therapy that alleviates their symptoms and prevents future occurrences of crime. Transferring criminals in and out of prison is simply futile compared to rehabilitation. This proactive involvement can also be applied to those prisoners not suffering defined medical conditions, but who have evident

deemed just. It is arguably more just to use our resources to rehabilitate those in need, transforming them into upstanding and active citizens in the community, preventing further crime, and benefitting a greater number of people. Yet, the criminal justice system is told to punish and so it does. Another dysfunction within the United States Criminal Justice System which prohibits true justice from being served involves the usage of evidence and the portrayal of speculation as irrefutable fact. We live in a modern society where we are taught that science is truth. Anything that can be observed, proved in a lab, viewed with a microscope, solved with an equation or supported by a myriad of experiments and scholars is scientific and indisputable. Therefore, if scientific evidence is presented in court, the truth is revealed and the jury has an easy decision to make: an observation cannot be false, a fingerprint cannot be denied, and DNA cannot be argued. With this evidence, the system has provided a guaranteed method for evaluating a case and promoting justice. However, lineups are vastly inaccurate, fingerprints are subject to human error, and there is no such thing as a DNA

Through this perspective, the United States Criminal Justice System is flawed by design and fundamentally miscarries justice, to varying degrees, on a regular basis.

behavioral problems. Those in the criminal justice system should examine the criminals more closely. They should learn who they are as people, find out why they do what they do, "instead of always just locking 'em up."⁸ But instead, America takes a fervent stance to be tough on crime; and in our current system, that is

"match." We ask the system to provide us with evidence, and it does. However, evidence is not infallible.

Eyewitness accounts, at first thought, seem like an honest mode to arrive at a conclusion. If an eyewitness claims they are one hundred percent positive they know what they saw, a jury should be inclined to

believe them. After all, if they are certain they know what they saw and they trust their own vision, what is not to believe? Most people, especially eyewitnesses, would be surprised to discover the inaccuracy of these identifications. The case of Ronald Cotton serves as an illustrative example of an eyewitness account leading to the conviction of an innocent man. Jennifer Thomas-Cannino told the jury that during her half-hour long rape she “made a very concentrated effort to pay attention to the facial features” and anything else she could bring forth to police, pending her survival.⁹ Even with her extreme devotion to memorizing the appearance of her attacker, she suffered from mental contamination after viewing multiple suspects. Her story is not uncommon. Recent studies have recognized the unreliability of these accounts, as demonstrated in an experiment in which only fifty-four percent of witnesses correctly identified the perpetrator in a staged lineup.¹⁰

What if the real perpetrator is missing from the lineup? Witnesses often believe that the perpetrator is there, and so they must select someone. Realistically, a lineup is not a multiple-choice question, and the true criminal may be absent. In another staged lineup experiment, this time devoid of the perpetrator, sixty-eight percent still chose a suspect. Yet witnesses who were incorrect in their selections were just as confident as those who identified the correct suspect, and jurors believe both groups equally.¹¹ The implications this has on the criminal justice system are massive. Eyewitness identifications, though presented as fact, are largely vulnerable to errors and contamination and should consequently not be considered solid proof in a trial.

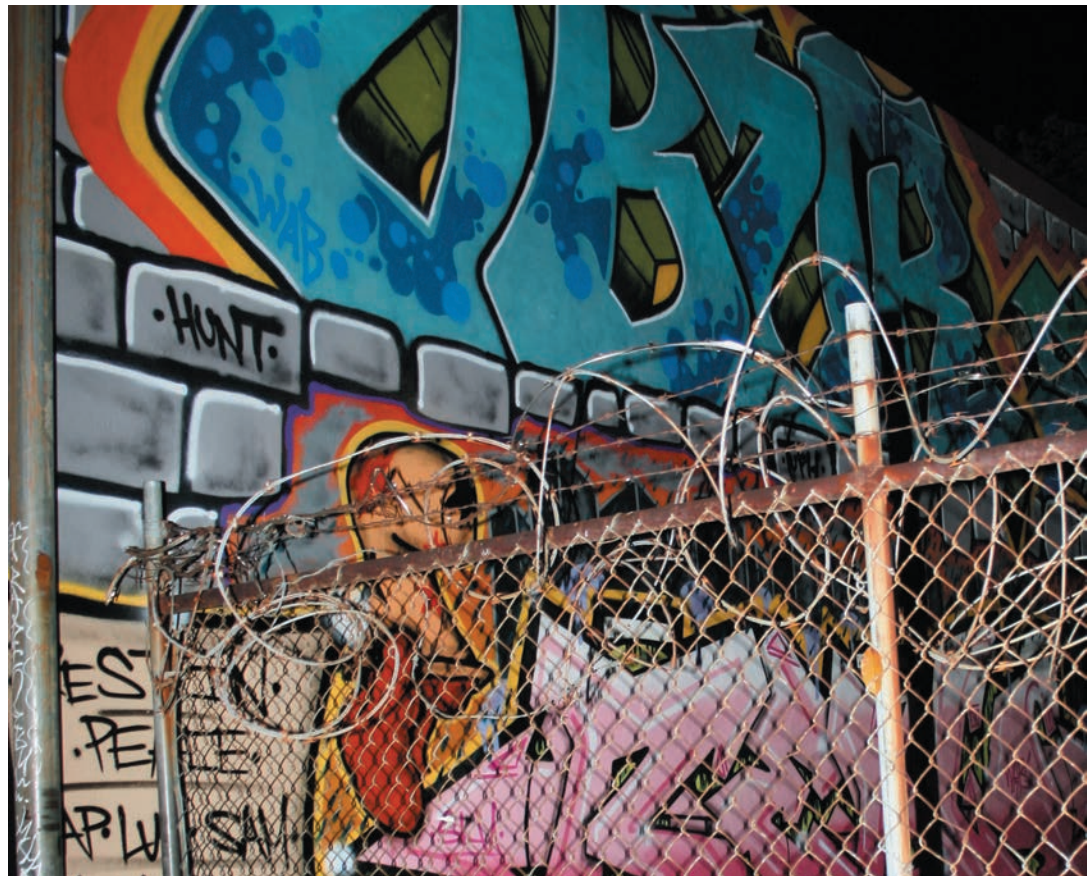
The role of fingerprints as evidence should also be viewed with a similar caution. Fingerprints are analyzed with human eyes to determine if there is a fit between the fingerprints of a suspect and those left on

evidence linking to a particular crime. The dogma of this previously regarded “unsailable symbol of truth” was in question when twenty percent of agencies in the United States failed to identify prints correctly during an F.B.I. study.¹² That being true, it is slightly alarming that fingerprints conclusively incriminate a suspect on the basis of being fact.

Yet another form of evidence that is also widely misperceived is DNA. People are led to believe that DNA is sacred in regards to proving guilt or innocence when this is not necessarily the case. Prosecutors like to speak of a match that ties the defendant to the crime and automatically proposes a guilty verdict. In fact, forensic scientists have omitted the word match

from their vocabulary and instead describe a more accurate analysis, such as “similar” or “could have come from” or “is associated with.”¹³ It is more precise to eliminate suspects based on DNA than it is to claim a fragment of a hair belonged to individual using nuclear DNA. But even as technology refines and develops in the forensic labs, it is being distorted in the criminal justice system. Lawyers tamper with and modify evidence to serve their best interests. DNA results have been overstated in strength and frequency, omitted if they conflicted, tested minimally, reported as conclusive when inconclusive and blatantly altered.¹⁴ Of course, this is all hidden from the jury, who is only told there is a match and is utterly unaware

Graffiti, Gina Mason





Lady in the Attic (2), Kenny Barry

of any other possibility. Jurors need to be educated on the dependability of their evidence so they are not easily swayed by lawyers. We demand that the criminal justice system provides the jury with evidence in order to make an informed decision. No one can accuse the system of depriving the jury of evidence; however, their means of extracting, manipulating and presenting evidence to an uninformed jury can be accused of impeding justice.

It can be reasoned that the structure of the United States Criminal Justice System is fundamentally flawed and inherently unjust. Police officers are given the mission to protect and serve the citizens in their community, but certainly not all citizens feel this obligation is being met. Police officers are given authority, which for some leads to a sense of entitlement and false belief that they are above the law. In a Cook County study conducted in 1987, ninety-two percent of judges, prosecutors, and public defenders claimed officers lie at least some of the time.¹⁵ Along with verbal immoralities, police officer coercion has been known to take place. Criminal suspects at Area 2 in Chicago describe being bagged, electroshocked and repeatedly beaten by members of the police department seeking confessions.¹⁶ Police officers are not necessarily intrinsically bad people, but their authoritarian role within the system can evoke abusive, insensitive, and cruel traits towards the prisoners. The Stanford Prison Experiment exhibited this phenomenon in 1971 so extremely that it was called off before it was even halfway completed. What was true in that controlled environment decades ago remains applicable. Officers meant to protect, serve and carry out justice can actually be detrimental for justice.

Lawyers are also asked to carry out justice, but in an adversary court system known to follow the fight theory this goal may be unrealistic. Unlike a criminal justice system that functions under a truth theory,

where both sides are in active pursuit of the truth, the fight theory system is in pursuit of victory. The lawyers' loyalties are not to justice and truth but rather to their client for whom they must advocate zealously. Lawyers following the fight theory may purposely confuse the opposition's witnesses and make them seem hostile or unfavorable, and they may also refuse to allow evidence in that does not support their claim.¹⁷ Lawyers will attempt to portray their client as worthy of sympathy by creating a completely false image. "Honest Abe" Dennison exemplified this tendency to rouse compassion by planting a bus ticket stub in the pocket of his Mercedes-owning defendant.¹⁸ Fight theory has become dangerously excessive in sabotage and manipulation, corrupting an ideally just system. However, the lawyers are acting in accordance with their roles—their purpose is to win cases.

We do ask our criminal justice system to provide an attorney to those who cannot afford one. This demand, too, causes injustices within the system. Those who need a

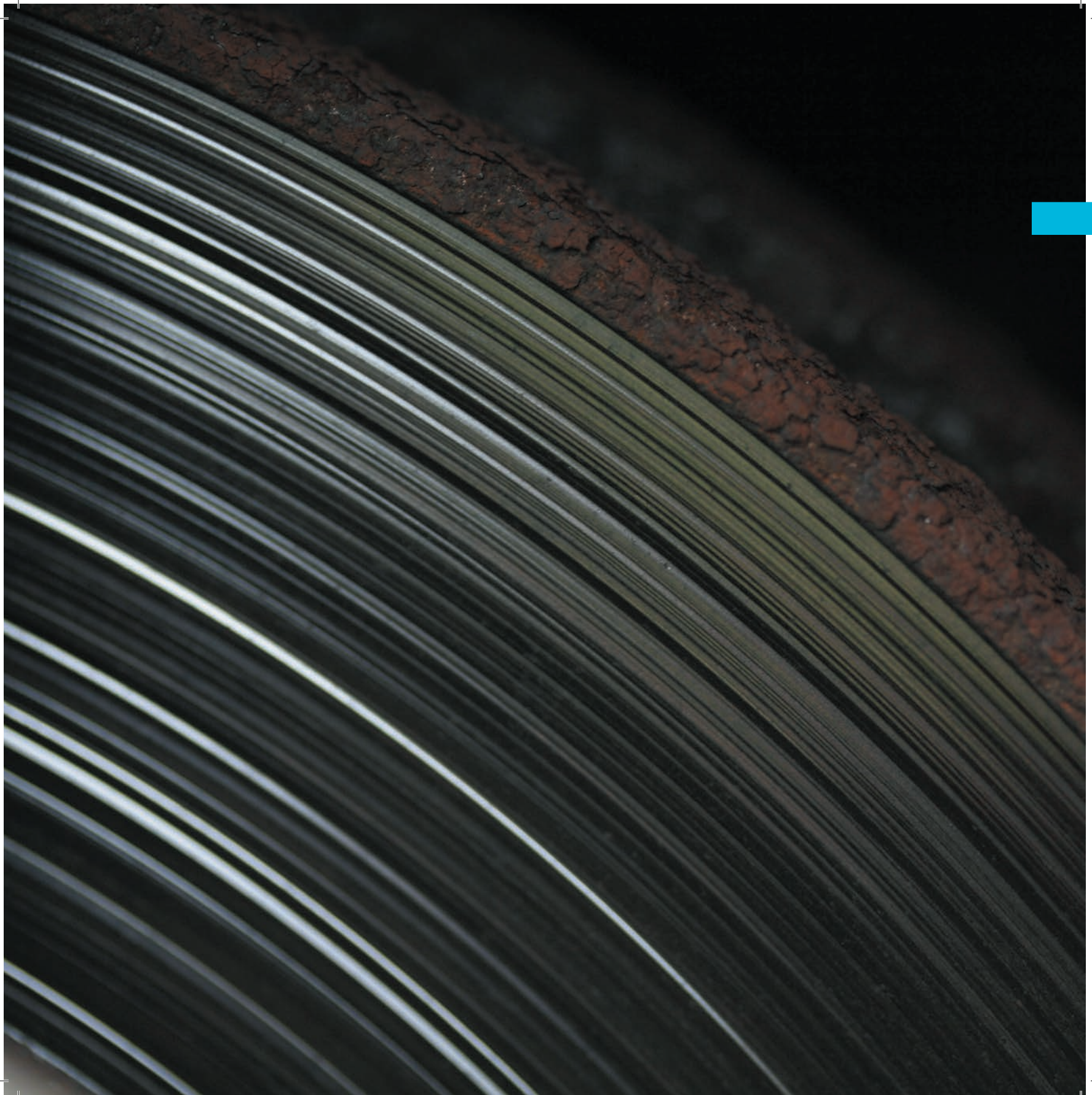
defendants feel hopeless about winning a trial and usually settle on a plea bargain to avoid a more severe punishment. These poverty-stricken individuals are at a great disadvantage in the system. Their representation in court is unfair because of the way the system is set up; there is evidently a need for more public defenders. Perhaps once this is achieved the playing field will become somewhat more level and justice will miscarry a great deal less.

Once you begin to question whether or not the United States Criminal Justice System is fair and righteous, continue to ask more questions. Take your pick of over 1.6 million incarcerated Americans and ask what their life has been like thus far. Was s/he a victim of a horrible childhood? How many times has s/he been locked up? Where is his/her family now? Have those in charge treated him/her harshly? Did s/he have a fair trial? Did his/her defense council even care? These are questions the majority of white suburbia could not answer because despite their perspective of the system, they have never been at the

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state-appointed Counsel are usually stuck with whomever they receive: "they are unable to buy their way out of trouble."¹⁹ Unfortunately, public defenders often have an exorbitant amount of cases at one time (as many as one hundred) and can therefore not devote as much of themselves to each case as they would like.²⁰ They have minimal time to become acclimated with each client and construct a strong personal defense. As a consequence, many

mercy of the system. They believe in the American doctrine that you are innocent until proven guilty and that liberty and justice are truly available for all. But those that have been on the other side of the United States Criminal Justice System have seen the internal flaws. The system is engineered to produce inequalities and injustices that are inescapable for some; the United States Criminal Justice System is flawed by design.



UNDERSTANDING THE RESOURCE CURSE:

Why Some Get More
Sick Than Others

by Karen Timmerman

Countries rich in natural resources often suffer from the “resource curse”: negative effects that high reserves of these resources have on economic, political and social institutions. Although richness in oil is presumed to bring national prosperity, at times it is detrimental to the country due to corruption and overdependence on petroleum revenues. This study seeks to understand how some countries manage this curse better than others by examining the varied experiences of three of the world’s largest oil-exporting countries: Venezuela, Nigeria and Kazakhstan.

“Ten years from now, twenty years from now, you will see: oil will bring us ruin...Oil is the Devil’s excrement.”

The Venezuelan co-creator of OPEC, Juan Pablo Pérez Alfonzo made this statement at a time when Venezuela’s economy was booming and the revenues were flowing in due to the high oil prices of 1973, and so his comment seemed out of place.

However, Alfonzo had made a startlingly accurate prediction for the future; in the many decades since the first discovery of oil in Titusville, Pennsylvania, to where so many had rushed for the chance at profiting from this new lucrative business, the world has seen the economies and institutions of some major oil-exporting countries falter and fail because of an increasing reliance on oil revenues to run the nation. This inverse relationship between dependence on natural resource exports and the economic growth rate of a region is known by many names, including the paradox of plenty, the “devil’s excrement,” and the resource curse.¹ Though its impacts can be devastating on the economies and livelihoods of oil-exporting nations, the resource curse does not affect every oil-producing country in the world. There have been many countries throughout history, such as Australia and Norway, who depend on the export of single-point natural resources such as oil for revenues but have not been afflicted by the negative consequences of the resource curse. In this paper I shall examine the resource curse and the impact it has had on three of the world’s largest petroleum exporters: Venezuela, Nigeria and Kazakhstan. These three nations, each the largest petroleum exporter within its region, suffer from this resource curse to some extent but with vastly different causes and consequences. I

wish to compare the impact of oil revenue dependence on each country’s economy and social and political institutions, and I will attempt to explain the differences in both the severity and causes of the resource curse in each case. I will also present the steps that each country has taken, if any, in an effort to reduce and reverse the consequences of their overdependence on the substance that makes the world go round.

The Resource Curse

Before analyzing its effects, the resource curse must be defined. The increased reliance on revenues from oil exports by countries that suffer from this paradox of plenty is harming their economies and populations so much that, if not checked, it could ultimately lead to civil strife and war. I shall characterize the resource curse using the explanations posited by Terry Lynn Karl, one of the forefront scholars on the idea of the paradox of plenty. She defines the resource curse as the “inverse relationship between high natural resource dependence and economic growth rate.”² In addition to examining the economics of the resource curse, Lynn also focuses on the “social and political relations arising from [the] utilization [of oil].”³ The immense wealth that oil exploitation can bring may cause the political and social institutional structures to change in a way that negatively affects the economy. The focus of this paper is on the export of the point source nonrenewable natural resource that is oil: a black, sticky substance that went from being used as a lubricant, a light source and even as a weapon in medieval wars to the liquid that has pushed globalization to a new level and has opened up a vast world economy. In an age where the demand for oil is growing every day, large oil reserves are seen as enormous assets for the countries they are found in. In 2011 global consumption had increased the most since 2004, up by 3.1%

to 87.4 million barrels a day, with the most rapid of growth occurring in developing countries.⁴ The reliance on fuel of nations such as China and India to connect their emerging markets around the world will only increase in the years to come, putting pressure on oil exporters to meet this demand without succumbing to the paradox of plenty.

The resource curse has several different causes and effects that each contribute in different ways to the growing dependence on oil rents, which cause poor economic growth and decreases efficiency of social and political institutions. The explanations include the change in the role of the government towards the market, especially after nationalizing part or the whole of their oil industry and the increasing power of elites and interest groups who use the oil rents to keep their positions. These changes have a number of negative effects such as the distorted economic growth characterized by Dutch Disease and the increasing difference in economic income that forces a majority of the population into poverty.

The first explanation of the resource curse is the change in the role of the state towards the market. Revenues from oil exports are received by the state in the form of royalties and rents from foreign companies or taxes and profits from state-owned companies. These revenues give the state less incentive to establish a system of taxation on their people, taking away some accountability for government spending. Because the state is receiving its money directly from the oil trade, it does not feel the need to show budget transparency for the general population, as the money belongs to the state, which leaves more room for corrupt spending. In order to pacify the people, the government will embark on massive infrastructure projects and increase social welfare, relying on oil rents to fund everything.

The elites and interest groups who are

in control will also use oil rents to reinforce their place in society in order to reap the benefits. The state begins to exhibit rent-seeking behavior in order to maintain the status quo of the regime and to accrue the short-term benefits of oil exploitation. This increased reliance on oil rents to fund projects and fuel corruption can have disastrous effects on a state's economy,

the development of other sectors of the economy. Countries that once depended upon agriculture for a large percentage of their exports may suddenly find it cheaper to import their food from another country. The government may place subsidies and taxes on these industries in a protectionist attempt, but this merely serves to continue to decrease competitiveness and also plac-

and the increase in productivity can lead to innovation for the future. By contrast, in a high rent model the profits from oil exploitation are received and dispersed of in large amounts very quickly in order to gain maximum short-term benefits. The money is spent in frivolous and corrupt ways on costly projects and to keep the elites in the political power positions they hold. With the oil industry as capital and technologically intensive as it is, few jobs are created, and poor funding for educational systems leaves a population of rural laborers watching the distance between high and low income increase as foreign workers are hired by oil companies and education is completed in foreign countries. The rent-seeking sector, by making poor investments and not bothering to correctly jumpstart the economy "corrodes the viability of the primary sector upon which it increasingly depends."⁷ In addition, a government may also invest little back into research and innovation in the oil industry, over time decreasing production levels and efficiency.

The high level of foreign workers and low domestic employment is also a result of the presence of foreign companies since the beginnings of a nation's oil history. Most oil-exporting countries lacked the technical skill and capital to extract and refine oil from their fields, and thus outside companies were awarded concessions and employed their own workers to extract the precious natural resource. When the oil industry took off, it caused a rise in the wages of the few employed by the oil industry which left the rest of the population out of work and watching their nation's resources be controlled by foreigners. For these reasons, especially due to poor economic management by the government, the population of an affected country may become very disgruntled with the way oil rents are being spent, and this could lead to increased violence and even war. As the majority of the population sinks

In an age where the demand for oil is growing every day, large oil reserves are seen as enormous assets for the countries they are found in.

especially with the world's fluctuating oil prices.

Due to events and wars occurring throughout the world, oil prices can be very volatile at times, with the West Texas Intermediate price for a barrel rising from \$41.51 in 2004 to \$99.67 in 2008, and then falling back down to \$61.95 in 2009.⁵ Oil exporting countries that sometimes depend on exports for up to 90% of their GDP can see great periods of profitability during booms turn into economic trends that take a turn for the worse when demand drops and prices fall. A government could set its yearly budget according to predicted oil prices, but there is always the chance that prices could fall and the previous surplus could turn into a deficit.

The rent-seeking behavior of the state can also have harmful consequences for the domestic economy. A major result of the social and political institutional changes that the resource curse can cause is known as "Dutch Disease." This phenomenon is seen when all non-oil exports are rendered both domestically and internationally non-competitive due to rising exchange rates. An abundance of natural resources gives a country easy access to large revenues and growth, but ignores

es an additional burden on the oil sector to provide funds for these policies. If not reversed, Dutch disease can become perpetuating, "provok[ing] a rapid, even distorted, growth of services, transportation, and other non-tradeables while simultaneously discouraging industrialization and agriculture," which could eventually lead the economy to collapse.⁶

In addition to the dominance of oil in the export sector, rent-seeking behavior causes the income gap to increase and poverty levels to rise due to the capital- and education-intensive characteristics of the oil industry. This can be explained through the rent cycling theory. This idea compares the differences between the effects of low and high oil rent revenues. In a low rent model, the incentive to create wealth is highly prevalent because the government relies less on oil rents to sustain itself and thus must invest in growing its economy by other means. Dutch Disease is not affecting the competitiveness of non-oil and labor-intensive manufactured goods, and so the government will expand these sectors, which in turn increases the diversification of the economy and decreases income inequality. There will be a higher demand for domestic skilled labor

into poverty and the per capita income of the country plummets, a small minority reaps the benefits of the nation's oil fields. If the government does not become fully accountable for their people or provide budget and revenue transparency for their financial transactions, the population may rise up against the elites in the form of attacks on individuals and oil infrastructure, terrorism, and even civil wars and coups.

Countries that suffer from an overdependence on oil export revenues will see different levels of severity of the resource curse depending on how the country is run. I shall examine the effects of the resource curse on the countries of Venezuela, Nigeria and Kazakhstan and compare the three in order to explain the reasons for the variance in the intensity of the resource curse and its effects.

Venezuela

At the end of 2010, Venezuela was the largest producer of petroleum in South America and the ninth largest producer in the world, with a 15.3% share of the total proven world reserves.⁸ This country has had a long history with oil; discovered in 1914 at the Mene Grande field, the natural resource was first seen in production for export in 1917, with Royal Dutch Shell and Standard Oil as the major players in its extraction and refinement. Oil's share of exports rose dramatically from 1.9% to 91.2% between 1920 and 1935 and by 1929 Venezuela was the world's largest oil exporter.⁹ In 1926, oil had surpassed the value of coffee and other agricultural commodities to become the most important export to the Venezuelan economy. This is a perfect example of Dutch Disease; with oil taking over as the major export, and a lucrative one at that, by 1940 the Venezuelan government found it cheaper to import their food rather than to rely on their once strong agricultural sector.¹⁰ The appreciation of the bolívar in relation to the U.S. dollar encouraged a growth in the import

sector of Venezuela while neglecting traditional domestic sectors such as the agriculture industry. By 1950, agricultural exports comprised of less than one-tenth of the country's GDP.¹¹

In 1943, the Fifty-Fifty Agreement was pushed for by Venezuela, who wanted to see royalties and taxes "raised to the point at which the government's take would about equal the companies' [Royal Dutch/Shell and Jersey] net profits in Venezuela."¹² At the same time, the Hydrocarbons Act was passed, giving the government greater control over oil revenues. This Act established a new income tax on the mining industry in order to fund the many recently created state agencies. This revolutionized oil revenues for the Venezuelan government; rather than handing out concessions in return for a chunk of the profits the state could now determine how much of a cut it would take, and the fact that the money came from oil rather than from taxing the citizens meant that the state could be a bit more secretive with their spending. The foreign oil companies went from the ones in control to a position in which they had to comply with the national government, lest they risk being thrown out of the business. For the next ten years, Venezuela witnessed a surge in production while at the same time spent millions of dollars on the import of consumer goods from countries such as the United States. Pérez Jiménez, who ruled Venezuela from 1948 to 1957, used this influx of oil to his advantage. Jiménez reduced social expenditures and poured the oil revenues into projects of his own, causing the economy to drop due to unnecessary expenditures and overspending. Public outrage at his poor fiscal policies was increasingly mounting as Venezuela headed towards massive debt.

