

Unruly Cyborgs: The Relational Set Designs of Isamu Noguchi

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The modern is the frictionful boundary where the body encounters mechanization. As such, the modern raises questions of how bodies move within this industrial logic—how and when do they transgress this boundary? Do they control, or are they controlled by, the systematic arrangement of objects and spaces in their environment? Artists and thinkers working across sculpture, architecture, dance, and informatics all contended with these questions in the 20th century. Norbert Wiener, a founder of cybernetics, expressed concerns about mechanization’s effect on human subjectivity even as he worked to advance the synthesis of humans and machines. Karl Marx wrote about the subordination of individual subjects to the industrial apparatus, “converting the workman into a living appendage of the machine.” Isamu Noguchi’s collaboration with Martha Graham presents a cybernetic counter-narrative, using frustration as a tool of resistance. The set designs produced by this sculptor-dancer partnership delineate hostile terms of behavior at the human-object interface that frustrate the seamless, symbiotic narrative of perfect cybernetic union. Considered in the context of industrial political economy, this innate hostility—unruliness, delinquency, chaoticness—designed into the form and arrangement of his sculptures subverts the mechanization of human labor and resists alienation under capitalism.

Encountering an Isamu Noguchi piece could mean standing in front of a striking sculpture in ceramics, metal, or stone. It could mean walking through a public garden or playground, or resting on a furniture design for Herman Miller or Knoll. “Isamu Noguchi is an emblematic figure of the twentieth century: a man of unsettled background floating in the uncertain space between worlds” (Stevens 2004). So begins a review of *Isamu Noguchi: Master Sculptor*, an exhibition at the Whitney Museum of American Art honoring the centennial of Noguchi’s birth. Rather than unsettled, I would call Noguchi’s work restless; ill at ease adhering

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to disciplinary boundaries or conventional notions of how objects and environments shape each other. Although most understand Noguchi as a sculptor, his wide ranging body of work as individual and collaborator could just as easily earn him labels ranging from industrial designer, to land artist, to urban planner. One of Noguchi's most rich periods of work representative of his values as an artist, however, is his time as a set designer in a period of prolific collaboration with modern dancer Martha Graham.

Noguchi was introduced to Martha Graham in 1928 through his half-sister Ailes Gilmour, who was an early member of Graham's company (Tracy 1986). He and Graham would work together on many sculptures and performances over the years, but the height of their collaboration took place "in the 1940s, when he produced fifteen décors for dance pieces based on Greek mythology and Biblical texts" (Tracy 1986). The prolific nature of their collaboration is perhaps evidence of the close relationship they developed over the years. Looking back on their collaboration after Noguchi's death, Graham would write, "there was an unspoken language between Isamu Noguchi and me. Our working together might have as its genesis a myth, a legend, a piece of poetry, but there always emerged for me from Isamu something of a strange beauty and an otherworldliness" (Graham 1989). The idea of a deep communication in their relationship beyond language was echoed by Noguchi. He said of working with Graham, "I just merely tried to become a part of her as she talked to me. I sort of blended, melded with her somehow and we were one" (Noguchi et al. 1994). The way Noguchi and Graham talk about their relationship to each other—the blurred boundary between their identities—prefigures the way in which Noguchi's sets engage with the cybernetic tradition of slippery, multi-body subjectivity.

Cybernetics emerged as a set of ideas at the same time Noguchi and Graham were finding their voice as collaborators. The refinement of these ideas reached a peak in the period from 1943 to 1954 at the Macy Conferences on Cybernetics, where researchers would convene to formulate the "theory of communication and control applying equally to animals, humans, and machines" (Hayles 1999). It is informative to read their work in the context of the modernist intellectual climate within which the concept of the cyborg came into existence. Donna Haraway writes that "a cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (1991). The cyborg unites human and machine, interior and exterior, material and metaphysical. It is prefigured in modern dance discourse by a predisposition toward movement in the machine age, like Isadora Duncan's call to "place a motor in [her] soul" (Preston 2005). For modernists, who disdained that which they considered primitive, perhaps the human body itself was in danger of becoming atavistic. The increasingly ambiguous distinction between natural and artificial could only create the appearance that "our machines are disturbingly lively, and we ourselves

frighteningly inert” (Haraway 1991). In other words, a cyborg is something only modernism could have imagined.

