

CONSTRUCTING GENDER IN JOSÉ MARTÍ'S BROOKLYN BRIDGE CHRONICLES

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Fragmentation of the object of production necessarily entails the fragmentation of its subject.

-- György Lukács¹

PRELIMINARIES

Recent attempts to understand José Martí's assessment of both gender² and technology³ have reached contradictory conclusions. Although usually dealt with separately, this essay proposes that Martí saw a relationship between these dual themes. Here, I explore three chronicles⁴ from 1883 which Martí dedicated to the construction and opening of the Brooklyn Bridge: "El Puente de Brooklyn", "Los ingenieros del Puente de Brooklyn: Roebling, Padre e Hijo," and "Dos damas norteamericanas."⁵ By examining these chronicles' engagement of machine technology and gender, I outline what the Bridge suggested to Martí about North American culture, the role of the body, and labor practices.⁶ Written when Martí's conceptions of masculinity and femininity were in flux, I argue that his Brooklyn Bridge chronicles situate gender as both biologically determined and, somewhat paradoxically, socially constructed,⁷ modified by revolutionizing modes of production. I begin with the best-known of the three pieces, "El Puente de Brooklyn."⁸

A MONSTROUS STRUCTURE

Published both in New York City's *La América* and Buenos Aires's *La Nación* in June of 1883, "El Puente" describes the construction and opening of the Brooklyn Bridge. In Martí's day, the Bridge was celebrated for harnessing the powers of practical science and industrial knowledge. Linking what were the first and third largest cities in the United States—New York and Brooklyn—the Bridge represented technological advancement, movement, and the collapse of social barriers.

To build the structure, the Bridge's Chief Engineer, John W. Roebling, employed various technical innovations.⁹ Most importantly, Roebling chose pneumatic caissons to excavate earth for the Bridge's two towers, a technique used for the first time in the 1850s at Eads Bridge in St. Louis. Differing from shallow caissons which are open to natural air, pneumatic caissons are watertight, inverted wooden boxes closed at the top and filled with pressurized air so as to impede earth and water from entering; the caissons are then sunk until they reach bedrock (see figure 1). Workers were then lowered to the bottom of the East River through an airtight tube.

In yet other ways the Bridge represented technological advancement; it housed gears, pulleys, and electrical wires, and the structure's much-discussed five thoroughfares—often shown in cross-sectional illustrations of the era,¹⁰—allowed for trolleys, carts, steam engines, telegraph wires, and even a pneumatic mail tube stretching between the New York and the Brooklyn post offices.¹¹ This motive (not static) character is emphasized in the Bridge's first review, written by architectural critic Montgomery Schuyler in 1883.¹² Finally, on the night of

May 19, 1883, the Brooklyn Bridge became the first bridge to be electrified, immediately becoming a luminous symbol of a technologically savvy world to come.¹³ Newspapers described the otherworldliness of the Bridge's lamps, and some wondered whether pedestrians were endangered by such a considerable quantity of electricity.¹⁴ This sense of danger underscored the sublimity of crossing the Bridge at night.¹⁵

Martí underscores these technological aspects of the Bridge in "El Puente". First, he details the Bridge's dimensions—its quantities, weights, and distances—in a hyper-rational vernacular of science and technology. As Ramos shows, Martí includes mathematically precise language among his otherwise prolonged baroque descriptions, thus highlighting the writer's claims to autonomy, social pertinence, and 'naturalness' against modernity's deadening rationality.¹⁶ Measurements and quantities, counterposed with poetic prose, ultimately underscore the artist's independence.

Qualitatively, the structure inspires fear, awe, and—as I argue—is repulsive. In "El Puente", grotesque and zoomorphic adjectives are used: the massive structure is "menos bella que grande" (432). Its cables—"4 dobles médulas de hierro" (428)—are described as a "gigantesco sustentáculo" (425). They are "gruesos y blancos" (426), or like "colosales boas" (426). Furthermore, the cable unwinds "como anillos de serpiente chata" (428). Similarly, in Martí's "Carta de Nueva York" dated June 20, 1883, the cables appear ready "a morder" (418). In "El Puente", the Bridge evinces "cóncavas mandíbulas" (429), while each of the dredgers digging the East River is a "draga famélica...cerrando de súbito los maxilares poderosos" (429). The Bridge's "estructura corpulenta" (429) seems animalistic and alive, like a "sierpe aérea" (423), or a "serpiente chata que anda" (430), and the structure's towers are "dos cuerpos monstruosos de granito,--médulas que remata luego armazón intrincada de nervios de acero" (428) which "muerden la roca en el fondo del río" (424) as if it were a "diente de un mamut" (423). Finally, the Bridge's plate supports are "rematadas por delgados dientes, como cuerpo de pulpo por sus múltiples brazos" (427) and across its thoroughfare, "se ven pasar como...monstruos menores, los trenes del ferrocarril elevado" (431). All told, the structure is portrayed as monstrous, inhumane, and given to violence;¹⁷ its grandeur is terrifyingly sublime.¹⁸ Significantly, although Roebling often characterized the Bridge, in an Emersonian way, as the perfection of nature, in Martí's piece it is nature's aberration.