In 1958, Jiménez was overthrown in a coup and Venezuela became a democracy. Karl defines the type of democracy present in Venezuela as a "pacted democ-

racy," which she describes as "established through elite bargains and compromises... [that] ensure their survival by selectively meeting demands while limiting the scope of representation in order to reassure traditional dominant classes that their vital interests will be respected."¹³ This form of democracy impacted Venezuela's dependence on petroleum in several ways; rigid political institutions were produced that kept barriers to admittance high, so that the elites in power positions could continue to keep their place and use oil rents for their own purposes. However, large amounts of social spending occurred in order to pacify and provide jobs for the working class. This social spending, which includes spending on education, health, and housing among other sectors, increased from 11.4% under Jiménez to a much higher 31.4% of total spending in 1973.¹⁴ Despite this, by 1973 there was much discontent apparent in the population. The political parties and government were highly centralized, leaving little room for newcomers and limiting representation, and the economy was balanced in the direct of the few wealthy elite.

In the mid-1950s, the rises in production in the Middle East and import controls in the United States led to a flooding of the markets, and prices plummeted, along with Venezuela's oil revenues. Juan Pablo Pérez Alfonzo, Venezuela's Minister of Mines and Hydrocarbons at the time, had realized the imminent dangers of the resource curse; he got together with Abdullah al-Tariki of Saudi Arabia and founded the Organization of Petroleum Exporting Countries in 1960. OPEC was an attempt by the world's largest oil-exporting countries to, through the imposition of export quotas, coordinate policies and keep world prices stable in such a volatile and ever-changing market.

The First Oil Shock in 1973, a result of the fourth Arab-Israeli War and the Arab oil embargo, sent oil prices skyrocketing,

increasing Venezuela's fiscal income per barrel of exported oil from \$1.65 to \$9.68 between 1972 and 1975. This led to massive increases in government spending.¹⁵ When Carlos Andrés Pérez of the Acción Democrática party won Presidency in 1973, he began to implement his plans for La Gran Venezuela, which consisted of income increases and job creation along with a push to diversify exports through the expansion and nationalization of other industries. However, most of the jobs created were for the national government, which doubled in the first five years of his rule, calling for an increase in petrodollars to fund their wages. Pérez also called for the nationalism of the oil industry and succeeded in 1976 when the newly created state-owned oil company known as *Petróleos de Venezuela S.A.* (PDVSA) took over concessions of foreign companies.¹⁶ At this time in history, Venezuela and the other OPEC and non-OPEC countries were profiting greatly from the high prices of the first oil shock. Carlos Pérez seized this moment to complete his vision of a modern and industrialized Venezuela fueled by the large amounts of incoming oil rents. There was also a rise in wages and new employment opportunities in oil-exporting countries, which increased consumption at a rate of 7% between 1970 and 1979. Despite the expulsion of most foreign workers from Venezuela's oil industry however, only about 37,000 jobs were provided to the domestic labor force.¹⁷ By the late 1970s, on the eve of the coming oil glut, the surpluses turned into deficits. Spending has grown out of control, and during the 1980s oil glut, a result of declining consumption due to the high prices of the oil shocks and over-quota production from OPEC countries, prices dropped to \$13.00 per barrel in 1986 and Venezuela's oil revenues fell with them, putting Venezuela into massive debt, with "the ratio of debt to GNP reach[ing]... [a] high of 65.3 percent" in 1987.¹⁸



Backlit, Gina Mason

In 1974, the Venezuelan Investment Fund was created to accumulate oil revenue and foreign exchange reserves. However, the government also saw the fund as a bank for their large public sector projects. Although the Fund did accrue a modest amount of income, rather than being used fully to improve the economy and lives of Venezuela's citizens, the Fund was "an executor of the government's plans and wishes," meaning that oil was still being used for wasteful projects and corruption.¹⁹

Between 1970 and 1994, foreign debt

increased to 53% of GNP from 9% as a result of poor fiscal policies in Pérez's government.²⁰ The increased revenues of the oil booms of the 1970s were used to fund social spending and massive infrastructure projects that had been budgeted poorly and ended up being enormous wastes of petrodollars. Wanting to increase spending come election season but faced with a lack of funds due to debt, the Pérez government relied upon floating debt, which did not have to be recorded in any official manner. This allowed for an augmentation in government spending, for which float-

ing loans accounted for \$10 billion. These short-term, high-interest loans, combined with increasing interest rates and a faltering economy, catapulted Venezuela's debt to 69.7% of GNP by 1989.²¹ In exchange for new loans, the Venezuelan government eliminated many non-tariff barriers, cut subsidies and increased the domestic price of petroleum. This caused an uprising by the people of Venezuela, who rioted in the capitol of Caracas in February of 1989. Pérez's plan backfired; wages dropped as unemployment and inflation rose to unprecedented levels, ushering in an attempted coup in 1992.

Hugo Chávez was elected President in 1998 and three years later passed a series of laws aimed at strengthening government control over PDVSA. This was met with a great amount of resistance and in April 2002 PDVSA employee went on strike, to which Chávez responded by firing executives and cleaning house. Production levels decreased and the oil industry was producing at one-third of its normal levels. Violence struck in 2002 when an attempted forty-eight-hour coup occurred, and although Chávez quickly came back to power, protests in Miraflores

The effects of the resource curse in Venezuela seem to be caused by rent-seeking behavior and poor government spending of oil rents. Dutch Disease is rampant, with the once flourishing agricultural sector taking a back seat to oil exports. Although the Venezuelan government seems to put a lot of revenue into public spending projects, many end up being ineffective and costly. Venezuela's case of the resource curse needs to be cured before it spins further out of control.

Nigeria

Nigeria is a country that in this day is filled with poverty, disease and violence that upon closer inspection can point to the resource curse as a large factor in these negative aspects.

Nigeria gained independence from Britain in 1960 and the new government had the role of unifying a nation that had over 250 ethnic and linguistic groups. In 1966 a military coup put Colonel Yakubu Gowon in power, which caused Christian Ibos in the east to declare independence from Nigeria, sparking a civil war in 1967. In 1975, another coup put Army Brig. Muritala Mohammad in charge and civilian lead-

cy. However, symptoms of Dutch Disease were beginning to present themselves as agriculture's share of GDP dropped from 68% in 1965 to 35% in 1981 while the government invested heavily in services and manufacturing.²⁴ In addition, government investment in the manufacturing sector demonstrated a waste of at least two-thirds of oil revenues, with only 35% of capacity utilization in manufacturing investment in the mid-1980s.²⁵

In 1984 a series of military coups began again, leaving the Nigerian government open to much corruption until 1999, when free presidential elections led to a victory for General Olusegun Obasanjo, who was committed to eliminating corruption and promoting democracy in Nigeria.

The Movement for the Survival of the Ogoni People, led by Nigerian activist Ken Saro-Wiwa protested against the government and Royal Dutch/Shell in the 1990s because of the lack of benefits from oil revenues given to the Ogoni people and the massive environmental damage caused by oil extraction. In 1992 the Movement demanded over \$10 billion in previous royalties and damages from Shell, Chevron and the Nigerian National Petroleum Company as well as rioted in the streets, causing oil production to slow to 10,000 bbl/d as Shell removed all employees from Ogoniland. In 1994, four Ogoni chiefs were murdered and the Nigerian government placed the blame on Ken Saro-Wiwa and eight others, executing them in 1995 to the protests of the international community. In 2009, Shell reached a \$15.5 million settlement with the relatives of the Ogoni nine, who claimed that the oil company had aided and collaborated with the Nigerian government in the murder of Saro-Wiwa.²⁶

The Movement for the Emancipation of the Niger Delta (MEND) is one of the largest insurgent groups in the area and in 2006 was involved in the kidnapping of foreign oil workers. The group has continued to kidnap and stage attacks on oil

While Nigeria has had the potential to drastically improve its economy and living situation by taking advantage of revenues from petroleum exports, it instead has neglected the majority of the people.

left nineteen dead and many more injured, and it has since been suspected that pro-Chávez forces may be to blame.²² The GINI index, which measures income inequality on a scale of 0 to 100, with 0 representing perfect equality, gave Venezuela a 41 in 2009, down from 49.5 in 1998, which is still a very negative rating.²³

ership was put into control in 1979, with Alhaji Shehu Shagari elected as president. Because of the variation of regimes in such a short time, the economy of Nigeria did not fare well.

Into the oil booms of the 1970s and the early 1980s, Nigeria enjoyed an improving economy and the push for more democra-

pipelines in order to protest the lack of development and distribution of oil revenues to the Delta region as well as the immense environmental degradation caused by oil exploitation. A 2007 report by the Council on Foreign Relations found that “in 2003, some 70 percent of oil revenues was stolen or wasted, according to an estimate by the head of Nigeria’s anticorruption agency.”²⁷ In retaliation, militant groups such as MEND engage in kidnapping and oil bunkering, in which they tap pipelines and steal crude oil to sell on the market. The group insists that the government give 50% of the oil revenues from the Niger Delta back to its people and declare they will not stop attacks until this happens.

President Goodluck Jonathan took over in 2010 after his predecessor died and won again in 2011. As Vice President in 2008, he was quoted as saying that “the over-dependence on oil has put an unpleasant bracket in [Nigeria’s] national economic freedom.”²⁸ Currently, Nigeria is the largest oil producer in Africa and the tenth largest in the world, with the oil sector compromising 78% of total revenues, while the non-oil sector holds only 15%. From 1990 to 2000, Nigeria’s annual percentage growth of GDP was a mere 2.4%, worse even than Ghana, who had averaged 4.3%. The GINI index gave Nigeria a score of 43.7 in 2011, down from a high of 50.6 in 2006.²⁹

In 1999, President Obasanjo set up two agencies in order to increase transparency and reduce corruption. The first was the Independent Corrupt Practices and the Related Offences Commission, the duty of which was to receive and investigate complaints, taking legal action if necessary. The second agency was the Economic and Financial Crimes Commission, which was established with the purpose of rooting out corruption among the government and elites in Nigeria. The EFCC estimates that between 1960 and 1999 over \$400 billion was stolen in oil revenues by the coun-

try’s rulers, which is equivalent to the total aid sent to Africa in this time period.³⁰

While Nigeria has had the potential to drastically improve its economy and living situation by taking advantage of revenues from petroleum exports, it instead has neglected the majority of the people. Only 36% of the Nigerian population is estimated to have access to electricity, while the rest generate it themselves or live without.³¹ Like Venezuela, Nigeria has no need for much human capital as the oil industry is very technically intensive. It is ranked 91st in Newsweek’s study of the World’s Best Countries, with a dismal grade of 65.54 in education, and also ranks around the 90s in health, quality of life, economic dynamism, and political environment.³²

Wikileaks released a summary on Nigeria’s governmental corruption and the health of the president as reported by Shell’s executive vice president for Africa Ann Pickard. She spoke of the increasing problems Shell had hiring oil tankers, as in 2009 there were eighty incidents of piracy in Nigeria. Piracy has become a huge problem in the Niger Delta, with an oil tanker being seized a little over a month ago so attackers could take its oil. She reported instances of oil buyers paying members of the National Petroleum Corporation and the Nigeria government bribes to lift oil.³³

Oil rents have had a large impact on the Nigerian economy and livelihood of its people and out of those studied in this paper, this country seems to suffer the worst from the resource curse. The government is clearly deeply involved in the oil industry, using revenues for corrupt practices and eliminating anyone that stands in their way. The suspicious execution of the Ogoni nine and Shell’s later settlement with their families shows how the Nigerian government and oil companies will take extreme measures to secure their interests in the area. The people of the Niger Delta live in extreme poverty and see none of the benefits and solely the damage

from the exploitation of the oil fields in their land. The insurgent groups fighting the government and international oil companies only exacerbate the ethical and religious tensions in this diverse nation, and attacks on pipelines and workers threaten oil production. In order to reach optimal production in this world of increasing demand, the Nigerian government must realize that their citizens are in desperate need of a change. This nation can no longer run for the few at the expense of many.

Kazakhstan

Unlike the previous two countries, Kazakhstan has exhibited much more prudent behavior when it comes to the oil revenues it accrues. Kazakhstan has the both the second-largest reserves and production capacity in all of the former Soviet Republics.³⁴ With the development of its three largest fields, Tengiz, Karachaganak and Kashagan, Kazakhstan has the potential to become one of the world’s top five producers. At the end of 2010, Kazakhstan had proven reserves of 38.9 thousand million barrels at 2.9% of the world total and 9th in ranking.³⁵ The Tengiz, which lies along the northeast shores of the Caspian Sea, was discovered in 1979 and is Kazakhstan’s largest producing field. It produced 492,000 bbl/d of crude oil in 2009 and has been in development since 1993, when a forty-year joint venture between Chevron and the state-owned KazMunayGas was created that later became known as Tengizchevroil when it expanded into a four-company consortium in 1997. Its sister field, Kashagan, is an offshore field found in the north of the Caspian Sea. It is being developed by an international consortium called North Caspian Operating Company and has estimated reserves of eleven billion barrels of oil.³⁶

Before it declared its independence in 1991, Kazakhstan had spent the majority of the twentieth century as a republic of the Soviet Union. Its industrial sector con-



Sea Foam, Gina Mason

sisted of large enterprises that were interdependent with businesses in other USSR regions, and the breakup of the Soviet Union left much of Kazakhstan's industry useless. After the collapse of the USSR, newly elected President Nursultan Nazarbayev focused much of the state's efforts on developing the economy of Kazakhstan. Due to Kazakhstan's marginalized role in the economy of the Soviet Union, this new country was left with an underdeveloped economy. However, Kazakhstan had a resource that could potentially push the economy skyward or drive it into the ground: oil.

Even though Kazakhstan's oil fields had opened up to the world in a time when the majority of oil companies were state-owned due to the 50-50 Agreements of the past, this Caspian Sea country had privatized much of the petroleum sector and opened up its fields to foreign investors. This was due to the lack of another source of export revenues beside oil and the lack of technical and managerial skills needed to develop the oil industry, which ushered in the joint venture of Chevron and KazMunaiGaz to manage the Tengiz field. The country also signed two production-sharing agreements with international companies to develop the Kashagan oil deposit and Karachagnak field, with the state-owned company KazMunaiGaz holding shares in each.

At the turn of the twenty-first century, the Kazakh government began to venture towards a more protective stance towards the energy sector. Rising oil prices had spurred economic growth, and the government of Kazakhstan was ready to take on a larger role in the petroleum industry. In 2004 it changed its tax structure, increasing the government's share of oil revenues to 65-85% by including an excess profit tax and imposing a new tax on imports and limiting foreign companies to a maximum of 50% participation in projects. The new tax laws also gave the government

rights to purchase shares in any energy project, allowing the state to legitimately purchase part of British Gas's share in Kashagan production and bid for 33% of the Canadian-based PetroKazakhstan. This gave KazMunaiGaz a larger role in the participation of the state-owned company as both an investor and a partner.³⁷ In 2007 President Nazarbayev amended the "Law on Subsoil and Subsoil Use," giving the government the right to change or revoke national resource contracts if they were deemed to be a threat to national security. In 2008, Tax Codes were proposed that replaced royalties with a mineral extraction tax, rent taxes with export duties, and announced that there would be no future production-sharing agreements.³⁸ However, the bulk of future oil production predicted for the future would take place in fields under production-sharing agreements, such as those in Kashagan and Karachagnak.

In 2001 the National Fund for the Republic of Kazakhstan was created with the purpose of negating the impact of volatile oil prices on the economy and to save a significant chunk of the oil revenues for future generations. It is owned by the Ministry of Finance and is managed by the National Bank of Kazakhstan, who keeps 75% of the Fund's assets in a stabilization portfolio in the form of liquid assets and 25% in savings in the form of high return long-term securities.³⁹ All revenues from oil exports first go to this fund, and from there a specified amount known as the annual guaranteed transfer is put into the state budget. In order to avoid sucking the Fund dry, it is stipulated that no more than one-third of the Fund's total assets may be withdrawn at once and that the budget must be used for development projects. Between 2001 and 2008, the National Fund grew to \$13.7 billion from \$1.345 billion. In the early years of the decade, Kazakhstan was running under a very tight fiscal policy, diverting

about 79% of revenues to the Fund. In the mid-2000s, Kazakhstan began using the development funds to improve infrastructure and support agricultural development in an attempt to boost the economy. Many national funds were created, including the National Innovative Fund and the Small Business Development Fund, in an attempt to diversify the economy. At this time tax reforms took place, which reduced taxes for the non-oil industries in an attempt to diversify the economy. High oil prices towards the end of the decade meant that 86% of revenues could go to the Fund with a large chunk of profits going towards investments in education and welfare. Indeed, in the 2010 study by Newsweek of the world's best countries, Kazakhstan received a 91.35 in education, ranking 14th on earth.⁴⁰ The National Fund of Kazakhstan is one factor in the fight against the resource curse; by saving the majority of oil revenues as public assets and using approved transfers for non-oil economic developments, Kazakhstan largely avoided the symptoms of Dutch Disease and did not suffer the large income inequality that can clearly be seen in Venezuela and Nigeria.

In 2006, the Kazyna Sustainable Development Fund was created with the aim of increasing industrial competition and diversity through innovative economic development. The Samruk State Holding Company was also created at this time in order to enhance the accountability and efficiency of asset management by the state. The two joined together in 2008 to become Samruk-Kazyna Welfare Fund, a 100% state-owned holding company that consolidates the majority of the state-owned enterprises in Kazakhstan.⁴¹ The creation of this Fund was required as a result of the 2007 financial crisis and its impact on the Kazakh economy. In the mid-2000s, Kazakh banks began to excessively invest abroad due to the favorable credit ratings of banks caused by high commodity prices

and the lack of local funding. During the financial crisis, the quality of banks assets was questioned and Kazakhstan's economy was threatened with a recession; thus the Samruk-Kazyna Fund was created in order to avoid a crisis in the nation. This Fund issued securities that were sold to the National Fund in order to increase domestic investment and reduce reliance on foreign funds.

Unlike the other two nations studied in this paper, Kazakhstan has been experiencing pronounced economic growth due to economic reform and foreign investment concentrated in the energy sector. The majority of this growth has occurred starting at the turn of the twenty-first century. In 2003, the GINI Index gave Kazakhstan a score of 31.5, which improved to reach 26.7 in 2009, relatively low rates compared to Venezuela's 41 and Nigeria's 43.7.⁴²

Despite the avoidance of the economic effects of the resource curse, Kazakhstan has still fallen victim to the corruption that can be caused by the massive revenues oil exploitation brings in. James Giffen is an American merchant banker

mid-1990s to secret bank accounts managed by both President Nazarbayev and Nurlan Balgimbaev, the former prime minister and oil minister of Kazakhstan.⁴³ However, Giffen's defense claims that in his job as economic advisor the President Nazarbayev the American was working under the approval of senior officials in Washington. Although both the American government and the oil companies have denied any connection to Giffen's illegal dealings, this case shows that the corruption in Kazakhstan is caused by oil revenues and demonstrates the possibility of corruption in foreign nations.⁴⁴ Years later in 2007, UK banker Robert Kissin was accused of playing the part of the middleman who helped Texas oil service company Baker Hughes pay \$4 million in bribes to the Kazakhstani government in exchange for an oil contract.⁴⁵

Kazakhstan has suffered the least from the paradox of plenty. For the most part it has had positive economic growth and the government has invested heavily in the welfare of its population. The creation of the National Fund has shown to be very effective at saving rents for the future and

resource on a lesser degree than Venezuela and Nigeria could be the country's late arrival to the oil trade. Kazakhstan did not fully become an oil-exporting country until its independence in 1991. This means that it had the time to observe other oil exporting countries' strategies of the previous century and perhaps avoid the same economic and political mistakes that had send others spiraling down through the paradox of plenty.

Finding an Antidote

When looking to the future, it is imperative that these countries quickly learn to better manage oil revenues with full transparency and accountability in order to keep up with increasing world demand without falling victim to the resource curse. A measure that would be effective at keeping the resource curse at bay would be managerial independence for state-owned oil companies. Today, many of the members of the oil industry are also government officials; in fact, the head of Venezuela's PDVSA is also the Minister of Energy and Petroleum.⁴⁶ This encourages rent-seeking behavior, as there is easier access for the government to oil revenues because of close political connections. By eliminating the clear governmental influence in the oil industry, rent-seeking behavior will decrease, as the oil rents will then be part of a private industry with commercial interests. Hiring should be merit-based and market-driven to encourage true competition for recognition in the industry.

There are also many international organizations that have been formed in order to encourage transparency and better economic management of revenues by oil-exporting countries. One such group is the Extractive Industries Transparency Initiative, or EITI, which was launched in 2002 at the World Summit for Sustainable Development and is the major international force behind the urging for transparency in revenues and government

The largest problem that Kazakhstan suffers from is the corruption present in both its government and the international oil companies operating in the area

who in 2003 was accused of overseeing the issue of bribes from oil companies such as Exxon Mobil, BP, and ConocoPhillips to the Kazakhstan government in return for access to oil reserves. In violation of the Foreign Corrupt Practices Act of 1977, Mr. Giffen was alleged to have been paid tens of millions of dollars for negotiating deals between the American oil companies and the Kazakh government and also transmitted over \$60 million in the

demonstrates long-term thinking, rather than the short-term rent seeking behavior of the previous two countries examined. The largest problem that Kazakhstan suffers from is the corruption present in both its government and the international oil companies operating in the area, with much evidence of bribes being given to officials and even President Nazarbayev for lucrative concession contracts. One reason that Kazakhstan has suffered from the

accountability from the extractive industries.⁴⁷ The principles of this organization promote the use of “natural resource wealth [as] an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction.”⁴⁸ One may become a candidate country by fulfilling five requirements including implementation of EITI ideals, and may become a compliant country after a validation period. Out of the nations studied in this paper, so far Nigeria is the only compliant country, but Kazakhstan is on its way, having become a candidate in 2010.

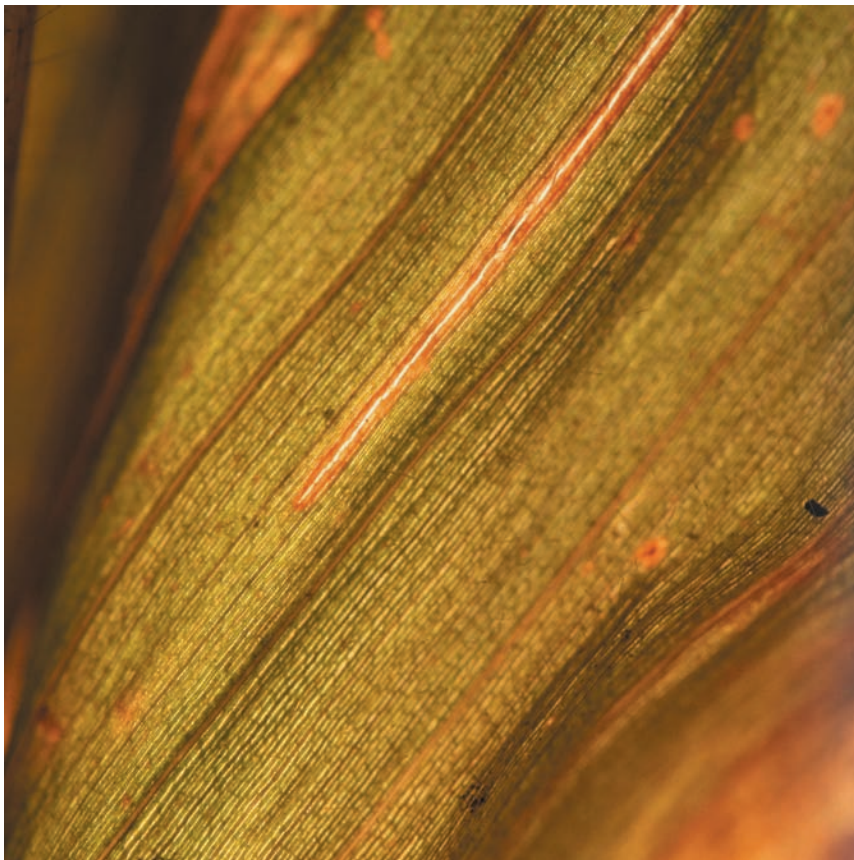
Conclusion

Venezuela, Nigeria and Kazakhstan have much to look to in the future. All three of these countries are currently among the highest world exporters and producers of oil and their output has the potential to increase in the decades to come. However,

When looking to the future, it is imperative that these countries quickly learn to better manage oil revenues with full transparency and accountability in order to keep up with increasing world demand without falling victim to the resource curse.

before any of these nations can reach full production capacity, they must overcome the resource curse. This will be slightly easier for Kazakhstan, who has learned from those before it and seems to suffer from elite corruption rather than the negative economic growth and inequalities seen in Venezuela and Nigeria. The latter two represent more extreme cases; Venezuela and Nigeria have both been victim to many coups and riots that have been inter-

twined with the politics of the oil industry. There exist huge gaps between the living situations of the rich and the poor, which the falling economies and the intense government control over the oil industry only worsens. These countries must reconcile their aspirations to reap the benefits of oil wealth with the sensible ideals of profit maximization if they are to rid themselves of the resource curse.