Although Noguchi never makes direct reference to the discourse of cybernetics, its influence is clear in his thinking and his work. The critic Vicki Goldberg, on Noguchi’s sculptural work, observes that “his goal is a kind of dialogue between person and environment. He designs not simply sculpture but relationships” (1980). These relationships often manifest on stage as interactions between human bodies and synthetic objects. They are cybernetic in the sense that not only do the dancers exert influence on their environment, but also the environment dictates a structure to which dancers must conform—a feedback loop. What emerges from these cybernetic interactions is a way of conceiving of subjectivity known as the posthuman. According to Hayles, “the posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction” (1999). The cyborg as posthuman subject implies not only disembodiment, but distributed cognition. Subjectivity is dispersed across multiple bodies—be they fleshy or synthetic—and the boundaries between them are not only blurry, but permeable. Control passes through in both directions. Noguchi sums it up best in a reflection on his art practice: “‘I do not differentiate,’ he says, ‘between life and environment’” (Goldberg 1980). For the posthuman, life is environment and environment is life.

Where does this implicit interest in posthumanism come from for Noguchi? Noguchi was born to an Irish-American mother and a Japanese father; Graham recalls that “at first, it was for him a difficult duality to reconcile” (1989). From his biography, it’s understandable why. He spent periods of his early life between both countries, neither one more his home than the other. He spent time in an internment camp during World War II, where he tried and failed to design better quarters for the internees—a failed first attempt at designing environments that resist dehumanization (Stevens 2004). It would seem that he had a fraught relationship with his own body and identity. While it’s clear that Japanese aesthetic ideas influenced his work, it also subjected him to orientalism from critics and an unstable place in American civic life as a mixed-race Nisei—second-generation Japanese American—during the 20th century. It might not be hard to imagine that he wanted via the cybernetic decoupling of body and self—a systematic decentering of embodiment—to claim “universality, a claim that depends on erasing markers of bodily difference, including sex, race, and ethnicity” (Hayles 1999). The denial of difference enacted by the cybernetic construction of the posthuman subject, to some an erasure of self, might have seemed to him a release from the trappings of his body.

But if life is environment and environment is life, this decentering of conventional embodiment for the posthuman subject could be read as an expansion of embodiment’s territory under the framework of extended cognition.

Speaking about Graham's use of his sculptures, Noguchi said, "These are symbolic or gestural tools [Graham] was using. They were an extension of her body. It's my own approach to sculpture—as being part of living, not just part of art" (Tracy 1986). Noguchi's rhetoric of extending the body reiterates a trope in media and cultural theory of using prostheses as a metaphor for shifting subjectivity. Adopting the posthuman view, one conceives of the body as "the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process" (Hayles 1999). These prostheses are connected to the subject through immaterial, informatic, relational pathways designed by Noguchi in his sets and instantiated in affordance relationships—which contextually suggest possible interactions between individual and environment—between sculptural form and the human body.

The set for Graham's piece *Errand Into the Maze* in 1947 is a powerful example of Noguchi's sculptures as prosthesis. Describing his process for the piece, Noguchi says, "I tried to depict the way, or the labyrinth, as the interior spaces of the mind by means of rope ... a space confined like the cave of the mind" (1968). The rope is a recurring motif in Noguchi's work with Graham, beginning with their first performance collaboration on *Frontier* in 1935. Graham described the design Noguchi produced for *Frontier* as "endless ropes into the future," representing train tracks (1989). In *Errand*, the rope is simultaneously the labyrinth and the path out of the labyrinth—Ariadne's string. This equivalence of material and information represented in a single object gestures at cybernetic logic. The rope connects the protagonist to the built environment, and extends her consciousness and awareness of moving and being in the maze. If the labyrinth is confined like the cave of the mind, then the rope is what opens up the cave and untethers the self from the confines of a single body. Describing Graham's performance, Noguchi recalls that "she danced around the rope and then tied herself around the pelvislike structure with it" (Tracy 1986). The theme of entanglement, enabled by the presence of the rope, recurs in many of Graham's pieces but particularly strongly in *Errand*. The movement interactions with the rope as the dancer becomes entangled evoke a contest of control—at times it seems the dancer is in control of her own movement, guided by the rope; at others, the rope insurmountably constrains the ability of the dancer to move freely. Control and agency between the rope and the dancer stands in for control and agency within the distributed posthuman subject. Where the will resides in a heterogenous subject assembled from materially distinct parts is up for grabs. As the piece comes to an end, "the final image is of the heroine stepping through an imaginary gate, a Noguchi set that has been called the pelvic bone, an unmistakable symbol of the birth canal" (Franko 2012). If the gate is the birth canal, then the rope can clearly be read as an umbilical cord tethering Graham to her synthetic mother—the built environment designed by Noguchi. Just as the

umbilical cord is a two-way conduit, the material-informatic rope conducts the dancer's subjectivity across material boundaries.