Yet, while the Bridge has the physiology of predatory animals—jaws, teeth, and body—the Bridge's workers appear less than human: Martí describes them as "hombres tallados en granito" (424) or "[e]statuas talladas en fango" (424). When the Bridge is finished, Martí describes the public that has come to "hormiguar velozmente sobre la sierpe aérea" (424), while the Bridge itself appears "como lengua de hormiguero monstruoso" (426). The leviathan structure devours men and thus the cables "se mecen, a manera de boas satisfechos" (426)—a simile employed twice in "El Puente". The "trabajadores febriles, en cuyo cerebro hinchado la sangre precipitada se aglomera" (429), are likened to worms living parasitically in the Bridge's "entrañas" (430).

Martí underscores the Bridge's anthropophagic character both in "El Puente" and in his May 14 "Carta de Nueva York" by evoking the Cyclops episode from Homer's *The Odyssey*. In

"El Puente", the four Bridge cables appear "luengos, paralelos y ciclópeos" (423). And in the May 14 "Carta" Martí describes the Bridge as a "poder ciclópeo" (417) and its towers as "fábricas ciclópeas" (418). Yet while Homer's fable points up the power of human ingenuity over brute strength, in "El Puente" the value of human intellect is helpless next to the structure's power. Describing technological behemoths like the Bridge as Cyclopean was not uncommon in the nineteenth-century.¹⁹ Like Homer's Cyclops Polyphemus episode, Martí's Bridge, too, includes a cavernous structure: the aforementioned caissons, where workers' bodies were particularly ravaged. Here, in the depths of the East River, where the bedrock was deeper than original estimations, communication with the surface of the water was impossible. Martí dramatizes the workers' chthonic descent into the caissons in hellish terms. Workers appear "graves y silenciosos...fríos, ansiosos, blancos y lúgubres como fantasmas" (428); while dredging up the mucky river floor "[n]i silbar pueden los hombres que trabajan en aquella hondura" (429). The effects of the Bridge's construction become clear: working in the infernal bowels of the earth has silenced the Bridge's workers and—both literally and figuratively—they cannot whistle. The caissons' constrained environment were known to produce strange acoustics: voices took on a tinny, even 'girlish' quality.²⁰ Due to their immensity of the Brooklyn Bridge's caissons, these odd effects were intensified; the Bridge's caissons were the largest that had ever been built, with their base measuring half a city block in length. Apprehended metaphorically, the caissons' effects appear even more deleterious: workers have lost that which most defines the human—the power of language—"silbar" serving as a trope for oral expression and humanness itself. Thus while the Bridge's workers have lost their humanity—their voice—the lifelike Bridge makes itself heard. For instance, the suspension cables are likened to a "lira ponderosa...que empieza a entonar ahora sus cantos" (425); they are "gruesos y blancos, que, como serpiente en hora de apetito se desenroscan y alzan *el silbante cuerpo* de un lado del río" (426, *Italics mine*). Yet other sections of the Bridge are capable of expression: "las colosales torres: *zumban* sobre nuestra cabeza" (425, *Italics mine*) and earth is excavated for the Bridge's towers by "dragas sonantes" (429). All told, while fatigued workers are silenced, the lively Bridge literally 'whistles' across the East River. The animated Bridge has seemingly scaled a link on the evolutionary chain while workers, alienated from their labor, have devolved to a pre-human, atavistic, and invertebrate state.

That the workers are characterized as infantile, inanimate, or non-human vis-à-vis the structure symbolizes the extreme, even dangerous working conditions demanded by the Bridge. Those who dug out the bedrock, referred to as "sandhogs," worked around the clock,²¹ while the carbide lamps used inside the caisson regularly caused fires. During the Bridge's 14-year construction, more than 30 construction workers perished at the Bridge, the majority of them stricken with decompression disease (also known as 'caisson disease' or 'the bends').²² An astounding 110 cases of decompression disease were reported between May 31, 1872 and January 25, 1872.²³ This excruciating sickness provoked great pain in workers' joints and muscles after they had resurfaced. Oftentimes workers fell to the ground writhing in pain, sometimes vomiting uncontrollably. Although we now know that the sickness is caused by nitrogen bubbles in the bloodstream which form after an overly quick exit out of the caissons' pressurized air, the origin of the disease was unknown during the Bridge's construction. Thus for many of the immigrant men who worked at the structure—most of them nineteen or twenty years old—obtaining a job at the construction site was thus both a blessing and a curse: workers earned

a hefty 2 dollars and a quarter daily when digging reached 70 feet below sea level even though the costs of the job were great.²⁴

