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Miniature Nation Building: Model Railroading and the Dialectics of Scale in Post-WWII America

Ivan Weber

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MINIATURE NATION BUILDING: MODEL RAILROADING
AND THE DIALECTICS OF SCALE IN POST-WWII AMERICA

by

Ivan Weber

B.A., American Studies, University of California, Berkeley, 2005

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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ABSTRACT

This thesis advances a critical understanding of how scale informs the production and consumption of the American nation, and it makes a foray into Marxist critical analysis by integrating the theoretical and methodological objectives of historical materialism with the multiple, dialectically construed dimensionalities of scale. The hobby of model railroading serves as the case study for this analysis, and the dialectics of scale as the theoretical apparatus with which this analysis is articulated. The central argument of the thesis is that the model railroad hobby builds the nation, in miniature, through the continual regeneration of American masculinity, the traditional American family, archetypal spatial and geographic imaginaries, paradigmatic historical moments, and the ways in which the railroad links all of these together. Subtending this larger argument are questions of how the categories of race, class, gender, and nation are mutually constituted and reinscribed in everyday cultural practices like model railroading. The bulk of the evidence is drawn from hobby catalogs, magazines, and advertisements from the 1930s through the 1950s. The primary historical period under investigation is the decade-and-a-half following World War II, though the late-nineteenth century and the late-twentieth century are considered as part of the larger historical constellation that surrounds the early postwar era. All three periods, and the first two in particular, were marked by bourgeois anxiety over an increasingly modern present and nostalgia for an idealized past. These periods also saw bursts in model railroading activity, which suggests that the hobby has been repeatedly called upon to mediate the real and imagined historical losses that have characterized American modernity.

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Introduction: The Dialectics of Scale

In the August 1953 issue of *Model Railroader*, magazine contributor Tom Beresford writes in a letter to the editor that, while cleaning out his desk, he came across an article in the March 1951 issue of *Fortune* that “really hits the nail on the head.” According to the article, which Beresford’s letter includes in its entirety, “Almost every live male these days seems interested in trains. It is not merely that investors are paying more for railroad securities than they have since 1931 (because railroads stand to make—and keep—more money with their long freight trains than they have since World War II). It is that modern man simply likes to look at trains, or look at and tinker with replicas or models of trains. Even in these days of standardized diesel engines, with their rickety exhausts and bleating horns, a train arrests the senses as does no other man-made device.”¹ By the early 1950s, as American railroads were rapidly dieselizing, the model railroad hobby was booming. The steam-to-diesel transition had begun in the mid-1930s and, tellingly, this is also when the hobby started to distance itself from its toy train origins. For the first three decades of the twentieth century, model railroading had revolved around the electric toy trains made by companies like Lionel, American Flyer, and Ives, but these model trains were intended for boys rather than men. By the mid-1930s, however, white, middle-class men were coalescing into a distinct hobby demographic, and they increasingly gravitated to *scale*-model railroading as an adult alternative to playing with toy trains.² Tracking the history of the hobby alongside the history of the railroad suggests, then, that the emergence of scale-model railroading, as a primarily adult male obsession, is immanently linked with the demise of steam railroading and an attendant sense of historical loss.

From the vantage point of the present, it is perhaps difficult to see why the disappearance of steam locomotives would generate acute feelings of nostalgia and ache, and to see how the cultural practice of model railroading expressed, and continues to express, these feelings in material form. But as Albert Churella explains, “Beyond their duties as haulers of freight and passenger traffic, steam locomotives symbolized both the

romance of the rails and the industrial might of the American economy.” And yet, “For all of their undeniable power and majesty,” writes Churella, “steam locomotives were notoriously inefficient and costly to maintain. For all of their symbolic reference to American industry, steam locomotives remained customized, hand-built products in a nation that enthusiastically embraced mass production.”³ Echoing Churella, Sam Posey asserts that “[s]team locomotives, for all their tough steel construction, fiery interiors, and brutish demeanor, were innately vulnerable. They were hopelessly complex, at least for their time.” Diesel engines, by contrast, “were down-to-earth and undemanding,” and leading diesel manufacturers like General Motors and General Electric “discouraged the railroads’ desire to customize the design and tinker with the finished product.”⁴ It is precisely this tension between hand-craftsmanship and mass production, customization and standardization, that makes the steam locomotive such a potent historical symbol, and that makes model railroading, which miniaturizes the industrial landscape by means of artisanal labor, such a generative site for the production of historical and cultural meaning. As the name “iron horse” indicates, the steam locomotive straddled the threshold of American modernity, linking past and present through the evolution of motive power. The fact that early-twentieth-century model railroads were powered by electricity—called “the mysterious force” in Lionel’s 1930 catalog—makes the interrelationships among forms of motive power, modes of production, and historical moments all the more complex.⁵

The overarching question this essay seeks to address is how scale mediates the cultural production and popular historicization of the American nation. I answer this question by analyzing the cultural practice of model railroading, but my larger theoretical and methodological move is to treat scale, as it is dialectically construed, as a constitutive element in the production and consumption of history and culture. Anna McCarthy points out that cultural studies “has consistently and persistently called attention to the broader political implications of scale-based methodological problematics such as the relationship between micro and macro social processes, or the establishment of valid conditions for empirical generalizability.” McCarthy goes on to explain that, according to Stuart Hall, “Concreteness... restored materiality to Marx’s method” by emphasizing “the ways in which conjunctures are formed between different ‘levels’ of social life.”⁶ I consider scale

along similar lines, but I also take concreteness a step further by reading larger social processes through material objects that are themselves products of scalar relationships. The shifting meanings associated with models and their prototypes—meanings that are in large measure informed by the spatial and temporal distances between units of scale—exist in a form of dialectical tension in which synthesis is either perennially elusive or only ephemeral. It is in the space between models and prototypes, a space that scale shortens and elongates ad infinitum, where meaning proliferates.

Through an examination of model railroads and their makers, and the discursive routes by which both find expression, I argue that the model railroad hobby builds the nation, in miniature, via the continual regeneration of American masculinity, the “traditional” American family, archetypal spatial and geographic imaginaries, paradigmatic historical moments, and the ways in which the railroad links all of these together. This vernacular form of nation building front-loads sentiments of nostalgia, longing, and utopian desire, and uses scale models to calibrate these sentiments with both lived and unlived national experience. Formative historical periods, especially moments of rupture and transition, are resuscitated to perform the cultural labor of shoring up the foundations of an ostensibly monolithic American identity. The two eras most frequently depicted on model railroad layouts—the late nineteenth century and the mid-twentieth—capture a similar historical process, namely, bourgeois anxiety over an increasingly modern present and nostalgia for an idealized past. This essay primarily deals with the middle decades of the twentieth century, not only because this is when the hobby gained widespread traction, but also because this period serves as a middle point in the “critical constellation” whose outer reaches are the late nineteenth and late twentieth centuries.⁷

In my analysis of model railroading as a form of nation building, I consider scale not only thematically, but also theoretically. As the passage from the *Fortune* article cited above suggests, both real trains and model trains occupy the same category of male desire. But more importantly, the author of the article goes on to assert that “the sight of a train provides a kind of escape for [modern man]. For he is a man who cannot really escape and would not if he could; and a train gratifies simultaneously and harmoniously those faculties that are so often in conflict: the imaginative and the mechanical. It suggests to him the charming irresponsibility of flight from routine into the irregular

experience of the vaguely distant place, and at the same time it satisfies his urge for operating according to rule or practice, and for keeping everything in proper place and in working order.”⁸ Seen dialectically, the train, freighted with cultural meaning, synthesizes “modern man’s” imaginative and mechanical “faculties.” By the same token, the scalar relationships between prototype railroads and model railroads produce an array of dialectical tensions, and it is these that form the basis of what I am calling the dialectics of scale. This theoretical formulation serves as the interpretive staging area from which I advance a critical analysis of how the American nation gets crafted along scale’s intersecting bodily, familial, spatial, and temporal axes.

The dialectics of scale owes much of its logic to Walter Benjamin’s formulation of the “dialectical image” as “a way of seeing that crystallizes antithetical elements by providing the axes for their alignment,” and his related concept of “dialectics at a standstill.”⁹ “Where thinking comes to a standstill in a constellation saturated with tensions,” he writes, “there the dialectical image appears. It is the caesura in the movement of thought. Its position is naturally not an arbitrary one. It is to be found, in a word, where the tension between dialectical opposites is greatest. Hence, the object constructed in the materialist presentation of history is itself the dialectical image. The latter is identical with the historical object; it justifies its violent expulsion from the continuum of historical process.”¹⁰ While the dialectics of scale is clearly informed by Benjamin’s work, it is nevertheless a new theoretical model insofar as it proposes a reconsideration of the limitations of historical materialism by using scale to open up the monadological structure of fore- and after-history, and the structure of the Hegelian dialectic more generally.

In *The Dialectics of Seeing*, Susan Buck-Morss writes that Benjamin’s unfinished Arcades project “was to be a ‘materialist philosophy of history,’ constructed with ‘the utmost concreteness’ out of the historical material itself, the outdated remains of those nineteenth-century buildings, technologies, and commodities that were the precursors of his own era. As the ‘ur-phenomena’ of modernity, they were to provide the material necessary for an interpretation of history’s most recent configurations.” Buck-Morss goes on to explain that “it was precisely Benjamin’s point to bridge the gap between everyday experience and traditional academic concerns, actually to achieve that phenomenological

hermeneutics of the profane world which Heidegger only pretended. Benjamin's goal was to take materialism so seriously that the historical phenomena themselves were brought to speech."¹¹ Like Benjamin, I take as my point of departure the notion that history is produced and consumed in and through everyday cultural practices, and therefore I position seemingly mundane objects like model railroads, magazines, and catalogs at the heart of historical process.

The passage from the 1852 *Illustrated Guide to Paris* that Benjamin called "the locus classicus for the presentation of the arcades" describes them as "a recent invention of industrial luxury" and "a world in miniature," and these descriptions are equally applicable to both the railroad and model railroads.¹² Indeed, for Benjamin, the railroad was one of the "ur-phenomena" of modernity. From the middle of the nineteenth century to the middle of the twentieth, the railroad was—throughout the global West, but especially in the United States, where the vastness of the space it traversed made its unifying function all the more salient—arguably the most prominent symbol of technology's increasing ubiquity. The obvious tension that emerges out of the railroad's unifying function and the experiential disarray it helped produce parallels one of the main lines of tension that cuts across the model railroad hobby: how to live out, amidst the splintering of reality, the sense of national unity, belonging, and prosperity that industrial technology once heralded. And, bound up in this tension is yet another: in addition to being a "master symbol" of technological progress, the railroad provides the original form of American corporate capitalism.¹³ The fact that model railroad magazines, catalogs, and advertisements are filled with references to modelers as presidents, "brass hats," and empire builders works to underscore the desire to experience, if only in miniature, the wealth and power of nineteenth-century railroad tycoons. In the February 1951 issue of *Model Railroader*, for example, the how-to article, "A Private Car for Your Pike," urges modelers, "Give your president the luxurious transportation his position demands."¹⁴

For Benjamin, "The arcades that in the nineteenth century housed the first consumer dream worlds appeared in the twentieth as commodity graveyards, containing the refuse of a discarded past."¹⁵ On the one hand, the history of the railroad follows a similar course: a technological wonder in the nineteenth century and the first half of the

twentieth that had, upon the arrival of widespread automobile and airplane use, become outdated by the late 1950s; as artifacts of the recent past, railroads began to decay in the industrial “graveyards” of the American landscape. On the other hand, model railroading, whose “ur-history” dates back to the early railroad era, came of age in the 1950s, obscuring the lines between “commodity graveyards” and the afterlife of the objects interred. “In the traces left by the object’s after-history, the conditions of its decay and the manner of its cultural transmission,” writes Buck-Morss, “the utopian images of past products can be read in the present as truth.”¹⁶ In the case of the railroad, however, there are at least three factors that tilt the “monadological structure” of “fore- and after-history” slightly off-kilter. One is that the “after-history” of the railroad has in many ways been lived out in the miniature world of scale models and the expanding world of consumption that has marked the postwar era. Another is that, from the 1950s on, many model railroaders have depicted weathered, hardscrabble scenes—a kind of built-in decay. And the other is that the railroad has, in the last two decades, reemerged as a “modern” technology, confounding teleological narratives of technological progress. While utilizing Benjamin’s notion of “dialectics at a standstill,” then, I am also interested in how this formulation might be modified to include scale as a primary unit of analysis. How does model railroading—not just as an effort to grab hold of the “traces” left by decaying objects, but also as an effort to make these objects whole again—re-polarize the “force field” created by “the conflict between [the object’s] fore- and after-history”?¹⁷ How can the afterlife of railroad modernity be read back over the second half of the twentieth century through model railroading? And how might the dialectics of scale add a new theoretical valence to historical materialism?

While Benjamin’s analysis of dialectical images provides the terms for one side of “the dialectics of scale” equation, the terms for the other side are provided by Susan Stewart’s analysis of the ways in which scale informs narrative articulations of bourgeois space and time. In addition to bringing together “dialectical materialism” and scale, then, the pairing of Benjamin’s and Stewart’s theoretical precepts allows for a simultaneous foregrounding of image and narrative that is well suited to an analysis of the model railroad hobby, which employs both expressive forms for its constructions of cultural meaning. In *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the*

Collection, Stewart tracks “the social disease of nostalgia” through the narrative expressions of the terms listed in her subtitle. Narrative, Stewart explains, is “a structure of desire, a structure that both invents and distances its object and thereby inscribes again and again the gap between signifier and signified that is the place of generation for the symbolic.”¹⁸ Yet so too is nostalgia political. As Svetlana Boym has argued, “Nostalgia is a double-edged sword: it seems to be an emotional antidote to politics, and thus remains the best political tool.”¹⁹ To the extent that nostalgia for the past is one of the main sentiments model railroaders express in their material and discursive practices, the negation of politics, which is in itself political, can be seen as the hobby’s predominant political stance. At the same time, there are instances in 1940s and 1950s hobby catalogs and magazines, and in advertisements especially, that are overtly political insofar as they reify white, middle-class masculinity as the bedrock of national belonging. Conversely, in representing modernity negatively, some modelers can be seen to articulate something of a political critique. Of Baudelaire, Nietzsche, and Benjamin, Boym writes, “All three poetic critics of modernity are nostalgic for the present, yet they strive not so much to regain the present as to reveal its fragility.”²⁰ Though it is unlikely that modelers who critically represent modernity would overtly identify with these “poetic critics,” the practice of model railroading can occasionally be seen to express similar sentiments.

“The body is our mode of perceiving scale,” writes Stewart, “and, as the body of the other, becomes our antithetical mode of stating conventions of symmetry and balance on the one hand, and the grotesque and disproportionate on the other... It is this very desire of part for whole which both animates narrative and, in fact, creates the illusion of the real.” For Stewart, the miniature functions “as a metaphor for the interior space and time of the bourgeois subject,” and the gigantic “as a metaphor for the abstract authority of the state and the collective, public, life.” The dialectical pairing of the miniature and the gigantic works to illuminate the ways in which “discourses of the self and the world mutually define and delimit one another.”²¹ In the case of model railroading, the miniature, interior world the layout depicts and the gigantic, exterior world the layout imaginatively represents are brought together by the modeler’s bodily perception of the exaggeration in each direction. To the extent that this bringing-together represents an effort to reconcile the partial perspective of personal experience and the transcendent

perspective of collective experience, model railroading offers a rich example of how material and popular cultural practices bridge the divide between individual subjectivity and national belonging.

According to Benjamin, “Every childhood, through its interest in technological phenomena, its curiosity for all sorts of inventions and machinery, binds technological achievement [the newest things] onto the old world of symbols.” To which Buck-Morss adds: “Slumbering within the objects, the utopian wish is awakened by a new generation that ‘rescues’ it by bringing the old ‘world of symbols’ back to life... When the child’s fantasy is cathected onto the products of modern production, it reactivates the original promise of industrialism, now slumbering in the lap of capitalism, to deliver a humane society of material abundance.”²² And Stewart, noting the connection between the world of miniatures and the world of childhood, points out that the latter, “limited in physical scope yet fantastic in its content, presents in some ways a miniature and fictive chapter in each life history; it is a world that is part of history, at least the history of the individual subject, but remote from the presentness of adult life.”²³ “The toy,” she goes on to write, “is the physical embodiment of fiction; it is a device for fantasy, a point of beginning for narrative.”²⁴ Indeed, toy trains—and their more sophisticated offspring, scale-model railroads—form a vocabulary of material objects, and modelers use this vocabulary to tell stories ranging from the historical and nostalgic to the autobiographical and fantastic, often drawing on multiple narrative modes at once.