Martha Graham in *Errand Into the Maze* (Gage 2016)

The rope makes a return in Graham's *Night Journey*, which also premiered in 1947. At times the rope is an instrument of suicide for Jocasta, and at others it is the cord that binds Jocasta and Oedipus together in cybernetic union on/with their bed. The bed is Noguchi's centerpiece in this set. Speaking about his process, Noguchi said, "Martha wanted a bed. I made a nonbed. When I had to make a woman's place, I made a seat shaped as an hourglass. I tried to make a nonseat because I didn't want a chair there" (Tracy 1986). This rejection of conventional functionality and conceptualization of forms in terms of their negation demonstrates Noguchi's attenuation to absence and immateriality as ways to subvert the demands of industrialization. In the modern workplace, "furnishings quite often create the material conditions for compulsory community, coercive commitment, and competitive productivity" (Mattern 2017). The unwillingness to make a bed simply a bed gestures toward sleep as a rejection of the body's

predetermined function of labor within the logic of capitalism. Within this logic, “fatigue and exhaustion are treated as necessary conditions of modernity, industrialization, and the cost of social success ... and not as a shorthand for how hard we are worked by our institutions and our environments” (Mulvin 2018). Noguchi’s nonbed, in its resistance to bodies at rest, foregrounds the damage that modern systems and environments do to bodies. If rest and self-care under modernity is itself labor in service of future labor, the hostility of Noguchi’s design materializes that labor on stage allowing the dancers to embody it.



Martha Graham performs *Night Journey* (Cashdan 2016)

The bed itself, irrespective of dancers’ fraught interactions with it onstage, is a worthy object of study. Critics would remark that the image of Graham on Noguchi’s bed resembles “nothing so much as a psychoanalytic patient on the couch, ready to delve into the depths of the unconscious in order to dredge up painful, ancient buried memories” (Franko 2012). This reading squares with Graham’s demonstrated interest in psychoanalysis and the source material of the

Oedipus Rex story. It also is consistent with the form of the bed itself. As Noguchi describes, “the bed in *Night Journey* is actually two people lying there, which is a symbol of man and woman” (Tracy 1986).



Martha Graham, Bertram Ross, and chorus in *Night Journey* (Swope 2016)

In the bed, I see an instance of Noguchi’s interest in cybernetic disembodiment, or at least the decentering of bodily difference. Since the construction of the posthuman subject “privileges informational pattern over material instantiation,” biological sex is incidental to the informatic self with its immaterial identity (Hayles 1999). The indeterminacy of the Jocasta character, with her dual relationship as mother and lover—juxtaposed against the bed, a single entity formed from the union of the male and female figures—reinforces this fuzzy reading of biological body and metaphysical identity. “Can we be individuals and also a duo?” Noguchi asks. “I don’t know. It’s a very difficult problem” (Tracy 1986). He is probably talking about Jocasta, but he could just as easily be

referring to himself and Graham. In the same interview he would also say, “The fact is, I’m not particularly inhibited about sex and neither is Martha” (Tracy 1986). The cyborg is produced with at first the disassembly of markers of bodily difference including race and sex, but then also a reassembly of disembodied identity. Noguchi and Graham’s collaboration is thought of as having an emergent quality; their union having the gestalt quality of being different from the sum of the parts. Do their two bodies, the works they produced together, and even perhaps the dancers they worked with, form a distributed cybernetic entity? On the occasion of an event at the Lincoln Center, Graham would ask a colleague, “Would you please arrange for the car taking me to Lincoln Center to stop for Isamu, too? Afterwards I should like to take him home. I want him with me all evening” (Mason 2004). There were certainly rumors of a sexual relationship between Noguchi and Graham, although without any confirmation. The sites of assimilation where their subjectivities merge to construct a third emergent identity as partners, working or otherwise, are essential to the legibility of Noguchi’s work as engaging with the posthuman.