In Martí's chronicle, these grueling labor conditions constitute a corporeal sacrifice, a theme which greatly intrigued him.²⁵ As noted above, allusions to corporeality are central from the first lines of "El Puente" "Palpita en estos días más generosamente la sangre en las venas de los asombrados y alegres neoyorquinos" (423). Even readers' knowledge of the Bridge is garnered via tactile senses: "De la mano tomamos a los lectores de *La América*" (423). Martí describes the structure as a site of bodily sacrifice, as workers offer themselves to the Bridge.²⁶ We read:

los albañiles encajaron en aquella altura, como niños sus cantos de madera en torre de juguetes de Crandall, piedras a cuyo choque ligerísimo, como alas de mariposa a choque humano *se despedazaban los cuerpos* de los trabajadores, o se destapaba su cráneo. (430, italics mine)

Significantly, the workers' bodily destruction is explained by verbs normally employed to discuss the physical changes that structures undergo, like "despedazar" and "destapar (430)," thus underscoring that the Bridge's construction and the workers' physical degeneration are part of the same production processes. For Martí, the Bridge simultaneously symbolizes creation and destruction. Appropriately, these dual processes are described via a chiasmic structure: "construyeron, sobre el cajón que con su entraña de hombre se iba hundiendo, la torre que con su pesadumbre de granito, se iba levantando" (430). The antagonistic gerunds connote contrary movements, and thus emphasize the dynamic between man and mechanism, construction and collapse, sacrifice and invention. Moreover, and like other thinkers of his day, Martí, too, describes human physiology and psychology via mechanical terminology.²⁷ In the caissons, men's chests doubled in size; thus when they emerged from the depths, their internal pressures—not unlike the subterranean spaces themselves—went dangerously awry. Some engineers of the Bridge even likened the body's adverse reactions within the caissons to valvular technology.²⁸ Bricklaying and the immolation of men were interconnected processes of specific modes of production.

Corporeal metaphors are invoked in yet other ways in "El Puente", when Martí alludes to past civilizations known for their predilection for bodily sacrifices. Heralded as the 'eighth wonder of the world,' in the days immediately before and after its opening, the Brooklyn Bridge was routinely compared to marvelous structures built by past civilizations. Had technological advancements ushered in a new era of enlightenment and prosperity or rather, had they revived inhumane conditions and servitude thought to have been defeated?²⁹ In "El Puente", Martí mentions the Trojan Horse, the Acropolis, and the Great Pyramids of Egypt, and alludes to the Aztecs, the ancient civilization perhaps most famous for its predilection for human sacrifice: "Ya no se abren fosos hondos en torno de almenadas fortalezas; sino se abrazan con brazos de acero, las ciudades" (432). Moreover, "[m]ejor que abrir pechos es juntar ciudades" (432) Martí explains, thus drawing distinction between the physical travails of the Bridge workers and those sacrificed at Templo Mayor at Tenochtitlán. It is indubitably better to build bridges than it is to destroy bodies. And yet they are in no way described as separate processes in "El Puente."

Martí's contrast rings hollow because it belies every worker's tortured body that has been detailed in the chronicle until this final paragraph: the juxtaposition of wrenching a victim's heart out and building a bridge reads like a comparison. In this way, even while describing the Bridge as a wonder of technological know-how and a triumph of ingenuity, Martí signals other forces at work: "El Puente" does not flatten the Bridge's contradictory meanings rather, it simultaneously celebrates and censures this technological behemoth, thus depicting one of modernity's most troubling antinomies: humanity's newfound ability, via our immense technological know-how, to build structures more formidable than the sum of their parts, but whose construction demands labor practices (repetitive, strenuous, and dangerous) which do not make manifest the highest capacities of our species.³⁰ Those modes of production sap that which most distinguishes us from the animal world—our ability to dream beyond ourselves—and strangely brings us closer to the lowest common denominator of existence. The technologized modes of production workers confronted at the Bridge transformed them into little more than beasts of burden. The Bridge's grandeur occludes the stamp of individual hands, and the generalized immiseration of work appears a necessary byproduct of progress: tellingly, in "El Puente", Martí refuses to name the Chief Engineer John W. Roebling, but instead wonders who actually built the Bridge, thereby underscoring how the labor used to construct such a structure is necessarily rendered opaque: "¿cómo anclaron en la tierra esos mágicos cables? ¿Cómo surgieron de las aguas, con su manto de trenzas de acero, esas esbeltas torres?" (426).³¹

Martí develops his extended body metaphor further when language of masculinity and femininity is invoked. As arduous labor ravages workers' bodies, Martí suggests that their status as males—traditionally thought to stem from biological, physiological differences—is subsequently transformed.³² Not only animate and grotesque, the Bridge is also feminine, especially compared to its workers, who are characterized as her (the Bridge's) emasculated male counterparts. Bricklayers and carpenters are "soldados del puente" (431) who "coronan la torre" of the structure (423). A brotherhood of soldiers crown the Bridge's tower as if they were knight errants, sacrificing themselves to a sadistic queen.³³