In the case of the dollhouse, which Stewart calls “the most consummate of miniatures,” nostalgia is joined by wealth as a dominant motif: “It presents a myriad of perfect objects that are, as signifiers, often affordable, whereas the signified is not.”²⁵ This certainly holds true for model railroads, but model railroads also traffic in signifiers for which the signified exceeds the category of wealth altogether. An article in the December 1952 issue of *Model Railroader*, for example, explains that “[the Pine Tree Central] is your railroad—even if you’ve never even heard of model railroading before—if you hanker to shake off the cares of the world and stride into a little world where you are the empire builder, the boss, the creator. The prophet Mohammed is a bush-leaguer compared to you. A mountain came to him, but you—ah—you go Mohammed one better. You *create* mountains, also tunnels, trees, villages—the whole shebang!”²⁶ By crafting an

entire world—featuring not just trains, tracks, and buildings, but also mountains, rivers, and sky—model railroaders articulate visions of grandeur that go beyond imagined luxury. “What is this erasure of labor, this celebration of the mechanism for its own sake,” asks Stewart, “if not a promise of immortality, the immortal leisure promised by surplus value?”²⁷

While model railroading serves as a particularly apt case study with which to develop the dialectics of scale (and advance an understanding of the production and consumption of the American nation), the intelligibility of this theoretical formulation does not hinge on model railroading. The dialectics of scale is perhaps equally applicable to cultural products as wide-ranging as dollhouses and quilts, baseball cards and stamps, hunting decoys and taxidermies, gardens and bomb shelters, museums and theme parks, historical reenactments and fraternal organizations. Model railroading could, for instance, be one example in a group that might include decoys, taxidermies, bomb shelters, and baseball cards, all of which take on multiple valences of scale and point to broader historical and cultural configurations that at once reflect and help reinforce the durability of white, middle-class, manhood as the standard against which national identity is measured. More generally, the dialectics of scale could be applied to investigations of collections, souvenirs, tourism, and mapping, and scales of belonging that are both smaller and larger than the nation.

This essay is broken up into four sections, each of which deals with a different aspect of scale and a corresponding construction of the American nation. The first two, “Scale of the Body” and “Scale of the Body Politic,” work as one pair, and the second two, “Material Scale” and “Historical Scale,” work as another. In “Scale of the Body,” I look at the ways in which hobby catalogs and magazines articulate relationships between the individual and the family and between the scale model and the body. In particular, I focus on Lionel catalogs, which chart a genealogy of the bourgeois American family that places its male members and the railroad at the leading edge of national progress, and on modeling and photographic techniques that hobbyists employ to manipulate body-scale relationships. “Scale of the Body Politic” builds on the previous section by extending the family metaphor to the scale of the nation. Here I am concerned with how model railroad catalogs, magazines, and advertisements represent notions of a national family, and with

how the politics of race, class, and gender that shape the hobby reflect a more general calculus for determining the parameters of national belonging in the middle decades of the twentieth century. In the third section, “Material Scale,” I consider the intricate relationships between scale models and their prototypes, the multiple scales at which the hobby crafts both models and the nation, and the ways in which model railroads map the geography of postwar America. To this end, I look primarily at magazine articles and books dealing with specific layouts.²⁸ In the last section, “Historical Scale,” I use a similar archive to examine the process in which historical moments are kept alive (or brought back from the dead) in order to make past and present mutually intelligible (or utopia imaginable), and I link this process to a commodity-mediated experience of history that is inextricably bound up with middle-class anxiety, nostalgia, and utopian (intermingled with dystopian) desire. I conclude by discussing Chris Burden’s 1990 sculpture, *Medusa’s Head*, a five-ton spherical mass of rock and concrete covered with model trains and tracks in various scales, in conjunction with the revival of the railroad in the twenty-first century and the deployment of frontier mythology and model railroad metaphors for orienting this revival toward both the past and the future.

I have systematically examined issues of *Model Railroader* from the late-1930s through the late-1950s and Lionel catalogs from the late-1920s through the mid-1950s. While I marshal the bulk of my evidence from these sources, and from *Model Railroader* in particular, I draw additional examples from contemporaneous American Flyer catalogs, 1950s issues of *HO Model Trains*, more recent issues of *Model Railroader*, and books written about the hobby since World War II. My methodological approach is anchored by textual and image analysis, but a kind of montage, or tableau, method plays a supporting role. Buck-Morss writes that the “dialectical images” with which Benjamin was concerned are to be understood not as they “are empirically given, nor even as they are critically interpreted as emblematic of commodity society, but as they are dialectically ‘constructed,’ as ‘historical objects,’ politically charged monads, ‘blasted’ out of history’s continuum and made ‘actual’ in the present. This construction of historical objects clearly involved the mediation of the author’s imagination... And yet Benjamin insisted, in accordance with the method of literary montage: ‘I have nothing to say, only to show.’”²⁹

Scale of the Body: The “Lionel Engineer” and His Dad

In order to understand the ways in which the model railroad hobby has expressed the shifting relationships between body and scale, it is necessary to first note how the railroad fundamentally reshaped the experience of time and space during the closing decades of the nineteenth century and the opening decades of the twentieth. “Just as the railroad changed the way people experienced the seasons of the year,” writes William Cronon, “so too did it begin to change their relationship to hours of the day. No earlier invention had so fundamentally altered people’s expectations of how long it took to travel between two distant points on the continent, for no earlier form of transportation had ever moved people so quickly.”¹ John Stilgoe’s “metropolitan corridor” chronotope does much to capture the new spatial arrangements the railroad produced, and it provides some insight into the overarching “structure of feeling” of American railroad modernity.² “Metropolitan corridor,” writes Stilgoe, “designates the portion of the American built environment that evolved along railroad rights-of-way in the years between 1880 and 1935. No traditional spatial term, not *urban*, *suburban*, or *rural*, not *cityscape* or *landscape*, adequately identifies the space that perplexed so many turn-of-the-century observers. Reaching from the very hearts of great cities across industrial zones, suburbs, small towns, and into mountain wilderness, the metropolitan corridor objectified in its unprecedented arrangement of space and structure a wholly new lifestyle. Along it flowed the forces of modernization, announcing the character of the twentieth century.”³ Writing of this same historical moment in his classic essay, “The Work of Art in the Age of Mechanical Reproduction,” Benjamin attributes “the contemporary decay of the aura” to “the desire of contemporary masses to bring things ‘closer’ spatially and humanly, which is just as ardent as their bent toward overcoming the uniqueness of reality by accepting its reproduction.”⁴ It might be said, then, that the “wholly new lifestyle” the metropolitan corridor ushered in not only generated, but also demanded, reproducible artistic forms. Moreover, model railroads—as miniature copies of real railroads—carry

with them a good deal of the tension and ambivalence bound up in the metropolitan corridor.

By the early twentieth century, as electric train sets began to appear in department store displays and the homes of the well-to-do, the railroad had come to encompass an array of cultural meanings. It was at once ultra-modern and a remnant of the frontier past, a symbol of the good life and a reminder of what had been lost. Amidst these mixed feelings, and perhaps in part because of them, the hobby continued to gain new devotees. But more than any other factors, this growth was facilitated by the expansion of the electrical transmission system and the successful advertising campaigns of toy companies. According to Stilgoe, “Firms such as the Ives Company, American Flyer, and Lionel helped mold the national imagination; since their founding in the first years of the new century, they had exploited the love of railroading, the new force of electricity, and, above all, the power of sophisticated advertising. Even *Fortune Magazine* studied their effect on the national character.”⁵ Lionel’s 1929 catalogue, for example, asserts the following in its introduction: “There’s action all the time with a Lionel. Is there a boy or man who doesn’t thrill at the sight of a Lionel Passenger or Freight Train—speedy as a comet—life-like in every detail, flashing by crossings, slowing down to stop as the automatic semaphore or train control is set against it, and gliding away again as the signal shows ‘Clear.’ There’s knowledge to be gained from the study of Lionel Model Railroading and there’s realism!—and the thrill that comes from the personal operation and direction of a great railroad system.”⁶ In addition to demarcating the hobby’s gender lines, this sales pitch encapsulates much of what fuels enthusiasm for model trains: realism, locomotion, dominion. As Jean Baudrillard puts it, “If we consume the product as product, we consume its meaning through advertising.”⁷

Pointing out that the *Transcontinental Limited*, “[a] jewel-like toy modeled on the nation’s finest express trains,” was the centerpiece of the 1929 catalog, Stilgoe writes: “Only the rare boy—or rarer girl—awoke on Christmas morning to find *The Transcontinental Limited*, but hundreds of thousands found less expensive electric trains. And they fell asleep after looking at the lighted locomotives and cars circling and circling in darkened rooms, recreating in miniature the landscape and the vehicle of American traveling romance.”⁸ Indeed, the association of model trains with Christmas, for which

Lionel was the driving force, has proven extremely durable. Of Lionel founder, Joshua Lionel Cowen, Sam Posey writes that “Cowen turned Christmas into a marketing event for his products. He made Christmas and Lionel so inseparable you couldn’t be sure which came first, the trains or the tree.”⁹

The cover of the 1929 catalog features a rosy-cheeked boy in shirt and tie, perhaps one of the rare children who received the *Transcontinental Limited* for Christmas, smiling as he towers above his miniature trains (figure 1).¹⁰ By 1929, this kind of scene had become a hallmark of Lionel catalog covers, with other versions often including the boy’s father and perhaps the family dog (figure 2).¹¹ According to Posey, “Cowen’s greatest strength was that he understood the mythology of the American family. He used his catalogs to create a world where father knew best. Father’s role was to watch indulgently as Son operated the trains. Son was destined to assume the traditions of hard work and fair play that had been passed down from generation to generation. Mother and Little Sister (she was always younger), if they appeared in a picture at all, were in the background as an adoring audience, along with the family’s dog, which was typically a Scottie or small collie.”¹² Seen through the lens of scale, Son is one link in a tradition-filled, generational chain. He is a smaller version of his father. As Stewart explains, “the child is in some physical sense a miniature of the adult.”¹³ Mother and Little Sister, who are relegated to the background, are rendered at once peripheral and diminutive. Here it is also worth pointing out that, at this point, Father is not himself a modeler, but rather a supervisor who presides over the scene.

Catalog covers in the thirties continued to employ the imagery of “the perfect Lionel family,” but they projected this imagery onto the outside world of the metropolitan corridor.¹⁴ In 1931, for example, the cover featured two boys and an engineer holding a miniature *Twentieth Century Limited* locomotive in front of its prototype, along with the slogan, “THE TRAINS THAT RAILROAD MEN BUY FOR THEIR BOYS,” and a caption reading, “‘Just Like Mine,’ says Bob Butterfield, engineer of the ‘20th Century Limited’” (figure 3).¹⁵ On the cover of the following year’s catalog, the same slogan was paired with an image of a boy riding in the cab of a speeding locomotive, along with the caption, “A Boy’s Dream Come True” (figure 4).¹⁶ And in 1933, the cover showed a boy waving from a catwalk to an engineer in a passing locomotive and the caption,

“Jimmie... the Lionel engineer meets Mike Bolan” (figure 5).¹⁷ What can be seen in this triptych of catalog covers is a visual narrative structured by a progression of scale. The “Lionel engineer” moves from the observational, educational space of trackside to the operational, active space of the locomotive’s cab to the supervisory, managerial space of the catwalk. Building on the advertising success of “the perfect Lionel family,” but extending the father-son bonds forged by Lionel trains to the larger world of “railroad men,” “their boys,” and full-size trains, these early-1930s catalogs worked to place the male members of the traditional American family within the context of a larger, national family organized by the flows of the metropolitan corridor.

No longer hovering over his model trains in the domestic space of the living room, Son was out in the world, applying his know-how to the real thing, which was the desired outcome. As the introduction to the 1930 catalog put it, “Lionel’s supreme leadership has remained unchallenged since Lionel Trains were first created and built in 1900. In other words, ever since your Dad was a boy. He played with electric trains then, and he probably helps you play with yours now. It is play, yes, but it is more than just that. It is a pleasant, exciting way of learning something about the world, about the world of travel; about the world of railroading; about the mysterious force—Electricity. You must think of the Lionel Corporation as a national institution of learning, whose aim is to help the future engineer.”¹⁸ Just what kind of engineer, engineman or railroad builder, was left intentionally open-ended so that boys—and perhaps men as well—could imagine the possibility of being both. “By January 1937,” writes Stilgoe, “the color cover of *Railroad Stories* featured a locomotive engineer pausing from oiling his own machine to put a drop or two on the toy engine held up to him by a young boy. The cover spoke volumes about the intricate web of railroad affections that directed attention at the metropolitan corridor” (figure 6).¹⁹ And by 1939, the inside front cover and adjoining page of the Lionel catalog featured a boy dressed as a locomotive engineer, manning the controls of his layout (figure 7), along with the claim: “No railroad president on earth has buttons on his desk which command such instant response as do those in front of a Lionel engineer.”²⁰ Not only could “Jimmie” imagine himself as both engineman and railroad builder, then, but also as railroad president, if not a kind of engineer-god who had assumed a level of control that exceeded that of railroad presidents.

By 1940, the Lionel catalog cover had bundled all of these occupational fantasies together and introduced still another crucial element: the “Lionel engineer” and his father had become figures in the miniature Lionel world, which suggests that the conceptual merging of models and prototypes had reached the point of scalar synthesis. The cover depicts a neatly dressed father and son in the foreground, dwarfed by a passing Hudson locomotive and a giant hand pushing a button on a transformer wired to the track (figure 8). With one hand on his son’s shoulder, the father points to the locomotive with the other and says, “NOW THAT’S THE SCALE MODEL FOR US, SON!”²¹ Without the presence of the hand and transformer, the image would depict a father and son going to see the train pass, which was a common occurrence along the metropolitan corridor. “For the small boy grasping his father’s hand as the crack express thundered past in a roar of steam, coal smoke, and dizzying vibration,” writes Stilgoe, “the train existed as fiercely directed energy, as power magnified, almost beyond comprehension. For the father, the train represented perhaps nothing more than *The Limited* or *Fast Mail* passing through on schedule; or perhaps it represented something so important that he deliberately brought his child into its presence.”²² This activity takes on new meaning, however, when *miniature* Father and Son go to see a passing *model* train controlled by a full-size hand. Father and Son become figures positioned within the dream world of the layout; like the model train, they become part of the phantasmagoria of commodity fetishism.²³

Benjamin’s discussion of Grandville, a graphic artist and contemporary of Marx, provides a useful point of comparison. “Grandville’s fantasies,” Benjamin writes, “transfer commodity-character onto the universe. They modernize it.”²⁴ But whereas Grandville, in the “too-early” stage of technology, “stamp[ed] human characteristics onto nature” in order to critically represent the commodity phantasmagoria, the 1940 Lionel catalog indicates that technology had come of age, that mythic technology had begun to replace “mythic nature” as the “ur-past” on which “collective wish images” drew.²⁵ Buck-Morss writes that “Benjamin tells us that this formal inadequacy of the new nature is not synonymous with (but only ‘corresponds’ to) ‘wish images’ which, far from restraining the new within the given forms, reach back to a more distant past in order to *break free* from conventional forms.”²⁶ The transfer of natural, and especially animal, characteristics onto technology—seen, for example, in calling locomotives “iron horses”

and in the shark mouth paint scheme on military planes—was followed by the transfer of human characteristics onto technology. A recent example of the latter, which also suggests the completion of this transformation of mythic origins, is the long roster of anthropomorphized toy locomotives sold under the Thomas and Friends trademark. “Thomas and his other engine friends such as Percy and James,” explains Posey, “have expressive faces painted right on their smokeboxes. They are always steaming out of their roundhouse to encounter adventure.”²⁷

According to Louis Hertz, “By the beginning of the second World War, the leading manufacturers of tinsplate trains in the United States were estimating that 35 percent of their not inconsiderable total production was being sold to adults for adult use.”²⁸ Lionel had boasted in its 1934 catalog that “only Lionel models look, and act, and sound like ‘the real thing.’ And only Lionel makes accessories which duplicate *everything* found in the modern railroad.”²⁹ But, as Posey explains, “Lionel’s line of trains and accessories suffered from a split personality because they tried to look like scale models but work like toys.”³⁰ In addition to hairpin turns and out-of-scale accessories, the major complaint about Lionel was its three-rail track, which “looked awful” because it was such an obvious deviation from prototypical railroad tracks.³¹ Starting in the 1930s, tinsplate trains—the bulky, O gauge models of Lionel, American Flyer, and Ives—were increasingly thought of as toys, and toys were for boys. In a letter to the editor in the August 1953 *Model Railroader*, for example, Robert A. Ward writes: “The main reason that we are scale model railroaders is that we want realism. It is supposed to be our guiding light. The fact that we strive for prototype realism is one of our main lines of defense when we are answering the charges of those who accuse us of playing with toys.”³² Seen thus, the evolution of HO (or, “half O”) is coeval with the evolution of scale-model railroading as an adult male hobby.³³ The W. K. Walther Company, the world’s largest distributor of scale-model railroad products, published its first catalog in 1932. *Railroad Model Craftsman* produced its first issue in 1933, and *Model Railroader*, the hobby’s leading magazine, produced its first issue in 1934. The National Model Railroad Association was founded in 1935, and *Model Railroader’s Digest* appeared in 1936.³⁴

The fact that, amidst the turmoil of two world wars and the Great Depression, model railroading steadily grew in popularity, especially among adults, suggests that one of the ways in which Americans dealt with historical turbulence was to turn inward, to construct a happier, utopian world that was less complicated and less terrifying. The introduction to the June 1941 issue of *Model Railroader*, for example, asserts that “[t]he model railroad hobby is even more necessary than ever, as a psychological relief from the worries of the daily news.”³⁵ Similarly, in the November 1941 issue, one modeler explains that model railroading provides “fun and relaxation,” but also “forgetfulness of life’s vexations and war and murder and sordid things.”³⁶ As Posey puts it, “Throughout these decades of uncertainty, [Cowen] offered stability: a world to escape into in which everything was always under control.”³⁷ Offering a useful point of comparison, Leslie Paris argues in her essay on Colleen Moore’s Fairy Castle, a dollhouse that toured the United States from 1935 to 1939, that “we might interpret the doll house itself, in its incessant focus on fairy tales and nursery rhymes, as the very model of Depression-era infantile regression for a nation looking backward to better times.”³⁸ Indeed, for Benjamin, this “Depression-era infantile regression” seems to have been, at least in part, the basis for hatching the *Passagen-Werk* as a “dialectical fairy scene.”³⁹

In his essay, “Old Toys: The Toy Exhibition at the Märkisches Museum,” Benjamin captures an important aspect of this turn inward to the smaller world of childhood toys, as well as one way in which to consider the scalar dynamics of the bourgeois family: “We all know the picture of the family gathered beneath the Christmas tree, the father engrossed in playing with the toy train that he has given to his son, the latter standing next to him in tears. When the urge to play overcomes an adult, this is not simply a regression to childhood. To be sure, play is always liberating. Surrounded by a world of giants, children use play to create a world appropriate to their size. But the adult, who finds himself threatened by the real world and can find no escape, removes its sting by playing with its image in reduced form.”⁴⁰ As Buck-Morss explains, “The effect of technology on both work and leisure in the modern metropolis had been to shatter experience into fragments.”⁴¹ In order to understand why “modern man” increasingly sought out the relief from life’s concerns furnished by the miniature world of model

railroading, then, it is necessary to place the rise in adult modeling activity within the larger historical context of depression and world war.