Striations
Gina Mason



*The ability of an animal
to locate a sound in space
requires complex neural
computation. In this study,
we investigated the role of the
inhibitory neurotransmitter
glycine in the sound
localization circuitry of avians.*

*Glycine receptor expression
was examined at different
pre- and post-hatch ages in
the main nuclei of this circuit.
Our preliminary data indicate
that there is a decrease in
glycine receptor expression in
the auditory nuclei NM and
NL during avian development,
which is opposite to the
developmental shift observed
in mammals.*

Untitled

Jessica Johansson,
Julia Klitzke,
Kathryn Stevens

Characterization of Glycine Receptor Expression in the

AVIAN AUDITORY BRAINSTEM

*by Gina Notaro
for the lab of R. Michael Burger*

Introduction

Animals, including humans, possess elegant auditory circuitry that endows them with the capability of locating sound sources in space. Sound inputs are conveyed to auditory nuclei within the brainstem and are processed via both excitatory and inhibitory signals. Inhibition in the auditory circuit allows for improved computation of the sound input and plays an important role in all species studied to date. The two most commonly studied auditory circuits include the mammalian and avian systems. Despite numerous studies on the avian auditory system, many questions still remain regarding how this circuit is modulated by inhibition. Previous experiments in mammals have determined that both GABAergic and glycinergic signaling are sources of auditory inhibition,¹ but only recently has glycine been studied within the avian auditory circuit.² Therefore, we sought to characterize the expression of this inhibitory neurotransmitter within the avian brainstem circuit. We did so through glycine receptor detection at various ages in order to increase our knowledge of the avian sound localization circuit through development. From our tissue, we determined that there is a potential decrease in glycine receptor expression in two of the auditory nuclei as the chick matures.

Sound input is initially transduced by the hair cells, or mechanoreceptors, of the ear. This input is then conveyed to the auditory nuclei in the brainstem via the auditory nerve (nVIII). The difference in the arrival time of the input between each ear is one feature an organism uses to localize sounds. These binaural acoustic cues are referred to as interaural time differences (ITDs) and are modulated by inhibitory signaling. An animal is able to process ITDs through a series of coincidence detecting neurons, as represented by the Jeffress model (Figures 1a & 1b). Each bipolar

neuron in the array receives input axons of different lengths originating from both ears, known as delay lines. An individual neuron is activated only when it receives simultaneous converging input from each ear. The convergence onto a single neuron thus encodes the time difference in order to determine from which side of the head the sound originates, as each cell is tuned to a spatially-restricted receptive field.³ The sharpening of ITDs through inhibition allows for more accurate localization of a larger range of stimuli.⁴

In order to draw generalizations about the auditory circuit, the systems of different species need to be considered. Our current work is concerned with inhibition within the avian system, but understanding how this function is performed analogously in other species yields insight into what features may be conserved in the system. In mammals, the medial superior olive (MSO) of the brainstem contains the

AVCN and LNTB are glycinergic.⁵

More recent studies have uncovered a shift in the inhibitory neurotransmitter input onto the MSO throughout development. During the early post-natal period, mixed GABAergic and glycinergic signaling is present.⁶ A shift in balance of these neurotransmitters occurs throughout development, resulting in the predominance of quicker glycinergic signaling by adulthood.⁷ This developmental shift has only been shown in the mammalian system, but may also be present analogously in the auditory nuclei of birds. Conversely, we found in this study that the shift present in chicks is the reverse of the mammalian system for at least two nuclei, showing a decrease in glycine receptor expression over time.

The avian auditory circuit conveys sound information through different nuclei than in the mammal, although some features of the system are conserved. This

Our current work is concerned with inhibition within the avian system, but understanding how this function is performed analogously in other species yields insight into what features may be conserved in the system.

coincidence-detecting neurons used in sound localization. Contralaterally-evoked inhibitory input onto the coincidence-detecting neurons of the MSO arises from projections of the ipsilateral medial nucleus of the trapezoid body (MNTB). The MNTB receives input from the anteroventral cochlear nucleus (AVCN), which project onto the contralateral MSO. The ipsilaterally-evoked inhibitory input on the MSO arises from the lateral nucleus of the trapezoid body (LNTB). These two inhibitory projections into the MSO by the

brainstem circuit consists of four bilaterally represented, interconnected nuclei: nucleus magnocellularis (NM), nucleus angularis (NA), nucleus laminaris (NL), and the superior olivary nucleus (SON) (Figure 2). Once nVIII enters the avian brainstem, it bifurcates onto NM and NA. NM preserves the incoming sound information through a specialized synaptic connection before it reaches the coincidence-detecting neurons of NL. NM projects ipsilaterally to NL, which receives input axons of equal lengths. The axons of NM also

provide the gradient of delay lines into the contralateral NL for detection of ITDs, as depicted by the Jeffress model (Figures 1 & 2).⁸ Analogy to the mammalian system is present in the avian NL, which contains the coincidence-detecting neurons similar to the MSO of the mammalian circuit. Additionally, the AVCN shares common functionality with nucleus magnocellularis (NM) of the avian auditory circuit. As there are commonalities between the two circuits, other features, such as inhibitory neurotransmitters, may also be conserved between the circuits of mammals and chicks.

In all systems studied to date, integration of excitatory and inhibitory signaling are required for proper functioning of the auditory circuit. The avian SON provides the primary inhibitory inputs into the ipsilateral NA, NL, and NM. NL receives inhibition from both NM and the ipsilateral SON.⁹ The SON receives excitatory input from NA and NL, but receives inhibitory input from the contralateral SON.¹⁰ Previous studies have determined that the primary signal for inhibition is GABAergic.¹¹

However, glycinergic signaling has not been thoroughly studied in the avian auditory system as it has for the mammalian circuit. Therefore, it is possible that glycine is also responsible for the observed inhibition.

Recent experiments indicate the presence of glycinergic signaling within the avian auditory circuit. The first study on glycinergic signaling determined that glycine terminal expression in the chick is developmentally dependent.¹² Glycine was detected within the auditory nuclei of both embryonic and post-hatch chicks using glycine terminal immunoreactivity. These terminals were most abundant in the embryonic tissue, while post-hatch chicks lost some of this signaling.¹³ Only a small number of glycine terminals were found synapsing onto the cell bodies of the NM and rarely onto NL and NA. The glycine terminals present in NL were located on the cell bodies of the neurons but not found on the dendrites of the NL neurons. GABA terminal labeling seemed to show a contrasting pattern to that of glycine, as many GABAergic terminals were present

on NM, NL and NA.¹⁴ Glycine terminals were only present on the cell bodies and not the dendrites of the auditory nuclei, while GABA terminals were found on both of these structures.¹⁵

A more recent study suggests that glycine acts in NA as quick inhibition in addition to inhibition by GABA, though the source of the glycinergic inputs is unknown.¹⁶ Recent experiments in our lab have supported the finding that glycinergic signaling is present in the avian auditory circuit.¹⁷ SON cell responses were found to be modified by both GABAergic and glycinergic inputs. Additionally, GABA and glycine were found to be co-released within these neurons. Using the glycine receptor antagonist strychnine, inhibition within the SON was decreased similar to seen when restricting GABAergic signaling.¹⁸ Since little is known regarding the function of glycinergic inputs in the avian auditory system, further experiments are needed to characterize this novel finding. We will attempt to address this question by targeting the glycine receptor on the cells of the auditory circuit.

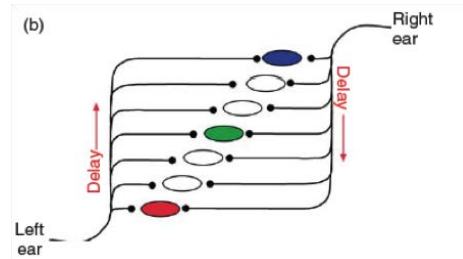
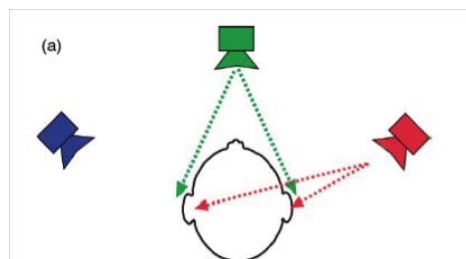


Figure 1. The Jeffress model. The location of the sound input (a) determines which neuron in the coincidence detecting array is activated (b). The activation of a neuron is dependent on the signal reaching the body of the neuron from each ear's delay line simultaneously (Jeffress 1949, Burger et al., 2008).

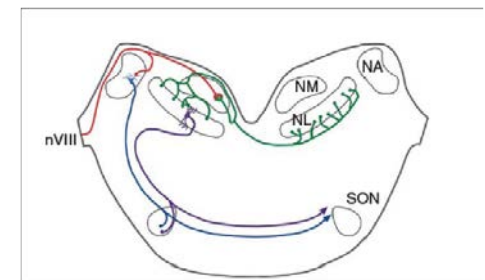


Figure 2. Neural circuitry of the avian auditory system, located within the brainstem. nVIII innervates the ipsilateral nucleus magnocellularis (NM) and nucleus angularis (NA), which are interconnected to the other nuclei (see text for details), nucleus laminaris (NL) and the superior olivary nucleus (SON) (Jeffress 1949, Burger et al., 2008).

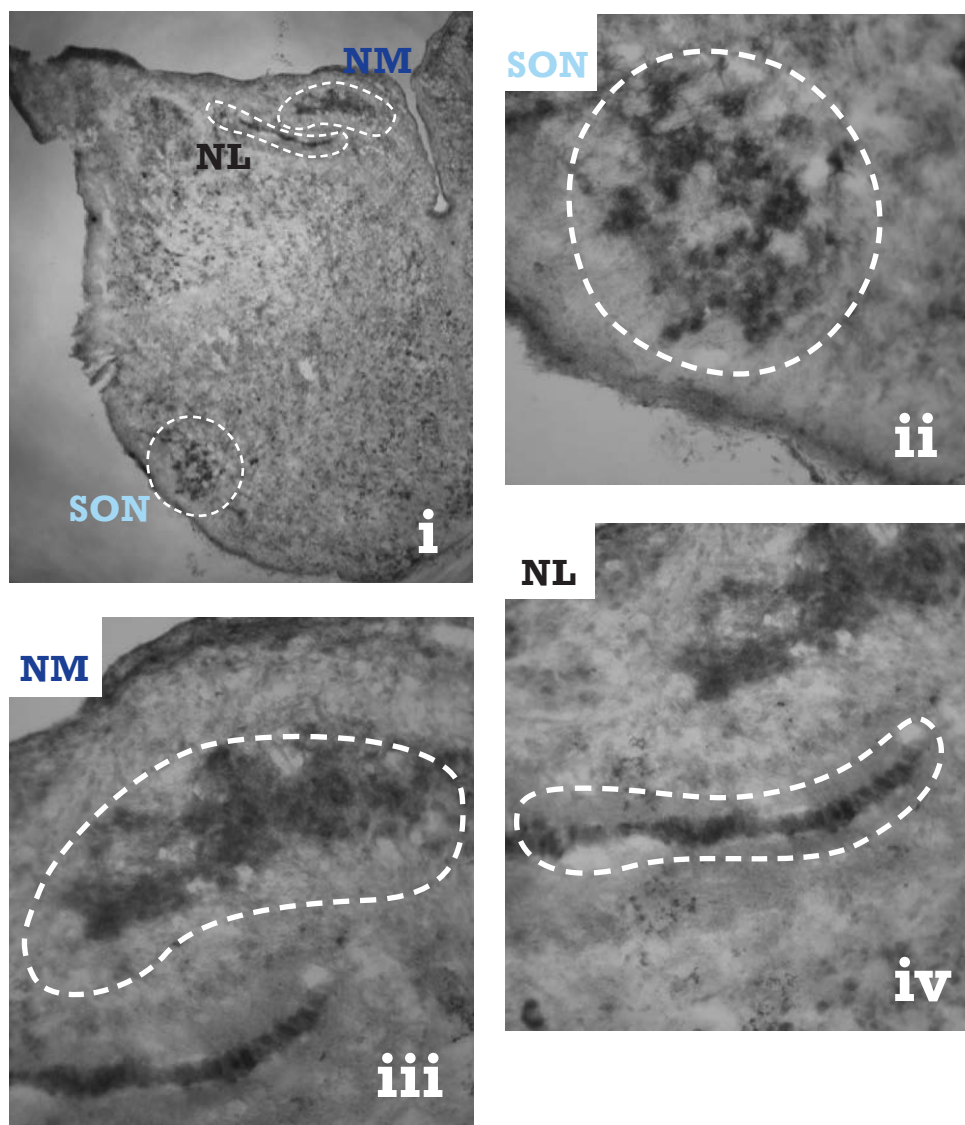


Figure 3. A 25µm cross-section of the avian auditory brainstem for an E12 chick is shown in panel i (4x). Magnified images of chroma-gen-stained glycine receptors in the SON (ii), NM (iii), and NL (iv) are also displayed. Individual cells were hard to distinguish between at the young age (20x; 25µm section using cryostat).

To identify the expression pattern of glycinergic signaling in the avian auditory system, we will use immunohistochemistry to detect the glycine receptor. The glycine receptor is an ionotropic, ligand-gated chloride channel and is composed of five subunits- $\alpha 1$ - $\alpha 4$ and one β -subunit.¹⁹ Detection of the glycine receptor will show us which cells receive glycinergic input within the nuclei. In future experiments, we will attempt to unveil the source of the glycinergic input, as it is unclear where this inhibition arises from. Removal of the cochlea did not affect the glycine terminals onto NM, suggesting that it does not provide this input.²⁰

Detection of these glycine receptors and the source of glycinergic input within the auditory nuclei will allow for a greater understanding of the role of inhibition within the chick avian system. Further characterization of glycine receptor distribution within these nuclei at varying ages will show us whether a developmental downshift actually occurs in the signaling system used in sound localization, as our preliminary data show. Comparison of the auditory system between birds and mammals will also allow us to determine the functionality of glycinergic signaling and its importance within the auditory circuit.

Methods

Animals and Tissue Extraction

All protocols for animal use have been approved by the Lehigh University Institutional Animal Care and Use Committee. White Leghorn chickens of ages spanning embryonic day twelve (E12) to post-hatch day eight (p8) were used in our study. The fertilized eggs for both embryonic and post-hatch chicks were obtained from Moyer's Chicks (Quakertown, PA). Phosphate buffer saline (PBS, pH 7.3) and 4% paraformaldehyde (4% PFA) in PBS was prepared and used during perfusion to fix the tissue.

Embryonic tissue was collected from these

eggs at the appropriate ages (E12, E16 & E19). The tissue was obtained through rapid decapitation, extraction of the brain and fixation in 4% PFA. The following day, the brains were transferred into a solution of 30% sucrose in PBS. After the brains sunk to the bottom of the sucrose solution, they were flash-frozen in OCT compound using cold methanol (from freezer) and stored until sectioning at -80°C.

The post-hatch tissue (p8) was obtained from perfusion of the chicks raised at Lehigh University's central animal facility. Ketamine (Ketaset, Fort Dodge Animal, 146 Health, Fort Dodge, IA) at 80 mg/kg and pentobarbital (Sigma-Aldrich, Saint Louis, MO) were used to anaesthetize the chickens prior to perfusions. Additional pentobarbital was administered if the chick did not fully lose consciousness following the first round of injections. Once the perfusion was performed, the dissected brain was then placed in 4% PFA overnight. Both vibratome and cryosectioning methods could then be implemented. When using the vibratome (50µm), the tissue was rinsed the following day in PBS. For cryostat sectioning (25µm), the brains

were placed in 30% sucrose after fixation and flash frozen using cold methanol (chilled in freezer). The brains were stored until sectioning at -80°C.

Gel-Coated Slide Preparation

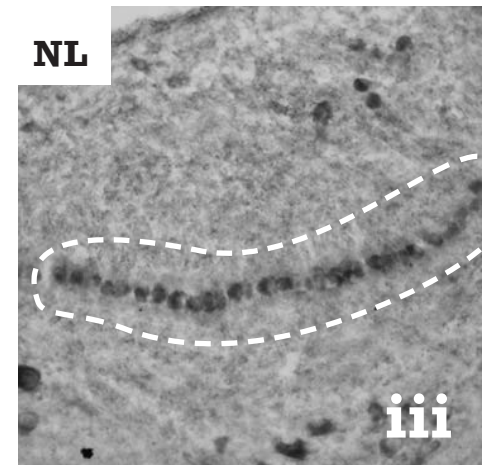
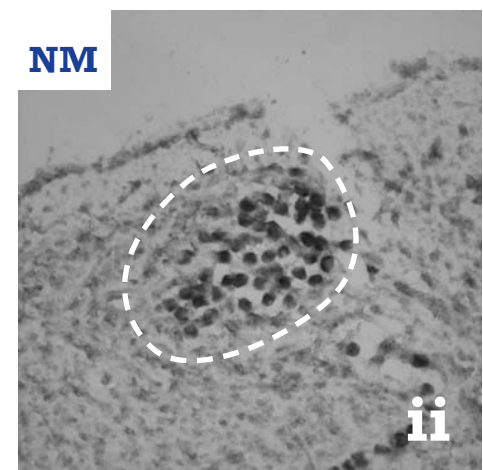
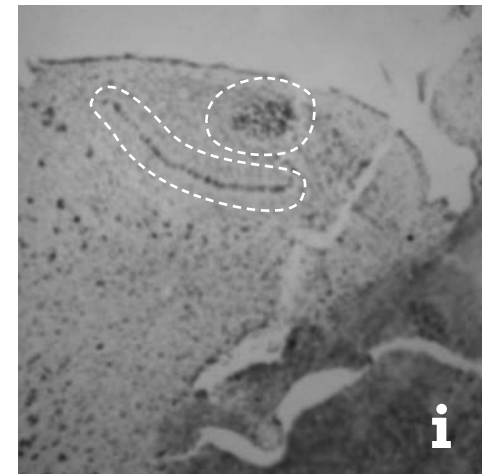
Gel-coated slides allow for better adhesion of the tissue to the slide and thus were prepared for use. First, 600mL of distilled H₂O was heated to 60°C. To the water, 3.0g of gelatin and 0.30g of chromium potassium sulfate was added and dissolved. After mixing thoroughly, the solution was cooled to about 30°C, and frosted slides were dipped into the solution to coat them. The slides were allowed to dry for at least a day before use.

Tissue Sectioning and Immunohistochemistry

The frozen brains were sectioned into 25µm slices using the cryostat on Chromium-Gelatin coated slides. The brains fixed using 4% PFA were sectioned at 50µm using the vibratome. Each step below required 400-500ul of the prepared solution. The tissue sections were placed on the rotator for all the steps except the extra

Detection of these glycine receptors and the source of glycinergic input within the auditory nuclei will allow for a greater understanding of the role of inhibition within the chick avian system.

Figure 4. Fainter staining is seen in NL and NM of E16 tissue in panel I compared to the E12 tissue (4x, SON not present). Magnification of NL (ii) and NM (iii) in the E16 chick shows more definably stained individual cells than in the E12 tissue, despite lighter staining (20x; 25µm section using cryostat).



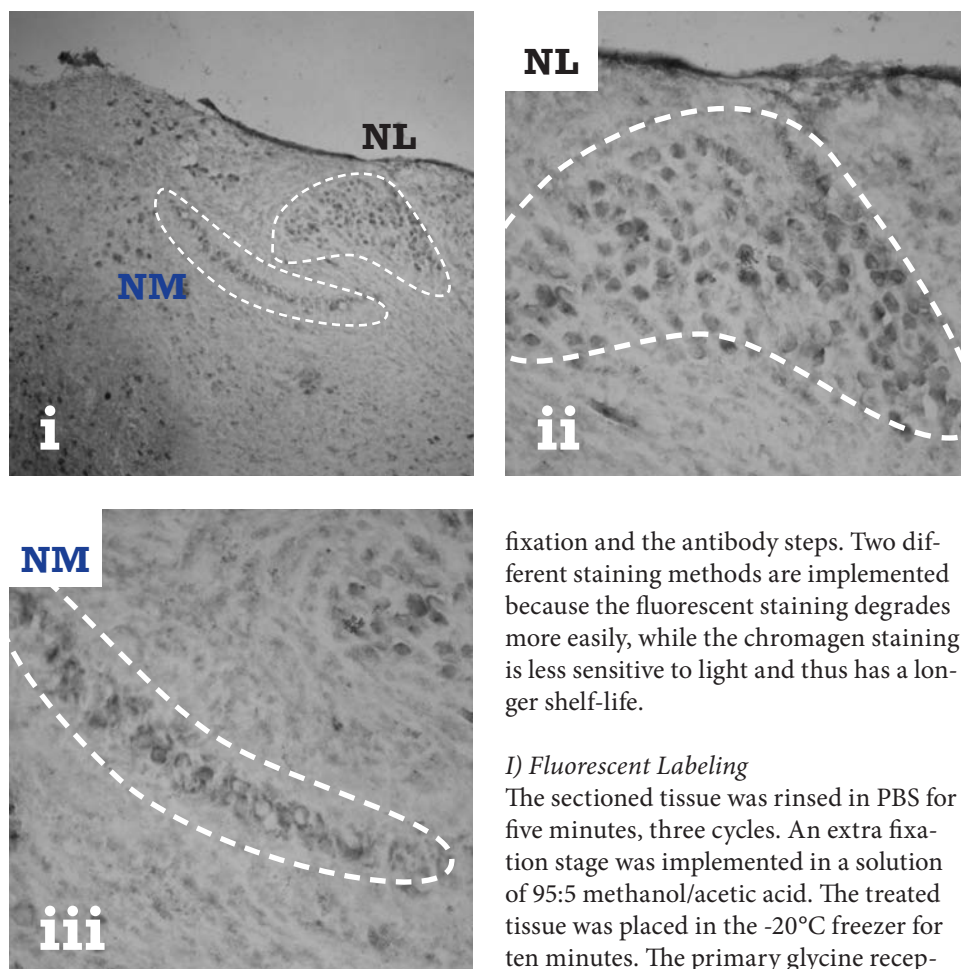


Figure 5. A 4x view of E19 auditory nuclei NL and NM (i). The E19 tissue shows the least prominent staining in NM (ii) and NL (iii) of the embryonic ages observed. The SON and NA were not viewable in any of our sections (20x; 25µm section using cryostat).

fixation and the antibody steps. Two different staining methods are implemented because the fluorescent staining degrades more easily, while the chromagen staining is less sensitive to light and thus has a longer shelf-life.

I) Fluorescent Labeling

The sectioned tissue was rinsed in PBS for five minutes, three cycles. An extra fixation stage was implemented in a solution of 95:5 methanol/acetic acid. The treated tissue was placed in the -20°C freezer for ten minutes. The primary glycine receptor antibody (Mouse, Synaptic Systems, Gottingen, Germany, Lot #146011/13) was prepped in a solution of 5% normal goat serum (Invitrogen) and 0.3% Triton-X in PBS, at a concentration of 1:1000. Several sections were prepared in the same solution without the primary antibody as control tissue. The tissue was incubated in the primary antibody overnight in the refrigerator.

The following day, the tissue was rinsed three times for ten minutes each in PBS. The secondary antibody (goat anti-mouse IgG (H+C), 2mg/mL, Alexa Fluor 488; Invitrogen; Eugene, Oregon) was prepared at a 1:200 concentration in PBS, and was stored in the dark for thirty minutes before use. The tissue was then incubated

in the secondary solution for two hours in the dark by covering with aluminum foil. After the incubation period, the tissue was rinsed three times, for ten minutes each in PBS. Next, the tissue was mounted on gel-coated slides and was dried before cover-slipping using GlycerGel. The slides were dried and stored in the dark to avoid degradation of the fluorescence.