Furthermore, while the Bridge is characterized as a place of inverted hierarchies, Martí's metaphors suggest a barbaric servitude befitting medieval times. Thus in "El Puente", the vapor rising from the workers' steam engines whips around the structure "como galán que *corteja a su dama*, un vapor daba vueltas al pie de la torre de Brooklyn" (430, *Italics mine*). Martí describes how 'liberty' personified—namely the Statue of Liberty—has given birth to the Bridge, structure which is, in turn, also described as female: "la Libertad, que en esta ciudad ha dado *tal hija*. La Libertad es la madre del mundo nuevo, -- que alborea" (423, *Italics mine*). In this way, the Bridge epitomizes modernity's paradox; Martí reads its construction as an attack on the body that, in turn, troubles traditional notions of masculinity and femininity. Certain mechanized forms of labor have diminished patriarchy and heralded new slavery.

That Martí's chronicle is simultaneously celebratory and deflationary is, in a sense, not surprising. When it opened on May 24, 1883, an estimated 150,000 people crossed the Bridge; however, the mood on the structure soon became riotous, as rouges raced horses, guttersnipes threw rocks at passing boats, and thronging crowds stormed the walkway.³⁴ Less than a week later, on the Sunday of Memorial Day weekend (May 30, 1883), 35 people were wounded and 12

were trampled to death in the structure's stairway after someone reportedly shouted "The bridge is falling!"³⁵ The Bridge, a beacon of technological triumph, had become a site of tragedy. Appropriately, Martí's chronicle concludes with a ghastly vision of "millares de mujeres que sollozan, niños que gritan" (432) as they cross the pedestrian walkway.

In sum, Martí's characterization of the Bridge is a confluence of sexual sciences, teratology, and techno-talk. The Bridge has a hideous origin and exemplifies ambiguous sexual identities.³⁶ In collapsing the space between Brooklyn and New York, Martí's Bridge has lessened the distance between the sexes: it is a monument representative of American ingenuity, modernity, and as I am proposing, anxiety about the changing social roles.

PERFECT GENTLEMEN

José Martí wrote two shorter chronicles dealing with those involved in the Brooklyn Bridge's construction: "Dos damas" was published, like "El Puente" in *La América* in June of 1883, while "Los ingenieros" was published a few months after "El Puente" in Buenos Aires's *La Nación*. Although "Los ingenieros" and "Dos damas" differ in scope and tone from "El Puente", both recast themes which Martí examined in "El Puente": the role of innovations in everyday life, labor practices, the body, and gender identity.

Whereas "El Puente" described a de-centered concept of gender identity, "Los ingenieros" and "Dos damas" offer secure, traditional (or stereotypical) visions of gender. "Los ingenieros" praises traditional notions of masculinity while "Dos damas" celebrates time-honored notions of femininity. I will examine "Los ingenieros" before "Dos damas" due to the fact that all personas mentioned in "Los ingenieros" are directly involved in the history of the Brooklyn Bridge, which is not true of "Dos damas".

"Los ingenieros" is a sketch of the Bridge's original Chief Engineer, John Roebling, and his son, Washington (1837-1926). The younger Roebling was tasked with completing the Brooklyn Bridge after his father died from tetanus on July 22, 1869, having suffered a crushed foot the previous June 28 while overseeing work on the Bridge. Washington assumed the head role from 1869 until 1872, when he was incapacitated by decompression disease, suffering from diminished eyesight and extreme nervousness.³⁷ Unable to oversee the Bridge's construction on-site, Roebling observed the ongoing work from the upstairs window of his home at 110 Columbia Heights street in Brooklyn. Doubtful that an invalid engineer could take on such a grand project, many New York newspapers clamored for Washington's resignation. His wife, Emily, eventually played a fundamental role in the Bridge's completion.

"Los ingenieros" is a Great Man history of the Carlylean ilk: its laudatory language countervails the distinctly deflationary, gruesome descriptions of "El Puente". The chronicle emphasizes the shared professional vision and close relationship between the Bridge's "dos bravos e ilustres ingenieros" (254): John Roebling and his son and protégé, Washington. Gone are descriptions of jaw-like bulwarks, claw-like columns, emasculated workers, and upended hierarchies between the sexes. Rather, the Bridge is depicted as the Roebling family's intellectual culmination. Unlike the alienating, manual labor described in "El Puente", in "Los ingenieros" the Bridge evinces an organic connection to Roebling's mental facilities: "Como

crece un poema en la mente del bardo genioso, así creció este puente en la mente de Roebling” (256). While “El Puente” alluded to mental breakdown, “Los ingenieros” lauds the intellect of a father and son engineering team.³⁸

“Los ingenieros” also celebrates the Roebling family’s emigration to the United States. As if to contradict readers’ assumptions as to Roebling’s provenance, Martí initiates conversation about the engineer’s origins with a negative statement: contrary to what one may assume, Roebling, in fact, “*no nació en los Estados Unidos*” (254, *Italics mine*). Rather, Roebling *became* American. The passage is markedly different from those found in “El Puente,” where we see ambivalent images of the immigrants who constructed the Bridge:

hebreos de perfil agudo y ojos ávidos, irlandeses joviales, alemanes carnosos y recios, escoceses sonrosados y fornidos, húngaros bellos, negros lujosos, rusos—
de ojos que queman, noruegos de pelo rojo, japoneses elegantes, enjutos e
indiferentes chinos. (Martí 425)