Due to a postwar paper shortage, Lionel's 1946 catalog appeared in *Liberty* magazine as a sixteen-page advertisement. The magazine cover features a father and son playing with a Lionel train set, but the image represents a significant departure from Lionel catalog imagery of the twenties and thirties. Father's role was no longer "to watch indulgently as Son operated the trains," but rather to operate the trains himself, even if it meant alienating his son. The father on the *Liberty* cover is crouched down on his hands and knees, making a track adjustment, while his son kneels beside him, holding the train set's station and looking at his father with a mix of vexation and incredulity (figure 9).⁴² Ambroid would run an advertisement in the March 1951 *Model Railroader* that even more explicitly illustrates Benjamin's point. Here, in a similar scene, the father is so "engrossed in playing with the toy train" that he appears oblivious to the fact that his son is "standing next to him in tears" (figure 10).⁴³ While "children, especially boys, fit into the larger concatenation of hope and nostalgia and worry as consumers of toy trains," writes Stilgoe, "[t]he entire 1950s panoply of toy trains—the basic train set, the additional cars, the complexities of track and switches, the structures and signal systems, the scenery and the electrical components—all existed perhaps as much for parents (especially fathers) as for children (especially sons)."⁴⁴

After a deep lull during WWII, the hobby experienced unprecedented growth in the late 1940s, and reached its golden age in the early 1950s. While this was Lionel's heyday, so too had scale-model railroading emerged as a muscular arm of the hobby. *The HO Monthly* released its first issue in 1948. By 1952, one reader of *Model Railroader* was suggesting that the magazine change its title to "The HO Modeler" because "[m]onth after month all anyone can find in your magazine is HO."⁴⁵ And by 1959, HO made up "about 85 percent of all model railroading activity."⁴⁶ Model railroad advertisements continued to make wide use of father-son imagery throughout the 1940s and 1950s, but because it was also during this period that fathers—and men generally—emerged as a distinct hobby demographic, these ads tended to directly address fathers who were hobby aficionados; unlike the Lionel Dads of the twenties and thirties, these were fathers who shared *their* hobby with their sons. In the May 1952 issue of *Model Railroader*, for

example, a full-page Varney advertisement features an image of a father and son sitting at a table strewn with model parts and modeling tools, happily working on their hobby together (figure 11). “What better way is there to start a lad down life’s road?” the ad asks. “A constructive hobby... companionship... dad and son with heads together on a mutual project... and at home. Here is a boy you will never have to worry about.”⁴⁷ In the October issue of the same year, the author of “How I built the North Merrick & Indian” expresses similar sentiments in his closing, moral-of-the-story remarks. “One of the main reasons for delinquency is the improper use of leisure time among our teen-age group,” the author writes. “If Jay takes over from me this hobby of model railroading, and when 14 or 15 years old invites me to the cellar to look as ‘his’ pike, I shall feel that the old pike and I have done much toward shaping his destiny as a good solid American.”⁴⁸

While my discussion up to this point has focused on Lionel catalogs and the scalar relationships embedded in representations of the “traditional” American family, the rise of scale-model railroading supplies a range of examples that more directly engage the relationships between the body and scale. *Model Railroader* contributor George Allen offers the following useful explanation of scalar perception, which he calls the “*Rule of Comparison*”: “If someone handed you a book and asked if it ‘was large—or small,’ you’d be correct in replying either way. The real answer would depend on your having *another* book to compare it to. Thus, an HO loco alongside an O loco looks insignificantly small. The same holds true of TT when compared to HO. But, when you isolate one scale from another—and *give yourself time to become adjusted*—your TT, HO or OO rolling stock assumes ample proportions.”⁴⁹ The differentiation among scales, then, is as much a question of bodily perception as the relative sizes of material objects. It is when the object is isolated, when the only frame of reference is the body, that the scale of a particular object “assumes ample proportions.”

Throughout the 1940s and 1950s, one of the more common motifs that hobby magazines like *Model Railroader*, *HO Model Trains*, and *Railroad Model Craftsman* employed on their covers was a modeler working on or operating his models. He was often shown at his workbench or somewhere within his layout, tinkering with a locomotive, adjusting a building or a piece of scenery, or manning the controls. What is immediately striking about these images is the contrast between the scale of the modeler

and the scale of the model: like Gulliver in Lilliput, the modeler is a giant in a miniature world (figure 12). The result, however, is that the miniature is emptied of its potential to trick the eye because the presence of the modeler's body eliminates the possibility of suspending disbelief. In some versions of this motif, only a hand is shown, perhaps painting backdrop details with a tiny brush, or slotting a structural detail into place with tweezers (figure 13). In a more abstract version, a hand is shown holding a piece of model railroad equipment, usually a locomotive, against an empty background.

Against the solid yellow background of the cover of the November 1955 *Model Railroader*, for example, a forward-facing locomotive sits perched in a cupped hand (figure 14). The effect of this added level of abstraction is to naturalize the scale differential between the body and the model. No longer part of the integral world of the layout, the isolated model and hand present a distillation of the hobby's essential scalar relationships. Godlike, the human hand renders the locomotive diminutive and quaint. Or, as Stewart puts it, "In approaching the miniature, our bodies erupt into a confusion of before-unrealized surfaces. We are able to hold the miniature object in our hand, but our hand is no longer in proportion with its world; instead our hand becomes a form of undifferentiated landscape, the body a kind of background."⁵⁰ Following Allen's *Rule of Comparison*, the scale-model locomotive, isolated from both its prototype and models in other scales, becomes proportionally coherent.

What can be seen in the evolution of this motif is a scaled progression of the shifting relationships between landscape, technology, and the body. Leo Marx offers the useful formulation of "the machine in the garden" to capture the tension between the first two of these terms. "Within the lifetime of a single generation," he writes, "a rustic and in large part wild landscape was transformed into the site of the world's most productive industrial machine. It would be difficult to imagine more profound contradictions of value or meaning than those made manifest by this circumstance. Its influence upon our literature is suggested by the recurrent image of the machine's sudden entrance into the landscape."⁵¹ Of central concern to Marx are the ways in which "the [pastoral] ideal has figured in the American view of life," not the least of which, as the citation above indicates, is its "transformation under the impact of industrialism."⁵² Despite Marx's assumption of a monolithic national experience, evidenced by phrases like "the American

view of life” and “American experience,” his analysis of fin de siècle American literature provides a useful point of reference for the present discussion. If, at the turn of the century, Frank Norris, for example, was writing of the locomotive as “the galloping monster” and “the symbol of a vast power,” by mid-century, the model railroad hobby had subdued it by making it small enough to fit in the human hand.⁵³

This taming of the locomotive finds further expression in the miniaturization of the model railroad itself. In the November 1952 issue of *HO Model Trains*, in the “HOddities by Alan” section, Alan reports on “Paul Thompson’s pike” (figure 15), which “can be held in the palm of your hand... It’s only 4” square. Scenery consists of ballast, grass and a tramp warming his hands over a grain-o-wheat bulb. A Penn Line diesel and a crummyette built from HOMT [*HO Model Trains*] plans highball over Paul’s layout. He didn’t mention the road’s name but we bet it’s one of those multi-place titles in the short-line tradition.”⁵⁴ If the hand-sized locomotive suggests the domestication of technology, the hand-sized layout suggests the domestication of the larger world in which that technology functions. The crummyette—or short, four-wheel caboose also known as a “bobber”—that trails the Penn Line diesel provides sleeping quarters for the imagined tiny crew, and even the homeless tramp is provided a place to build his campfire. The bobber was in operation primarily during the last two decades of the nineteenth century, making its combination with a diesel engine playfully anachronistic.⁵⁵ From his historical vantage point of the early 1950s, Thompson literally couples the most modern piece of railroad equipment to a remnant of the railroad past. His tiny layout implodes space and time, and, in both cases, it is scale that provides these implosions with their detonative charge.

In the July 1958 issue of *Model Railroader*, a how-to article on concealing the corners of one’s layout asserts that “a modern railroad layout should have no corners at all, and this would appear almost true if a person were reduced to the same size and scale as his model railroad and saw everything from the same plane on which the equipment operates. This, of course, is impossible, unless you possess some sort of magic amulet, but you can get a fairly good idea of how things would look at a reduced scale by placing your eyes at the edge of your layout and level with the layout ground.”⁵⁶ At issue here is the question of realism and how the body perceives it. Short of possessing a “magic

amulet,” the modeler is limited to strategies like the one the article describes for achieving the illusion that his (or her) body exists at the reduced scale of the layout. Something different, however, occurs when the layout is photographed. No longer constrained by the body’s size relative to the model, the viewer of a given image can actually be fooled by it. This is, in fact, often the goal, even to the point of modeling for the camera. In the February 1995 issue of *Model Railroader*, for example, Sam Posey explains that his camera lens provides him with a “third eye”: “I use my camera as a tool, part of the building process. I start a scene with sketches, but once I begin to mock it up (using blocks of Styrofoam and cardboard models) I’m totally guided from that point on by what I see through the lens.”⁵⁷ More recently, the cover story for the September 2009 issue of *Model Railroader*, “Make your layout look picture-perfect,” rehearses the main points of the 1958 article cited above, a full half-century later. “Though it would be great to become a scale-sized figure on my HO scale layout,” writes the author, “I discovered a more practical solution to achieving my desired low-angle perspective... I placed my digital camera at the lowest possible trackside position to photograph the view.”⁵⁸ Like the cover of the 1940 Lionel catalog, both the 1958 and 2009 articles express the utopian desire to reduce the size of one’s body to the scale of one’s layout.

Far more common than articles on how to create realistic perspectives in layout photographs are articles and books on how to create the illusions of distance and depth on the layout itself. The legendary model railroader, John Allen, also dubbed “the Orson Welles of model railroading” and “the Wizard of Monterrey,” has been one of the most frequently referenced modelers in the history of the hobby, and among his broad range of modeling and artistic talents was his ability to make his already large layout appear even larger.⁵⁹ In his book, *Model Railroading with John Allen*, Linn Westcott writes that the distance across Allen’s 23-by-32-foot Gorre & Daphetid layout “appears much greater, partly due to the reduced scale of the trees on distant slopes and partly due to a disguised mirror in the far corner that reflects the mountain scenery and visually expands the room.”⁶⁰ The author of the introduction to the March 1951 issue of *Model Railroader* writes that the Gorre & Daphetid’s “publicity director,” Barnum N. Baily, explained to him that they had “doubled all scenery on the Gorre & Daphetid by using mirrors! The scenery used to be magnificent. Now,’ he said with triumphant finality, ‘it’s

overwhelming.”⁶¹ As Posey puts it, “Allen’s layout was the size of a three-car garage, but it looked as if it existed without any borders at all.”⁶² Allen ended up using over thirty mirrors on his layout and he “employed reduced-scale modeling to make the most of several cramped spaces.” Allen explained this “diorama technique” in the following way: “When your layout is against a wall, the space beyond the last visible track can be used very effectively to help enlarge the appearance of the scene. This forced perspective starts with full-scale buildings or scenery next to the track, reducing the scale as the perspective recedes until the modeling is at a much-reduced scale. The backdrop painting continues the scene.”⁶³

While the “magic amulet” that would enable one to physically enter the world of the layout as a scale-sized figure has, as with all utopias, proven elusive, Posey describes how this can happen psychologically. Echoing Stilgoe’s description of the children who had received electric trains for Christmas falling asleep while watching the lights of their trains circle in darkened rooms, Posey tells of the feeling he had as a child while playing with his Lionel trains: “Standing inside the layout, with one train going clockwise along the lower level and another running counterclockwise on the upper, was like being at the center of a universe. At night, the lights of the trains orbited around me as if I were the nucleus of an atom.”⁶⁴ Posey’s juxtaposition of the miniature (atom) and the gigantic (universe) works to delineate the tension between the poles of the body’s perception of scale, and it suggests that, in the physically limited yet fantastic world of childhood, this polarity takes on extreme proportions.

Later, in his discussion of the layout he built over the course of sixteen years as an adult, Posey writes that “areas [on the layout] kept inventing themselves, as if they had been waiting for me in some parallel universe. I was being drawn into a fantasy world that was becoming increasingly real every day.” He explains that, like John Allen, he had entered a “twilight zone” in which the world he modeled “no longer referred to an external reality—it referred only to itself.”⁶⁵ Seen thus, the miniature world of the layout can serve as a kind of portal through which the modeler is able to access a hidden plane of perception. According to Stewart, “There are no miniatures in nature; the miniature is a cultural production.”⁶⁶ Yet Posey explains that he had begun to think that HO must be one of the scales at which nature reproduced itself. “Twigs of real trees were ready-made

HO scale trunks, pebbles from the driveway became boulders, saw cuts were crevices,” he writes. “Working day after day in HO made me think that a successful world could be created at this scale... and made me wonder, too, if our idea of 1:1 being ‘real’ wasn’t perhaps a bit presumptuous—surely a world could exist that was eighty-seven times *bigger* than ours.”⁶⁷ And after describing his rare opportunity to drive a restored 1924 steam locomotive (No. 90) through the Pennsylvania countryside, he writes: “In our basement, of course, the trains ran anytime we wanted them to—and my recent outing aboard No. 90 allowed me to attach my memories of the real thing to our little locomotives, making them—in my eyes—more fascinating than ever and drawing me into a world that was neither 1:1 nor 1:87, but somehow both.”⁶⁸ This last assertion serves as a compelling example of how the dialectics of scale functions. Because scale works in increments, the modeler is continually performing the work of translation. In Posey’s case, this translation is not just between 1:87 and 1:1, but also between 1:1 and 87:1, between the size of an atom’s nucleus and the size of the universe.

Scale presents the body with a field of signification, and as soon as one dialectical pair of scales seems to produce a synthetic arrangement, the interpretation of this arrangement requires different scales of perception and experience. Upon the introduction of a new scale, the original arrangement becomes one terminus along a new line of dialectical tension. Or, perhaps the original dialectical pair breaks apart, only to recombine in new, fractal arrangements. As McCarthy puts it, “The slippery relativism of orders of scale – always open to the possibility of adding one more degree of size or magnification, one more level of concreteness or abstraction, always producing continuities between things and ideas, between universals and the particulars that produce them – makes them highly heuristic thinking tools for cultural materialists.”⁶⁹ If the world Posey was drawn into was “somehow both” 1:1 and 1:87, this would suggest that both scales are almost real, but not quite, and it is precisely the unreality of 1:1 scale and the almost-reality of 1:87 scale that facilitates this implosion of spatial experience. This relationship is further complicated by the fact that, whatever scale the modeler selects, the actual crafting of models takes place at 1:1 scale, making the modeling activity itself as real as the world the model represents.