II) Chromagen Labeling

The sectioned tissue was rinsed for five minutes, a total of three times, in PBS. After the rinse, the endogenous peroxidases were quenched with a solution of 1% H₂O₂ and 10% methanol in PBS for thirty minutes on the rotator. The tissue was then rinsed in PBS for ten minutes, three times. An extra fixation step was implemented in 95:5 methanol/acetic acid at -20°C for ten minutes. The tissue was rinsed again for five minutes three times in PBS. After the rinses, three drops of blocking normal horse serum were added (VECTASTAIN ABC Mouse IgG Kit, Vector Laboratories) to every 10 mLs of PBS for an hour. The primary antibody solution (anti-glycine receptor) was prepared in 0.3% Triton-X in PBS, at 1:1000 for the 50µm slices and 1:500 for the cryosectioned tissue. Control sections were prepared without the use of primary antibody. The antibody was incubated with the sections overnight in the 4°C fridge using humidifying chambers. The following day, the primary antibody was rinsed off for ten minutes in PBS, a total of three times. The biotinylated antibody was prepared by adding three drops of normal horse blocking serum (VECTASTAIN ABC Mouse IgG Kit, Vector Laboratories) and one drop biotinylated antibody stock (VECTASTAIN ABC Mouse IgG Kit, Vector Laboratories) to every 10 mLs of PBS. The tissue was then incubated in this solution for two hours. During the last thirty minutes of this step, the ABC reagent was prepared. The ABC reagent was made by adding two drops

reagent A and two drops of reagent B to every 5 mLs of 0.3% PBS (VECTASTAIN ABC Mouse IgG Kit, Vector Laboratories). At the end of the incubation step, the tissue was rinsed for five minutes in PBS and was placed in the prepared ABC solution for two hours on the rotator. The staining solution was prepared by adding three drops of the chromagen solution (VECTOR SG Chromagen Peroxidase Substrate Kit, Vector Laboratories) to every 5 mLs of PBS. The tissue was then placed in the chromagen solution for five to ten minutes, until the labeling was visible and reached the appropriate darkness. Before coverslipping with Permount, the vibratome p8 tissue was cleared in 95% ethanol for five minutes twice, and then twice in 100% ethanol. The cryostat embryonic tissue used a ladder method, clearing for four minutes in 30% Ethanol, four minutes in 50% Ethanol, four minutes in 70% Ethanol, four minutes in 95% Ethanol, and then four minutes in 100% Ethanol. The coverslipped slides were set aside to dry for a minimum of a day before imaging.

Microscopy & Imaging

Images were taken of the stained tissue at 4x and 20x (See Figures 3-5) using a Nikon Eclipse E800 and SPOT software (Model 7.2, Diagnostic Instruments). Scale bars were added to the images by photographing a ruler at the appropriate magnification, and then superimposing the length onto the images using Adobe Photoshop. Nuclei were outlined and labeled using the drawing feature of Microsoft Word.

Results

Images of the avian auditory brainstem nuclei are outlined for embryonic day 12 (Figure 3), embryonic day 16 (Figure 4), and embryonic day 19 (Figure 5). Intense somatic staining of glycine receptors (chromagen) in NL and NM is present (Figure 3), but declines markedly with developmental age in E16 (Figure 4) and E19

(Figure 5) tissue. The SON was not visible in all tissue sectioned, therefore a comparison between ages for these nuclei was not yet possible. The NA was undetectable in any of the tissue, potentially due to poor quality tissue sections. For each embryonic age, NM and NL showed consistency in stain strength, but differed across ages. The auditory E12 tissue is shown at 4x zoom to illustrate all of the nuclei (Figure 3i). A scale bar is shown on each image. All nuclei appear to be stained a similar strength per age, and showed fairly even distribution on the cell somas. In some tissue, a lighter void was visible in the middle of the cells, presumed to be the nucleus (Figures 4ii, 4iii, 5ii and 5iii). Magnification at 20x shows chromagen-stained glycine receptors in the SON, NM, and NL (iv) (Figure 3ii-iv). Fainter labeling is seen in NL and NM of E16 tissue at a 4x view (Figure 4i). NL and NM in the E16 chick shows more definably stained cell somas than in the E12 tissue at 20x, potentially due to smaller cells (Figure 4ii-iii, Figure 3). A 4x view of the E19 auditory nuclei shows very light staining on the cell somas within the nuclei (Figure 5i). The E19 tissue shows the least prominent staining in NM and NL at 20x magnification

comparisons to the embryonic tissue. NM, NL and NA are all visible and stained (Figure 6A). The staining is darkest in the cells of NM, but is also visible in portions of NA and along the midline of NL. Only a few cells near the periphery of NA seem to be heavily stained, while others within the nucleus are stained less prominently. The SON (Figure 6B) also contains darkly stained cells, which appear smaller than the cells of the other nuclei. Panel C shows a close-up of NM cell staining (Figure 6C). The staining appears the same strength throughout each stained cell, except for a circular void in the center presumed to be each cell's nucleus.

Figure 7 was produced recently by our lab.²¹ This figure shows glycine receptor labeling (green) using anti-glycine receptor primary antibody and cell nuclei detection (red) using Nissl stain in a post-hatch day 7 (p7) chick. The SON is outlined in panel B, showing intense staining within this nucleus. Panel C shows the Nissl nuclei labeling alone, in the absence of glycine receptor primary antibody.

Discussion

Our data potentially indicates a gradual decrease in glycine receptor expression

Our data potentially indicates a gradual decrease in glycine receptor expression throughout development in NM and NL, opposite to the shift observed in mammals.

(Figure 5ii-iii). Of our slides, only the E12 tissue showed a clearly stained SON. The SON was not locatable in the E16 or E19 tissue.

Post-hatch day 8 (p8) tissue is also shown (Figure 6). This tissue was obtained using the vibratome (50µm sections) as opposed to the cryostat (25µm sections), and thus cannot be used for staining com-

throughout development in NM and NL, opposite to the shift observed in mammals.²² This decrease in glycinergic expression was first detected by Code and Rubel,²³ and our findings serve to support their claim. Of the visible nuclei, this decline in receptor expression is most apparent in NL and NM (Figures 3, 4 & 5). Contrary to previous findings stating that

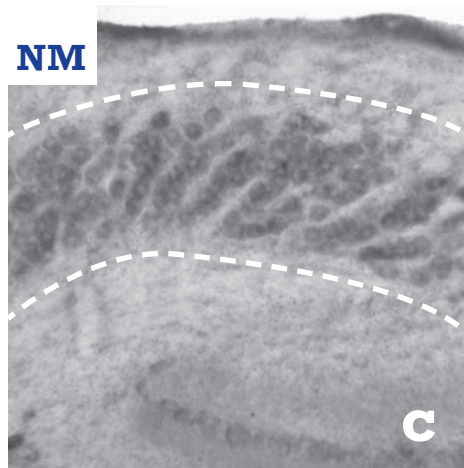
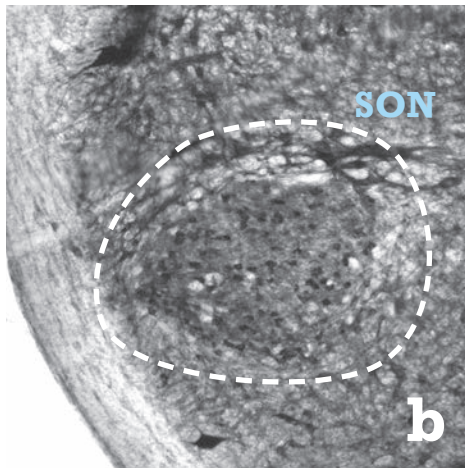
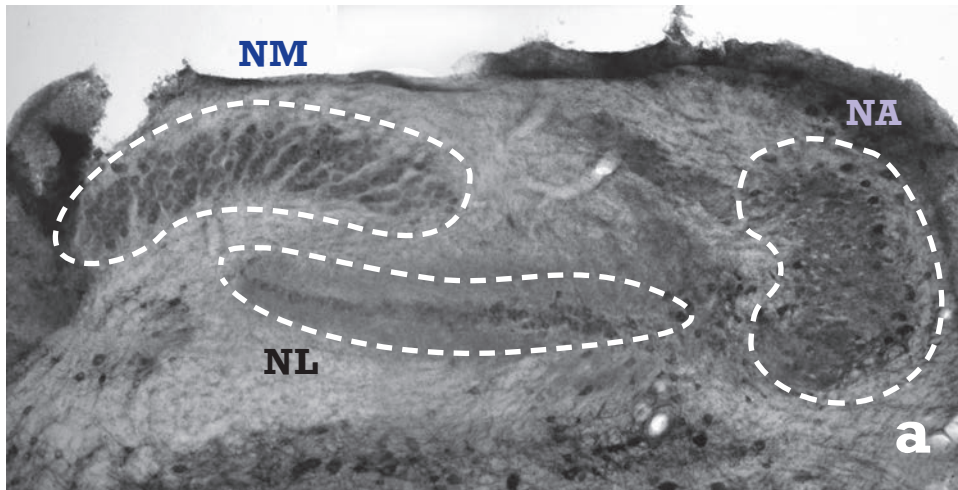


Figure 6. An image of NM, NL and NA in a post-hatch day 8 (p8) chick (a). Of these nuclei, dark staining is most prominent in NM, but is also seen along the midline of NL and the outer portions of NA to a lesser extent. Smaller, darkly stained cells are observable within the SON (b). Glycine receptor staining appears widespread throughout the cells of NM (c). Cell nuclei likely appear as a void in the cellular stain (50µm section using vibratome).

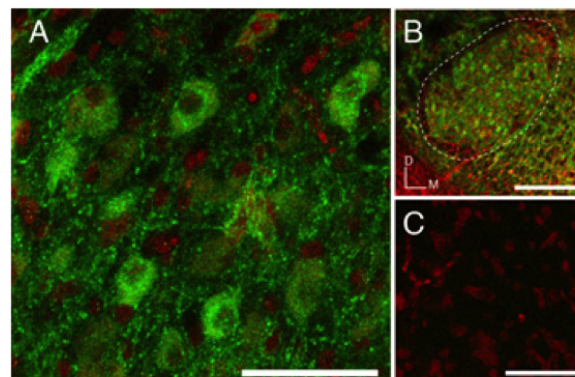


Figure 7. Cells within the SON stained for glycine receptors (green) using the glycine receptor antibody (a). An image of the entire SON (outlined in white) containing stained glycine receptors in green (b). Nissl stain was used to detect cell nuclei in the absence of primary antibody (red) as the control. (Scale bars: A=50 µm; B=200 µm; C=50 µm) (Coleman, et al., 2011)

expression of glycine receptors in NL is sparser,²⁴ we found more prominent labeling in NL than expected for the embryonic tissue (Figures 3, 4 & 5). The staining of NL was about equal to that of NM at each embryonic age. The SON was only visible in our E12 and p8 tissue, but stained similarly to the other nuclei. We have been yet unable to determine a pattern for NA and SON tissue, as these structures were not represented across the different ages. Additional tissue needs to be collected in order to obtain a larger n-value for the observed effects in glycine receptor expression. These data will allow us to draw more definitive conclusions regarding the overall developmental shift of glycinergic signaling within the chick circuit.

Most auditory structure and function is mature by E19, therefore we expect to see similar faint labeling in the post-hatch tissue as shown by our E19 tissue (Figure 5). Conversely, fluorescently-labeled post-hatch chick tissue (p7) from our lab showed prominent glycinergic labeling in the SON (Figure 7),²⁵ as well as post-hatch tissue stained with chromagen (Figure 6). The density of SON staining shown in this fluorescent image is similar to that of the SON tissue observed using the chromagen stain for glycine receptors. Dark SON labeling is observed even in the embryonic day twelve tissue (Figure 3). Therefore, it is possible that this down-regulation does not occur in the cells of the SON. However, as the SON is not visible in our embryonic tissue, we have not yet been able to compare the developmental expression pattern of glycine receptors in the SON.

Functional Significance of GlyR development

Down-regulation of fast-acting, glycine transmission may reflect the lack of need for fast-acting inhibition in the various nuclei, and thus a “weeding out” of receptors might occur throughout maturation. Glycine receptor expression may be stabilized or up-regulated throughout develop-

ment in the SON of the chick in order for the contralateral SON to provide quick inhibition to the opposite circuit. This may allow for compensation for the long distance between the two SONs. The presence of glycine receptors within NM and NL may regions in immediate projections from the SON,²⁶ or possibly other nuclei within the circuit, are required to integrate a response.

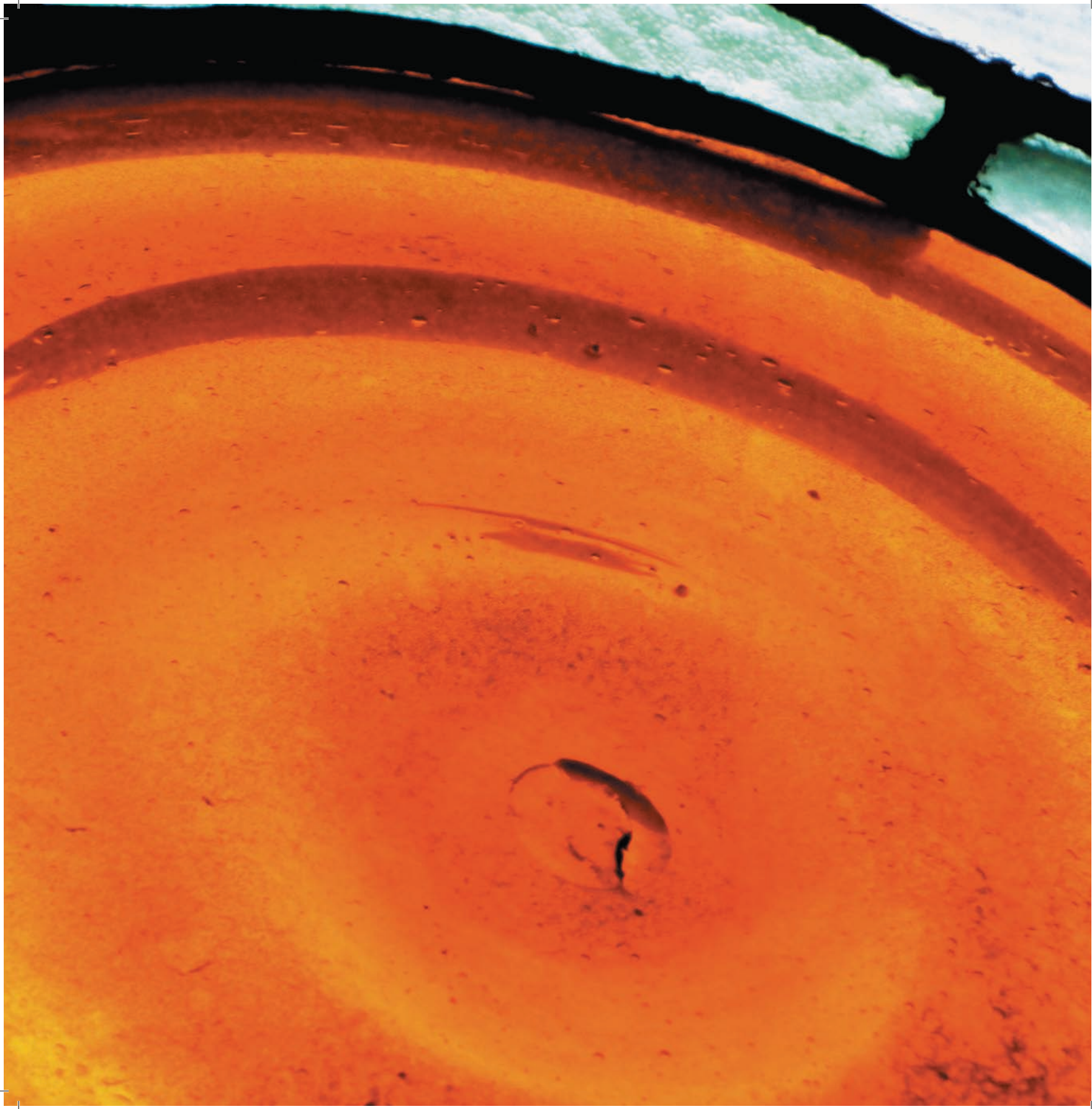
The glycine receptors in the auditory nuclei were present in our tissue on the cell somas of the nuclei as previously determined, and were also less abundant in the post-hatch brains than the embryonic tissue.²⁷ Additionally, based on the fluorescent image (Figure 7) it appears there also may be slight staining on the cell projections, as green fluorescent puncta are observed within the auditory nuclei, indicating the presence of receptors. If these puncta are not simply background, this may indicate the need for some glycinergic signaling on the dendrites to reduce the input of an excitatory signal.

One possible explanation for the observed down-regulation is that the receptors become internalized throughout development in order to regulate glycinergic activity. It seems as the tissue ages, circular voids within the cells become more prominent, suggesting a decrease in density of receptors on the cell surfaces. These voids are presumed to be the cell nuclei and are visible in NM of the post-hatch chick (Figure 6c, Figure 7a). Cell nuclei seem to be less prominent in the younger, embryonic tissue but seem to become more visible with developmental age (Figures 3, 4 & 5). If the receptors were coating the outside of the cells, their nuclei should not be clearly visible as they appear in the older tissue. Higher magnification of these cells via electron microscopy may help determine whether the glycine receptors become internalized during aging. If internalization of receptors is occurring, further research may be needed to uncover which proteins

trigger the decrease in receptor density throughout development.

We are still working to improve our methods for optimal visualization of glycine receptor expression in the auditory nuclei of the brainstem throughout development. This will allow for further comparison of pre- and post-hearing onset glycine receptor expression within the nuclei. Once gathered, these data will provide additional support in determining the developmental pattern of glycinergic signaling in the avian auditory nuclei.

Future experiments will be not only to continue our current methods but also to identify the source of the glycinergic signaling in the system. Glycinergic signaling seemed prominent within the SON in both the E12 and p8 tissue, possibly due to great innervation by the contralateral SON (Figures 3 and 6). There is always the possibility, however, that inhibition originates from other sources. For example, developmental cues from other parts of the brain could be using glycinergic signaling to establish the map of the brain quickly in order for the chicken to have a functional auditory system by the time it hatches. Evolutionarily, it would be favorable to have the system developed prenatally in order for better survival. Retrograde tracing is one method that could be implemented to discover the source of the signaling, in both embryonic and post-hatch chicks. A comparison between neurotransmitter staining and receptor staining patterns may also yield insight on the role of glycine in this auditory circuit. The source of glycinergic signaling may reveal more about the connections of the nuclei in this circuit, along with the function of such inhibition. This information will serve to broaden our understanding of the sound localization circuitry in the avian system.



This paper seeks to reject the immutability of the written word for the changeability of oral storytelling by acknowledging that the biblical creation myth of Adam and Eve is itself a product of centuries' worth of oral adaptation. The paper culminates with the author's own adaptation of the Adam and Eve myth: this rewriting inhabits a less sexist perspective and deviates from the biblical text by celebrating free will and humankind's potential for greatness, rather than mourning the loss of the paradisiacal Garden of Eden.

Radiant
(detail)
Stephen Kuschman

ADAM AND EVE:

An Adaptation

by Anu Paulose

Introduction: Adam and Eve

While the secular study of the Bible is controversial in some circles, the product of this research is essential to understanding the origins of the Judeo-Christian faith as well as its future. Many religious conservatives will argue that Biblical texts should be taken literally. Yet is it proper not to subject scripture written millennia ago to academic criticism when the religious texts of the Greeks and Romans are taken and treated as mythology? Does defining ourselves as Jewish or Christian truly mean that we cannot associate these religious texts with mythology? To answer this question, we must look at the art of storytelling itself for indeed the Bible has its origins in oral storytelling. Transmitted from one person to the next, passed down from generation to generation and modified at each retelling, the religious stories of the early Hebrew people, like all other forms of folklore, are sure to have been adapted repeatedly to fit the attitudes of the changing times before entering the literary world where they suddenly became treated as immutable. In "Folklore and Literature," Vladimir Propp argues that consciously or unconsciously, oral storytellers are bound to introduce changes into a story. He claims that, "Everything that is out-of-date and incongruous with new attitudes, tastes, and ideology will be discarded. These new tastes will affect not only what will be discarded but also what will be reworked and supplemented."¹ If religious stories were continuously altered over centuries (if not millennia) before being written down and treated as immutable, then shouldn't the discovery of their origins and any variants of the stories be cherished for providing us with a closer look at the foundations and motivations of a particular faith? Furthermore, if the written stories of at least some of the earlier books in the Old Testament are proven

through scholarly research to be the product of eons of oral storytelling, then what is to keep us from continuing the tradition of reworking religious mythology to suit the times? It is with this thought in mind that I began to write an adaptation of the Adam and Eve creation myth.

Most of us are aware of the Judeo-Christian creation story. According to the story as written in Genesis 1, God creates the universe in six days, constructing man and woman on the last. Eve is created from Adam's rib to be a helpmate to Adam and the two live together in mutual happiness in the paradisiacal Garden of Eden. Their stay is ruined by the fallen angel Lucifer, who convinces Eve to eat the fruit from the forbidden tree of knowledge. Eve in turn convinces Adam to eat from the tree. As punishment for their disobedience to God, Adam and Eve are cast out from the Garden of Eden and forced to live in the wilderness. The story is memorable in its simplicity. Clear dual oppositions are set throughout the story, good versus evil, God versus Satan and even man versus woman. It is a story that is clearly derived from a culture that relies on order and hierarchical structure.

Now let us take a look at the tale of Enki and Ninhursaja, the Sumerian predecessor of the Adam and Eve myth. Sumerian literature is thought to have influenced the Hebrew people through the Canaanites who lived in Palestine before the Hebrew people. Indeed, there are many parallels between the Sumerian and Judeo-Christian creation myths. In the Sumerian myth, the Goddess Ninhursaja creates a beautiful garden called Edinu in Dilmun, the Sumerian earthly paradise. Ninhursaja then asks her husband Enki to guard her garden against wild animals which might destroy it just as God places Adam in charge of the Garden of Eden. But rather than protecting her Garden, Enki becomes famished and eats eight plants that his wife had planted,

thus inciting her fury. Ninhursaja rejects Enki as retaliation for eating the forbidden plants, stating that, "Until his dying day, I will never look upon him with life-giving eye."² Her anger at Enki parallels God's anger when Adam & Eve eat from the forbidden tree of knowledge. Because he ate the forbidden plants, Enki feels pain in eight parts of his body including his ti, a Sumerian word meaning both "rib" and "life." Here, Enki faces the same punishment as Adam and Eve. For his transgression, he faces losing his immortality. However, unlike God who casts Adam and Eve out into the wilderness with only the distant promise that one day mankind might earn eternal life once again, Ninhursaja is quick to forgive Enki. She heals him by giving birth to eight new goddesses to heal the eight parts of Enki's body that have been cursed. One of the new goddesses is named Ninti. The etymology of the name Ninti is interesting for Nin means lady and ti means both rib and life. Thus Ninti can be translated as both "Lady of the Living" and "Lady of the Rib." Consequently, Ninti, who is created to help heal Enki, shares a link with the Eve of the Judeo-Christian creation myth, who is created from Adam's rib to be his helpmate.

While there are many similarities between these two tales, the differences are also thought-provoking. For instance, while the relationship between Enki and Ninhursaja is quarrelsome, it also seems to present a much more realistic depiction of marriage than the seemingly tranquil relationship between Adam and Eve. Furthermore, it is interesting that in the Sumerian tale it is Enki, the husband, and not his wife who eats the forbidden plant. In the Adam and Eve myth, the story of how Eve succumbs to temptation serves to justify the patriarchal order by portraying woman as more weak-minded and fickle than men. What purpose is served by a Sumerian tale about a man's disobedience to his wife? To answer this question, we

must take a closer look at this Sumerian myth. One important detail about the Sumerian myth not yet discussed is that the plants that Enki ate were actually created by Ninhursaja from Enki's own seed. By consuming his own seed, Enki in effect impregnates himself without having the ability to give birth. Ninhursaja saves Enki by taking his seed into her own body and

as the perfect revenge for his previous actions against women by reversing the trend and forcing him to live out the pain he caused them. After humbling her husband in this manner, Ninhursaja is quick to forgive and save him. This lack of permanent consequences is a significant difference between the Sumerian myth and the Adam and Eve myth. Adam and Eve

Sumerian literature is thought to have influenced the Hebrew people through the Canaanites who lived in Palestine before the Hebrew people. Indeed, there are many parallels between the Sumerian and Judeo-Christian creation myths.

giving birth to eight goddesses who can heal him. These details of the Sumerian myth suggest that this story is a cautionary tale about the dangers of womb envy and the dire consequences that men risk when they try to usurp women's reproductive capabilities.

There are also other ways in which this tale emphasizes the importance of respecting women. In the beginning of the tale, Enki disrespects his wife by engaging in an incestuous affair with his daughter that culminates with him abandoning her after she becomes pregnant. To add insult to this injury, Enki then engages in another incestuous affair with his granddaughter, the very product of his affair with his daughter. This process is repeated over and over throughout the tale with Enki consistently choosing to abandon his pregnant daughters, seemingly unconcerned by the anguish he is causing them. Ironically, Enki's accidental self-impregnation culminates with his wife choosing to abandon him in the same way that he had abandoned his daughters after impregnating them. This situation serves

are not as fortunate as Enki and for their transgression they must live out a mortal life in the wilderness rather than enjoying immortal life in the Garden of Eden. The lack of permanent consequences for Enki's actions underlines the fact that this is not a tale about female supremacy but rather a tale about cooperation and the importance of maintaining a balance between male and female powers. Despite the major differences between the two tales, the resemblances between them suggest the possibility that the Adam and Eve creation myth was created by adding a patriarchal veneer to this older Sumerian tale. To suit the ideals of the patriarchal Israelites, a female Goddess's wrath against her husband is replaced with a male God's wrath against his creations, leading to the formation of a myth that explains the cause of human suffering while simultaneously providing hope for a better future.