The Bridge was, in fact, primarily built by non-traditional Americans: African Americans, Germans, Italians, Poles, and Irish worked side by side at the construction site. And yet, the Bridge’s opening on May 24, 1883 unfortunately underscored the continuing tension between supposedly ‘American’ versus ‘foreign’ values. Specifically, Irish Americans who had worked on the Bridge boycotted the opening on account of it being Queen Victoria’s birthday.³⁹ Martí, in his “Carta de Nueva York” of May 14, 1883 refers to these workers as “indiscretos e irlandeses odiadores” (418-419) for abstaining from the festivities.

With “Los ingenieros,” gone are Martí’s Babel-esque descriptions of different ethnicities. While in “El Puente,” a Chinese man is referred to as an “hijo infeliz del mundo antiguo” (430), in “Los ingenieros,” John Roebling is portrayed as a model émigré—professionally successful, democratically-spirited, and a guiding patriarch. Unquestionably “[e]namorado de la libertad” (256), the engineer assimilated easily to the cultural and political values of the United States: “la mente de Roebling...se tornó en americana” (256-257). While in Prussia, Roebling “andaba torvo, como grande hombre esclavo,” but on American soil, both his craft and sensibilities flourish; Roebling even “bautizó a su hijo con el nombre de su pontífice”—that is, “Washington” (255). The United States offered Roebling professional opportunities and peace, a place where his natural impulses were nurtured. Martí’s Roebling is also an exemplary father who enjoys an intellectually fruitful relationship with his son who, as already noted, took over as Chief Engineer of the Bridge after John’s on-site accident of July 22, 1869. Their shared accomplishments underscore the importance of traditional patriarchy, family legacies, and pride in masculine social power. Even the first line of “Los ingenieros” is a sly wink between men: “¿Quién no ha de leer con gozo, como un triunfo propio, *por ser hombre*, una noticia breve de la vida de dos bravos e ilustres ingenieros[?]” (255, *Italics mine*). Although “hombre” here could be glossed as ‘humankind’—women and men—the rest of the chronicle unquestionably emphasizes the centrality of males. Martí describes the Bridge as emblematic of “un nuevo hombre” (256) who individuates himself vis-à-vis a feminine other: “Dos madres tienen los hombres: la Naturaleza y las circunstancias” (256). Washington follows in his father’s footsteps as an engineer and preserves the democratic values of North America’s founding father, George

Washington. Of course, Martí's history may only be partly true. Many believe that Washington was not the brilliant engineer that his father had been: the lame scion of visionary John confined to his attic window in Brooklyn did not always inspire confidence.⁴⁰

Regardless the facts of history, "Los ingenieros" unequivocally presents Washington as realizing his father's grand ideas. A patriarchal transmission of democratic values and engineering know-how between father and son is perceived even at the level of sentence structure. When explaining the Bridge's engineers, a parallel phraseology is employed, thus formally representing the occupational heritage between John and Washington: "La ideó el padre; la hizo el hijo" (255). The sentence serves as a metaphor for a shared legacy passed between generations: the father's labor is listed before the son's, and both men's respective activities are described by a direct object followed by a verb in the preterite tense. Martí employs this structure again with: "Lo que el padre esbozó, él completó" or, "[l]o que el padre no previó, por él fue resuelto" (257). Form and function coincide as Washington is forwarded as the inheritor of his father's professional service, masculine values, and national ethos. These are, in sum, images of stable family values, paired with the successful transmission of values in an adopted fatherland. Significantly, Washington Roebling often discussed heredity, especially after his father died and he (Washington) assumed the monumental role of Chief Engineer.⁴¹ Martí concludes that the Bridge "tuvo numerosos e imponentes padres" (258); Washington "[v]olvió; trabajó con el padre hasta su muerte" (258). The piece ends with Washington represented as a Great Man who, "desde otro sillón regio, acariciando compases y muestras de material de construcción...rey por rey, Dios guarde al rey de ahora" (259).