One of the most direct ways in which modelers can be seen to conflate the scale of their layouts and the scale of their bodies is by wearing railroad clothing. Especially in the 1940s and 1950s, the desire to be an engineer was often expressed through dressing the part. This connection was made explicit in Lionel's catalogs of the 1930s, and by the early 1950s, Lionel had distilled this motif even further. On the cover of its 1952 catalog, a boy wearing an engineer's hat and a red bandana around his neck towers above a bridge, under which are lined up a mix of steam and diesel locomotives (figure 16). In 1954, a boy in the same outfit and his father, who wears a suit, peer down on a row of similarly arranged locomotives (figure 17). In both instances, the scalar relationships are made intentionally ambiguous: it is not clear whether the locomotives are miniatures or the people are giants.⁷⁰

In 1952, an advertisement for "Dad & Son Authentic Engineer Caps" asserts the following: "Here's railroad romance brought right into your own electric train layout! Genuine engineer caps—same kind real engineers wear when highballing thousands of surging horsepower over the shining rails! Your son (or daughter) will be delighted—you'll feel in command of a 6-unit diesel yourself!"⁷¹ In addition to the hat and red bandana, denim or hickory stripe overalls are generally considered a requisite feature of the outfit (figure 18). Magazine cartoons of the era frequently depicted model railroaders dressed as engineers, as did many advertisements. During the 1950s, the graphic for *Model Railroader's* "Bull Session" showed four men gathered around a potbelly stove, smoking and drinking coffee (figure 19). One of the men wears the engineer outfit and the other three wear dress shirts and ties, as if they were, perhaps, railroad executives.

This last kind of attire is the more common way in which modelers of the 1940s and 1950s appear in magazine photographs, which suggests that, to the extent that modelers donned the engineer outfit, they did so in private. It was, however, not unusual for modelers to add the engineer's cap to the shirt and tie ensemble, and the tie could even be one of the "railroad neckties" with "authentic heralds and color on off-white broadcloth" offered by Darragh Models.⁷² By playing engineer or railroad president, or both simultaneously, modelers can be seen to articulate a dialectical form of desire. The modeler operating his layout while dressed as an engineer expresses a longing to be in both the world of the layout and the world of the actual railroad. He imagines another

time, another place, another life—another scale of experience. Hovering over a miniature world that he has dressed the part to enter, his wish to physically do so is inevitably thwarted. It is by way of the imagination, then, that he is able to achieve the kind of phenomenological experience of poetic space so elegantly described by Gaston Bachelard. “Being myself a philosopher of adjectives,” writes Bachelard, “I am caught up in the perplexing dialectics of deep and large; of the infinitely diminished that deepens, or the large that extends beyond all limits.”⁷³ Citing a fragment from Herman Hesse’s *Fontaine*, in which “[a] prisoner paints a landscape on the wall of his cell showing a miniature train entering a tunnel,” Bachelard explains that “if we follow the poets of miniature sympathetically, if we take the imprisoned painter’s little train, geometrical contradiction is redeemed, and Representation is dominated by Imagination.”⁷⁴ Like the imprisoned painter, the model railroader, “who finds himself threatened by the real world and can find no escape,” imagines his freedom in the world of miniature trains.

Scale of the Body Politic: Modeling the National Family

As the term “body politic” makes clear, the body serves as a foundational metaphor for shuttling back and forth between the scale of the individual citizen and the scale of the nation. In his classic formulation of the nation as an “imagined political community,” Benedict Anderson argues that “[the nation] is *imagined* because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion.” And “it is imagined as a *community*, because, regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship.”¹ According to Phillip Deloria, “One of the most powerful lines that can be drawn across the spectrum ranging from sister to nonhuman is that which delineates the nation. Nationalism links land, subsistence, political identity, and group destiny together, creating a clear-cut boundary between insiders and outsiders.”² And according to Robert Lee, “The family is the primary metaphor for the nation. The idea of Americans as a family is the discursive basis for an imagined nationhood. The family as a symbol of nationhood structures nationality as fictive kinship, a common ancestry.”³

By 1941, with direct American involvement in WWII becoming increasingly likely, Lionel’s catalog cover featured a locomotive placed within a patriotic ensemble of blue background and bands of white stars and red and white stripes running across the top and bottom (figure 20). Beneath the large gold lettering of “LIONEL” is the slogan, “ELECTRIC TRAINS FOR THE YOUTH OF AMERICA,” and below and off to one side is the U.S. Navy insignia with the caption, “PRECISION INSTRUMENTS FOR THE UNITED STATES NAVY.” The catalog goes on to explain, “Today, the great Lionel factories in New Jersey hum with national defense activity, coupled with fulfilling the greatest demands ever made for Lionel Electric Trains.”⁴ Similarly, American Flyer’s 1941 catalog cover featured a locomotive passing “the Gilbert Hall of Science,” behind which are bands of red, white, and blue (figure 21). Echoing Lionel’s claim to be “a national institution of learning,” the back cover of the American Flyer catalog features six

boys working on various engineering and scientific projects, along with the slogan, “FOR TODAY’S FUN AND TOMORROW’S CAREER.”⁵ In 1942, with the country now at war, the Lionel catalog cover resembled the American flag (“LIONEL TRAINS” replaces the stars in the top left quadrant), in front of which is a Lionel locomotive (figure 22).⁶ All of these catalogs work to align the hobby with patriotism and national purpose, and to position white, middle-class boys and men at the center of the national family. Although a spike in patriotic imagery and rhetoric during wartime is not surprising, the explicit equation of the consumption of Lionel and American Flyer trains with nationalism furnishes a salient example of the degree to which the hobby had conflated a love of (model) trains with a love of country. As these catalogs make clear, Lionel and American Flyer aimed to tap nationalist sentiments by, quite literally in the case of Lionel’s 1942 catalog, positioning their products in front of the flag. But it is also worth noting that these companies had only to tweak their messaging to make it war-ready because they had, by the early forties, already established themselves as popular cultural “institutions” that “helped mold the national imagination.”⁷

Like the wartime catalogs of Lionel and American Flyer, early 1940s issues of *Model Railroader* reveal the model railroad industry’s success at aligning the hobby with patriotism. The introduction to the January 1942 issue, for instance, asserts that “the winning of a war must take first place in our thoughts and efforts,” but also that “hobbies will help win the war. Men working under strain, thinking too much of one subject, are likely to suffer mentally and physically. A hobby lifts a man for a few minutes or hours completely out of his everyday surroundings into another world.”⁸ Later in the same issue, a message from the *Model Railroader* “crew” explains, “The best antidote for war depression is a hobby. A new station, a new locomotive, or a change in trackwork will keep you too busy to have war jitters.”⁹ Similarly, the M. Dale Newton Company ran an ad prescribing, “One hour each evening spent on your model railroad” as a “sure cure” for “war jitters.”¹⁰ Subsequent issues featured ads for items like Varney’s “Buy More War Bonds” box car, which would become “an interesting and unusual memento” once the war was won (a kind of premeditated souvenir), and still other ads in which companies like Mantua, Scale-Craft, and Lionel affirmed their patriotism and dedication

to defense production by drawing on images of battleships, tanks, and planes, and phrases like “patriotic duty,” “Uncle Sam,” and “the Stars and Stripes.”¹¹

Although there exist no published statistics, past or present, on the racial makeup of the hobby, a perusal of model railroad magazines from the 1940s and 1950s suggests that the overwhelming majority of hobby members during this period were white, middle-class men. To the extent that baby boomers who are now in their retirement years (the sons of these white men) make up the bulk of present-day model railroaders, this racial makeup remains largely unchanged. While the category of American whiteness has been historically unstable, Matthew Frye Jacobson points out that “in the 1920s and after, partly because the crisis of over-inclusive whiteness had been solved by restrictive legislation and partly in response to a new racial alchemy generated by African-American migrations to the North and West, whiteness was reconsolidated: the late nineteenth century’s probationary white groups were now remade and granted the scientific stamp of authenticity as the unitary Caucasian race.”¹² For my purposes, whiteness is understood according to this post-1920s “racial alchemy,” though hobbyist articulations of earlier versions of whiteness, especially those anchored in the frontier era, are quite common.

In the first part of his “Saga of the Tuxedo Junction” series, George Allen notes “two interesting facets of the model railroading fraternity. One is its rugged individualism; the other, the interesting characters which the hobby seems to breed. Model rails possess many unknown traits, which, having long been smothered under the daily grind of civilization, suddenly blossom forth when watered down with generous amounts of the hobby.”¹³ As if having plucked adjectives directly from Frederick Jackson Turner’s “Frontier Thesis,” Allen’s meditations on the special qualities of model railroaders place them squarely in the camp of nineteenth-century frontiersmen. Even more overtly, Linn Westcott describes the early modelers of HO_n3, or HO narrow gauge, as “a hardy band of pioneers.”¹⁴ “The Myth of the Frontier is our oldest and most characteristic myth,” explains Richard Slotkin. “According to this myth-historiography, the conquest of the wilderness and the subjugation or displacement of the Native Americans who originally inhabited it have been the means to our achievement of a national identity, a democratic polity, an ever-expanding economy, and a phenomenally dynamic and ‘progressive’ civilization.”¹⁵ And yet, as Slotkin points out, “The complet

‘American’ of the Myth was one who had defeated and freed himself from both the ‘savage’ of the western wilderness and the metropolitan regime of authoritarian politics and class privilege.”¹⁶ The organizing principles of the myth can be seen to function dialectically, then, and this dialectical relationship carries over into Allen’s article. On the one hand, “model rails” are characterized by their “rugged individualism,” and on the other, by their unique traits that have been stifled by modern civilization. It is the model railroad hobby which—as the frontier had done previously for Anglo-American settlers—allows “model rails” to synthesize these antithetical elements.

As previously noted, Stewart considers the gigantic “as a metaphor for the abstract authority of the state and the collective, public, life.” She fleshes this definition out by analyzing the gigantic in terms of “its relation to landscape, to the exteriority of nature and the city, [and] its place within systems of representation” like tall tales, commercial advertising, and “spectacle[s] of consumption.”¹⁷ “The idea of a ‘New World,’ the enormity of the wilderness and its demand for a type of physical labor correspondingly extraordinary,” she writes, “has been the locus for a particularly strong and widespread tall-tale tradition in North America. The tall tale is both a genre of the frontier, with its expansive form, and a genre of emigration, of experience conveyed second- to thirdhand, of ‘the report.’” In contrast to Old World giants, who “represented the unleashed forces of nature,” their North American counterparts “are often famous for taming nature.”¹⁸

Mantua’s “Gandy Dancer Bunk Car Kit” advertisement in the July 1958 issue of *Model Railroader* (figure 23) offers an illustration of the hobby’s racial, class, and gender makeup, an example of the persistence of frontier mythology into the second half of the twentieth century, and a way of engaging Stewart’s discussion of tall tales. On the right side of the ad, set against black, is an image of the assembled car sitting on a section of track. To the left is a black and white sketch of a model railroader sitting on a stool at the edge of his layout, his hand poised above a miniature train. He wears a white dress shirt with the sleeves rolled up, dark slacks, and dress shoes, as if having spent the day at his office desk. Engulfing the scene of the modeler and his layout is a line drawing, in blue, of a gandy dancer swinging his hammer high above his shoulder. He wears a work shirt with the sleeves rolled up, work pants, and a railroad cap with the brim turned upward.

“IF YOU’RE WORKIN’ ON YOUR RAILROAD,” the ad reads in large text, “You’ll Want This Unusual Gandy Dancer Bunk Car Kit.” Below, in smaller text, the ad explains, “They may not be ‘castles’ but they’re sure home to thousands of railroaders whose muscles and skill keep American rail lines and roadbed the safest and quietest in the world.”¹⁹ This text, coupled with the superimposed drawings, together suggest that just as American railroaders have built the nation using their “muscles and skill,” model railroaders build the nation using their ingenuity, craftsmanship, and technological mastery. In his first *Model Railroader* series, “50,000 Spikes,” which began in 1941 but was derailed by WWII, George Allen describes himself and his modeling partner, Ernie, as “a hard looking crew” after a Saturday spent working in the basement. “Ernie not only looked like a gandy dancer after a tough day of ballasting a 152-pound main,” writes Allen, “but every time he moved a cloud of fine sawdust would settle in the air.”²⁰

Both the gandy dancer and the model railroader in the Mantua ad are firmly cast in normative molds of Americanness, whiteness, and masculinity, yet the differences between them—which are differences rooted in their respective historical moments and class positions—are plainly stated. The nineteenth-century gandy dancer is the stereotypical rugged, working-class American man, living a strenuous life and using his brawn to blaze a trail for civilization. The bunk car in which he sleeps (one imagines that he takes his meals outside) may not be a “castle,” but it is his temporary home. As Stilgoe explains, “a [gandy] dancer is not rooted to any particular spot; he needs only a dwelling for shelter, since he is likely to move on.”²¹ The 1950s model railroader lacks the imposing physique of the gandy dancer, but he dons the manly attire of the professional-managerial class. His house (one imagines that he lives in the suburbs) may not be a castle either, but it does offer enough surplus square footage for his layout. Compositionally, these differences are rendered slight by the superimposition of the two drawings. Conceptually, the modeler’s and gandy dancer’s distinct, yet inextricably linked, versions of railroading coalesce around the cultural iconicity and symbolism of the railroad in the United States. And perhaps most importantly, scale functions not only as the interpretive device that mediates these dimensional relationships, but also as the binding agent that affixes the narratives embedded in this ensemble to dispersed historical and cultural meanings.

Michel de Certeau writes that “[tales and legends] are deployed, like games, in a space outside of and isolated from daily competition, that of the past, the marvelous, the original. In that space can thus be revealed, dressed as gods or heroes, the models of good or bad ruses that can be used every day.”²² The viewer of the Mantua ad who sees himself in the gandy dancer could, in turn, see in the gandy dancer the folk hero, John Henry. Here, the relational dynamics of scale free the viewer to indulge in reverie, to collapse space and time in an effort to commune with his imagined cultural predecessors. Peering out over a miniature landscape traversed by a miniature railroad, the modeler might fancy himself a spectator of John Henry’s mythologized race against the steam drill at Big Bend Tunnel, or perhaps even John Henry reincarnated. He, too, is a steel-driving man, facing off with “the abstract infinity of machine production” and winning, only to die from exhaustion.²³ With some racial and historical gymnastics—the railroad laborer on which the tale is based was a former slave—the modeler reconstructs the story of John Henry in the imagined space of his layout. As Stewart points out, however, the historical existence of John Henry and other “heroes of production” like the railroad engineer Casey Jones “does not make the cycles of narratives associated with such figures any less fantastic, for the tale relies on internal rather than external criteria of realism.”²⁴ Seen thus, a day at a 1950s office desk, far removed from the time, place, and manual labor of laying track, is countervailed by the dream world of model railroading and the popular history with which it forms constellations. The story of John Henry, argues Stewart, “marks the beginning of the nostalgic distancing of the gigantic.”²⁵

Resonating in the hobby more directly, and more deeply, is the legend of Casey Jones. In the “Bull Session” in the November 1953 issue of *Model Railroader*, Ray Rhodes writes that “H. C. Van Zant of Jackson, Miss., sent in a write up of the ceremonies at Vaughn, Miss., where a commemorative plaque was erected on the spot where Casey Jones rode to fame in the wreck of the IC *Cannonball*. Seems queer, doesn’t it, that there are people still living who knew and talked to the man who represents the popular conception of the brave engineer. Casey’s wife is still alive at 83 and Sim Webb, his fireman, is still around, yet to many people Casey is only a legend. They just can’t believe that there really was a living person named Casey Jones.”²⁶ Like John Henry, Casey Jones is a giant of popular history, a national hero of whom Americans can be

proud. And one could incorporate the legend of Casey Jones into one's layout by purchasing a miniature replica of the locomotive that Casey Jones "rode to fame." On the back cover of the September 1952 *Model Railroader*, for example, a John Allen photograph depicts Varney's "HO Train of the Year" (figure 24), a string of gondola cars pulled by a "tough, sweet-running Casey Jones 10-wheeler!" The ad asserts that the locomotive is "authentic to the last detail," and urges modelers, "put this train on *your* pike."²⁷ Or, one could scratch-build it. In April 1954, in *Model Railroader's* "Trackside Photos" section, the caption below a photograph of James Cromwell's Casey Jones locomotive reads: "Without question one of the best-known locomotives, this engine's prototype is familiar to just about every American... That's right, this HO model is an excellent replica of Casey Jones' famous Ten-Wheeler."²⁸

If at the start of the war Mantua was running ads stating its commitment to the war effort, by late 1943, the company was running a new kind of ad. In both November and December, Mantua's ads in *Model Railroader* employed the motif of a soldier stuck on a "Pacific Isle," thinking about model trains. In the November ad, one marine runs in the direction of an approaching battleship and shouts, "We're saved!" while another, lying in the sand beside a woman wearing only a hula skirt and a flower in her hair, responds, "Just ask them if they have a new Mantua catalog on board" (figure 25).²⁹ In the December version, a lone soldier leans against a palm tree and, with "The Mantua 'HO' Handbook" by his side, daydreams of a Christmas filled with model trains and hobby magazines.³⁰ As these ads indicate, one of the ways in which the model railroad hobby crafts the nation is by reinscribing racial, class, and gender boundaries. The marines in both ads are clearly coded as white and masculine, while the woman in the November ad is coded as racially Other and hyper-sexualized. A related example can be found in a Roundhouse ad that ran in *Model Railroader* and *HO Model Trains* in the early 1950s. "Feast your Eyes on... EFFORTLESS, SMOOTH ROLLING, FLEXIBLE MOTION," instructs the ad. Inserted between the words "flexible" and "motion" is a "hula girl" wearing a grass skirt, flowers in her hair, and a lei that only partially covers her breasts.³¹ Here, as with the November Mantua ad, a kind of Orientalist discourse works to reinscribe racialized and gendered national boundaries.