The dancers who interacted with Noguchi’s pieces on stage acknowledge this cybernetic synergy when working with the two collaborators; however, they are also the voices most qualified to speak about the difficulty of interacting with the work itself. Janet Eilber, a Graham dancer, says, “the interaction between these two artists continues to this day. It exists wherever a Graham dancer and a Noguchi set rehearse together” (2004). Her statement highlights a way in which the Graham-Noguchi cyborg has made itself endless—they are now an informatic pattern, to be infinitely re-instantiated across different arrangements of dancers and sets so long as their legacy continues to be reiterated through performance. But Eilber also has much to say about the discomfort and challenge of moving with Noguchi’s sculptures. “The world ... has rarely thought of them as the obstacles that they literally are,” she says. “We dancers who have worked on stage with these sculptural masterworks are reluctant to reveal this aspect to our audiences. In fact, as part of our intimate and complicated relationship with the sets, we have systematically kept it hidden” (2004). Even as they work to keep their discomfort invisible to others, they sharpen the subjective feeling of their own embodiment through throbbing thighs and sore backs. Noguchi has been said to design not only things, but relationships; the terms of the relationship he has designed between objects and dancers enact a severe power asymmetry that is hostile to the bodies of the dancers. Yet even within this asymmetry, the dancers identify themselves with the cybernetic structure that Noguchi has set up. “It is our job to convince the audience that the sets are not only the tangible structures of our world ... but that they symbolize our very selves, from our bones to our dreams to our deepest human urges,” says Eilber. “...Our task is to embody the music, to possess the movement, and to sculpt ourselves into Noguchi’s designs” (2004). By rehearsing and acclimating themselves to the Noguchi sets, the dancers

performatively deconstruct and reconstruct themselves into posthuman subjects sculpted into their environment. They engage in a process which complicates their own sense of embodiment and materiality. Eilber says, “As performers, we are not only working with the materials of the set itself—the bruise-inducing brass, wood, or fibreglass. Far more daunting, we must interact with all that those materials suggest and evoke” (2004). This sensitivity to both the material and immaterial aspects of the pieces, demonstrates Eilber’s implicit recognition of their cybernetic nature.

Why do all of this work of identification with sculptures that so strongly resist their bodies? Fundamental to the cybernetic dream is a fraught and often irreconcilable question of control, agency, and will. For Hayles, “the presumption that there is an agency, desire, or will belonging to the self and clearly distinguished from the ‘wills of others’ is undercut in the posthuman, for the posthuman’s collective heterogeneous quality implies a distributed cognition located in disparate parts that may be in only tenuous communication with one another” (1999). Within the power asymmetry in the relationship between environment and body, the balance of where agency resides—environment or body—seems clearly to tip toward the environment. I believe Noguchi was fundamentally and intentionally interested in this question of environment vs. body, object vs. subject, structure vs. agency.

This is a question that naturally finds a home in the discourse of architecture. Frédéric Flamand, a choreographer who often engages with architecture, says, “What interests me is the body coming up against a system that dictates behavior. This is the core of architecture” (2004). Noguchi clearly thinks about sculpture, as an architect would, in terms of the production and manipulation of space. He says, “My interest was to see how sculpture might be in the hypothetical space of theater as a living part of human relationships” (Noguchi 1994). He conceives of spatial systems as actors in a network of relationships that have ability to dictate the terms of behavior and interaction equal to human actors. The critic Harold Schonberg calls him “one of the few artists in the world who understands architectural space” (1968).

Noguchi took the position of a total artist, much like his partner Graham. Just as she integrated dance with religion, psychoanalysis, and metaphysics, Noguchi called for a “reintegration of the arts ... in order to enlarge the present outlet permitted by our limiting categories of architects, painters, sculptors, and landscapists” (1994). In his work there is a canny recognition of the power environments and spaces have over bodies—of the invisible work of design that operates on structure, such that power asymmetries are rendered invisible because of their embeddedness in the built environment. He was even aware of these dynamics at play in his own creative process. Talking about his studio practice, he said, “I’m afraid of technique getting in the way—that is to say, if you have too facile a technique, then you express only those things which the

technique permits you to express” (Noguchi 1994). Throughout his work, there is a constant negotiation of control over his material—skill and mastery as a way of increasing his foothold in a contest against nature.