Thus in "Los ingenieros," a (male) subject enjoys an unalienated relationship both with nature and his own productive facilities: labor is fulfilling, intellectual (not manual), and manly. Although Martí is obviously aware of the grueling processes by which the Bridge was built, here—with a striking lack of irony—he explains that Roebling's achievement signals an overcoming of the harsh labor practices which characterized most of human history: "ya no fabrican los hombres en el fondo del río, sino en el aire" (257). The caisson-dwelling, infirm sandhogs of "El Puente" have disappeared. Apprehended together, the two chronicles studied thus far recapitulate the division of labor. Intellectual labor is celebrated while manual labor is spurned. With Martí's celebration of the Bridge's genius engineers, manual labor is rendered opaque.⁴²

LOVELY LADIES

Martí examined the Brooklyn Bridge in one final chronicle. In June of 1883, *La América* published his one and a half-page "Dos damas." Here, Martí compares the biographies of two public figures he characterizes as exemplary North American women: Lydia Pinkham and Emily Roebling. Pinkham, originally trained as a nurse, created a best-selling woman's tonic for menstrual and menopausal aches.⁴³ Emily Roebling, as noted above, was the wife of Washington Roebling, who worked on the completion of the Bridge when her husband became ill with decompression disease. Both Roebling and Pinkham were astonishingly innovative women who led remarkable public lives. For Martí, they epitomize enlightened, ethical, and distinctly North American women.

Yet, although both women are forwarded as faithful companions to their husbands, the chronicle firmly situates the worth of both of them in the domestic sphere.⁴⁴ They are “dos buenos tipos de dama norteamericana, en quienes las dulces piedades de la casa han embellecido el enérgico empleo de la razón” (251). Both Pinkham and Roebling are lauded for bringing rationality into the home.⁴⁵ The two women are impressively innovative—an architect and an inventor—but more importantly, they are willing to reign in their traditionally masculine, overly public ambitions. Thus immediately after acknowledging Emily’s importance in completing the Bridge, Martí relegates her to a traditional female subject position:

Pero de estas hazañas en metales nobles, ninguna le vale más pro que la de haber mantenido a buen temple, en su trémulo cuerpo, el alma de su esposo egregio. Construir: he ahí la gran labor del hombre:--consolar, que es dar fuerzas para construir: he ahí la gran labor de las mujeres. (252)

Emily’s awesome role as the Bridge’s de facto Chief Engineer is less important than her maintenance of the “bienestar de su hogar” (252). This may be a bit of fortuitous forgetting on the part of Martí: when a lack of funds and expertise cast doubt on the completion of the Bridge, Emily became the structure’s overseer, a story that does not easily conform to the defense of traditional roles between men and women that Martí offers in his Brooklyn Bridge chronicles.⁴⁶

Furthermore, although Martí lauds the women for their successful enterprises, he denounces the ‘excessive virility’ of some North American women “Brillan...por su brío *viril y sensatez, a veces descarnada y excesiva*, las mujeres de la América sajona” (251, Italics mine). Their intellectual aptitudes, when extreme, are tantamount to assuming traditionally masculine roles. Even in “El Puente”, Emily is described as “piadosa, como gallarda *amazona*” (258, Italics mine). Just as Pinkham’s elixir remedied those bodily ailments which are innately feminine, Emily Roebling cared for the damaged body of her husband, Washington. Like “El Puente” and “Los ingenieros,” this piece, too, discusses the body and gender on various levels.

Martí, who oftentimes used other publications for inspiration,⁴⁷ was not alone in associating the chronicle’s three wonders—Lydia Pinkham, Emily Roebling, and the Brooklyn Bridge. When Pinkham first tried to sell her medicinal compound in 1876, pharmacists were uncomfortable displaying a product that was marketed to women using unabashed body talk about “females weakness,” “painful menstruation,” and “falling of the womb.”⁴⁸ With her son, Daniel, Pinkham opted for another tactic, launching an advertising campaign based around her motherly demeanor. Daniel also concocted a plan to stretch a Lydia Pinkham banner across the Brooklyn Bridge. Hefty costs ultimately squelched the idea, but the Pinkhams did print advertising cards showing the Bridge decorated with Pinkham’s name (see figure 2). Consumers around the country wondered if a banner had been stretched across the engineering wonder.