A related example can be found in a 1953 Ambroid advertisement (figure 26). Accompanying a cartoon drawing of an Eskimo using Ambroid's scale-model snow plow car to clear the snow in front of his igloo, is the message: "From the Arctic Circle to the Tropics, Ambroid Kits and Ambroid Cement have earned a reputation for outstanding quality."³² While the geographic imaginary mapped along this north-south axis is continental (or hemispheric) rather than national, the United States is clearly understood to be bounded by these climatic zones, and the stereotypical figure of the Eskimo to be the exotic Other against which normative national belonging can be measured. In light of the absence of people of color in the hobby, it is worth looking at a few additional instances in which racial minorities did appear in model railroad magazines from the middle decades of the twentieth century, albeit as caricatures in advertisements.

In August 1948, Varney ran an ad in *Model Railroader* likening the habits of squirrels to the wisdom of stocking up on Varney products during the summer "to lay in supplies for the happy winter months ahead" (figure 27). A stereotypical cartoon drawing of a slumbering Mexican wearing a sombrero, poncho, and sandals joins a drawing of a streamlined locomotive (presumably passing the Mexican as he sleeps hunched over under the desert sun), and the message: "But don't say 'mañana' (tomorrow). Right now is the time to order these hard-to-get items."³³ Curtis Marez points out that "the barefoot, straw-hat wearing Mexican boy with his burro recalls the similarly attired plantation 'pickaninny,'" and, citing the claims of David Roediger "concerning white representations of blacks in the rural south," argues "that 'all of the old habits and styles of life so recently discarded by whites in the process of adopting capitalist values came to be fastened' onto Mexican workers, or in some cases their burro proxies. 'The separation of work from the rest of life, the bridling of sexuality, the loss of contact with nature, the timing of labor by clocks rather than by sun and season, the injunction to save by postponing gratification'—in both modernist and mass cultural images, Mexican workers such as the wood vendor were depicted as picturesque and exotic exceptions to these capitalist disciplines."³⁴ Like the Mexican boy with his burro, the Mexican in the Varney ad is consigned to the pre-modern past, and this is emphasized by the contrasting image of the modern locomotive. Marez goes on to assert that images like these "promised Anglos a vacation from capitalist discipline by projecting idealized fantasies of Mexican

service.” Indeed, so “idealized” are the “fantasies of Mexican service” in the Varney ad that the Mexican is not even working. Instead, he is represented as lazy, and *unlike* him, the modeler should not say “mañana.” Here the Mexican is, on the one hand, the “picturesque and exotic” exception to capitalist discipline and, on the other, the example that confirms the rationality and superiority of capitalist discipline.

Similarly, an October 1952 ad for “Walthers’ Goo” employs the racist stereotype of the Oriental. “Once upon a time,” the ad begins, “a mysterious, oriental-looking character told us a weird tale of a wonderful all-purpose adhesive.” Below this text is a cartoon of the “oriental-looking character” (he wears “traditional” clothes, a skull cap, and his hair in a braided plait) emphatically describing the product to a white businessman, who is taken aback by a barrage of faux Chinese characters (figure 28). The narrative continues: “‘Even stronger than Walthers’ Goo,’ he said (knowing no greater superlative). The only difficulty was that no one could get it out of the container. Well, Walthers’ Goo comes out of the container—but after that, look out!”³⁵ The Oriental is represented here in the tradition of what Robert Lee has called “the yellowface grotesque.”³⁶ Lee, who is centrally concerned with “popular culture as a process, as a set of cultural practices that define American nationality—who ‘real Americans’ are at any given historical moment,” focuses in particular on the production of the Oriental as a racial category and the ways in which representations of the Oriental have been called upon to patrol the routes of national belonging.³⁷ The deployment of “the yellowface grotesque” in this 1952 ad functions to reify the traditional, white American family by representing the “oriental-looking character” as a “mysterious” alien.

For *Model Railroader*’s twenty-fifth anniversary issue, Floquil Products ran an ad congratulating the magazine. Beneath a cartoon of two “braves” sitting by a fire outside of their teepees, one smoking a peace pipe and the other folding his arms, is the text: “25 Years Heap Long Time!” Both of the men wear leggings only, and one has a feather (Floquil’s logo) in his hair (figure 29). The ad goes on to say, “FLOQUIL BURY PEACE PIPE SMOKEM HATCHET,” and then, in smaller print, “All best Braves choose Floquil war paint for Model Railroads. You be big chief, too. Askem for Floquil Feather at dealer.”³⁸ Like the Walthers and Varney ads, this ad traffics in precisely those kinds of racial, cultural, and linguistic stereotypes that underpin both the colonial desire for

otherness and the alignment of national identity with whiteness. Despite Floquil's claim that "All best Braves choose Floquil war paint for Model Railroads," neither magazines nor catalogs from the period reveal a Native American presence in the hobby. Phillip Deloria's analysis of "playing Indian" proves helpful here. Deloria asserts that "the practice of playing Indian has clustered around two paradigmatic moments—the Revolution, which rested on the creation of a national identity, and modernity, which has used Indian play to encounter the authentic amidst the anxiety of urban industrial and postindustrial life."³⁹ As an example of the latter, Deloria examines Indian lore hobbyists of the 1950s and 1960s, largely members of the white middle-class who turned to playing Indian out of a desire for authenticity and meaning in their lives. "Indianness, with its multilayered history of evocative symbolisms," Deloria explains, "offered a rich palette of additional meanings—nature, patriotic rebellion, freedom, and Americanness itself."⁴⁰ During this same moment, model railroaders—who, like the Indian lore hobbyists, were primarily white and middle-class—were engaged in their own pursuit of authenticity. While the Floquil ad makes no pretense of representing authentic Indianness, it does suggest that Indian stereotypes were expected to resonate with model railroaders, and that this was perhaps the case because these stereotypes readily lent themselves to associations with the frontier, the railroad, and the nation.

Beyond their casual use of racist stereotypes, what is especially striking about these three ads is the fact that the groups they represent are precisely those that experienced the largest amount of exploitation and displacement due to railroad construction and westward expansion generally. "Unkempt and volatile," writes Pablo Mitchell, "the American railroad was none other than the ultimate agent of American modernity and imperialism."⁴¹ In the second half of the nineteenth century, for example, "those of Mexican origin (either born in Mexico or American born of Mexican descent) suffered great losses: in land, in wealth, in status, in political power, even in percentage of the population."⁴² During the same period, Chinese railroad workers, who made up a significant part of the "coolie labor" economy in the West, were frequently exploited by their railroad employers. The most visible example of this exploitation came in 1867, when 8,000 Chinese laborers working on the Central Pacific struck for "pay and working conditions equal to those of their white co-workers."⁴³ "To the railroad builders,"

explains Patricia Nelson Limerick, “the Chinese were cheap, expendable, and replaceable, performing a necessary but unattractive form of labor.”⁴⁴ And, according to Richard White, in the closing decades of the nineteenth century, “railroad companies that would by law get large grants of land if Indian Territory was dissolved” helped create “an unstoppable momentum for dissolving the governments of the Five Civilized Tribes.” White goes on to note, “As corporations built the railroads and opened coal mines, the federal government limited the ability of the Indian nations to regulate these corporations or their workers.”⁴⁵ In each of these advertisements, dark historical realities are erased, and the people the advertisements represent are rendered as cartoons, “humorous” traces of their historical (and contemporary) selves.

And yet, there is still another element to this equation that has to be considered: the depiction of these groups on actual layouts. Not unlike the effect of the cartoonish representations in the ads, the miniaturization—and, as static figures positioned on the layout, the immobilization—of stereotypical members of these groups reduces the actual people to props, freezing them in the past by reenacting the settler colonial relationships of the nineteenth century. A John Allen photograph used for a Varney ad in 1953, for instance, depicts a scene on his layout in which a group of stereotypical Mexican workers, identified by their signature sombreros, lay track while a white foreman looks on (figure 30).⁴⁶ And Posey explains that on his layout he positioned “a herd of galloping buffalo... at the edge of a cliff, pursued by an Apache on horseback.”⁴⁷ It might be noted that by the 1890s, the period Posey models, the only buffalo left in the United States were in Yellowstone National Park, placed there by Eastern preservationists. Perhaps, like them, Posey unwittingly desired “to preserve the bison as a living memorial to a romanticized frontier of Euroamerican conquest.”⁴⁸

Like the “hula girls” in the Roundhouse and Mantua ads, even those women racially coded as white tended to be represented as sex objects in hobby advertisements of the 1950s. In July 1953, for instance, an ad for Tru-Scale “Quality Roadbed” features a drawing of a blond, lingerie-clad “pin-up girl” looking over her shoulder as two miniature railroad men, one perched on each hip, tighten her corset with determined looks on their faces (figure 31). The ad, which is for flexible track, asks, “...are ‘Tight Curves’ giving you trouble?”⁴⁹ The scale differential between the woman and the toddler-sized modelers,

coupled with the fact that there is only one woman but two men, is suggestive of sexual domination in general, and perhaps even Oedipal desire. While Tru-Scale was the company that most consistently employed this kind of cartoonish representation, other companies like Walthers and Margo Kraft ran similar ads during this period.⁵⁰

In a late 1950s Fleischmann ad, a sample of the company's products, which range from locomotives and rolling stock to track and buildings, are displayed on a table, and seductively posing in a white, low-cut silk dress behind the products, and holding a Fleischmann sign, is the stripper and burlesque dancer, Blaze Starr (figure 32).⁵¹ By juxtaposing model railroad products with a woman model, Fleischmann rather straightforwardly groups both together as commodity fetishes. Ben Chappell describes a cognate example in his discussion of lowriders. "In lowrider magazines, which often feature models in bikini swimsuits posing in front of cars," writes Chappell, "lowriders are presented as the objects of a specific kind of male, heterosexual desire. In these cases, women's bodies are used as ornaments for the magazine and the cars it depicts."⁵² Citing Benjamin's discussion of fashion and death, Buck-Morss explains that "[fashion] is 'the dialectical switching station between woman and commodity—desire and dead body.' With its power to direct libidinal desire onto inorganic nature, fashion connects commodity fetishism with that sexual fetishism characteristic of modern eroticism."⁵³ And later, citing Benjamin's discussion of prostitution and Baudelaire, she writes, "The modern prostitute is a mass article in the 'precise sense,' due to the fashions and makeup that camouflage her 'individual expression,' and package her as an identifiable type: 'later this is underscored by the uniformed girls in the review.'"⁵⁴ In the Fleischmann ad, Blaze Starr appears as a commodity fetish in a double sense, as both burlesque star and advertising prop. Like lowrider bikini models and the cars they show off, both Starr and the products she poses with are "objects of a specific kind of male, heterosexual desire." As a 1951 *Model Railroader* article, "How to Be a Model Railroader Though Married," puts it, "It is no easy task keeping a wife and a model railroad at the same time. It is not unlike keeping a favorite blond in the attic."⁵⁵ The conflation of the model railroad with the female sex object takes on an added layer of meaning, if not dialectical synthesis, in a cartoon from the Fall 1961 issue of *Model Trains*. A white, middle-aged model railroader is shown walking away from the hobby shop with his hands full of kits and pieces of

track, turning back to look at a buxom young woman, dressed in the latest fashions, as she walks down the street (figure 33). The thought cloud emerging from the modeler shows that he is imagining the woman, not without her clothes on—but as a figure on his layout.⁵⁶

If not depicted as sex objects, white women in mid-twentieth century hobby magazines were almost invariably represented as domestic, patient, and supportive wives and mothers. In articles describing operating sessions at a modeler's house, for example, the author often notes that the session ended with his wife serving the group "refreshments." Or, in a letter to the editor from the August 1948 *Model Railroader*, Mrs. Joyce A. Heaney explains that she made a storage case for her husband's modeling tools so he would stop using her "tweezers, nail scissors, etc." She even marked each of her husband's tools "with a daub of blue paint to distinguish his items from [hers]."⁵⁷ In the "Meet Our Authors" sidebar in the September 1952 *Model Railroader*, the author writes that George Allen's wife "presides over the distaff functions at Chanticleer Farm with some kind of magical efficiency. Somehow she keeps everything pin-neat, prepares excellent dinners, and enjoys free time without ever appearing to be hurried or even busy."⁵⁸ And Wilbur Johnson explains in "How I built The Cactus Gulch" that he decided to build his layout because he had, among others things, "a bunch of 2 x 4's and other lumber that the wife procured for the purpose of building a picket fence, with me as the chief engineer, of course," and "said wife, who did not mind if I spent all my spare time in the basement (at least I was at home where she could keep an eye on me)."⁵⁹ In each of these examples, the modeler's wife neatly fits 1950s models of middle-class female domesticity.

As Posey notes in a passage cited above, if the female members of "the perfect Lionel family" appeared at all, they "were in the background as an adoring audience." Posey's mother was an exception to this rule, as his father was killed in WWII when Posey was less than a year old, and she assumed the role of helping him with his layout—until she remarried, at least, at which point Posey's new stepfather took charge.⁶⁰ Another (partial) exception to this rule can be found in a letter to the editor in the July 1953 issue of *Model Railroader*. Sent in response to a woman who referred to herself "as a lonely model railroad widow," Mrs. Wm. O. Arnold offered the following tip: "Make model

railroading your hobby, too, and you'll cease to be lonely! It is a fascinating, creative and educational hobby. My husband has shown me that there are things in model railroading where a woman's touch is an asset."⁶¹ Even here, however, the woman is peripheral, an extension of her husband. She signs her letter "Mrs. Wm. O. Arnold," and it took her husband to show her that her "woman's touch" was an asset. Aside from other occasional references to wives and daughters helping, for example, to paint scenery, female participation in the hobby seems to have been quite rare in the 1950s.

For as seldom as women are mentioned in hobby magazine articles, cartoons—like advertisements—tend to be a venue in which women appear almost as often men. As with the Varney, Walthers, and Floquil ads discussed above, then, the cartoon works to relegate women to a discursive space in which they have little or no agency. Despite the range of sentiments the women represented in these cartoons express toward their husbands' hobby, they form an identifiable type: white, middle-class, and matronly. In the July 1950 issue of *The HO Monthly*, for instance, a cartoon depicts a man sitting at a table, fixated on his model railroad, almost to the point of appearing catatonic (figure 34). As his wife sees their dinner guests to the door, she says, "Thanks for coming. I'll tell Jim you were here."⁶² The modeler's obsession has made him socially alienated, but his sympathetic wife bears it not unlike she might the antisocial habits of a maladjusted child. A similar instance of a modeler's wife accommodating her husband's obsession can be found in a November 1953 *Model Railroader* cartoon (figure 35). Here, a modeler is pictured working on his sprawling, makeshift layout in the living room as his wife, wearing an apron and holding a pot, enters and says, "O.K., James J. Hill – soup's on!"⁶³ Like Mrs. Joyce A. Heaney, who color-coded her husband's modeling tools as if they were her son's clothes, the woman in this cartoon addresses her husband as if he were her child. In contrast to these representations of the modeler's wife as nurturing and sympathetic, a December 1952 *Model Railroader* cartoon (figure 36) depicts a club meeting in a room full of men wearing engineer's caps and a speaker who, with bandaged head, a black eye, and his arm in a sling, says: "My next topic is, 'How I Got My Wife to Accept the Kitchen Branch Line'..."⁶⁴ In each of these cartoons, the modeler is seen as a man who has not grown up, and his wife as a woman who bears her husband's childish behavior by acting like his mother.

Material Scale:
“A Piece of Honest-to-Goodness U.S.A.”

The model railroad hobby traces its origins not only to the early railroad era, but also to the tradition of landscape design that emerged in England in the eighteenth century, when “[a new English school of landscape architects] turned the estates of English lords and aristocrats into rolling expanses of meadows, trees, lakes, and streams.”¹ According to Raymond Williams, “Eighteenth-century landlords, going on the Grand Tour and collecting their pictures by Claude and Poussin, learned new ways of looking at landscape and came back to create such landscapes as prospects from their own houses.” He goes on to explain: “When men could produce their own nature, both by the physical means of improvement (earth-moving with new machines; draining and irrigation; pumping water to elevated sites) and by the understanding of the physical laws of light and thence of artificial viewpoints and perspectives, there was bound to be a change from the limited and conventionally symbolic and iconographic decoration of the land under immediate view... For what was being done, by this new class, with new capital, new equipment and new skills to hire, was indeed a disposition of ‘Nature’ to their own point of view.” Moreover, the “self-conscious observer [of these “pleasing prospects”] was very specifically the self-conscious owner,” who arranged the landscape for personal consumption by actively removing any traces of human labor.² It was within this landscape tradition that miniature railways—understood to mean large, industrial miniatures that traversed the grounds of parks and estates—first appeared around the middle of the nineteenth century.