The replacement of a female Goddess with a male God is not surprising. As Riane Eisler argues in her essay "The Goddess of Nature & Spirituality: An Eco-manifesto," many of the earliest known

creation stories are of a Great Mother because in the early cradles of civilization, the "feminine power to give and sustain life, the power incarnated in the body of woman" was the highest power.³ According to Eisler, the story of the Fall of Man in the Garden of Eden illustrates major shifts in society: from equality of genders in partnership societies to male dominance and from hunting and gathering to agriculture and settlement during the Neolithic Revolution. It marks the end of an era where man and woman lived in harmony with one another and nature and the beginning of an era of warfare and hierarchic social structure.

Yet we must question the extent to which this transition from a female creator to a male creator was successful. In her essay "Depatriarchalizing in Biblical Interpretation," Phyllis Trible attempts to reread and translate Biblical faith without the sexism that many assume is inherent within it. By refusing to assume that the Bible is written from a completely patriarchal view, Trible was able to find subversive elements throughout the Old Testament. One of Trible's most noteworthy findings from her perusal of the Bible is the discovery that while we tend to view the Old Testament God Yahweh as a stern father figure, "feminine imagery for God is more prevalent in the Old Testament than we usually acknowledge."⁴ According to Trible, Yahweh actually "embraces and transcends both sexes" and it is not unusual for him to take up feminine as well as masculine roles.⁵ Thus it is not atypical for Yahweh to be portrayed as a provider of life sustaining nourishment or as a seamstress who provides clothes for her children. Even gynomorphic speech is associated with Yahweh: he speaks of birth pangs, compares himself to a nursing mother, acts as a comforting maternal presence and is even associated with midwives like many fertility goddesses of the past.

Other subversive elements within the Old Testament also indicate that some of the stories within it did not originate in patriarchal cultures. For example, the creation story itself provides contradictory views of the creation of mankind. The contradiction exists because Genesis actually contains dual versions of the creation of man and woman. In the first version of the creation of mankind, found in Genesis 1, it is stated, "So God created man in his own image, in the image of God created he him; male and female created he them."⁶ This version indicates that man and woman were actually created simultaneously. In the second version of the creation of mankind, found in Genesis 2, it is stated, "And the rib, which the Lord God had taken from man, made he a woman, and brought her unto the man.

patriarchal viewpoints while ignoring accounts that are favorable to woman. Of course the existence of these dual accounts of the creation of mankind could not be ignored. Indeed, the first version of the creation story, which indicates that man and woman were created simultaneously, was simply too dangerous to the patriarchal order to be ignored. In what was probably an attempt to explain away this version, Jewish theologians speculated that Eve was not the first woman. This led to the formation of the myth of Lilith, who is said to have preceded Eve. Unlike Eve, Lilith was not created from Adam's rib but simultaneously with him. In Jewish folklore, Lilith claims equality with Adam because they were created in the same way. She leaves Adam because she refuses to be subservient to him and obey his com-

is created from Adam's rib expounds on other subversive elements within the Adam and Eve myth. For instance, Tribble notes that "ambiguity characterizes the meaning of 'adham in Genesis 2-3."⁸ She questions whether the term 'adham is a term that stands for male or a term that stands for humankind in general. Tribble argues that if 'adham is a generic term for humankind, then before the differentiation of male and female in Genesis 2: 21-23, 'adham is androgynous. If Adam really is androgynous until the creation of Eve, then man and woman are created simultaneously in both the first and the second version of the creation of mankind. Thus, neither man nor woman can argue supremacy over the other.

Critical analysis of the Adam and Eve myth reveals subversive elements within this patriarchal tale while critical analysis of its Sumerian predecessor reveals this Judeo-Christian creation story's non-patriarchal origins. Both sources provide historical justification for a less sexist interpretation of the Adam and Eve myth while also providing interesting material for an adaptation of the myth. Some might argue that adapting this religious myth into a story that more closely reflects my own interpretations about the Fall of Mankind is an exercise in futility, as it fails to disprove the sexism which is inherent within the original myth. But the purpose of this work is not to deny that sexism is inherent within the tale. Rather, this work is simply meant to illustrate that the tale did not always contain sexist elements and that the patriarchal order for all its efforts was not able to completely suppress elements of subversion within the tale. My adaptation of the story has only one other purpose: to reject the immutability of the literary work in favor of the changeability of oral storytelling. After all, the Judeo-Christian faith has its origins in the ever-adaptive art of oral storytelling. Reworking mythology to better suit the beliefs of one's own setting and time period was a standard religious practice in ancient

Through Lilith, the first version of the creation of mankind can be interpreted in a way that demonizes women who seek to exist outside the patriarchal order.

And Adam said, This is now bone of my bones, and flesh of my flesh: she shall be called Woman, because she was taken out of Man."⁷ In contrast to the first version of the creation of mankind, in this second version not only is Eve created from Adam but she is also named by him. Thus she is placed on the same level as the animals of the Garden of Eden who Adam was also responsible for naming. This degrading position indicates her subservience to Adam.

Unsurprisingly, this second version of the creation of mankind which claims that woman was created from man is more widely known because it supports the beliefs of the patriarchal order. What this suggests is that traditional readings of the Bible tend to favor accounts that support

mands. For her rejection of the patriarchal order, Lilith is demonized in many tales. She is depicted as a child-killing witch, a female demon, an incarnation of lust who leads men astray, the mother of demonic offspring who spread chaos throughout the world, the serpent who tempted Eve and even the consort of Lucifer. Through Lilith, the first version of the creation of mankind can be interpreted in a way that demonizes women who seek to exist outside the patriarchal order. By stereotyping such women as monstrous and unnatural, the patriarchal order is able to control the behavior of women while also suppressing subversive elements within their sacred texts.

Tribble's discussion of the second version of the creation of mankind where Eve

times when literacy levels were low; it was a practice which kept mythologies relevant to the lives of the people who revered them. In my opinion, it is better to adapt our religious myths to our times than to reject them altogether because they no longer reflect our ideals. Thus, my adaptation of the Adam and Eve myth reflects a less sexist relationship between Adam, Lilith and Eve while recognizing the limitations of human relationships. Furthermore, rather than mourning the loss of the paradisiacal Garden of Eden, it celebrates the gift of free will and humankind's potential for greatness.

“That which is spoken by God-the-Sun is life; that which is spoken by the Devil is death; Abraxas speaketh that hallowed and accursed word, which is life and death at the same time. Abraxas begetteth truth and lying, good and evil, light and darkness in the same word and in the same act. Wherefore is Abraxas terrible.”

–Carl Jung, Seven Sermons to the Dead, 3rd Sermon (1916)

“The bird fights its way out of the egg. The egg is the world. Who would be born must first destroy a world. The bird flies to God. The God’s name is Abraxas... Our god’s name is Abraxas and he is God and Satan and he contains both the luminous and the dark world.”

–Herman Hesse, Demian (1919)

Adam And Eve: An Adaptation

Chapter One: Meeting

As he gazed upon His favorite son with bemusement in His eyes, Elohim wondered what could have prompted Lucifer to come down to the lower realm of all places. Though indulgent with His creations, He could not help but question the inclinations of this particular subject. After all, no other angel left the Heavens unless it was on His orders. None of them seemed to feel any of the fascination that Lucifer held for this world. And why would they when they knew full well that nothing which existed below the heavens could match those things which the Supreme Being deemed worthy to be enshrined within his higher realm.

If Lucifer were any other angel, he would be basking in the glory of God’s

Heavenly Realm rather than standing here upon this world that was but a pale reflection of its predecessor. Only Lucifer was unpredictable. Only Lucifer acted on sentiments seemingly uninspired by Divine Will. His Will. True, Lucifer had never been forbidden to enter the lower world. Indeed, none of the angels were forbidden to enter Earth. And yet none of the others ever came down here unbidden. Only Lucifer. Only Lucifer seemed to act on such strange impulses.

And so Elohim was left to wonder once again what it was that inspired Lucifer to act so differently from his compatriots. Not that Lucifer’s actions had ever been the cause of any displeasure. On the contrary, this peculiarity was the very trait which made him Elohim’s favorite and indeed a favorite among all the angels.

Abin, JC Eckstine-Gomez



Most of the time, his originality was an appealing quality. Indeed, his capabilities had wrought such admiration amongst his peers that even his elders amongst the archangels more often than not deferred to him. And yet there were other times as well when it was worrisome to see the individualism that was his most prominent characteristic; times when Elohim feared that this unnatural tendency to act without prompt would drive him too far away from his proper place beside his Father. And as he watched His son now, Elohim felt that this was one of those times. For Lucifer was watching Eden from the peak of Mount Moriah with an emotion akin to jealousy.

Chapter Two: Decay

The lower world created for His lower creations; the corporal world which could only mirror the perfections of the spiritual world above. Everything in this world, though imbued with life from above, was also destined to decay. The beings that were left to this disquieting landscape were His weaker creations, the ones that failed in some way to do what they were intended to do. But Elohim had found that though they failed to meet His expectations, they were simply too beautiful for Him to completely abandon. While He could not in good conscience allow them entrance into his Heavenly Kingdom, neither could He bring Himself to feel nothing for them. Why else would they be so well-cared for? Why else would He have endowed them with the gift of procreation so that even as they died new life would spring up, engulfing them in a cycle of death and renewal that allowed for at least some illusion of permanence even in the ever changing landscape of the Earthly Kingdom? Yes, though He loved His lower progeny and allowed them the ability to procreate as a balm to soothe the bleakness which characterized their existence, Elohim had not given into any of His

sentimental desires to place them on equal footing with His elect. No matter how He loved them, He kept them in their place where they belonged.

And yet this was not precisely true. For there was one creation which He could not bear to surrender to such a fate: mankind, the crown of His creation, at least on Earth, made to reflect the corporal image of Elohim and His angels above. Their creation was an endeavor that spanned eons, but the final result proved well worth the effort, so beautiful was the product. And yet for all their external beauty, Elohim was saddened to realize that they were not so perfect as He had first assumed. No, they were not like His perfect angels whom He had based them on, for they did not understand His will.

Mankind had been created, unlike the angels, with a spiritual core that was bonded completely to their corporal bodies rather than to Him. Though still connected to their Maker, the source of their spiritual existence, mankind did not seem to possess that intuitive perception of His desires that all His elect possessed. Consequently, they could not obey for they could not know what He wanted. He had intended them for the Heavenly Kingdom, but with such a flaw, how could He ever allow them right of entry? And yet, He could not bear to resign them to such a thwarted existence as that which existed in the lower realm. And so Elohim made a compromise. While He did not admit these beautifully imperfect creatures to His Heavenly Realm, neither did He place them within the terrestrial sphere. Instead, He created for them the Garden of Eden, a veritable Heaven on Earth. And in this beautiful paradise, they were safe from the deterioration which marred the surface of the rest of the Earth, existing perfectly in a state of eternal childhood.

Chapter Three: Flawed

When He had first gazed upon the final

fruition of all His careful planning, Elohim's face had radiated with victory while the angels watched with astonished eyes the delivery of the first young of their kind. God created his angels in a fully mature state and since they did not reproduce, there had been no youthful progeny of their own kind to grace the halls of Heaven. But now these undeveloped forms lay sleeping contentedly in the arms of their proud creator-mother, looking identical to the corporal forms that their angelic forbears occasionally took save for the reproductive organs which made one male and the other female and set them apart from the androgynous celestial beings on which they had been based.

The years in which their young forms had tottered across the Heavenly Realm had been the most delightful years to ever grace those venerated halls. And the day when Elohim had realized the flaw in what he'd then considered his greatest creation had been the grimmest day to ever mar the Heavens. It was with pain that Elohim made the decision to throw these innocent but imperfect creatures out of His sight. And yet when it came down to it, He could not abandon their infantile forms to the miserable Earth. For only two fates awaited them upon the decaying Earth: to die swiftly from exposure to the elements or to survive only to grow farther and farther away from him. And since He could not decide which of these two destinies was worse, He chose neither.

With great swiftness, Elohim embarked on a journey to Earth with His two sleeping charges and created for them a world so indistinguishable from Heaven that it would forever be remembered as God's paradise on Earth. He justified Himself with his firm belief that for now the flaw which marred His Adam and Eve was so small as to be unnoticeable. The only measure that needed to be taken to avoid this deterioration and preserve their perfect forms was to prevent their continued

growth. Only in a state of eternal childhood could they exist in perfection and without risk of endangerment. The angels watched the departure with grief-stricken but determined eyes, their cheeks flush with the same frantic worry that characterized their Lord and creator. Only one angel watched these doings with dawning horror and the beginnings of a newfound anger at His creator.

Chapter Four: Trust

Elohim continued to gaze upon His son. Both were lost in introspection and felt no need to acknowledge one another. He marveled at how similar His favorite son was to the flawed creations enshrined below in the Garden of Eden before firmly crushing the traitorous thought. To say that Lucifer sometimes acted without the inspiration of His Divine Will was not the same as to say that he was not in accordance with that Will. Lucifer was the eighth archangel, the youngest and last of His archangels, and in many ways the best. Practice had only perfected the skill through which Elohim created other beings. God had grown with His creations and so it was only logical that some of His

and Eve, there were no outside influences that could corrupt his spiritual core and fracture his connection to his Lord and Master. Any imperfections that marred his existence had to be those arising from God Himself. And God had no imperfections, just as He had no doubts and felt no hesitation. So Elohim turned to face His son with complete trust in His eyes.

Chapter Five: Doubt

Lucifer remembered when he had felt the first stirrings of doubt in his creator. It was probably the first moment that God had felt doubt in Himself. Angels in their most basic forms are but extensions of God's own will, the embodiment of his own imaginative powers. Though they have consciousness beyond that of God's will and can make decisions outside of His orders, they exist primarily to enact his desires. Angels lack true identities for they do not have personalities of their own. Instead of an identity composed of actual personality traits, an angel's identity is equal to its functions. Even the archangels who command the other angels are no different. For though angels might obey the orders of other angels who are higher in

of Elohim's archangels. Being termed an archangel simply indicates that one has more functions attached to his identity than the other angels. In reality, they had no skills or traits that made them inherently better than the other angels though they were a bit more complex because of the extra functions they served. God created the archangels only sporadically as need arose. So the archangels were neither his oldest nor his youngest creations. Lucifer, however, turned out to be different from his fellow archangels. For as God's creations become more complex and He incorporated them within Himself, He himself grew more complex.

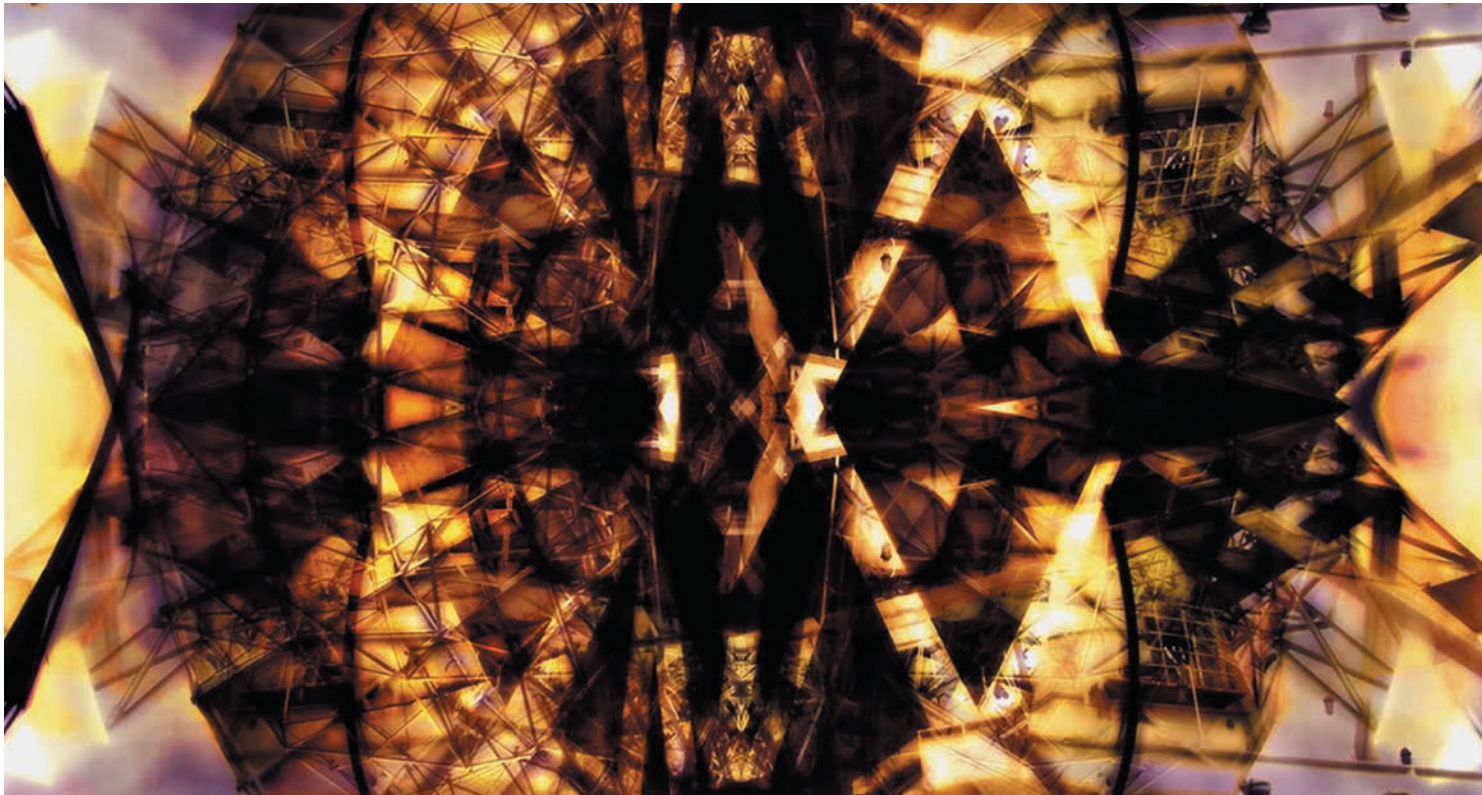
In the end, perhaps it was Earth that was His undoing. For how could a being so completely devoted to life and creation incorporate that which reeked of death and decay within Himself? It only followed that some great contradiction would arise within His being to mar the simplicity of his prior existence. Lucifer was God's last archangel, the youngest of the eight, created in the wake of the creation of Earth itself, as if God in His bewilderment at creating something so opposite to Himself had tried to cast out from his sight the paradoxical image of death and renewal which haunted Him with its puzzling existence. Thus, it was only natural that Lucifer, his last creation, born amongst all this self-turmoil, would be the embodiment of this contradiction and a contradiction himself since he, as all the other angels, also embodies God's will. It was only natural that along with God's will, Lucifer also attuned with that growing part of God that dissented with Himself, that part which no one else save Lucifer could hear or respond to. And because he holds that part of God which disagrees with Himself, it was inevitable that he would eventually begin to feel complex desires not bound to God's Divine Will. It was inevitable that he should become the first to practice free will and further that he would appreciate

And the day when Elohim had realized the flaw in what he'd then considered his greatest creation had been the grimmest day to ever mar the Heavens.

later creations often outshined the earlier ones with their originality and ingeniousness. A more complex creator made for a more complex creation. So it should have come as no surprise that Lucifer was perhaps the closest Elohim could come to making a replica of His own self. This God knew and so how could He doubt His son? He was but a mirror reflection of His creator-father, was he not? Unlike Adam

the hierarchy, there is no sense of status between angels. Thus, there is also no jealousy among angels nor is there pride within them for their own accomplishments. Only joy existed. Joy in serving the will of God and meeting His desires. Once upon a time, Lucifer had felt that joy too before his growing cynicism began to slowly whittle away at that simple pleasure.

But don't think that this was true of all



Satellites, JC Eckstine-Gomez

Adam and Eve not in spite of their imperfection but because of it, for Lucifer was a person who could appreciate the imperfection and contradiction that characterizes humanity.

Chapter Six: Lilith

“Well then... which shall it be?”

Lucifer looked at the young girl before him, a blossoming rose that put the flowers surrounding her in this Edenic paradise to shame. The thought that this rose would never be allowed to come into full bloom was too agonizing to be borne. There was a part of him that wanted to take the apple in his hand and force it down her slender throat. But he wouldn't. If freedom was to be had, she must choose it herself. He owed her that much at least.

“Will you eat of the apple of the tree of knowledge?”

The brooding girl crinkled her brow in thought.

“Adam will not be pleased,” she muttered under her breath with just a hint of indecision.

No, Adam wouldn't. Wasn't that why he'd chosen her in the first place? They were two halves of the same whole, created from the same egg. And so it only followed that they would be polar opposites in behavior, Adam favoring his tie to the living Earth beneath him while Lilith was more inclined towards the mystical aspects of life. She was the one who missed the celestial realm for she possessed the closer tie to the divine aspect of their being while he, who was more closely tied to his corporal form, was happier in this Earthly paradise than in its heavenly counterpart. Adam frolicked merrily in his beautiful new playground as boys are wont to do while Lilith

was content to sit motionless. Motionless, except for her eyes, those beautiful green eyes that were forever shifting around so eager to understand the world around her and to solve the mystery of her own existence. How often had he seen her stare at her own reflection for hours upon hours? He knew it was not out of vanity, though she certainly had cause to be vain, but a true desire to comprehend what she was. Some might wonder why Lucifer would find her self-contemplation so arresting. But for a creature who never questioned his own existence, her wonderment made for a beguiling picture that he never quite tired of watching. He had known then that if either of them could comprehend what he was trying to offer them then it would be her. Yes, Adam would be upset. But he would accept it. For first and foremost, he belonged to her as she belonged to him. If

she went, he would follow.

"But he will bear it. For you, he will bear it. And when he sees what the two of you can be together away from this mockery of a paradise, he will not look back."

With surprisingly steady hands, she grasped the apple firmly with her fingers and ate of the tree of knowledge.

Lucifer smiled.

Chapter Seven: The Prodigal Son

Elohim watched the son He couldn't understand with sadness in His eyes. He looked past him at the two captives locked in the paradise below only to double back in shock.

"What have you done?"

"Only what you wanted me to do."

Elohim watched the scene playing out in the garden below with mounting horror.

Chapter Eight: The Temptation Of Adam

Eons ago, when Elohim had first left them there, He gave His two children free reign over the Garden to do with it as they pleased. Only one edict did He give them to follow. Only one thing was forbidden to them: the fruit of the tree of knowledge. The fruit that could reverse the halting of their growth, created only to be consumed once the flaw had been eradicated and they could become subservient to His Divine Will like the angels before them.

"Lilith, you cannot truly mean to—"

"It is already done Adam. And now you must choose. Will you eat of the apple of the tree of knowledge? Will you come with me or will you stay here?"

"With you . . . of course I go with you."

Adam grasped the apple with trembling hands and ate of the tree of knowledge.

Chapter Nine: Eve

Of course Adam accepted the apple. They were two halves of the same whole, were they not? Where she went, of course he would follow. What she ate, he must eat too. It wasn't a question of whether or not

he would eat of the forbidden tree. The question was whether or not he could live with the consequences.

A scream rose up within him only to die soundlessly within his throat as he was wrenched from the Earth beneath him; the living, breathing Earth that was pulling at something at the very center of his being, refusing to let go. Could he live with it? As it turned out, the question didn't matter. For as Lilith felt him breaking apart next to her, so close and yet so far away, she found that it was she who couldn't live with it.

The Earth didn't pull at her the way it did him, yet she felt his pain nonetheless. And at the same time as she felt it pierce her heart, she also felt herself relent. She felt herself begin to do that which they had always sworn they would never do to each other. She felt herself let go. For one brief moment, she resisted her own impulse and then she realized she had no choice. She couldn't go back even if she wanted to. And to take him with her would be far crueler than to leave him. So she did the only thing she could do for him. She took the fruit of the tree of knowledge from within him, the very fruit which she had offered him only moment ago, pulling some of his own life essence out with it. To this she added a portion of her own spirit.

When he woke up, a pale beauty lay beside him, a blossoming rose that put the flowers surrounding her in their Edenic paradise to shame. But she wasn't Lilith.

Chapter Ten: Contradiction

Elohim looks at His son and perhaps it is the first time that He truly sees him. Lucifer is still smiling.