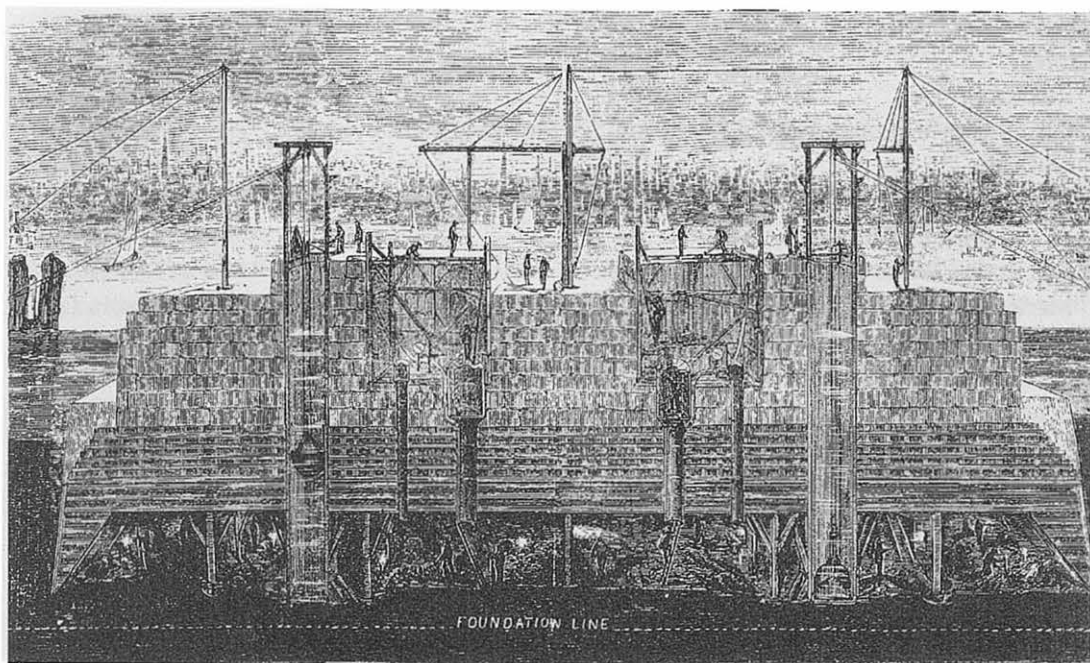
CONCLUSIONS

With the construction and opening of the Brooklyn Bridge, José Martí—along with many others of his day—examined the relation between technology and gender.⁴⁹ Here, these twin concepts were modified by the corporeal consequences of labor practices. The three Bridge chronicles represent a crucial moment in America when social roles between the sexes was being

interrogated: Martí, via his three Brooklyn Bridge pieces, too, casts light on an epoch when biological deterministic theories of masculinity and femininity precariously coexisted with social constructivist ones.⁵⁰ Martí's texts query how notions of gender are oftentimes based on corporeality, but which can be transformed alongside evolving modes of production. Thus his reading of gender is both traditionally biologist and radically socially constructivist. These three pieces are testament not only to Martí's unique intellect, but also to the historical era in which he lived, which was characterized by revolutionizing modes of production, new gender identities, new freedoms, and finally, new hatreds.⁵¹ In this way, concepts of masculinity and femininity were and are buttressed in a significant way through language.⁵²

Martí's reading of the Bridge—part defense of traditional roles between the sexes, part radically materialist revision of gender identity—remains pertinent for our time, when the division of labor along gender lines has almost been overcome. The arduous tasks demanded by the construction of the Bridge, rendering workers cogs in a mechanical monstrosity, problematized one's corporeal and social identity. Is one still sufficiently masculine even if their body, bowled over by decompression disease, cannot labor like before? What new rights can be demanded when women like Emily Roebling become engineers? What if biological technology (like Pinkham's elixir) can erase corporeal traits innate to women? Such issues are absent from other chronicles written by Martí such as "Nueva York bajo la nieve," "Coney Island," and "Un drama terrible." A man of his time, Martí points up how the construction of the Brooklyn Bridge piques North America's interest in relations between the sexes.

Martí's Brooklyn Bridge chronicles express one of modernity's greatest mysteries: technological development's contradictory capacity to both enslave and liberate humankind, to simultaneously hypostatize and deconstruct social identity. Along this collective journey, conceptions of both masculinity and femininity are constantly under construction.



Sinking of caissons for the Brooklyn Bridge.

Figure 1. Sinking of caissons for the Brooklyn Bridge



Figure 2. Lydia E. Pinkham's Vegetable Compound

Notes

- ¹ Lukács (89).
- ² Nancy Hewitt signals Martí's machismo; for Montero, Martí evinces a progressive view of gender.
- ³ Ramos characterizes Martí's reading of technology as inspiring anxiety. For Laraway, Martí celebrates technology.
- ⁴ See Rotker for her definition of 'chronicle'.
- ⁵ Martí mentions the Bridge briefly in three other writings: in his "Carta[s]" published in *La Nación* of August 15, 1883, on May 14, 1883, and in an article titled "¿Cuál es el objeto de la torre?" from *La América* in October of 1883.
- ⁶ When referring to the Brooklyn Bridge, I will capitalize: 'Bridge'. If referring to a general bridge, a lowercase 'b' will be used.
- ⁷ For Rodríguez Jiménez, between 1887 and 1895 Martí reconsiders the role of women.
- ⁸ I will abbreviate Martí's pieces as such: "El Puente de Brooklyn" will be "El Puente." "Dos damas norteamericanas" will be "Dos damas," and "Los ingenieros del Puente de Brooklyn Roebing, Padre e Hijo" will be "Los ingenieros."
- ⁹ First, the Bridge's suspension cables were strengthened with a system of diagonal inclined stays (Salvadori and Tountas 71). Secondly, Roebing invented a process for spinning the wire cables on site, rather than transporting them from afar (Kawada 81). Thirdly, Roebing invented the steel wire-rope used in the Bridge's cables.
- ¹⁰ See "The Brooklyn Bridge," *Harper's New Monthly Magazine* May 1883: Volume 66, Issue 396.
- ¹¹ See Manbeck (65).
- ¹² The structure "looks like a motionless mass of masonry and metal; but, as a matter of fact, it is instinct with motion. There is not a particle of matter in it which is at rest even for the minutest portion of time" (Conant and Schulyer 31).
- ¹³ See Nye (145).
- ¹⁴ See "To-Day's Great Ceremony," *The New York Times*. 24 May, 1883.
- ¹⁵ See "The Great Event," *The Daily Graphic* 24 May, 1883.
- ¹⁶ See pages 160-189.
- ¹⁷ Beside the animalistic metaphors, in "El Puente," the suspension cables are described as an "inmenso alfanje encorvado" (424).
- ¹⁸ See Burke.
- ¹⁹ While Marx uses the term six times in Chapter 15 of *Capital*—"Machinery and Large-Scale Industry"—a steam engine created in 1802 was also named 'Cyclops,' as was a steam frigate from the US Civil War. It should be historical moment and witnessed some of the same processes of industrialization, modernization, and liberalization. Finally, Green, too, compares work at the Bridge—monstrosity: compressors and air-pumps are likened to "Frankenstein" (17).