Susan Stewart asserts that these early miniatures “found their function in the aesthetic or play sphere whether they were part of private estates or public displays. By the turn of the century,” which is also when electric toy trains emerged as the playthings of bourgeois European and American boys, these industrial miniatures “had been totally given over to amusement.”³ According to Stewart, the parks that housed mid-nineteenth-century miniature railways bear “the double stamp of culture brought about by introducing the mechanical to the natural and by traversing the natural with the

mechanical at the same time that a reduction of scale is effected. Whereas the railroad itself had brought about a new traversal of the landscape, the vision it offered was a partial one, the vision of an observer moving through, not above, the landscape. In the miniature railroad we have a reduction of scale and a corresponding increase in detail and significance, and we are able to transcend the mechanical as well as the natural that forms its context.”⁴ The reduced scale of these early miniatures, then, had already shifted the perspectival relationships that accompanied railroad travel, and already set in motion future reductions of scale. “In the further miniaturization of the table-top train set,” Stewart explains, “we have an access to simultaneity and transcendence completed. Correspondingly, the natural has moved from the forest to the individual trees of the park to the synthetic trees, barns, cows, and farmers of the train set’s landscape.”⁵ Echoing Leo Marx’s discussion of “the machine in the garden,” Stewart is primarily concerned here with the tension between the mechanical and the natural. While representations of the natural form an important part of most model railroad layouts, representations of the urban, and especially the industrial, tend to be just as important, if not more so. For the majority of modelers, an agricultural operation involving “barns, cows, and farmers” would require at least a whistle-stop, if not a larger town to which the farmer could ship his products by train.

Williams’s formulation of the dialectic between the country and the city helps explain how these spatial imaginaries are mutually constituted and culturally produced. “On the country,” he writes, “has gathered the idea of a natural way of life: of peace, innocence, and simple virtue. On the city has gathered the idea of an achieved centre: of learning, communication, light.”⁶ Noting some of the ways in which “the real history, throughout, has been astonishingly varied,” Williams goes on to assert that “in our own world, there is a wide range of settlements between the traditional poles of country and city: suburb, dormitory town, shanty town, industrial estate.”⁷ While model railroad layouts often capture a number of different scales of settlement, the basic relationship between country and city is the most commonly expressed spatial arrangement. In a 1948 article, for example, one modeler explains, “To me, railroads consist principally of two essential parts: the part through the city where scheduled stops are made, and the part through the country and villages where no stops are made.”⁸ Similarly, in a 1954 *Model*

Railroader article on a tabletop trolley layout, the author explains, “On one side is the city, on the other side the country.”⁹

In most cases, the decision to model only this basic relationship is in large measure due to limited space. Not so, however, for George Sellios. Housed in a large loft in Peabody, Massachusetts, Sellios’s HO-scale Franklin & South Manchester layout measures more than forty feet from one end to the other. It has two cities, Manchester and Doyertown, which are connected by an expansive greenway. Like many other modelers, Sellios was inspired by John Allen. “But instead of Allen’s signature landscapes,” Posey explains, “George was attracted to a city Allen had included on his layout.”¹⁰ According to Posey, and numerous *Model Railroader* articles that have been written about the Franklin & South Manchester in the last twenty-five years, what is most impressive about the layout is its phenomenal level of detail. Posey writes that Sellios “has modeled every sort of material: brick, concrete, glass, copper, tar paper, tin, wood, steel. Every surface has been textured, painted, smudged, scraped, scoured, stained, weathered.”¹¹ As John Page points out in the July 1953 *Model Railroader*, “We are all aware that a fine model must be reasonably close to scale in three dimensions, length, width, and height. But there is another aspect to modelbuilding about which we know very little and seem to regard quite casually. That aspect is the model’s surface, its texture. We might call this the model’s fourth dimension.”¹² In his emphasis on highly detailed urban scenes, it might be said that Sellios captures the texture, or fourth dimension, of city life.

After describing Port, the city that was to inspire Sellios’s Manchester and Doyertown, Linn Westcott describes some of the landscapes that made John Allen so famous: “Now look to the left of Port and take in the sweeping panorama of G.D. territory. The distant half of the room is entirely mountains. Some peaks touch the ceiling while their steep slopes fall to the floor on each side of the aisleway. Here the walking surface represents a river flowing through a gorge called ‘Giant Canyon.’”¹³ As this description suggests, Allen’s layout complicates the relationship between the miniature and the gigantic. According to Stewart, “Our most fundamental relation to the gigantic is articulated in our relation to landscape, our immediate and lived relation to nature as it ‘surrounds’ us. Our position here is the antithesis to our position in relation to the miniature; we are enveloped by the gigantic, surrounded by it, enclosed within its

shadow. Whereas we know the miniature as a spatial whole or as temporal parts, we know the gigantic only partially... Consequently, both the miniature and the gigantic may be described through metaphors of containment—the miniature as contained, the gigantic as container.”¹⁴ If, as Stewart argues, the miniature and the gigantic are antithetical categories of scale, model railroads like Allen’s can be seen to embody the dialectical tension these categories produce. Though in HO, his layout is enormous. The body’s “relation to landscape” runs together with its “relation to the miniature,” and subsumes both within the dialectics of scale.

Stewart points out that “the dollhouse not only presents the house’s articulation of the tension between inner and outer spheres, of exteriority and interiority—it also represents the tension between two modes of interiority. Occupying a space within an enclosed space, the dollhouse’s aptest analogy is the locket or the secret recesses of the heart: center within center, within within within.”¹⁵ The model railroad is bound up along similar lines of tension, but I would argue that in addition to “represent[ing] the tension between two modes of interiority,” the model railroad represents the tension between two modes of exteriority. Stewart asserts that “what we look for is the dollhouse within the dollhouse and its promise of an infinitely profound interiority.”¹⁶ This same promise manifests itself on model railroad layouts, but just as importantly, the layout—a miniature of the larger, outside world—holds the promise of an “infinitely profound” exteriority. This is evidenced, for example, by Posey’s sense of the relationship between not only 1:87 and 1:1, but also 1:1 and 87:1, as well as by the frequency with which modelers express the desire to expand their layouts, to make their “empires” larger still.

While T scale, or 1:480, is a recent addition to the model-railroading lexicon of scales, John Allen had already pondered something along the same lines. Westcott explains that, “as a hoax to convince other modelers that someone was building a working railroad in tiny 1/400 scale,” Allen staged a pair of photographs depicting a locomotive and boxcar along with a pencil and ruler as points of reference. “In reality,” writes Westcott, “the models were HO, and the pencil and ruler were much-enlarged photos instead of the actual objects.”¹⁷ The infinite interiority promised by the miniature finds further expression in two features of Allen’s layout itself. In 1950, Allen celebrated the fiftieth anniversary of his railroad by orchestrating a rail fan excursion on his layout.

Though Allen's layout was only four years old, he reasoned that, on his railroad, "time is 12 times faster than in real life."¹⁸ And Westcott explains that "one of the last touches [Allen] added before his death in 1973 was the tiny live steam club railroad under construction under the viaduct at Gorre."¹⁹

This logic of "center within center" can also be found in Allen's planning techniques. Not only did he make a miniature model of his proposed layout, but before even moving into his new house in Monterrey—which he bought because it had a basement that would accommodate his layout—he made a scale model of the house.²⁰ As one Gorre & Daphetid operator said, "We all knew he planned one day at a time in his life, but planned many years ahead for his railroad and followed his plan."²¹ This model was clearly intended for practical purposes, but it might also be interpreted as a kind of dollhouse. It was a three-level model with a removable roof, and it could be lifted off the foundation for closer examination of the basement. As dollhouse, this model achieves a triple interiority, where the proposed layout becomes the additional layer of interior space, which in turn carries with it both the simulated exterior world of the layout and the actual exterior world the layout imaginatively depicts. These relationships take on still further layers of complexity and meaning in light of instances like Posey calling a town on his layout Cielo Vista, "after the street on which John Allen had lived," and Sellios copying a trestle from Allen's layout and naming the mountain where the trestle is located, Mt. Allen.²²

In "the practice of everyday life," the categories of scale most frequently encountered are the material and the spatial. "As unrecognized producers, poets of their own acts, silent discoverers of their own paths through the jungle of functionalist rationality," writes Michel de Certeau, "consumers produce through their signifying practices... 'indirect' or 'errant' trajectories obeying their own logic."²³ The "spatial practice" of riding the train, for instance, presents the traveler with the double immobility imposed by "the grid of the railway car": "Inside, there is the immobility of an order. Here rest and dreams reign supreme... Outside, there is another immobility, that of things, towering mountains, stretches of green field and forest, arrested villages, colonnades of buildings, black urban silhouettes against the pink evening sky, the twinkling of nocturnal lights on a sea that precedes or succeeds our histories."²⁴ Noting

the “chiasm... produced by the windowpane and the rail,” de Certeau argues that “paradoxically it is the silence of these things put at a distance, behind the windowpane, which, from a great distance, makes our memories speak or draws out of the shadows the dreams of our secrets.”²⁵ The model railroad produces a similar dream state, only here this dream state is activated not by the distance created by the windowpane but rather the closeness created by the modeler’s relation to the miniature. As Stewart argues, “The toy world presents a projection of the world of everyday life; this real world is miniaturized or giganticized in such a way as to test the relation between materiality and meaning.”²⁶

Recalling Stewart’s discussion of “center within center,” Anne Whiston Spirn writes, “There are landscapes within landscapes within landscapes. Every landscape feature is both a whole and part of one or more larger wholes.”²⁷ Seen thus, “Space is not segmented into scales, but continuous... Path, garden, neighborhood, town, region, nation are nested contexts, each enclosed within a larger whole and context for features at smaller scales.”²⁸ Model railroads are similarly nested along a spatial continuum. A layout might be in a basement or attic, which is inside a house, which is part of a neighborhood, and so on. And yet model railroads also form their own self-contained worlds, duplicating this structure in miniature. Numerous “nested contexts” appear on the layout itself, and still others are imagined. Added to this is the fact that model railroads are built in a wide range of scales and gauges, from T scale to “grand scale” live steam railroads (the descendents of mid-nineteenth-century industrial miniatures). The result is a multiplication of the meanings associated with a given nested context. Moreover, because model railroads form their own miniature geographies, they enact a kind of mapping that makes these geographies not only mobile but saturated with nostalgia and utopian desire. Perhaps the most direct example of this mobility is furnished by T and Z scale (1:220) “briefcase layouts.” As articles with titles like “Z scale in a briefcase” and “A layout built to travel: The Z scale Val Ease Central is a globe trotting hobby ambassador” suggest, not only do the smaller scales permit representations of larger geographies, they also make it possible for tiny scenes to move through the transient spaces of everyday life.²⁹

If, for John Allen, the house on Cielo Vista Terrace was a kind of dream home because it could accommodate his sprawling Gorre & Daphetid layout, an inversion of

this relationship, where the layout furnishes space for a miniature version of one's dream home, is also evident in the hobby. In the July 1953 issue of *HO Model Trains*, for example, the how-to article, "Build a Small Summer Home on Your Layout: Ideal for the Beach, Mountains, or Lakeside," provides scale drawings and a short description of "Kinsella's Suitsus Bungalow."³⁰ A modeler might not be able to afford an actual summer home, but he could build a miniature substitute on his layout. Similarly, a Tru-Scale ad in the January 1959 *Model Railroader* (figure 37) announces a "REAL ESTATE SPECIAL" on "New modern 'dream' homes . . . READY-Bilt . . . Illuminated and Landscaped . . . Nothing to assemble! Startlingly realistic . . . Large, beautiful landscaped lots with velvet-green lawns, and all kinds of flowers, vines, shrubbery, hedge and trees. Soft, indirect lighting, Finest and most expensive construction materials . . . Harmonizing decorator colors . . . Distinctive architectural designs . . . Exclusive residential district! Tru-Scale's mastery of 'REALISM' in miniature!"³¹ Without the references to realism, this advertisement could easily work as a blurb for one of the new suburban housing developments that sprang up across the country during the 1940s and 1950s. Indeed, the image that accompanies the ad had become quite familiar in the decade-and-a-half following WWII.

The ideal of a suburban home with a well-manicured front lawn was the subject of hobby humor as early as September 1942, when *Model Railroader* ran a cartoon depicting two men driving through a neighborhood where, one of the men remembers, a modeler with a "basement full of railroad" lives (figure 38). The men are not sure whether the modeler said his house was the second or third from the corner, but the overgrown front yard of the third house leaves little doubt.³² Like this modeler with a "basement full of railroad," John Allen neglected yard maintenance at his house in Monterrey. "The house is hidden behind overgrown shrubbery," explains Westcott. "Even though the steep drop-off allows a shallow front lawn, John has let the front yard grow in dense bushes rather than have to mow it."³³ Further evidence of this turn inward from the outside world can be found in the fact that most modelers cover the windows in the their layout rooms to keep natural light from interfering with their model railroad lighting. Allen's layout, for example, featured a daytime lighting scheme, night lighting effects, and even the moonrise, all of which required that outside light be kept at bay.

Perhaps more importantly, this level of orchestration simultaneously reflects an embrace and a rejection of reality. On the one hand, Allen wanted his miniature world to feel real, down to the movements of celestial bodies, and on the other, he sought this world out in his basement, with the window covered and his yard left untended. This tension between interiority and exteriority should nevertheless be seen as productive insofar as it forces a reappraisal of the assumption that the private world of the individual is somehow less real than the public world of the collective.

Toward the effort to achieve prototype realism, modelers have consistently turned to magazines like *Trains* and *Model Railroader*, photographic histories, books on specific railroads, and real world reconnaissance. In the January 1959 *Model Railroader*, for instance, an advertisement for *Trains*, “the magazine of real railroading,” states: “As model railroaders, you know the value of clear, sharp photos of prototype railroad subjects... Whether you model a particular prototype or free lance, you want to know what the ‘big brothers’ are doing—and TRAINS tells you! TRAINS magazine is a ‘natural’ companion publication to go along with your MODEL RAILROADER.”³⁴ In April 1954, the cover of *Model Railroader* featured an image of a scale-model refrigerator car and a photograph of two men inspecting the model’s prototype, along with the text, “We measure a car and build it in HO.”³⁵ Posey writes that he “studied the Western layouts featured in *Model Railroader* and compared them with [William Henry] Jackson’s landscapes.”³⁶ In addition to a book on Jackson’s nineteenth-century Colorado photographs and Westcott’s book on John Allen, Posey explains that there were two other books, *The Colorado Midland* and *Colorado Midland Railway*, which “were to create a looking glass through which I could step from our basement into a world of granite and iron that had existed one hundred years before.”³⁷ And, rather than relying on the accuracy of manufacturers, John Allen studied prototype railroads: “Take track walking as an example. I would wander by the railroad tracks and measure the sizes of things like the spacing between tracks, rail sizes used in different kinds of track, color of the roadbed, etc.”³⁸ Perhaps Allen’s yard was overgrown, but his hobby brought him into close contact with the subtle details of the outside world of the railroad right-of-way.

As Posey’s comparison of the photographs of layouts and the photographs of Colorado suggests, the goal of prototype realism extends to every aspect of the layout,

from landscape, vegetation, and dirt to buildings, bridges, and roads. In “Old King Coal on the N&O,” Boomer Pete explains that Carl Appel’s OO gauge Norfolk & Ohio (figure 39) achieves the “over-all effect of a real railroad” in part because “Appel went to Lynchburg on his vacation and studied the real thing in detail. He took dozens of photos of the bridges across the river, even to details of construction and abutments. He studied the types of buildings, the topography of the country along the river and the traffic on the railroad.”³⁹ Noting how the track plan and construction further the layout’s realism, Pete goes on to assert that “probably the most stunning effect of all is the background, a flat photographic panorama which makes the countryside back of the railroad stretch without limit into the distance.” Pete concludes: “So here we have not a model railroad, but a piece of the Virginia countryside, lifted right out of reality and stuck into Carl Appel’s basement... [S]o perfect is the scene that we almost hear, instead of the hum of OO gauge wheels, the clank and pound of real 50-ton cars... This is realism in miniature.”⁴⁰ What is especially striking here is the notion that “a piece of the Virginia countryside” could be uprooted from reality and transplanted in Appel’s basement in Allentown, Pennsylvania. Appel’s layout can be seen as a raised relief map (which takes on an additional layer of realism with the introduction of moving trains), and Appel as a modeler-cartographer.

While Appel’s layout maps a section of Virginia coal country through close attention to prototypical detail, other layouts map imagined places. *Model Railroader’s* October 1939 issue begins with the article, “Brass Hattin’ A Pike of Your Own,” which asserts that, in freelance modeling, “We build our own railroad, but always to scale from first class standard practice.”⁴¹ The layouts of John Allen and George Sellios, for instance, are freelanced. “Off in the wild someplace,” the article explains, “there is a section of country which needs a railroad. Perhaps if you look hard enough you can find a location where even the I.C.C. can’t butt in and tell you what to do. If you can’t find such a location, make your own country, and appoint yourself the I.C.C.” Like the “wild” frontier tamed by the arrival of the railroad and “civilization,” the real and imagined parts of the country that modelers might still develop are rendered here as places where the battle between wilderness and civilization, country and city, individual and state, plays out. The Interstate Commerce Commission, with its oppressive regulations, is cast as Big

Brother, whose circumvention frees the modeler to tap into the rugged individualism and enterprising spirit of nineteenth-century railroad men. At the same time, building a model railroad “is being in the railroad business without the headaches of funded debts and subsidized competition.”⁴² It might be said, then, that the hobby offers a way around both real-world economic constraints (the I.C.C.) and real-world economic risks (debt and competition). It provides flight from responsibility via the simulation of responsibility.