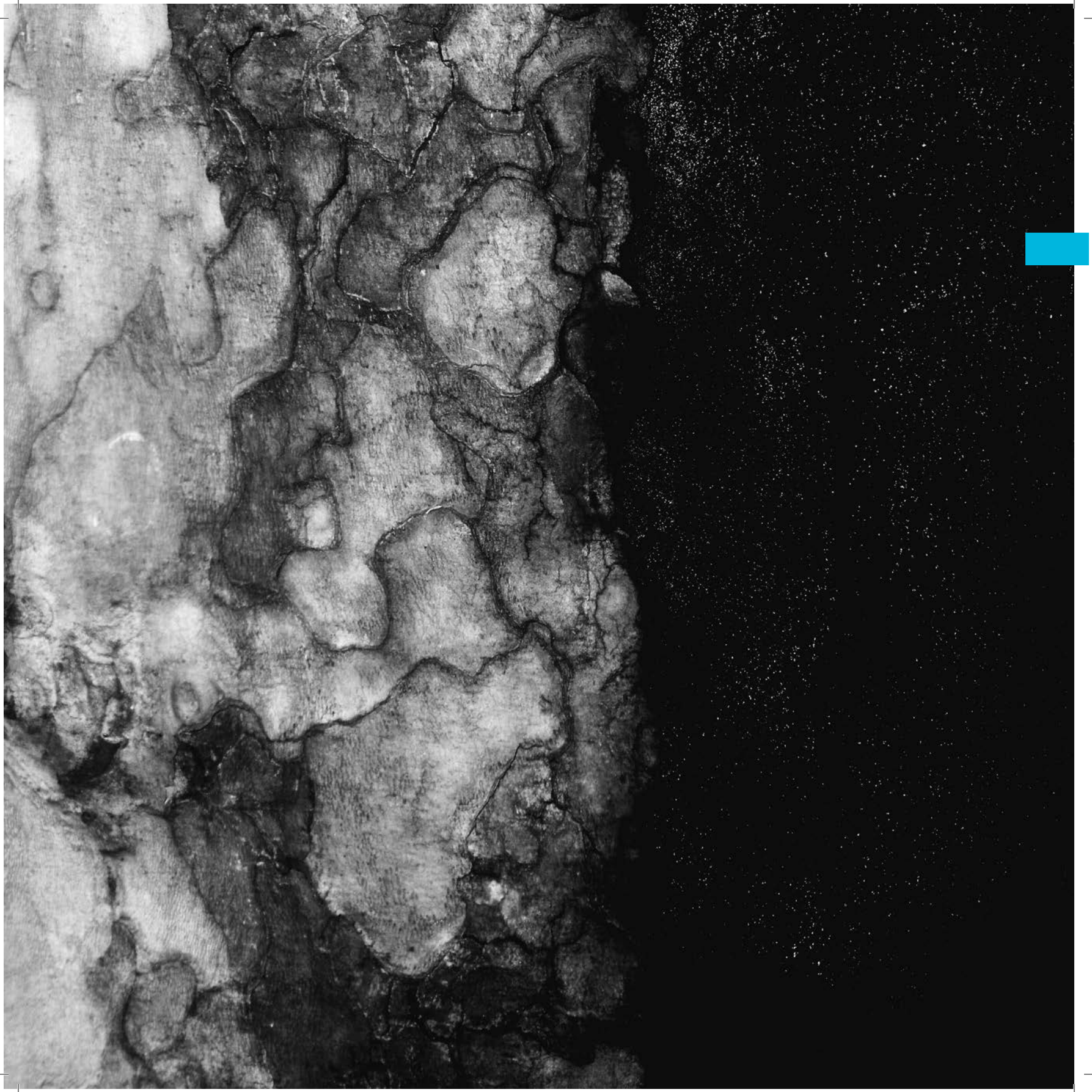
"What was this meant to accomplish? If you had but left them alone in Eden, they would have remained flawless eternally." "And that's precisely why I didn't leave them alone... couldn't leave them alone. I couldn't bear to watch them lead such a futile existence. Could you?"

"And yet they did not do as you wished them. They did not stay together as they should have. You gave them choice and they chose wrong."

"I will admit this turn of events was most unexpected. But perhaps I should have expected it. They were made to be perfect for each other, to complement each other in every way. And yet how could they truly be together when Lilith's soul yearns upwards while Adam's remains below? A contradiction is what they are, for you gave them everything they needed to be together except a world that could encompass both of their desires."

"Perhaps that is so. But can you truly say that this new path that you have set them on is better than the life that I had planned so carefully for them? Lilith is alone now as she was never meant to be while Adam remains on his beloved Earth where he and his Eve will surely die with the Garden that they have polluted. With Lilith separated from them, the beauty that encompassed humanity will be lost forever."

"But can you not see? The purpose of life is death. If you cannot die, then you cannot be called living. That is the contradiction of the living Earth beneath us, death and renewal tied so closely that you cannot tell them apart. And that is why humanity will be the envy of even the angels, for they can live in a way that we with our immortal lives cannot. As for Lilith, she is with them even now. For Eve is of both her and Adam, a careful balance of the two. With the death of the Garden also comes the possibility of new life and through Eve the progeny of Adam will never be lost to you. They will always yearn for you even as they cling to earthly life. You will see. They may not do what they were originally intended to do and they may never be able to truly understand you, but they will help you to understand the Earth beneath us, the contradiction of this aberration called life."



ECONOMIZATION OF THE SIERRA LEONE WAR

by Stephen Erbrick

In the Sierra Leone Civil War, politically and militarily counterproductive actions were commonplace and atrocities were committed against those who offered support. Despite efforts of external powers to broker peace agreements, the various factions continued fighting. This study seeks to answer why the RUF was successful despite inferior numbers and strategies anathema to modern counterinsurgency doctrines. It analyzes how war legitimizes crime and the suppression of democratic politics, adding to the growing body of research on intrastate conflict and the political economy of civil war.

Halflife
(detail)
E'lane Lemon

“We fought ten years for nothing.”

—Gibril Massaquoi, spokesman for the RUF high command

“Conflict can create war economies, often in regions controlled by rebels or warlords and linked to international trading networks; members of armed gangs can benefit from looting; and regimes can use violence to deflect opposition, reward supporters, or maintain their access to resources. Under these circumstances, ending civil wars becomes difficult. Winning may not be desirable: the point of war may be precisely the legitimacy which it confers on actions that in peacetime would be punishable as crimes.”

—David Keen, *The Economic Functions of Civil Wars*, 1998

Introduction

This report challenges the assumption that the aim of war is to win. During the Sierra Leone Civil War (SLCW), politically and militarily counterproductive actions were commonplace, enemies routinely collaborated, and atrocities were committed against the same population from which both sides should have sought support.¹ The primary question that this report will attempt to resolve is why the RUF (Revolutionary United Front) was so successful despite inferior numbers and barbarous behavior that rebuked modern counter-insurgency doctrines. In order to address my primary question, I must examine the origins of the conflict as well as the eco-

nomic, political, and military objectives of the opposing sides—the RUF and the SLA (Sierra Leone Army)—and also how they achieved their goals. Thus, I ask several subsidiary questions: what role did the initial political, social and economic conditions play in inviting the RUF intervention? Was the RUF primarily concerned with the exploitation of Sierra Leone’s alluvial diamond mines or did the RUF have real political aspirations as well? How did diamonds—of little or no value to ordinary Sierra Leoneans other than their attraction to foreigners—help finance the decade-long conflict? Even more importantly, did control of alluvial diamonds provide an incentive for the SLA and the RUF to tacitly collude to indefinitely prolong the civil war so that they could maintain their unique access to Sierra Leone’s lucrative mineral wealth? And lastly, was the presence of the alluvial diamond mines and unprotected villages a major determinant of the RUF’s and the SLA’s sordid behavior towards non-combatants?

In Sierra Leone, the civil war legitimized various kinds of crime and the suppression of democratic politics that served a multiplicity of local and individual goals. Importantly, this report examines if local and individual elements had a strong incentive to indefinitely prolong the civil war to maintain their economic and political benefits and even their lives. In support of this claim, it took a determined international force to tip the balance of power of the local interests and end the ten year long civil war.² But, what are the implications of the RUF’s success? Does the protracted and seemingly unending nature of the SLCW provide any lessons for structuring peace agreements when easily accessible natural resources are present? Many of the conditions illustrated in this report are not unique to Sierra Leone. Although Sierra Leone was especially ripe for conflict, the implications gleaned from this report may be applicable to other

states that are also suffering from brutal intrastate war that is caused and sustained by primarily economic factors and not real or perceived ethnic divisions.

Background

The Political History of Sierra Leone

Upon the death of Sierra Leone’s first prime minister in 1964, politics in the country became increasingly characterized by corruption, mismanagement and electoral violence that ultimately led to a weak and cynical civil society, the collapse of the education system and a generation of dissatisfied youth who would eventually become the RUF.³ When President Siaka Stevens entered into politics in 1968 Sierra Leone was a constitutional democracy.⁴ When he stepped down—seventeen years later—Sierra Leone was a one-party state with a lower GDP than both Somalia and Rwanda.⁵ Stevens’ rule, sometimes called “the seventeen year plague of locusts,” saw the destruction and perversion of every state institution.⁶ Parliament was undermined, judges were bribed and the treasury was bankrupted to finance personal projects that funneled millions of dollars to insiders.⁷ When Stevens failed to coopt his opponents, he often resorted to state sanctioned executions or exile. In 1985, Stevens stepped down and handed the nation’s preeminent position to Major General Joseph Momoh, a notoriously inept leader who maintained the status quo.⁸ During his seven year tenure, Momoh welcomed the spread of unchecked corruption and complete economic collapse. Unable to pay its civil servants, those desperate enough ransacked and looted government offices and property.⁹ But the government hit rock bottom when the treasury could no longer afford to pay schoolteachers and the education system collapsed.¹⁰ Because only wealthy families could afford to pay private tutors during the late 1980s, the bulk of Sierra Leone’s youth roamed the streets aimlessly. Corruption and mis-

rule by Momoh and Stevens left ordinary citizens with nothing. The most pressing issues for these citizens were (and arguably still are) basic: land, shelter and justice.

Major Actors

Revolutionary United Front (RUF)

Organized in Liberia under the guidance and leadership of both Charles Taylor and Foday Sankoh, this rebel group during the spring of 1991 intervened in Sierra Leone in an attempt to overthrow the Momoh government and sparked a gruesome ten year civil war that enveloped the entire country and left 50,000 dead.¹¹ The RUF had several objectives in addition to financing and equipping its forces, but three were most important: crippling the government's commercial and industrial activities, undermining the physical security of the state and attracting international publicity to their cause.¹² The main political goals of the RUF called were for the overthrow of the Momoh regime, the establishment of a multiparty democracy and an end to economic exploitation.¹³ Although the RUF used populist rhetoric to legitimize its initial rebellion and attract supporters, it continuously failed to articulate a coherent political agenda other than criticism that highlighted the shortcomings of the constantly changing government.¹⁴ It is conceivable that the RUF's initial rebellion was in part motivated by the shortcomings of the government of Sierra Leone (GoSL), however as the war progressed, the RUF became increasingly enamored with the cumulative benefits of Sierra Leone's profitable natural resources and not political power.¹⁵

Sierra Leone Army (SLA)

Originally a weak and rag-tag group, the SLA was largely impotent during the first year of the war.¹⁶ Within four years, however, the SLA had grown from under 4,000 to over 17,000 troops by recruiting imprisoned criminals and also by dragooning

unemployed youths.¹⁷ But it is important to note that the local civilians referred to many of these new soldiers as "sobels" or "soldiers by day, rebels by night" because of their close ties to the RUF.¹⁸ With morale low and rations even lower, many SLA soldiers discovered that they could do better by joining with the rebels in looting civilians in the countryside instead of fighting against them.¹⁹ By mid-1993, the two opposing sides became virtually indistinguishable.²⁰

Executive Outcomes (EO)

For \$1.8 million per month (financed primarily by the IMF), EO, a paramilitary group from South Africa, was paid to accomplish three goals: return the diamond mines to the government, locate and destroy the RUF's headquarters and operate a successful propaganda program that would encourage local Sierra Leoneans to support the GoSL.²¹ EO's military force consisted of 500 military advisors and 3,000 highly trained and well equipped combat ready soldiers backed by tactical air support and transport.²² Executive Outcomes employed black Angolans and Namibians from Apartheid South Africa's old 32nd Battalion, with an officer corps of white South Africans.²³ Harper's Magazine described this controversial unit as a collection of former spies, assassins and crack bush guerrillas, most of whom had served for fifteen to twenty years in South Africa's most notorious counter insurgency units.²⁴

Civil Defense Force (Kamajors)

A grassroots irregular force, the Kamajors operated invisibly in familiar territory and was a significant impediment to marauding government and RUF troops.²⁵ For displaced and unprotected Sierra Leonans, the Kamajors was a means of taking up arms to defend family and home due to the SLA's perceived incompetence and active collusion with the rebel enemy.²⁶ The Kamajors had a well-organized command

structure and its members were trained in the use of modern weaponry.²⁷ The Kamajors clashed with both government and RUF forces and was instrumental in countering government soldiers and rebels that were looting villages.²⁸ The success of the Kamajors raised calls for its expansion, and members of street gangs and deserters were also co-opted into the organization.²⁹ However, the Kamajors became corrupt and deeply involved in extortion, murder and kidnappings by the end of the conflict.³⁰

ECOMOG

The military branch of the Economic Community of West African States, this force intervened in the first days of the conflict and was most significant following the Armed Forces Revolutionary Council (AFRC) coup.³¹ Condemning the AFRC coup, ECOMOG forces demanded that the new junta return power peacefully to the Kabbah government or risk sanctions and increased military presence.³²

Geography and People

Sierra Leone is a small state—approximately the size of North Carolina—and lies on the West African coast.³³ It is surrounded by its larger neighbors: Guinea to the north and east, and both Liberia to the southeast and the Atlantic Ocean form its western border. Of the fourteen ethnic groups that settled in Sierra Leone, three groups—the Mende, Temne and Limba—are the numerically the largest.³⁴ Although real and imagined ethnic divisions have influenced political contests and military recruitment in the past, the SLCW was not characterized by ethnic strife.³⁵

The Demographics of RUF Recruitment

As a result of the Liberian Civil War, 80,000 refugees fled neighboring Liberia for the Sierra Leone-Liberian border.³⁶ This displaced population, composed almost entirely of children, would prove

an invaluable asset to the invading rebel armies because the refugee and detention centers, populated first by displaced Liberians and later by Sierra Leoneans, helped provide the manpower for the RUF's insurgency.³⁷ Abandoned, starving and in dire need of medical attention, the RUF took advantage of the refugees poor condition by promising food, shelter, medical care and whatever profits they gleaned from looting and mining in return for their support.³⁸ When this method of recruitment failed, as it often did for the RUF, youths were then coerced at the barrel of a gun to join the ranks. After being forced to join, many child soldiers learned that the complete lack of law—as a result of the civil war—provided a unique opportunity for self-empowerment through violence and thus continued to support the rebel cause.³⁹

But the most important reason why the civil war should not be entirely attributed to conflict over the economic benefits incurred from the alluvial diamond mines is that the pre-war frustrations and grievances did not just concern that of the diamond sector.

Diamonds – The Natural Resource Curse

The Eastern and Southern districts in Sierra Leone, most notably the Kono and the Koido districts, are rich in alluvial diamonds, and more importantly, are easily accessible by anyone with a shovel, sieve, and transport.⁴⁰ Since their discovery in the early 1930s, diamonds have been critical in financing the continuing pattern of corruption and personal aggrandizement at the expense of needed public services, institutions and infrastructure.⁴¹ The pres-

ence of diamonds in Sierra Leone invited and fed the civil war in several important ways. First, the highly unequal benefits incurred from diamond mining made ordinary Sierra Leoneans frustrated. For instance, the National Diamond Mining Corporation (NDMC)—DeBeer's venture during the Steven's government—was used to fund luxurious personal construction projects and extravagant salaries for government elites.⁴² With the RUF incursion, the formal diamond mining industry collapsed; government sponsored diamond exports declined significantly during the civil war while Liberia, a state with very few diamond reserves, exported more than \$2 billion worth of diamonds to Belgium.⁴³ This figure suggests that the profits garnered from the diamond trade with Liberia and other international clients were instrumental in financing both the RUF's and even Charles Taylor's war efforts in

neighboring Liberia.

The RUF used funds harvested from the alluvial diamond mines to purchase weapons and ammunition from neighboring Guinea, Liberia and even SLA soldiers.⁴⁴ Furthermore, the lack of external support made the control of the alluvial diamond mines that much more important. Most significantly, the presence of easily extractable diamonds provided an incentive for violence. To maintain control of important mining districts like Kono,

thousands of civilians were expelled and kept away from these important economic centers.⁴⁵

Although diamonds were a significant motivating and sustaining factor, there were other means of profiting from the civil war. For instance, gold mining was prominent in some regions.⁴⁶ Even more common was cash crop farming through the use of forced labor.⁴⁷ Looting during the Sierra Leone Civil War was not limited to diamonds, but also included that of currency, household items, food, livestock, cars, and international aid shipments.⁴⁸ For Sierra Leoneans who lacked access to arable land, joining the rebel cause was an opportunity to seize property through the use of deadly force. But the most important reason why the civil war should not be entirely attributed to conflict over the economic benefits incurred from the alluvial diamond mines is that the pre-war frustrations and grievances did not just concern that of the diamond sector. Contrary to some notable political economists, the root cause of SLCW was poor governance, poverty, and corruption, and the failure to create institutions that protected the freedoms of individual citizens.⁴⁹

The Sierra Leone Civil War (March 23, 1991 to January 11, 2002)

On March 23, 1991, The RUF, with support from the special forces of Charles Taylor's revolutionary army, the National Patriotic Front of Liberia (NPFL), invaded Eastern Sierra Leone.⁵⁰ As the armies moved towards the interior of the country they looted, raped, and murdered innocent civilians causing a massive refugee movement into the neighboring countries of Liberia and Guinea.⁵¹ The village of Koindo was a key target for the rebels during the initial incursion because it was an important staging point for smuggling between Sierra Leone and Liberia.⁵²

The initial rebellion could have easily been quelled in the first half of 1991.⁵³ But



African Cheetah, Linh Do

the RUF—despite being both numerically inferior and extremely brutal against civilians—controlled two-thirds of Sierra Leone by the year's end.⁵⁴ The SLA's equally poor behavior made this outcome possible. Often afraid to directly confront or unable to locate the elusive RUF, government soldiers were brutal and indiscriminate in their search for rebels or sympathizers among the civilian population.⁵⁵ After retaking captured towns, the SLA would perform a “mopping up” operation in which the townspeople were transported to concentration camp styled “strategic hamlets” far from their homes in Eastern and Southern Sierra Leone under the pretense of separating the population from the insurgents. However in many cases, this was followed by much looting and theft after the people were evacuated. This inevitably led to the alienation of many civilians and pushed some Sierra Leoneans to join the rebel cause. For these reasons, civilians increasingly relied on the Kamajors for their protection.

Within one year of fighting the RUF offensive had stalled, but it still remained in control of large territories in Eastern and Southern Sierra Leone, leaving many villages unprotected while also disrupting food and government diamond production.⁵⁶ Soon the government was unable to pay both its civil servants and the SLA.⁵⁷ As a result, the Momoh regime lost all remaining credibility and a group of disgruntled junior officers led by Captain Valentine Strasser overthrew the government on April 29, 1992.⁵⁸ Strasser justified the coup and the establishment of the National Provisional Ruling Council (NPRC) by referencing the corrupt Momoh regime and its inability to resuscitate the economy, provide for the people of Sierra Leone and repel the rebel invaders.⁵⁹ The NPRC's coup was largely popular because it promised to bring peace to Sierra Leone.⁶⁰ But the NPRC's promise would prove to be short-lived.

In March of 1993, with much help from ECOMOG troops provided by Nigeria, the SLA recaptured the Koidu and Kono diamond districts and pushed the RUF to the Sierra Leone-Liberia border. The RUF was facing supply problems as the United Liberation Movement of Liberia for Democracy (ULIMO) gains inside Liberia were restricting Charles Taylor's NPFL's ability to trade with the RUF.⁶¹ By the end of 1993, many observers thought that the war would soon be over because for the first time, the SLA was able to establish itself in the Eastern and the Southern mining districts.⁶²

However, with senior government officials neglectful of the poor conditions faced by SLA soldiers, front line soldiers became resentful and began helping themselves to Sierra Leone's rich natural resources. This included alluvial diamonds as well as looting and "sell game," a tactic in which government forces would withdraw from a town but not before leaving arms and ammunition for the roving rebels in return for cash.⁶³ Abraham suggests that both sides not only had an interest in looting for personal enrichment, but also had a reason to collude so that the strained RUF could remain a formidable fighting force, prolonging the war to the benefit of both parties. Renegade SLA soldiers even clashed with Kamajor units on a number of occasions when Kamajors intervened to halt looting and mining.⁶⁴ Furthermore, an end to the fighting would have made elections a certainty, ending the benefits that the NPRC military elites gained from holding office.⁶⁵ Instead of working towards ending the war, SLA soldiers and NPRC elites appeared to be acting to prolong it.⁶⁶ The war dragged on as a low intensity conflict until January of 1995 when RUF forces and dissident SLA elements seized the Sierronco and Sierra Rutile diamond mines in the South West, furthering the government's economic struggles and enabling a renewed RUF advance on the

capital at Freetown.⁶⁷

In March 1995, the South African mercenary group EO arrived in Sierra Leone when the RUF was within twenty miles of Freetown.⁶⁸ As a military force, EO was extremely skilled and conducted a highly successful counter insurgency against the RUF. In just seven months, EO, with support from loyal SLA and the Kamajors battalions, recaptured the diamond mining districts and the Kangari Hills, a major RUF stronghold.⁶⁹ A second offensive captured the provincial capital and the largest city in Sierra Leone and destroyed the RUF's main base of operations near Bo, finally forcing the RUF to admit defeat and sign the Abidjan Peace Accord.⁷⁰ The hiring of EO seems to demonstrate that some elements within the National Provisional Ruling Council still wanted to repel the RUF invasion. Another explanation is that the NPRC simply desired to protect the capital (and themselves) while regaining control of the profitable mining districts. In short, the efforts of EO forced Sankoh to cut his losses and enter into a ceasefire and peace process. This period of relative peace also allowed the country to hold elections during which the military junta handed power over to the democratically elected President Ahmad Tejan Kabbah in March of 1996.⁷¹

The Abidjan Peace Agreement was signed on November 30, 1996.⁷² Abidjan mandated that EO was to pull out in five weeks after the arrival of a neutral peace-keeping force. However, it soon became clear Sankoh and other hardline elements within the RUF did not want peace. The main stumbling block that prevented Sankoh from signing the agreement sooner was the number and type of peacekeepers that were to monitor the ceasefire.⁷³ Had the RUF leadership legitimately wanted to end the conflict, they would have requested more, not fewer, peacekeepers. Despite the RUF's loss of strongholds in the Kangari hills and Kailahun districts

and widespread food and ammunition shortages, many rebels still did not surrender because they were extremely fearful of retribution from the now ruling Kabbah regime and the Kamajor. In January of 1997, the new democratically elected government of Sierra Leone—beset by demands to reduce expenditures by the IMF—ordered Executive Outcomes (EO) to leave the country, even though a neutral monitoring force had yet to arrive.⁷⁴ The embryonic peace process began to collapse almost as soon as Abidjan was signed because of renewed Kamajor attacks and the fear of punitive tribunals following demobilization kept many rebels in the bush despite their dire situation.

On March 25, 1997, a group of disgruntled SLA officers freed and armed 600 prisoners from the Pademba Road prison in Freetown.⁷⁵ One of the prisoners, Major Johnny Paul Koroma, emerged as the leader of the coup and the Armed Forces Revolutionary Council (AFRC)—the new GoSL.⁷⁶ After blessing from the captured and imprisoned Foday Sankoh, RUF fighters—who were supposedly on their last legs—were ordered out of the bush to participate in the coup.⁷⁷ Without hesitation and encountering only light resistance from SLA loyalists, 5,000 rag-tag rebel fighters marched one hundred miles and overran the capital.⁷⁸ Without fear or reluctance, RUF and SLA dissidents then proceeded to parade peacefully together. In short, the coup had been planned in conjunction with the RUF leadership.⁷⁹ Koroma then invited Sankoh to join his government, and appointed him Deputy Chairman of Mining after appealing to Nigeria (where he was imprisoned) for his release.⁸⁰ The joint AFRC/RUF leadership then proclaimed that the war had been won, and a great wave of looting and reprisals against civilians in Freetown under the auspice of: 'Operation Pay Yourself' followed.⁸¹ President Kabbah, surrounded only by his bodyguards, left by helicopter

for exile in nearby Guinea.

Condemning the AFRC coup, ECOMOG forces demanded that the new junta return power peacefully to the Kabbah government or risk sanctions and increased military presence.⁸² Starting at the Lungi airport, ECOMOG forces formed a three-pronged attack that surrounded the capital of Freetown.⁸³ Overcoming en-

Lome Peace Agreement was not particularly popular with the people of Sierra Leone because Sankoh, the commander of the unimaginably brutal and treasonous RUF, was now handed the second most powerful position in the country and even more importantly, control over all of Sierra Leone's lucrative diamond mines.