- ²⁰ See McCullough (180).
- ²¹ See Delaney.
- ²² See Haw (16).
- ²³ See Butler (451).
- ²⁴ See "The East River Bridge," *The New York Times* 26 May, 1883.
- ²⁵ See Louis Pérez (80).
- ²⁶ See Lugo-Ortiz and Ette for the body in Martí.
- ²⁷ See Rosenberg. Like the vapor in a steam engine, for Freud one's libido energies built up until finding an outlet.
- ²⁸ See "A Memorable Day's Trip. What the American Society of Civil Engineers Saw," *The New York Times* 20 January, 1882.
- ²⁹ See Hewitt's speech at the Bridge on May 24, 1883.
- ³⁰ See McCullough's for work conditions at the Bridge (397).
- ³¹ See Martí's text for more questions.
- ³² See Fausto-Sterling (75-77) for an interrogation of biological determinism.
- ³³ The Bridge's "dientes" "espera[n] a soldados no nacidos" (427); later, the workers are called a "bravo ejército" (428).
- ³⁴ See "The Deaths at the Opening," *The New York Times* 26 May, 1883. Reckless behavior on the Bridge lasted into July. See "Incidents on the Bridge," *The New York Times* 19 July, 1883.
- ³⁵ See Manbeck.
- ³⁶ See Halberstam for monstrosity (13 and 31).
- ³⁷ Due to his reclusiveness, reports on Roebling's health differed.
- ³⁸ The caisson construction appears a crazed enterprise: "la boca, abajo; el fondo, arriba; y sobre el fondo que le sirve de tapa, veintidós pies de planchas de pino, cruzadas en ángulo recto sujetas al techo del cajón por tornillos gruesos como árboles, y retorcidos y agigantados, como debe ver, en su cerebro encendido, sus ideas un loco" (428).
- ³⁹ See Haw (21).
- ⁴⁰ See "A Majority for Roebling: The Engineer of the Big Bridge Not to be Removed," *The New York Times* 12 September, 1882.
- ⁴¹ See McCullough (149).
- ⁴² Interestingly, authorities feared the possibility of labor protests at the Bridge during the opening festivities; clandestine detectives were deployed to monitor events (Haw 21).
- ⁴³ See Stephens (150-151).
- ⁴⁴ Leyva González and Vázquez Pérez reach similar conclusions.
- ⁴⁵ Vázquez Pérez signals Martí's admiration for North American women.
- ⁴⁶ Many diminished Emily Roebling's achievements. See "Mrs. Roebling's Skill: How the Wife of the Brooklyn Bridge Engineer Has Assisted Her Husband," *New York Times* 23 May, 1883. Also see "Emily Warren Roebling," *The Daily Graphic*. 26 May, 1883: 604.

⁴⁷ See González Echeverría, xviii. Also see Ramos, page 107, where he refers to Martí as 'overwriting.'

⁴⁸ See Stage (35).

⁴⁹ The New York's *The Daily Graphic*, reporting on Abram S. Hewitt's speech at the opening of the Brooklyn Bridge, concurs with the philanthropist's message in his speech: Emily Roebling's role in building the Bridge should inspire a new debate as to the natural capacities of men versus women. "Mr. Hewitt's beautiful tribute to this lady brings up the old question as to the capability of women in comparison with that of the other sex, and probably a stronger argument against the theory put forth by Columbia and most of the other colleges could not be had than the one which suggests itself as a result of her experiences in connections with the great bridge." Also see "Mrs. Roebling's Skill: How the Wife of the Brooklyn Bridge Engineer Has Assisted Her Husband," *New York Times* 23 May, 1883: Mrs. Roebling, the previous day, had been the first to drive across the new bridge but "they did not state how fitting it was that she should be accorded the honor."

⁵⁰ In Martí's day, the biological determined nature of gender was challenged by Darwin's theory of evolution (Murphy 221).

⁵¹ See Dowling.

⁵² Scott argues that modes of discourse employed in specific social and historical contexts affect conceptions of gender.

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