The association of the hobby with the frontier takes on an additional layer of meaning when the modeler assumes the role of surveyor. “If the location of your prospective railroad is a piece of honest-to-goodness U.S.A.,” the article continues, “you can get topographical maps from the U.S. Geodetic Service, Washington, D.C. If the country springs full-fledged from your imagination, you will have to sketch it out in considerable detail, complete with a metropolis, suburban villages, and even perhaps a wildcat mining town. Either way you have a space that’s just aching for a railroad, and the fact that that’s unusual nowadays makes it all the more fun.”⁴³ While freelance modeling frees one to use his (or her) imagination to make his (or her) “own country,” this country is assumed to be, at least by the magazine, “a piece of honest-to-goodness U.S.A.,” which is, in turn, understood to contain “a metropolis, suburban villages, and even perhaps a wildcat mining town”—in short, a distilled, or scaled-down, version of conventional American spatial arrangements. It might be said, then, that the American nation is itself crafted along a continuum of scale, where certain types of built and natural landscape imaginaries function as geographic synecdoches for the country as a whole. Not unlike Spirm’s list, the continuum would start with the layout, move to the basement (ur-domain of twentieth-century, bourgeois male hobbies), up to the house’s main floor, out into the neighborhood, proceed onto Main Street, out past town and into the countryside, and onto the big city.

As this 1939 article suggests, the conventionality of these spatial arrangements is what allows them to be applied to more personal, imaginative geographies. In “How I Built the Carrizo & North Grand,” for example, Alex Tocquigny writes: “My railroad does not represent any particular prototype railroad or scenery. The name Carrizo & North Grand was derived from my old home town of Carrizo Springs and the street on which we now live. I have always liked the C&NW herald, so I adopted the basic design

for my pike.”⁴⁴ This layout strives for realism, but it is an abstract, generic realism, which allows Tocquigny to depict the imagined place formed by his hometown in South Texas and the street on which he and his family now live (figure 40). And, because the name of his railroad has the same first two initials as the Chicago & North Western, he borrows the latter’s herald, which incorporates still another geographic vector. His layout can be seen as a “cognitive map” of his personal geography and scale models as his cartographic instruments. The ordinariness of the scene he depicts affords him the freedom to infill that space with pieces of his own life, to bridge what Fredric Jameson, drawing on Althusser, has called the “gap between phenomenological perception and a reality that transcends all individual thinking or experience.”⁴⁵ As Posey explains, “Many layouts are a form of autobiography. Our mining town, for example, is named after our friend, Frank Stella, the abstract artist... My wife is the artist who creates the labels for Newman’s Own food products, so we have a Newman’s Own factory. The list goes on.”⁴⁶

Describing a different kind of imagined layout, John Armstrong explains in a 1952 article: “There’s a reason for everything. Take the case of two imaginary railroads that merged, put a magnifying glass on the spot where the main lines crossed and you have the reason for the Allegheny & Lake Erie RR.”⁴⁷ Joining this introductory statement is a drawing of a map with a magnifying glass hovering above it. “The layout presents a broad scene of a typical railroad town—mostly railroad, not much town,” writes Armstrong. In order to make sense of how the railroad would operate prototypically, he goes on to write that “we will have to use mental manipulations to explain the whys and wherefores,” and he proceeds to relay an imagined conversation with “the towerman.” The towerman recounts an intricate history, which “has ample basis in fact,” of “the friction of the consolidation of previously competing lines.”⁴⁸ Armstrong notes similar examples outside of Western Pennsylvania that include Arizona, New York, and St. Paul. Neatly summing up what Stilgoe has called “the industrial zone picturesque,” the article concludes: “We show a complex, heavy-goods manufacturing plant at one end and at the other a coal mine run in combination with one of the most picturesque of industrial scenes, a battery of beehive coke ovens” (figure 41).⁴⁹ Emerging out of this unique form of mapping the American industrial landscape is a layout plan that can be adapted to different geographic locations. Whereas Tocquigny’s layout charts a personal geography

by imaginatively combining multiple scales of time and place, the A&LE charts a prototypically common, regional—if not national—geography that lends itself to cartographic versatility.

Posey's discussion of his own layout, which incorporates a number of these imaginative possibilities, furnishes one last example. Posey writes of wondering if the Colorado Midland could have been saved, and, if so, how this might have happened—if an extension were to have been built, what its route might have been. He explains that an extension would have likely gone south along the western border of Colorado and into the Four Corners area, and this part of Colorado was the landscape his layout most resembled, not the high-mountain terrain of the Midland's actual route (figure 42). He decided to imagine that his layout was the never-built extension that saved the Midland: "Now we would have features inspired by the real Midland and a fictitious route that might have been its salvation—a promising hybrid that combined the historical prototype with a landscape I was free to invent, uninhibited by claims of reality. Our Colorado Midland would be its own myth."⁵⁰ He makes a trip to Colorado, of which he writes: "I flew into Grand Junction bent upon documenting specific geologies and seeking out some original Midland artifacts that I had reason to believe still existed... I drove south along the border between Colorado and Utah, imagining that I was a surveyor for the Midland who was looking for a route to Arizona."⁵¹ Here, as surveyor, the connections with cartography are made explicit. In his 1995 *Model Railroader* article, Posey writes that, at the Colorado Railroad Museum, "I climbed aboard [a partially restored Midland passenger car] and imagined I was riding the Midland route. I pictured the great mountains and valleys. Here was that incredible tunnel. Soon I was at Grand Junction, the end of the line. But I didn't have to stop. I imagined the train moving again, turning south, traversing the landscape of our layout. Cielo Vista came by, then Stella. Finally I daydreamed about the train going through to New Mexico and connecting with the Santa Fe."⁵² Like Hesse's prisoner who imagines his escape by taking the "little train" he has painted on the wall of his cell, Posey imagines the romance of rail travel in the old West by taking the little train he has modeled in his Connecticut basement.

Historical Scale: The Twilight of Steam and Time Machines

Up to this point, I have dealt primarily with the material and spatial aspects of scale, but in order to more fully develop the dialectics of scale as a theoretical apparatus, and to show how the model railroad hobby builds the nation in miniature, it will be necessary to more thoroughly examine the ways in which scale functions temporally and historically. For as fundamental as the refashioning of space is to the model-railroading endeavor, the refashioning of time—both personal and historical—infuses this space with much of its meaning, and much of its interpretive potential. Williams argues “that the common image of the country is now an image of the past, and the common image of the city an image of the future,” and that in “a present experienced as tension, we use the contrast of country and city to ratify an unresolved division and conflict of impulses.”¹ For model railroaders—both to the extent that this tension between country and city plays out on their layouts, and insofar as the overwhelming majority of layouts depict “period” railroads—representations of time imbue their material practice with historical significance.

In his December 1952 article, “Thornburgh Builds an HO 1910 American,” M. D. Thornburgh, “one of America’s finest modelbuilders,” writes: “Once upon a time, when the 4-4-0 was so plentiful on our railroad scene, Whyte, in his classification, called the wheel arrangement ‘American.’ This versatile loco has now all but disappeared. We model rails, however, are fortunate in being able to re-create the past.”² Similarly, an article in the April 1954 *Model Railroader* calls model railroading a “time machine,” and Posey refers to his layout as a “time warp.”³ What these examples show is a tendency among model railroaders to think of their railroads as time-traveling vehicles. More often than not, the historical moments brought back to life on modelers’ layouts are celebrated as more rugged, more authentic, and more meaningful than the present. According to Louis Hertz, model railroading “permits an individual to plan and create a miniature world of his own, a veritable utopia with everything ordered and arranged precisely as he

would like so see it. It is truly a mode of retaining one's youth; of continuing to enjoy the youthful attitude that is so important as one grows older."⁴

Williams points out "how often an idea of the country is an idea of childhood: not only the local memories, or the ideally shared communal memory, but the feel of childhood: of delighted absorption in our own world, from which, eventually, in the course of growing up, we are distanced and separated, so that it and the world become things we observe."⁵ Providing the other key part of the larger equation that concerns me here, Stilgoe explains that "[t]he siting, building, maintaining, and operating of a railroad right-of-way by the turn of the century represented the efficient use of geographical, mechanical, and human resources to advance not the traditional civilization of agriculture, but the electrically charged, efficient civilization of cities."⁶ The railroad, then, can be seen as an accelerator that made the already polarized relationship between country and city even more polarized. Seen in the context of model railroading, which so often engages these tensions, the miniature offers the possibility of dialectical synthesis.

As noted previously, Stewart describes the world of miniatures as "a world that is part of history, at least the history of the individual subject, but remote from the presentness of adult life," and modelers interviewed in the film, *Train Play*, articulate this phenomenon rather clearly.⁷ *Train Play* is a documentary about the Golden State Model Railroad Museum, which houses the O, HO, and N scale layouts of the East Bay Model Engineers Society in a 10,000-square-foot corrugated metal warehouse in Point Richmond, California.⁸ The film is largely comprised of interviews with Society members, interspersed with footage of layout operation. One of the most prevalent ideas these members express is that model railroading is immanently linked to childhood, whether because they grew up with model railroads or because what they model as adults harkens back to their youth. A number of members recall receiving Lionel and American Flyer train sets as children, and one remarks that seeing his layout for the first time forms one of the "strongest impressions" he has of his childhood. "I've always been a train buff, since I was a small child," he says, "and thought I'd work on the railroad." Another member explains: "I think the real attraction is, in essence, just trying to reconnect with my childhood. My grandfather and I—that's how we bonded—it was either through

carpentry or through trains.” This member returned to the hobby after receiving a train set for Christmas as an adult.

Providing a slightly different perspective are comments relating to childhood memories of the railroad itself. As one member puts it, “Usually, for the average person, it’s what they saw when they were young.” And according to another, “The fascination with model trains, I think, was that they are connected with something that was very close to me as a child. I lived within about two blocks of the Southern Pacific Railway in Kingsburg, California, and I got a great deal of fascination about, even as a little child, watching as the trains went by.” As Stilgoe puts it, “The depot exerted its fascination on children, and particularly on teenaged boys, because it was the threshold opening onto metropolitan glamour and technological excitement.”⁹ Or, as an August 1953 *Model Railroader* article, “Hear the Telegrapher,” asks: “Were you ever a boy in a small town? And did you ever on a drowsy summer day go down to the station and sit on a baggage wagon and swing your bare feet and wait for a train to go by? Do you remember the sound you heard? Particularly do you remember that most fascinating sound of all drifting out of the open station window – the clicking of the telegrapher’s sounder in the agent’s office? You got a thrill imagining what its mysterious messages might be. A wreck! A mighty engine roaring down on you out of control, its engineer dead at the throttle! A bridge washed out at Ten Mile Creek!”¹⁰ If this article is any indication, the hold of the metropolitan corridor on the 1950s popular imagination seems to have remained quite strong. The article assumes that the reader is a man who models the period of his childhood, who sees in his hobby a way of recreating the scenes—and sounds—of his youth.

Still other EBMES members see their hobby as a way of capturing the significance of the railroad in American history. “That’s been my fascination with railroads, is what they meant to the history of the country,” says one member. “[The railroad] really opened up and tied the country together as a whole. And it made a tremendous difference to moving our products and tying us together culturally, mov[ing] newspapers as well as goods and people.” As Stilgoe explains in his discussion of train stations, “Small-town America entered the metropolitan corridor in three stages: first, by receiving magazines, advertising circulars, and other urban literature delivered through

the depot; second, by ordering and receiving mail-order goods ranging from canned food to bagged sugar to summer hats to kitchen stoves, all shipped through the station; and finally, by entering the depot, buying a ticket, and boarding the local way train or *The City of New Orleans*.”¹¹ Benedict Anderson has argued that, far more than durables and other commodities, it was print-capitalism, and newspapers in particular, that facilitated the production of the nation as an imagined community. Of the “mass ceremony” of reading the newspaper, Anderson writes that “each communicant is well aware that the ceremony he performs is being replicated simultaneously by thousands (or millions) of others of whose existence he is confident, yet of whose identity he has not the slightest notion. Furthermore, this ceremony is incessantly repeated at daily or half-daily intervals throughout the calendar. What more vivid figure for the secular, historically clocked, imagined community can be envisioned?”¹² Noting that it was the railroad industry that instituted “standard time,” making itself “timekeeper of the nation,” Stilgoe writes: “Not only time signals flashed along the telegraph wires. By 1900, the typical small-town depot had become the entrepôt of nearly all news. The mail sacks handed down from local trains—and flung from high-speed expresses—contained letters, newspapers, magazines, and catalogues, all windows on the larger world.”¹³

Given that it was the railroad that instituted “standard time,” largely to ensure safe operation, it is not surprising that advertisers in model railroad magazines aimed to capitalize on the connection between the railroad and timepieces. In the April 1954 issue of *Model Railroader*, for example, an ad for the Hamilton Watch Company asserts: “Railroad men were the first to find in Hamilton the dependability and accuracy so essential to their personal and business lives. They really wrote Hamilton’s famous slogan, ‘The Watch of Railroad Accuracy.’”¹⁴ Model railroaders, who tended to be part of the professional-managerial class, might find in a Hamilton watch a way of bridging their daily lives and their railroad affections. A 1948 *Model Railroader* article notes that “the majority of prize winning models” in the magazine’s fifth annual model-building contest “were built by men whose vocations do not include working with hand tools, power tools, or machinery. They are engineers, photographers, purchasing agents, newspaper men, etc.”¹⁵ Indeed, as the biographical sketches in magazines of the period indicate, model railroaders more often than not held these and similar professions.

George Allen, for instance, was “the copy chief at a New York advertising firm,” while his friend and co-modeler of the Tuxedo Junction, Ernie, was an engineer.¹⁶ John Allen owned a photography studio in Monterrey.¹⁷ And Tom Beresford was “employed as a design engineer by the Radioplane Co. of Van Nuys, California.”¹⁸ As one modeler explains in a 1960 letter to the editor, most of the members in his club “are businessmen and do paper work all day long, but when it comes to our hobby we like to build and/or operate and do something entirely different from our daily chores.”¹⁹

Neither is it surprising that model railroaders have given a good deal of attention to the way that time functions on their layouts. George Allen notes that his friend, Bill Schopp, wears two wrist watches, one that “runs so slow [he] calls it O gauge time,” and one that “runs like a jackrabbit” because he removed some of the gears” to make it run on “HO scale time.”²⁰ The O gauge watch runs on standard time, of course, but to Schopp standard time is “outta whack” with the railroad time of his HO layout. Like Posey, who began to see HO as a scale in nature, it seems that Schopp had “crossed into a twilight zone.”²¹ Stewart asserts that “there may be an actual phenomenological correlation between the experience of scale and the experience of duration,” and among model railroaders, scale time and scale speed are key considerations for realistic operation.²² According to John Allen, “There is no difference between scaling time and scaling dimensions, they are both fantasy for the sake of realism.”²³

In the July 1958 *Model Railroader*, Ed Ravenscroft explains in “How to design a timetable” that “[o]peration should be timed with a special or ‘scale’ clock – a clock with gear changes made so that it operates at about 10 times normal speed.”²⁴ And in his “Scale Speed Operation” article in the August 1953 *Model Railroader*, “A. B. Bradley, Jr. defines scale speed as “the speed of a train over the rails... in proportion to our particular gauge.”²⁵ John Allen, who “wrote extensively on the subject of scale time” and “was an early proponent of running trains at realistic scale speeds,” also expressed distances on his layout in “smiles.” According to Allen, “When a modeler uses a scale time ratio, he should use the same ratio to further reduce his scale mile, which is called—to borrow a term from the late Frank Ellison—a ‘smile.’”²⁶ Like the models themselves, then, the operation of the model railroad ought to be prototypically accurate in order to achieve the all-important goal of realism. As the title to Ravenscroft’s article suggests,

many modelers operate their railroads according to timetables. And Allen, in addition to developing several complex time schedules, actually had his “fast clock located in one of the buildings near the passenger terminal at Great Divide.”²⁷

Since the 1950s, the two periods most commonly represented on model railroad layouts have been the late nineteenth century and the late steam era. Describing his reentry into the hobby upon the birth of his son, Posey writes that he “bought some issues of a magazine called *Model Railroader* and saw that many of the HO layouts they featured depicted the American West in the era of the old mining towns, around 1890. It was almost as if HO modelers could think of nothing else.”²⁸ And according to Stilgoe, “model railroaders build layouts that represent a particular piece of railroad at a particular moment, usually the late 1940s steam-to-diesel transition period.”²⁹ Beyond their importance in railroad history, both of these periods were marked by bourgeois angst in general, and by anxiety over white middle-class masculinity in particular. The selection of one of these periods as the historical setting for one’s layout, then, reflects a desire to freeze what are popularly understood to be moments of paradigmatic national significance, to recuperate the real and imagined past as a salve for the sting of life in the present.