Following the Lome Peace Agreement,

The Sierra Leone Civil War was the result of decades of state neglect and exploitation.

trenched AFRC positions, the ECOMOG forces retook the capital and reinstated the Kabbah government but let the rebels flee without further harassment.⁸⁴ However, the regions lying just beyond Freetown proved much more difficult to pacify.⁸⁵ In summation, ECOMOG's intervention in Sierra Leone brought a tentative peace that also reestablished the Kabbah regime through negotiated talks with the RUF/AFRC rebels.⁸⁶ Unable to push the AFRC/RUF rebels from South and Eastern Sierra Leone, the Kabbah regime was forced to make serious concessions in the coming year.

Given that Nigeria was due to recall its ECOMOG forces without achieving a tactical victory over the RUF, the international community intervened diplomatically to promote negotiations between the RUF/AFRC rebels and the newly reinstated Kabbah regime.⁸⁷ The Lome Peace Agreement, signed on July 7, 1999 is controversial in that Sankoh was pardoned for treason, granted official status at the Vice President, and made chairman of the commission that oversaw the entirety of Sierra Leone's diamond mines.⁸⁸ In return, the RUF was ordered to demobilize and disarm its armies through a process of disarmament, demobilization, and reintegration.⁸⁹ The

several renegade elements within the RUF, like the "West Side Boys," would require not only a 17,500 man UN intervention but also a British intervention to finally tip the balance of power and end the war decisively on January 11, 2002.⁹⁰ By most estimates, over 50,000 people lost their lives in the Sierra Leone Civil War.⁹¹ Countless more fell victim to the reprehensible and perverse behavior of the combatants. That May, hundreds of thousands of Sierra Leoneans reelected President Kabbah, and the RUF failed to gain a single seat in parliament.⁹² A victor was never proclaimed, and it is evident that all parties involved in the Sierra Leone Civil War had gained little in the end.

Analysis

Patrimonial System of Rule

The Sierra Leone Civil War was the result of decades of state neglect and exploitation. To better understand the civil war, it is paramount to remember the decades of political collapse that enabled a dysfunctional state system to perpetuate a patrimonial system of rule. In Sierra Leone, patron-client relationships have extended well past the time of colonial rule and have become commonplace in the modern political system.⁹³ This system of entrenched

patron-client relationships allowed the GoSL to exclude almost all of society from any tangible economic development or political representation.⁹⁴ In societies that are organized along patron-client lines, the state still extracts and distributes resources, however the extraction and distribution is privatized and therefore the interests of the society suffer immensely at the hands of small but powerful individual and group interests.⁹⁵ In political systems that are typified by entrenched patron-client relationships, politics becomes a business because political power controls the distribution of economic resources.⁹⁶ Thus, politics becomes economics. Consequently, life during the SLCW became a competition for the distribution of already scarce resources and had disastrous consequences.⁹⁷

A history typified by underdevelopment, single party rule, and widespread corruption generated a yearning for revolutionary change—especially amongst the youth of Sierra Leone.⁹⁸ Anger at the existing political system was pervasive, and many youths concluded that the unfair system of exploitation justified their often violent attempts at obtaining prosperity. But most importantly, this great divide between the "haves" and the "have-nots" of Sierra Leone made the country particularly receptive to the RUF's 1991 invasion.⁹⁹ The RUF's initial rebellion was an attempt to address the grievances of those at the bottom of a political system that failed to provide even basic state services. It was only in this environment of utter state collapse that such levels of sustained violence could be maintained.

The Economization of the Sierra Leone Civil War

While political rationality is difficult to find in the rebels' and the government's often counterproductive tactics, some semblance of economic rationality was more evident throughout the conflict. If one

takes a narrow conception of rationality as pursuing one's interests by the most efficient means possible, then making money at the expense of unarmed civilians while avoiding open confrontation with other armed groups becomes perfectly rational. This does not mean that the rebels or government dissidents were primarily motivated by greed instead of grievance. Grievances stemming from Sierra Leone's low level of development—e.g. perpetual poverty, poor healthcare and non-existent education system—invited and sustained the RUF invasion. Thus, one of the RUF's motivat-

the conflict indefinitely so that they could extend their presence in these remote areas. The RUF, and the SLA to a lesser extent, relied heavily on mining and looting to sustain their operations.¹⁰² Through the illegal diamond trade with neighboring Liberia, the RUF generated \$75 million annually which was then used to purchase arms, ammunition and equipment.¹⁰³ In a weak state like Sierra Leone, control of the political center was not necessarily the most efficient means of achieving wealth and power. For the impoverished and under-educated youth that constituted the

independent operations. This fragmentation was such that some rebels had little or no connection to that of Sankoh's RUF, as demonstrated by the renegade elements within the RUF that were reluctant to demobilize following Lome even when Sankoh was awarded the Vice Presidency and control of the country's alluvial diamond mines. Both the RUF and the SLA fragmented once in contact with the rich alluvial diamond mines. These rogue elements within the RUF, like that of the "West Side Boys," even fought against RUF forces during the late 1990s.¹⁰⁷

In our perverse world, civilians are sometimes feared simply because they are representative of some unknown and therefore possibly dangerous element.

ing factors in intervening in Sierra Leone was the desire to overthrow the neglectful, authoritarian and self-interested Momoh regime. But Sierra Leone's rich natural resources and easily lootable commodities also invited the RUF invasion and prolonged the conflict.

Protracted Nature of Conflict

Although reformist or revenge based motivations motivated the rebel invasion to some extent, the attainment of the alluvial diamonds mines and material resources from looting and theft increasingly became the overarching motivation for prolonging the insurgency.¹⁰⁰ This does not mean that the rebel forces did not wish to overthrow the government, but rather that the rebel factions wanted to gain political control as a means of maintaining their access to the vital economic resources.¹⁰¹ The alluvial diamond mines and raids on villages were very real means of economic advancement for both sides in the civil war and were powerful incentives to prolong

RUF, the alluvial diamonds mines were an easy means of improving one's well-being. For the RUF, warfare for expropriation became its *raison d'être*. It is conceivable that if the RUF failed to maintain control of the alluvial diamond mines or refrained from theft and robbery, then the conflict would have likely fizzled out by the end of the year given forceful government opposition.¹⁰⁴

Fragmentation of Warring Parties

In other intrastate conflicts that did not involve a wealth of natural resources, only a small number of warring parties openly confront each other because only a few groups are capable of financing the war effort.¹⁰⁵ But the SLCW is different from other intrastate conflicts in that the opposing factions were fragmented and numerous.¹⁰⁶ In Sierra Leone, the rich benefits that could be reaped from the alluvial diamond fields and unprotected villages, towns and cities enabled numerous actors to emerge because they could finance their

Brutalization of Civilizations

The economic opportunities provided by the civil war coupled with the fragmentation in the chain of command allowed groups on both sides to brutalize citizens with little recourse.¹⁰⁸ During the SLCW, low ranking SLA and RUF soldiers committed violent atrocities against non-combatants, because they did not have to fight for the support of the local population when the economic benefits derived from mining and looting increasingly replaced their desire for political control.¹⁰⁹ But even when political control was desired as in the case of RUF elites like Sankoh, the profits earned from the diamond trade could be used to achieve political office through bribery or violent insurrection. Furthermore, the SLA could loot and pillage because it could rely on external powers like ECOMOG, UNAMSIL, or the British to protect the political center. With actors on both sides less reliant on the civilian population for support because of profits earned from the diamond trade, the belligerents' main rationale from refraining from egregious acts of violence was essentially marginalized. Moreover, as the civil war progressed, groups from both sides increasingly recruited criminals and derelicts to join their respective ranks.¹¹⁰ This, coupled with independent factions that were able to operate free of the cen-

tralized chain of command, led to abuses against civilians during the SLCW that were high relative to counter counterinsurgency doctrine.

But both economic and political motivations are sometimes inadequate justifications for the RUF's and the SLA's simply barbaric and unnecessary level of violence. According to Human Rights Watch, 7,635 corpses were buried as a result of the January 1999 incursion into Freetown.¹¹¹ Keen suggests that the APCR/RUF rebels feared civilians and their militias because they stood beyond the system of collusion and therefore posed a substantial threat to their security.¹¹² By passing or harboring important information, civilians can hurt or betray, particularly because civilian women and children are not usually suspected. In our perverse world, civilians are sometimes feared simply because they are representative of some unknown and therefore possibly dangerous element. The ever increasing effectiveness of the CDFs Kamajors also added to the RUF's fear of the civilian population. Given that the Kamajors could not easily be targeted, indiscriminate and gruesome attacks against civilians became common as the Kamajors grew in strength.

Conclusions and Implications

All in all, access to Sierra Leone's rich natural and material resources—the alluvial diamond mines and unprotected villages—enabled both sides to finance a war that was increasing fought for economic motivations. The great wealth reaped from the vital economic centers had three primary effects. First, it enabled the fragmentation of both sides, because the individual detachments could break away from their former leadership and still fund their military campaigns with the income that they generated from mining and looting. Additionally, the diamond mines and material goods gained from theft were often used for personal enrichment thus reinforcing

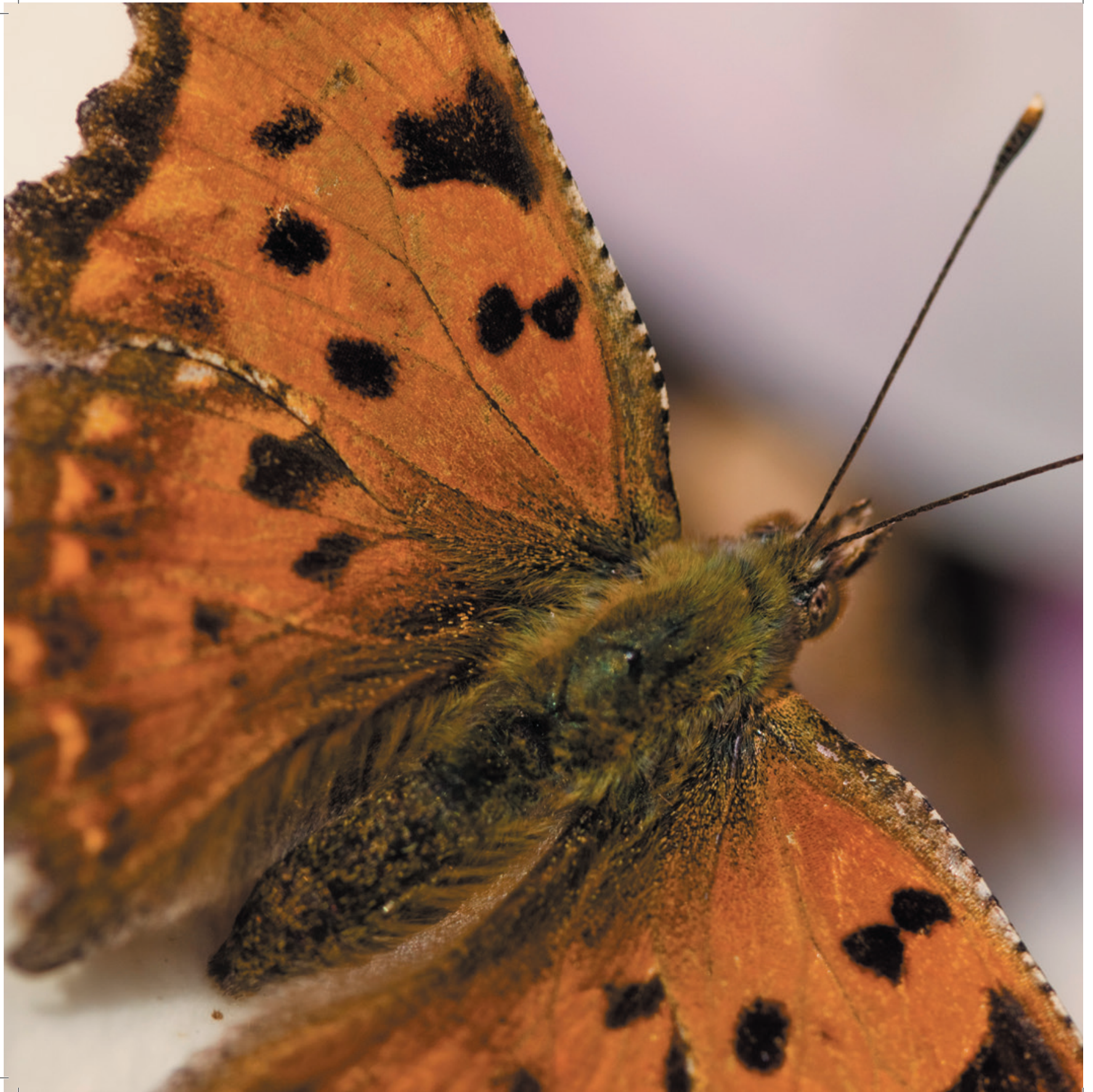


A Tinge of Summer, Lihn Do

the economic motivation to continue the insurgency. Sadly, the fragmentation of the warring parties and economic benefits gained from criminal and extractive efforts facilitated the brutalization of the civilian population because the lower ranks within the warring parties increasingly lost interest in political control. When the primary motivation of sustaining the war is the extraction of resources for personal enrichment, then it is more likely that both sides would be less inhibited to commit atrocities against civilians.¹¹³ Coupled with an increasing number of criminals and thugs that constituted the armies of both sides, the civil war took a barbaric turn. When civil war is no longer framed as a political contest for control of the state, but instead devolves into an economic contest between individual, local and foreign elements, then it can be assumed that the manner in which the civil war will be fought will

differ greatly from other intrastate conflict in which economic motivations play little role.

Although the focus of this report has concerned itself with only the SLCW, this analysis has similar implications for other cases in which the actors have access to valuable natural resources and real and imagined ethnic divisions are negligible. Importantly, these findings may improve our understanding of how to prevent civil war and also how to resolve them successfully. But even more importantly, if the actors in the Sierra Leone Civil War had access to economic and political advancement through other means than just civil war, then the existing conditions that invited the invasion would largely be marginalized and thus there would be little reason for conflict.



Most countries in the Western Hemisphere have reduced their incidence rates of HIV/AIDS, but Haiti continues to experience alarming increases in diagnosed cases.

This paper examines how political turmoil, poverty, violence and gender inequality contribute to the threat of HIV/AIDS throughout this region, and in particular, how gendered societal constraints make women especially vulnerable by compelling them to prioritize economically-beneficial sexual unions over personal health. Only when societal and economic factors are identified can a global eradication of the disease become possible.

POVERTY, INEQUALITY AND POWER DYNAMICS:

Women and their Role in the Haitian AIDS Epidemic

by Emily Purcell

Winged Orange
(detail)
Heather K. Salwach

The Haitian AIDS Epidemic: An Introduction

The AIDS pandemic has caused great alarm across the globe in the past thirty years. Initially, research efforts were launched in an attempt to control the spread of the disease: However, the infection spread rapidly. No longer just the disease of Caucasian homosexual men, AIDS has expanded to encompass people of all races, sexual orientations, and genders. The shift from distinct risk groups to an entire global population humbled all prevention efforts. Recent prevention efforts have resulted in reduced or leveled rates of HIV/AIDS incidents in countries such as North and Latin America. Unfortunately, not all regions are experiencing such favorable results. According to the Central Asian Regional Economic Corporation (CAREC), “The Caribbean remains the only region in the Western Hemisphere with steadily increasing rates of HIV.”¹ Areas within the Caribbean, including the Republic of Haiti, have been struggling to control the disease due to a long history of poverty and political turbulence. Just before the arrival of HIV/AIDS, there was a sizeable interval of political and social turmoil.² This chaos undermined preventative efforts, and was a catalyst for the rapid integration of AIDS into all aspects of Haitian society. Today, about six percent of Haiti’s adult population is infected with HIV (the highest rate of infection in the western hemisphere) and approximately 30,000 Haitians die from the disease each year.³ Risk of HIV infection spread from distinct groups, such as sex workers and homosexual men, to encompass the entire Republic of Haiti. Not only was the entire region affected, but the demographics of the illness shifted. Eighty-eight percent of initial cases of AIDS in Haiti were among men, but by 1983, women accounted for about a quarter to a third of all cases of the disease.⁴

The disease has shifted from prevalence in one gender to another. “By the end of 2007, 53 per cent of all reported cases of HIV in the country were among women aged 15 to 49 years old.”⁵ The expansion of AIDS throughout Haiti is fuelled by poverty, various types of sexual union, violence and power dynamics between genders—all of which are factors involved in gender inequality. Societal expectations and limitations for women draw the focus away from personal health and protection and towards economic support and stability.

Although dynamics within society and between genders drive the majority of the AIDS epidemic, women’s biological vulnerability plays a small role in their increased infection. HIV is transmitted more easily from men to women than from women to men. This is because the virus “is more highly concentrated in semen than in vaginal secretions; male ejaculate is orders of magnitude larger than that of females; anatomic considerations clearly favor viral penetration of the vagina (or rectum), in which infected ejaculate may easily pool.”⁶ Although this biological disadvantage is not the underlying cause of the epidemic in Haiti, it does highlight the overall theme of female vulnerability.

The Transition: The Risk Group Shift

When AIDS first emerged in Haiti, the high risk groups, such as gay men, drug users and prostitutes, were blamed for the spread of the disease. However, as the epidemic progressed, it shifted to encompass heterosexual couples and genders. It was clear in the early phases of the AIDS epidemic that the focus of the prevention programs was prostitutes and their customers. This was because the destitute conditions of Haiti drove women to sell their bodies to earn enough to survive. However, “the epidemic moved out from these primary risk groups to Haitians not at first regarded as populations at risk. In contrast

to the early years when cases of AIDS were observed almost exclusively in men, HIV infection in today’s society has now shifted to women and children.”⁷ When the first cases of the epidemic reached the village of Do Kay, the people infected were interviewed. Out of all the natives of Do Kay, “None of the first four villagers diagnosed with AIDS had a history of transfusion with blood or blood products; none used illicit drugs, and none had a history of homosexual contact or other ‘risk factors’ as designated by the CDC.”⁸ All four natives did share one characteristic, though—they all lived in severe poverty. Many women who contracted HIV, like those in Do Kay, were blamed to be sexually promiscuous. However, in a cross-sectional study conducted on pregnant women attending prenatal care in a hospital in Deschappelles, Haiti, “participants were primarily monogamous, with 61% reporting only one partner in their entire life... However, despite the monogamous behavior by the women, 61% of women reported that they perceived their primary partner had another partner.”⁹ Therefore, women were more at risk not because of their own sexual promiscuity, but because of their partners’ activity. Women with only a few partners still risked contraction of HIV. Subsequent research conducted in the impoverished regions of Port-au-Prince concluded that the “high seropositivity rate (8%) found in pregnant women 14 to 19 years of age suggests that women [in Cite Soleil] appear to acquire HIV infection soon after becoming sexually active. Moreover, this age group is the only one in which a higher seropositive rate is not associated with a greater number of sexual partners. Women with only one sexual partner in the year prior to pregnancy actually have a slightly higher prevalence rate... This suggests that they were infected by their first and only partner.”¹⁰ This research discounts the former belief that sex workers were the ones at highest risk

for contracting HIV. Because of this significant seropositivity rate, marriage and sexual unions are now included in the risk factors for women along with prostitution and drug use.

The Exodus Towards the Cities

Haiti has experienced a significant amount of political unrest, among other tumultuous conditions. The spread of the AIDS epidemic is fueled not only by poverty and economic instability, but also by political crisis. This is due to the fact that “anarchy and violence are likely to lead to higher rates of rape, and women in isolated areas who have no access to food for their families might be driven to form partnerships with soldiers or truckers.”¹¹ Because of the political unrest, the economy of Haiti is dwindling. People who live in the rural Haitian countryside travel to cities such as the capital Port-au-Prince in search of better economic opportunity. Because of societal expectations and restrictions that come into play with gender, women are often forced into unions with men for economic support. Women look to men, often soldiers and truck drivers, for a steady economic income. In a case-control

in rural areas. Searching for conjugal alliances with men with salaries, such as soldiers or truck drivers, suggests women’s economic dependence on men for financial security.¹³ These unions with salaried men are an indicator of poverty, one of the strongest causes for the increase in infection rates in Haiti.

Poverty, Inequality, and Sexual Unions

Poverty has been an issue in Haiti ever since colonists started producing sugar cane as a cash crop. Foreigners exploited the countryside and its inhabitants, and Haiti was left impoverished and desolate. Numerous political upheavals and a history of political unrest have encumbered Haiti with massive losses in unemployment, education, and health care. These issues affect all inhabitants of Haiti, but “women pay the greatest price in terms of low income, low literacy, high infertility, and high infant and maternal mortality.”¹⁴ However, despite their disadvantages in almost every aspect of society, Haitian women are expected to find ways to support themselves and their families. Many Haitian women turn to men as a source

Because of societal expectations and restrictions that come into play with gender, women are often forced into unions with men for economic support.

study of AIDS in rural Haitian women it was found that “the chief risk factors in this small cohort seemed to involve not number of partners, but rather the professions of these partners. Fully eight of the women with AIDS/ARC had histories of sexual contact with soldiers or truck drivers.”¹² The issue is that the men working in these professions have a higher risk for contracting HIV than do peasants living

of fiscal stability. One young Haitian woman profiled in Farmer et al., Acephie Joseph, is from the rural village of Do Kay. Acephie began to follow her mother to the market to carry produce to help raise money for her family. On one of her trips to the market, “she met a soldier, formerly stationed in Port-au-Prince, who began to make overtures to the striking young woman from Do Kay. Acephie ... looked

around and saw how poor [they] all were ... It was a way out, that’s how I saw it.”¹⁵ Acephie follows the trend of young, rural Haitian women entering sexual unions in exchange for monetary support. According to Farmer et al., Acephie is by no means a unique story: “In fact, in each case of AIDS diagnosed in Do Kay, young adults were driven to Port-au-Prince by the lure of an escape from the harshest poverty...women were straightforward about the non-voluntary aspect of their sexual unions: in their opinions, they had been driven into unfavorable unions by poverty.”¹⁶ Unfortunately, because many of these sexual unions are nonbinding, the men are free to leave the women without consequence at any point in the relationship. According to marriage laws in Haiti, a husband is obligated to support his wife and children. However, “less than 25 percent of Haitian men and women aged fifteen to forty-nine are married.”¹⁷ Many Haitian citizens simply cannot afford marriage, so many women are involved in relationships lacking compulsory economic support. If a Haitian woman who participates in a nonbinding union contracts HIV/AIDS, her sexual partner may leave her without consequence from the law. She will have to fend for the wellbeing of herself and her children. For many women in this scenario, finding another partner is their only option. This cycle contributes to the expanding practice of serial polyandry, another contributor to the spread of HIV/AIDS in Haiti.

Gender inequality in Haiti drives the phenomenon of serial polyandry. This survival strategy occurs when a woman has “a succession of partners, each one providing her with one or more children, along with the hope that the father may offer some support.”¹⁸ This phenomenon fuels the AIDS epidemic because sex becomes the only commodity that women can offer. The chain of consecutive marriages begins early for women, where cultural tradition

promotes early sexual behavior. According to a study conducted on Haitian street children, “adolescent girls are two to three times more likely to be HIV or syphilis-infected compared to boys of the same age due to sex with older men.”¹⁹ As with Acephie, young Haitian women cannot afford to refuse the sexual advances of older men. As related in Farmer, a young woman named Guylene from Savanette, Haiti, agreed to *plasaj*, a nonbinding union with a man twenty years her senior.²⁰ After the man left Guylene with two children, she met another man who offered a union once more. After three years, Guylene was diagnosed with HIV. After her positive diagnosis, Guylene reacted to the advances

boyfriend, Acephie returned to Do Kay.”²² Instead of providing her with a stable partner, Acephie’s pregnancy made her even more economically unstable and reliable on finding a man for support.

Both Acephie and Guylene spent their lives in search of a stable relationship. “In a country in which few couples legally marry, bearing a man’s child (and hence putting oneself at further risk for HIV) is one of the few ways in which a woman can legitimize her relationship with a man.”²³ The practice of *plasaj*, or nonbinding union, outnumbers marriages in Haiti three to one.²⁴ *Plasaj* is understood to be polygamous, for men can have multiple standing unions at once. This multi-part-

abuse. According to the Ministry of Women’s Affairs and Women’s Rights in Haiti, thirty percent of women living in Haiti suffer physical, emotional or sexual violence from their partners. Tanya, a young Haitian woman, recounts being abused by one of her partners. When she did not want to have sex, her partner “imposed himself upon [her] ... He blamed [her] lack of affection and even imagined that [she] was having an affair with another man. Finally, [she] had to let him do it.”²⁷ This psychological abuse degraded Tanya until she agreed to have sex with her partner. Violence, such as in Tanya’s relationship, is one of the many reasons for a lack of condom use throughout Haiti.