What is Noguchi’s point of view within all of these questions of control and domination—why ask dancers to contend with his demanding forms, and why did these demands make sense on some level to the dancers? I argue that the hostility of his set environments are a response to, or at least a recognition of, the increasingly hostile demands of industrial capitalism on the body. Industrialism was something that weighed on his mind. Noguchi wrote that “the blight of industrialism has pushed man into a specialized corner, and more and more he is assuming the role of spectator” (1994). This concern with industrialization, with mechanization and the obsolescence of the body embedded in its promise, reframes his interest in cybernetics. The telos of cybernetics is the technological realization of total capitalism; as author Mark O’Connell writes, “we get the word ‘robot’ from the Czech word *robota*, which means ‘forced labor.’ The robot has no choice in the matter of what work it does or whether it does it: It submits, by definition, to the will of its owner. As such, the dream of total automation represents a fulfillment of the logic of techno-capitalism: a fusion of the labor force with the means of production, and the absolute ownership of both” (2016). Noguchi perhaps feared that the endpoint of the cybernetic trajectory—the total union of human and machine through the complete denial of embodied difference—is ultimately the domination of the human by the machine.

What Noguchi feared, and worked to resist, is recognizable in the Marxist idea of alienation. For the alienated capitalist subject, “it is his creations that henceforth tell him what to do, what to feel, and what to become. The stronger the alienation, the deeper man’s belief that he is still in control (whereas, in fact, he is being controlled)” (Eco 1989). Within industrial modernism, alienation seems an almost inevitable consequence of the confluence of several overpowering ideas: cybernetics and universal logics of control, industrialization and mechanical production, and the desire for continual movement against regression toward the past—thereby never pausing to reflect on the present. But working within this confluence, Noguchi understood that “all things become something different when you move them. One thing that contains becomes a liberating force depending on how you use it” (Tracy 1986). The rhetoric of cybernetics is about the permeability of boundaries, and implicit in this idea is the seamless, frictionless transfer of information across an immaterial channel. In the ideal of posthuman universal connectivity, the human is “harmoniously assimilated to his function and to the instrument that allows its fulfillment” (Eco 1989). However, Noguchi understood as critics and theorists did that “this optimistic solution ... is just another form of oppression on the part of an industrial power which, by rendering our relationship to things and the world more pleasant, makes us forget that in fact we remain slaves” (Eco 1989).

In Noguchi's work, I see a resistance to this pleasantness-as-sedative. Noguchi's sets are an instantiation of Umberto Eco's thought experiment that humans under capitalism "devise instruments that would make our work as irksome as possible, so that we would never for a second forget that what we are producing is never going to be ours" (1989). Similarly to how his nonbed in *Night Journey* did its work to foreground the commodification of rest by resisting its intended function, all of the hostile features of Noguchi's sets—the impossibility of predicting where a rope will fall, the restricted movements of the Creature of Fear crucified on a staff—materialize the struggle of human bodies against the constraining forces of systems, environments, and machines of industry even as they operate within a cybernetic logic of union. Eilber sums this up best as she explains how "the resistance, support, and spirit of the immobile partners designed by Noguchi help inform who we will be on stage each night" (Eilber 2004). The resistance of Noguchi's forms produces a generativity toward the construction of a posthuman subject that is not seamless, and therefore has not fully dispersed its agency among distributed bodies. The dancers hold Noguchi's set designs in high regard because working with them creates a sense of unalienated labor in their bodies by reminding them that their bodies are theirs to control, not easily conformed to their environments.

Using cybernetic control as both the subject and vehicle of his critique, Noguchi overturns conventional regimes of control by "formulating a new grammar that rests not on a system of organization but on an assumption of disorder" (Eco 1989). Producing set designs premised on disorder, Noguchi materializes the relationship between order and control by asking the Graham dancers to deeply feel discomfort in the body's innate resistance to conformity. Their strained bodies stand in for the idea that, for industrial laborers, "[their] operational projects always remain more important to [them] than the biological harmony [they] may attain" with the machine, and that so long as they remember their purpose in using the machine they will remain in control (Eco 1989). The physically demanding nature of the sets replaces the passivity of posthuman distributed control with active involvement from the human subject, felt in a single body through discomfort and frustration. In doing so, workers can "thus avoid *Entfremdung* by means of *Verfremdung*, escape alienation through estrangement" (Eco 1989). Of Noguchi, critic Mark Stevens writes that his sculptures "represented a vision of what mankind's relationship to nature could, ideally, become" (2004). In the relationships between his designs and the Graham dancers, he articulated a vision for an unruly and unsubmitive cybernetic body.



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