Although there have been significant increases in HIV knowledge, technology, and treatment around the world, there has been little change in condom use and protection from sexually transmitted infections in countries such as Haiti.²⁸ Part of the reason for the unchanging practice of unprotected sex is due to lack of education. “Of a national study conducted in Haiti...24% of women and 14% of men believed that HIV could not be prevented. Furthermore, 35% of women...surveyed knew that HIV could be prevented, but could not name any method of prevention.”²⁹ However, the majority of the explanation for the lack of adaptation in contraception use is due to gender inequality and relationship dynamics in Haiti. Many women in Haiti are aware of the risks of unprotected sex but fear the consequences of asking their partners to use protection more than contracting HIV. According to a Yvette Gentil, a woman who assists a program for female victims of sexual violence in Haiti, “One very common practice is that of women being beaten for having demanded the use of condoms from their male partner.”³⁰ However, the fear reaches beyond just physical violence. According to Millord Dexai, Coordinator of the Collectif des Femmes Universitaires, many

Many women in Haiti are aware of the risks of unprotected sex but fear the consequences of asking their partners to use protection more than contracting HIV.

of another interested soldier, who had a wife and two children.²¹ Guylene’s story is full of poverty and death, and she ends up with HIV infection at a young age. However, despite her disease, Guylene conceives another child. In doing so, she most likely infects her partner, who goes home and infects his wife. This necessity to find a partner drives the AIDS epidemic in Haiti. Although Guylene understood that she was infected with AIDS, she had little choice but to find someone to support her. In the end, however, she was left relying on her elders to care for her remaining children. This vicious cycle continues until the woman finds a stable partner or death. The act of acquiring a man and bearing his children can drive a woman further into poverty. For instance, Acephie worked in the city until she discovered that she was pregnant: “This displeased both her partner and employer. Sans job and sans

ner system encourages the spread of infection. However, the sexual relations are not always willing on the part of the woman.

Sexual Violence: The Fear of Retaliation

The patterns of sexual unions in Haiti are driven by the necessity of women to find stability, in economic and social terms. These economic power differentials make it difficult for women to exercise control in contraceptive decisions.²⁵ According to Devieux et al., “A study among women in rural Haiti found that 54% of women reported forced sex. Factors related to economic vulnerability ... as well as a younger age and having STD-related symptoms were associated with forced sex.”²⁶ Violence against women, such as forced sexual relations, promotes the spread of HIV infection. Forms of such violence include psychological violence as well as physical

women do not ask their partners to use condoms because they are afraid of being accused of disloyalty.³¹ By being accused of infidelity, they are afraid “of jeopardizing a relationship in the building of which they have invested energy, emotion and many years of their life.”³² Many women are afraid of losing their economic stability if they ask to use protection. To some women, this fear of losing support is more imperative than the fear of contracting HIV.

Women’s fear of retaliation is one factor relating to the lack of condom use. Another is the cultural belief system, where gender inequality is supported by cultural convictions. For instance, some Haitian women believe that a woman is only right to ask her partner to use a condom when she is certain that he is being unfaithful; otherwise, she has no right to ask for protection during sexual intercourse.³³ Haitian society drives the insubordination of women economically and sexually so that they have little say when it comes to protection from sexually transmitted diseases.

Gender Power Dynamics

All of the factors driving the spread of HIV infection deal with the dynamics of power between genders. Employing protective methods, such as condoms during sex depends entirely on the influence that each partner has within the relationship. Australian sociologist Raewyn Connell is the author of the theory of gender and power, which is comprised of three major categories: the sexual division of labor, structure of cathexis, and the sexual division of power.³⁴ The sexual division of labor deals with control of money and economic stability. The structure of cathexis deals with gender differences in the investment of emotional energy in the relationship. The sexual division of power deals with the dynamics of power between the genders within the relationship, which often reflect the forces of power between



Turning the Corner, Tom McMurtrie

genders within society. These three sections are vital in understanding the forces behind the AIDS epidemic. For instance, the sexual division of labor dictates income and economic consistency, which influences sexual risk behaviors taken by Haitian women in search of economic support. The sexual division of power “seems particularly relevant to the social and economic environment of rural Haiti...Lack of economic resources, especially among women, can reduce decision-making power and has been linked to increases in HIV and STI risk.”³⁵ Women who are involved in relationships with power discrepancies often experience inferiority when it comes to decisions relating to contraceptives. According to the Bulletin of the Pan American Health Organization, in 1993 “61% of Haitian women felt it was exclusively the males’ right to choose whether or not to use a condom.”³⁶ The power dynamics of gender dictate women’s access to personal health and protection. The authority of the men in Haiti dominates that of the women in many aspects of the relationship. When sexual power is not shared equally between the two genders, decisions involving sexual interaction lead to a lack of protection from sexually transmitted diseases like HIV/AIDS.

The unbalanced power within a relationship is a catalyst for the spread of HIV infection. While men often have authority over women, women can also wield power over men. Many women refer to their sexuality as “‘my property’ or ‘my capital,’ thus defining sex in terms of a marketable commodity.”³⁷ This commodity gives women the power to seek out an economically supportive relationship. This influence, however, is fickle. Refusing to partake in sexual relations is not an option that many women feel they possess. Women fear that, by refusing sex to their partners, “they will send the man back out to the streets to find a more compliant woman who will infect him with HIV, which

he will then carry back to the woman at home. Women tend to agree that refusing sex amounts to less than a death warrant for themselves.”³⁸ For this reason, toying with sexual power is a dangerous game. The forces of power within relationships and society as a whole drive the insecurity of women, the lack of attention to contraceptive measures, and therefore, the AIDS epidemic.

Pregnancy and AIDS

A significant impact that serial polyandry has on the AIDS epidemic is through cases of AIDS in children. In 1987, 3.6 percent of all cases of AIDS in Haiti were pediatric cases; just two years later, that statistic had risen to 6.6 percent.³⁹ This statistic would be even higher, but most of the children who are infected die before their HIV develops into full-blown AIDS. Also, because of infrequent medical care, many mothers are not aware that they are infected with HIV until they visit the hospitals for prenatal care. They most likely will pass their infection on to their children, who die from complications during the first years of development. Based on data collected by various research groups, “approximately seventy thousand seropositive women in Haiti will give birth to between twenty-eight hundred and forty-five hundred HIV-infected infants a year, or an average of eight to twelve new cases a day.”⁴⁰ Also, based on data from the Centers for Disease Control and the World Health Organization, HIV infection, rather than malnutrition, was found to be the biggest contributor to child mortality in Haiti.⁴¹ This figure is noteworthy, considering Haiti ranked above India and Sudan in under-five child mortality in 2000.⁴² Societal expectations compel women to have children, and women spread HIV infection through childbirth: this cycle is one of many that perpetuates the AIDS epidemic in Haiti.

Conclusion

Haiti has always experienced poverty and inequality. With each successive political coup, poverty, violence and disease have wracked the struggling nation. Therefore, it was no surprise that AIDS emerged as a notable sexually transmitted infection. However, the spread of the infection from risk groups in the cities, such as prostitutes and homosexuals, to heterosexual couples across the countryside was a disconcerting dilemma. Stigma and discrimination shrouded the disease as researchers and anthropologists searched for an explanation. Finally, gender inequality emerged as a culprit of the spread of infection. The disparity between genders determines “the extent to which sexism will mark the course of HIV disease. In highly sexist settings, the disclosure of HIV infection is more likely to provoke stigma and threat of domestic violence than in environments where women enjoy gender equity.”⁴³ Domestic violence is a consequence of the power discrepancy within relationships. Fears of retaliation or abandonment promote habits of unprotected sex and exposure to HIV. Societal expectations drive women into unwilling unions and, perhaps, even deeper poverty: Women bear children to legitimize their relationships, and are often left without a partner for support. All of these factors driving the spread of HIV infection are connected in a complicated system of stigma, expectation and culture. By finally understanding the underlying causes of the AIDS epidemic in Haiti, prevention efforts can be better directed and perhaps level the increasing number of AIDS cases. Global eradication of the disease is a fantastical goal. Nevertheless, understanding the causes of disease proliferation is a vital step in the complex battle against HIV/AIDS.

ARTWORK



alexandra white
Crusta Mechanica

sarah wing
The Peaceful Warrior





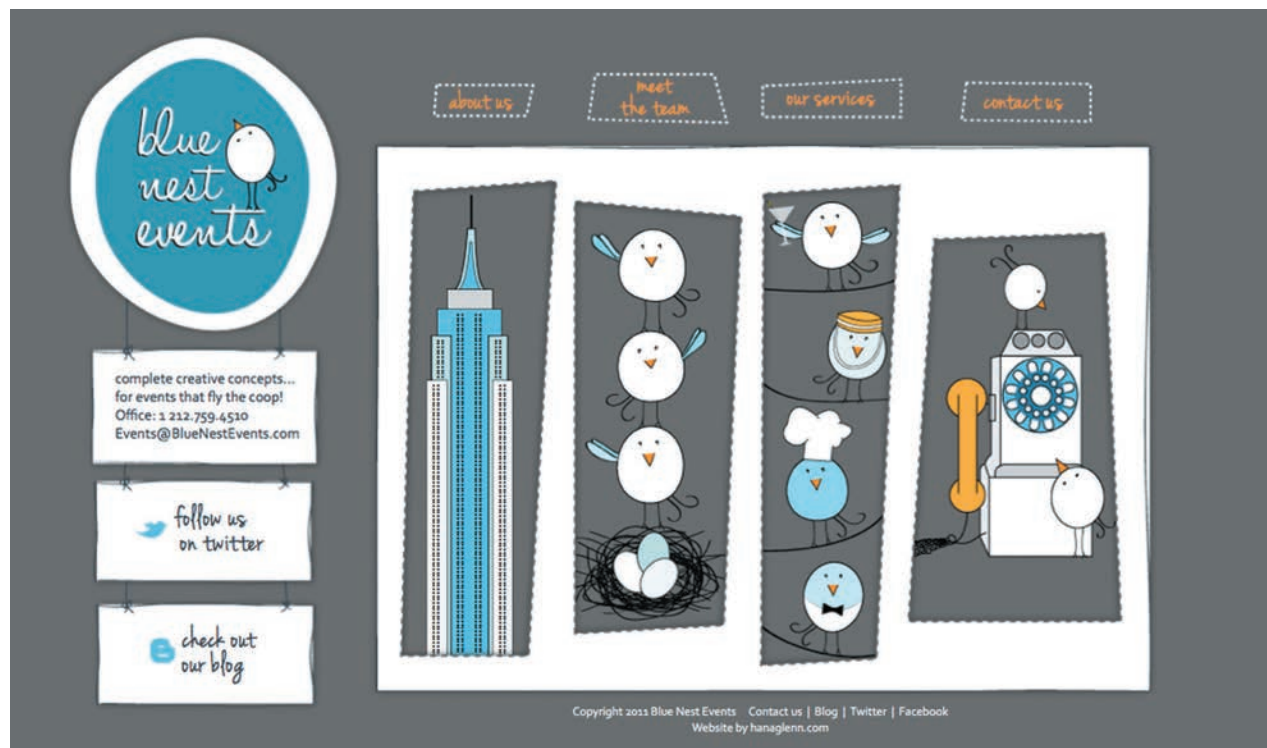
hannah han
My Sister



logan mcgee
Surface



max gilbert
Crayo-yos



hana harrison
Blue Nest Events
bluenestevents.com



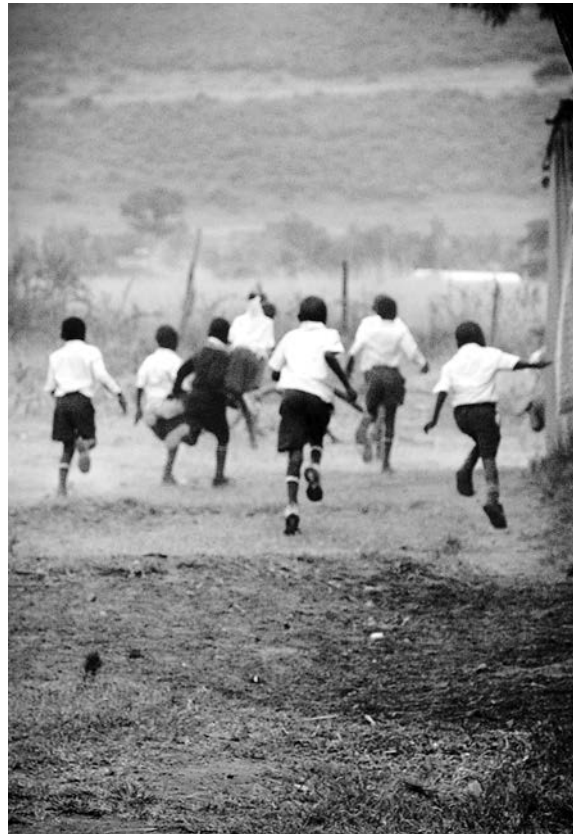
erin fox
Blonde



emily strackhouse
Window View



hannah cochran
Dot Window Display



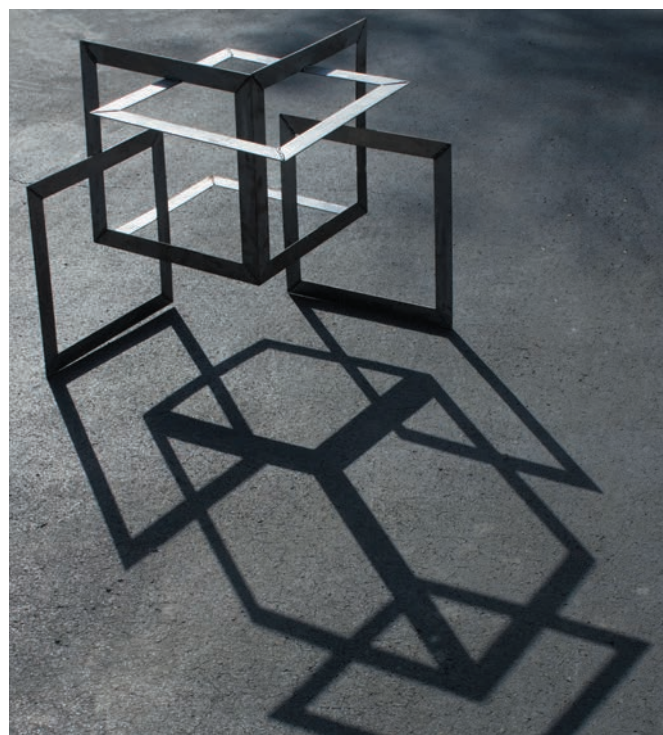
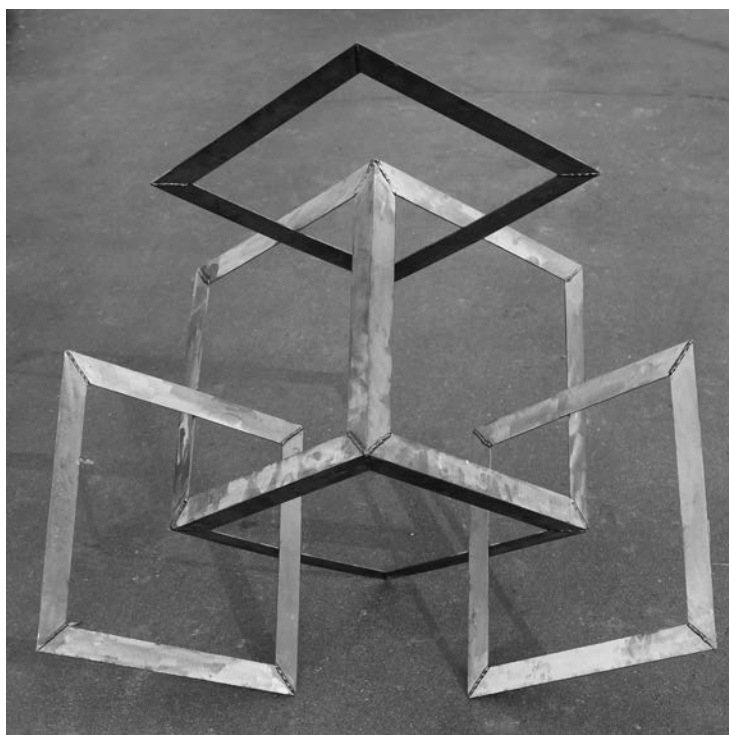
linh do
Never Let Me Go



**michael w.
moore**
Desk

heather k. salwach

Trinity



about the contributors

Sam Andersen

Sam Andersen is an art history and graphic design double major in her third year. She is drawn to an aesthetic of “clean imperfections” in that she incorporates hand drawn details in her graphic work. The focus of this project was to mimic the photorealism of Chuck Close.

Kenny Barry

I am a junior architecture and economics double major from Scottsdale, AZ. It is my intention to strike a nerve within the viewer of my work; a nerve which triggers a memory, even if only for a moment.

Hannah Cochran

I am from Fair Oaks, CA. I am a senior comprehensive design major. I played varsity soccer all four years and I’m working at Lilly Pulitzer as a junior store designer near Philadelphia, post graduation.

JC Eckstine-Gomez

JC Eckstine-Gomez is a senior graphic design major and entrepreneurship minor. Originally trained as a fine artist, he has actively explored the field of graphic design since the age of 14. JC adheres to his philosophy that the simplest and most basic designs can often best communicate an idea or message.

Stephen Erbrick

Stephen Erbrick is a graduate of Lehigh University. He currently lives in Washington D.C.

Linh Do

Linh Do is a senior international relations major and a former photo editor for *The Brown and White*. She is from Hanoi, Vietnam and has also lived in Eastern Africa for half a year. Her photography works focus on nature, people, and the delicate connection between reality, vision, and imagination.

Erin Fox

Erin Fox is a senior at Lehigh from Pittsburgh, PA. She has a major in graphic design and minor in art history with a passion for whimsical illustrations.

Tierney Gallagher

I am a junior history major working toward my Masters in Education as part of the five-year program, with plans to become a history teacher.

Max Gilbert

Max Gilbert is a senior in the Lehigh University design Arts Program, majoring in product design. Following his graduation in the spring of 2012, Max plans to intern as a creative professional for a number design agencies before returning to graduate school and receiving his masters in design.

Hannah Han

Hannah is a freshman architecture major and would possibly double in fine arts.

Hana Harrison

I was born and raised in El Paso, TX before making the trek to Pennsylvania. As a Lehigh senior, I am studying graphic design and computer science. Next year, I plan to stay at Lehigh to pursue a Computer science masters degree so that I can continue to foster my interest in web and software development.

Jessica Johansson

Jessica Johansson is a third year architecture student.

Jacob Kennon

Jacob Kennon is a senior economics and international relations major and is pursuing a career in public service. He grew up in Seattle, WA.

Julia Klitzke

Julia is a junior majoring in architecture and civil engineering. She is in the Eckhardts program and is a member of the Phi Sigma Pi honors fraternity. She is currently studying abroad in Denmark.

Stephen Kuschman

Stephen Kuschman is a senior architecture major with a minor in engineering from Westchester NY.

E'lana Lemon

I am a double major in English and art. I love creating portrait art, design, photography and watercolor works.

Gina Mason

Gina Mason is a senior English major hailing from Wilson Borough, Pennsylvania. After receiving her Bachelor of Arts in English in May '12, Gina plans to stay at Lehigh as a President's Scholar to complete her Master of Education and teacher certification in secondary education.

Logan McGee

Logan McGee is a design major with concentrations in both product and graphic design. He is also pursuing an engineering minor, which heavily influences his designs and other creative artwork.

Tom McMurtrie

Tom McMurtrie studies architecture and experiments with photography, much of which derives from his travels in China, Japan, and Finland. His work focuses on themes such as rituals in the built environment and materiality.

Michael W. Moore

Michael W. Moore is a senior IDEAS major with concentrations in mechanical engineering and design. He enjoys the tactility of working with wood and other materials, and strives to bring those feelings into the pieces he designs.

Gina Notaro

Gina Notaro is a senior majoring in behavioral neuroscience. Next year, she will be attending graduate school to study biomedical engineering.

Anu Paulose

Anu Paulose is an avid lover of literature who double majored in English and history at Lehigh University. Among Anu's achievements include her acceptance into Phi Beta Kappa, obtaining departmental honors in English, and being rewarded the George D. Harmon Memorial Award for Academic Excellence in History. She hopes to one day pursue a degree in law.

Erika M. Peters

Erika M. Peters is a double major in political science and global studies, with specific interests in comparative politics and current events. Upon her completion of a Masters degree in Political Science from Lehigh University, she intends to continue her education at law school.

Emily Purcell

I am a biology and anthropology double major with a health, medicine and society minor from Bethesda, Maryland (although my heart belongs to Washington, D.C.). After graduation, I hope to work in the field of public health, preferably with international disease prevention and treatment. I am grateful for the opportunity to have my work shared with the Lehigh community.

Heather K. Salwach

Heather K. Salwach is a senior majoring in graphic and product design. *"My idea of modern design is one of profound transdisciplinarity; a synthesis of disparate elements and various spheres of knowledge into a grand, united, and altogether incomparable whole."* After graduation, she will pursue a career in design in the Philadelphia metropolitan area.

Chelsea Sheridan

Chelsea Sheridan is a graphic design senior. She is graduating in May and is excited to pursue her career in graphic design wherever it may lead!

Kathryn Stevens

I am currently a junior partaking in the IDEAS program at Lehigh. I have concentrations in both architecture and environmental engineering and I am hoping to apply environmental sustainability concepts to architecture.

Emily Strackhouse

I'm a finance major and psychology minor and I play for the Varsity Women's Soccer Team. I've always had a strong interest in photography and this picture is an outside view of the Stockton Inn's tavern bar.

Karen Timmerman

Karen Timmerman is a graduating senior majoring in international relations with a minor in Biology. She enjoyed doing the research for this paper very much and is fascinated by the interdependence the global community has with oil.

Alexandra White

Alexandra White is a senior architecture student.

Sara Wing

"My name is Sara Wing and I am a senior architecture major with a minor in engineering. I enjoy using art as a medium of personal expression and communication and hope to pursue a higher degree in design in my hometown of Chicago after graduation."

Pei Pei Yang

Pei Pei Yang studies architecture and civil engineering. She seeks to capture poetic qualities in mundane industrial subjects with an emphasis on space, order, and light.

endnotes

Women and Unionism: How the Shirtwaist Makers Strike of 1909 Precipitated Female Organization and Unionism in the Garment Industry

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 - 30 Ibid., 615.
 - 31 Keen, *Conflict*, 84.
 - 32 Gberie, *A Dirty War*, 127.
 - 33 Hirsch, *Sierra Leone*, 6.
 - 34 Gberie, *A Dirty War*, 33.
 - 35 Keen, *Conflict*, 41.
 - 36 Bergner, *In the Land*, 15.
 - 37 Hirsch, *Sierra Leone*, 53. As cited in Keen (*Conflict*, 12), according to the most recent census in 1985, approximately 50% of Sierra Leone's population was under the age of eighteen.
 - 38 Weinstein, "Resources," 600.
 - 39 Gberie, *A Dirty War*, 74.
 - 40 Abdullah, *Between Democracy*, 100.
 - 41 Lujala, "A Diamond Curse?," 540.
 - 42 Keen, *Conflict*, 42.
 - 43 Keen, *Conflict*, 55. Prior to 1994, Liberia had never exported more than \$10 million worth of diamonds.
 - 44 Hirsch, *Sierra Leone*, 56.
 - 45 Abdullah, *Between Democracy*, 111.
 - 46 Keen, *Conflict*, 55.
 - 47 Ibid., 56-57.
 - 48 Ibid.
 - 49 Ibid., 36.
 - 50 Abdullah, *Between Democracy*, 34.
 - 51 "Sierra Leone//Amnesty International," Amnesty International//Working to Protect Human Rights, accessed December 3, 2010, <http://www.amnesty.org/en/region/sierra-leone>.
 - 52 Keen, *Conflict*, 82.
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 - 54 "Sierra Leone//Amnesty International."
 - 55 Ibid.
 - 56 Alfred B. Zack-Williams, "Sierra Leone: the Political Economy of Civil War, 1991-98," *Third World Quarterly* 20.1 (1999): 154.
 - 57 Ibid.
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 - 59 Gberie, *A Dirty War*, 102.
 - 60 Ibid.
 - 61 ULIMO was a rebel group that participated in the first Liberian Civil War in support of President Doe.
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 - 63 Keen, *Conflict*, 107.

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 65 Ibid., 143.
 66 Ibid., 150.
 67 Ibid., 160.
 68 Ibid., 49.
 69 Gberie, *A Dirty War*, 74.
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 74 Abdullah, *Between Democracy*, 150.
 75 Gberie, *A Dirty War*, 97.
 76 Keen, *Conflict*, 207.
 77 Gberie, *A Dirty War*, 101.
 78 Ibid., 102.
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 81 Gberie, *A Dirty War*, 200.
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 90 Ibid., 248-55.
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 98 Keen, *Conflict*, 56.
 99 Ibid., 56.
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 103 Lujala, "A Diamond Curse?," 540.
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 108 Ibid., 43.
 109 Zack-Williams, "Sierra Leone," 147.
 110 Richards, "To Fight," 580.
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 112 Keen, *Conflict*, 195.
 113 Huepel and Zangl, "On the Transformation," 24.

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