Frederick Jackson Turner’s 1893 address attributed “the contemporary crisis of American development” to “the closing of the ‘old frontier’ and the delay in finding a new one.”³⁰ This “crisis” was reflected in the Panic of 1893, the large-scale migration of rural Americans to expanding metropolitan centers, the rapidly accelerating pace of life due to the new technologies of mechanical reproduction and electricity, and the wars of imperial conquest in the 1890s. “With the end of continental expansion,” writes Amy Kaplan, “national power was no longer measured by the settlement and incorporation of new territory consolidated into a united state, but rather by the extension of vaster yet less tangible networks of international markets and political influence.” Kaplan points out that “Turner, for example, endorsed overseas expansion as an inevitable solution to ‘The Problem of the West.’” Paralleling this shift was the redefinition of “white middle-class masculinity from a republican quality of character based on self-control and social responsibility to a corporeal essence identified with the vigor and prowess of the

individual male body.”³¹ In Mantua’s “Gandy Dancer” advertisement discussed previously, one can see this “corporeal essence” in the virile railroad laborer.

Given the railroad’s central role in bringing about the close of the frontier, the decision to model the late frontier era carries with it both nostalgia for an earlier, simpler time and a desire to recapture this transitional historical moment. As hobby magazine articles and advertisements of the 1940s and 1950s suggest, many modelers chose this period for their layouts, perhaps because they had experienced traces of it in their youth, or perhaps because of its foundational place in the historiography of the first half of the twentieth century. According to the June 1941 issue of *Model Railroader*, “The man with a flare for detail can get immense satisfaction out of setting his railroad back in 1910, or 1870, and carrying out every detail of unpaved roads, horses and buggies, villagers on bicycles, locomotives of earlier vintage, and so on.”³² Phil Richardson’s Arizona, Nevada & West Pacific, for example, is a “period pike that depicts railroading from the 1870s up until about 1925,” “an era when all was steam at the head end . . . an era that inspired many a small boy to take to the rails.” In the autobiographical sketch that accompanies the article and photographs, Richardson says: “Born May, 10, 1907 on farm in Vermont. Took first train ride at 1½ years of age. Insist I can remember gas lights in Pullman we took out of Montreal for Minneapolis. At age four was positive all men riding tops of cars were Indians. Maybe they were. In high school rode from White Bear to Duluth on top of reefer in early spring... At age 45 wife presented me with an ‘electric train’ for Christmas, thereby fulfilling lifelong ambition to have such a possession.”³³

Joining articles like this one is an array of advertisements, product reviews, and how-to articles that cater to modelers of “old-time” railroads. In the August 1951 *Model Railroader*, an article on how to build “Old-Time Wood Freight Cars” explains, “At the turn of the century, the majority of freight cars in service on American railroads were basically of wood body construction, although such traces of decadent modernity as steel center sills and certain incidental parts had begun to rear their—to us old-time fans—ugly heads.”³⁴ To “old-time fans,” the early railroad might have been modern, but not *decadently* modern, a distinction that does much to capture the complicated relationships between the railroad and American modernity. In the November 1953 *Model Railroader*, Central Lines ran an ad for “Authentic Old Time Coaches,” and in the “Trade Topics”

section, Thomas Industries' "HO 'period' figures" are described as "little masterpieces that will dress up any old-time pike... Even the tiniest details are represented, such as the green eye shade on the telegraph operator, the individual chambers on the frontiersman's cartridge belt, and the characteristic bow tie, beard and silk hat on 'Honest Abe.' Other figures included in Thomas' line are a pioneer man and lady, an Indian, an infantryman and an officer for both the Union and Confederate Army." Later in the same issue is an ad for Thomas C. Cochran's *Railroad Leaders, 1845-1890*, "A fascinating book about 60 railroad leaders—and their impact on the American Way of Life."³⁵ *Model Railroader* reviewed Ayres' "HO Old Town Lodgings" in its April 1954 issue, and it offered plans for building a "Pennsy old-time inspection car" in its July 1958 issue. "Back in the 1870's and 1880's when railroads were mushrooming into every part of the country," explains the short article that accompanies the plans, "one of the finest, bar none, methods of impressing prospective investors was to pile them into an inspection car and let them see first hand what the railroad looked like."³⁶ Evident in these examples is both a condensation of late-nineteenth-century American history into a collection of figures, buildings, and pieces of railroad equipment and an effort to align the model railroader with the nineteenth-century railroad magnate. In his "Saga of the Tuxedo Junction" series, George Allen writes of his plans for "even greater expansion, down to and including *steamship* docks yet. Jim Hill had nothing on me. Where he softly spoke of 'footage,' I spoke of *yardage*. Now I knew how empire builders like the Hills and the Herrimans worked under strain. You get jittery. Snappy. Ruthless. Big Dreams..."³⁷

In a June 1960 article, "Across the continent in 1885!" Michael Welch describes his St. Louis, Rock Mountain & Pacific as "one of the first transcontinental railroads joining the Midwest with the West Coast. It has compressed 2100 miles into 238 ft. in covering the western half of the continent. As shown on the track plan, passengers and freight are received in St. Louis and are transported across the Great Plains, the Rockies, the Great Basin and the Sierra Nevadas to Sacramento, where the line connects with the Central Pacific."³⁸ While this layout serves as an example of the geographic compression discussed in the previous section, it also provides an example of how model railroads attempt to capture historical moments, and how these moments are associated with

specific geographic imaginaries. For Welch, as for many other modelers, the late nineteenth century and the West are natural counterparts.

Welch includes in his article the following brief history of the first transcontinental railroad: “On May 10, 1869, the Golden Spike was driven at Promontory Point and the Union Pacific and the Central Pacific formed the first transcontinental rail link between the Mississippi River and the Pacific Ocean. Shortly thereafter, four other transcontinental railroads were completed.”³⁹ Tellingly, Posey built his layout by working from the ends in toward the middle, reenacting the construction of the first transcontinental railroad. “Perhaps, like the men of the Central Pacific and the Union Pacific,” he writes, “[we] would someday drive a golden spike and have a party.”⁴⁰ While modelers whose layouts have nothing to do with either the West or the late nineteenth century also often make gold spike references, in Posey’s case this reference is part of the larger mythology of his old West layout. He writes, for example: “I found myself daydreaming about craggy peaks, rushing streams, high wooden bridges, and a town with a dusty and rutted Main Street. I wanted saloons and maybe a jail, with a dangerous hombre or two lounging outside. Lionel had seemed dated, and yet here was a world fully fifty years older that struck me as just right.”⁴¹ As Baudrillard explains, “When the real is no longer what it was, nostalgia assumes its full meaning. There is a plethora of myths of origin and of signs of reality—a plethora of truth, of secondary objectivity, and authenticity.”⁴² Or, as Stewart argues, the animated toy “initiates another world, the world of the daydream. The beginning of narrative time here is not an extension of the time of everyday life; it is the beginning of an entirely new temporal world, a fantasy world parallel to (and hence never intersecting) the world of everyday reality.”⁴³ By recreating the old West on his late-twentieth century layout, Posey articulates a double-nostalgia: for his 1950s childhood, for which model trains supply a material form, and for an imagined frontier past, for which the railroad serves as a dominant symbol. “My best friend, John Whitman,” writes Posey in his 1995 *Model Railroader* article, “says I should have lived in the 19th century as opposed to our electronic present. I prefer the aesthetics of the Mechanical Age, when functioning parts were out in the open. I enjoy the time warp of imagining life in the little towns I design, although I know better than to actually want to live in them.”⁴⁴

Like the dramatic changes witnessed at the end of the nineteenth century, the steam-to-diesel transition took place amidst the upheavals of the Depression, WWII, and the early years of the Cold War. Just as Americans had migrated en masse to cities at the turn of the twentieth century, millions of middle-class white families migrated to the suburbs in the 1940s and 1950s. For many Americans, and men especially, the disappearance of steam railroading from the American scene carried with it, not unlike the passing of the frontier, feelings of historical loss and ambivalence about the present. In a 1952 article, George Allen, for example, explains that he hopes to never “drive the gold spike” on his layout because “when the pike’s finished the misery begins. We soon get weary of operating. We start thinking about our troubles, taxes and the high cost of living. Our blood pressure goes up. We goes to the doctor. He gives us pills and monthly bills. We fret, fume, get gray.” To which his wife responds: “Then spend the rest of your days building your dream empire. I’d rather see you as sassy as you are—than succumb to the Twentieth Century Jitters.”⁴⁵ At issue here are the pressures of modernity and the ways in which model railroading provides relief from them. And yet, according to *Model Railroader*’s biographical sketch of Allen, his home “is a large (your writer is sure of at least seven bedrooms, three staircases), tradition-steeped country home called ‘Chanticleer Farm’ on the outskirts of White Plains, N.Y. The estate includes several barns, one of which George has renovated into a workshop and right of way for the Tuxedo Junction.” For all of his apparent concern over the burdens of modern life in general, and “taxes and the high cost of living” in particular, it seems that he was fairly well-to-do.

As noted at the start of this essay, both the steam locomotive and its scale-model counterpart embody the dialectical tensions between past and present, hand-craftsmanship and mass production, customization and standardization—in short, the tensions of modernity. Stewart argues that “models of the products of mechanized labor” like “ships, trains, airplanes, and automobiles” “are nostalgic in a fundamental sense, for they completely transform the mode of production of the original as they miniaturize it: they produce a representation of a product of alienated labor, a representation which itself is constructed by artisanal labor.”⁴⁶ Yet, as Churella points out, the hand-built, customized fabrication of steam locomotives ran counter to the methods of mass

production. Following Benjamin, it might be said that steam locomotives still retained something of an aura, the disappearance of which was cause for sober reappraisals of the meaning of modernity.

In his discussion of the group of “rail fans” that emerged in the 1950s, Stilgoe specifically addresses how this unease was bound up in the demise of steam power on American railroads. “Nostalgia for vanishing steam locomotives suffused these newcomers,” he writes, “almost entirely men who saw the demise of steam-powered railroading as the end of an era in which they had come of age. Aficionados may have seen the steam locomotive as symbolizing values—especially the freedom to travel—for which they had fought in World War II. The diesel-electric locomotive often seemed a product of a rapidly changing economy and a harbinger of excruciating changes in mining, heavy manufacturing, and other traditionally male-dominated industries. Thousands of men joined the rail fans in stopping the family at rail crossings and dragging little children up to the tracks when a steam locomotive chugged or blasted past.”⁴⁷ While being a model railroader was not a prerequisite for being a rail fan, there was, as one might expect, considerable overlap. In the 1958 “Bull Session,” for example, Ray Rhodes comments, “From what I hear, the N&W is dieselizing rapidly, too, so this could be the last summer for train chasers like you and me to see main line steam operation.”⁴⁸

As Rhodes’s comment suggests, the discussion surrounding the steam-to-diesel transition was extensive and ongoing in hobby magazines of 1950s. While almost any issue of *Model Railroader* during the decade would contain references to this tectonic shift in the railroad world, it is worth looking a handful of additional examples that indicate the nostalgic underpinnings of the discussion. The aforementioned Alex Tocquigny, for instance, writes, “I prefer steam power to diesel because it is rapidly becoming a thing of the past, a point I try to impress on my youngsters so that they can appreciate what little prototype steam power is still around.”⁴⁹ Similarly, the author of the “Meet Our Authors” article on Tom Beresford writes, “Despite the increasing number of diesels, there are still many of us who prefer the era when steam was supreme and the vanishing ‘iron horse’ was still lord of the rails.”⁵⁰ And, in the April 1954 “Bull Session,” remarking on the donation of a Shay steam locomotive to the Lima, Ohio Historical

Society, Rhodes asserts, “This heartening story proves that many people are interested in saving fast-vanishing pieces of Americana that are historically interesting and valuable.”⁵¹ As of January 1959, railroad enthusiasts could even purchase “Whistles West,” “a thrilling, new record of steam engines – and those whistles you will never hear again!”⁵²

If in the last decade of the twentieth century, it seemed that “HO modelers could think of nothing else” than the old West, it seems that modelers in the 1940s and 1950s could think of little else than the disappearance of steam railroading, which was an immediate concern that nevertheless evoked the late-nineteenth-century era of the “iron horse.” While it follows that modelers during this period would express longing for the era in which they had grown up, this would not explain their affection for what would have been for most the un-lived experience of the old West. Neither, clearly, can the present affection for the old West be explained by lived experience. What can be gleaned from these historical resuscitations, then, is a pervasive sense of nostalgia and utopian desire. And yet, as Boym has argued, one can also be nostalgic for the present, which represents an effort “not so much to regain the present as to reveal its fragility.” On model railroad layouts, this brand of nostalgia tends to manifest itself not as utopia, but rather dystopia.

John Allen’s *Gorre & Daphetid* provides a compelling example of the ways in which the old West and the late steam era form a Benjaminian constellation. The name of the railroad is pronounced “gory and defeated,” and this “post-battle pun” does much to capture the long historical moment Allen modeled, as well as the postwar moment in which he began modeling.⁵³ “In my land of make-believe,” says Allen, “a whole empire with mergers, celebrations, swindles, and depressions are indulged in.”⁵⁴ He goes on to explain: “This pike is conceived as one division of a railroad through the Akinback Mountains. The period is the latter days of the steam locomotive era. It is free-lanced, but I suppose the nearest prototype would be the Colorado Midland if the C.M. had continued running into the late 1940s. My G.D. railroad is a bridge line through the mountains and not too prosperous. Lack of auto roads through these passes leaves the area uncluttered with the impedimenta of our modern civilization.”⁵⁵ As both its name and Allen’s description make clear, the *Gorre & Daphetid* reflects a sense of playfulness and humor,

but also ache and ambivalence about the state of “modern civilization.” Even the mountains have “aching backs,” as if they, too, are burdened by the drudgery of daily life (figure 43). Allen’s railroad limps into the postwar era, struggling to stay upright, yet it also freezes, not unlike Benjamin’s arcades, this passing moment in the miniaturized remnants of a previous era. What sets the Gorre & Daphetid apart from the arcades, however, is the fact that it depicts a world that *began* in a state of decay rather than one that has decayed with the passage of time.

Allen described the setting for his railroad as “a mythical Western section of the U.S. Since the lines are small, old-fashioned railroads, it is supposed that much of our equipment was purchased secondhand from other more modern railroads. There is no attempt to make a period setting, but naturally on such a line equipment and buildings are old, run-down, and obsolete though more modern equipment could find its way onto the line.”⁵⁶ One of the towns on this “un-modernized railroad in a modern period” was Helengon, which Allen called a “Shoot ’em up and hang ’em tough western mining and lumber camp town.”⁵⁷ Joining Helengon are features like a lynched diesel salesman, grade crossing collisions between diesel locomotives and donkey carts, and a work dinosaur named Emma. Taken together, these scenes confound historical time on the layout. In light of Curtis Marez’s discussion of Mexican workers and their “burro proxies,” the literal collision of a diesel locomotive with donkey carts rather forcefully collapses present and past, modern and pre-modern (figure 44). And according to Boym, “The dinosaur is America’s unicorn, the mythical animal of Nature’s Nation.”⁵⁸ The placement of Emma on Allen’s layout, then, reinforces a kind of time out of time—the nebulous temporality of myth.

Yet, in March 1951, *Model Railroader* could note the progress that had been made on the Gorre & Daphetid since it was first featured in the magazine in 1948. “In the three plus years that have since elapsed,” writes the author of the article, “the Gorre & Daphetid, like all good model railroads, has prospered and grown. Its engineers have hacked a clearing through the sullen Rockies and built a new narrow gauge feeder—the Devil’s Gulch & Helengon—which trundles ore and lumber from remote mine and lumber camps to standard gauge trackage far below.” Recapitulating nineteenth-century narratives of the taming of the frontier and the march of progress, the author goes on to

explain: “As the railroad went, so went humanity, and signs of a growing civilization soon sprinkled the right of way. Miners’ shacks sprung up; telegraph lines were strung; crude, erratic roads were cut by horse and cart. Even the vegetation seemed to grow more profuse and luxuriant adjacent to the tracks. Everywhere, rough and ready men were busy helping the railroad tame a wild and rugged country.”⁵⁹ What emerges out of the dialectical tension between progress and decay on Allen’s layout is a magnification of the contradictions of modernity, a “telescoping [of] the past through the present.”⁶⁰

For whatever progress had been made on Allen’s layout by 1951, Posey asserts that “[m]any of [Allen’s] photographs were of vistas that looked distinctly apocalyptic, like something Albrecht Dürer might have painted. Allen’s geology was strictly freelance, and he had conjured up an unremittingly harsh world. Vegetation was sparse and many of his trees were dead.”⁶¹ Sellios’s Franklin & South Manchester layout depicts the city version of this apocalyptic landscape. Set in New England during the mid-1930s, the layout captures in painstaking detail the miasmatic blight of a Depression-era industrial center. Accordingly, Sellios has filled his cities with scenes of decay: “A man sits hunched on a toilet in an alley, under an Ex-Lax sign, while another pisses against a wall. Hobos are gathered around a fire... Sidewalks are cracked and sprouting weeds. Dogs sniff at garbage cans. Pipes leak. Gutters sag. Sewage pours into the harbor.”⁶² Amidst the soot and grime of the cities run dilapidated trains pulled by weathered steam locomotives (figure 45). Manchester and Doovertown are forlorn, weary places, and the layout as a whole suggests an overriding sense of lament and historical loss. While it might be said that what has been lost is an earlier, happier world, Sellios’s decision to model *this* world—a melancholy, Depression-era urban wasteland—reflects the desire to return not to some idealized past, but rather to a world that has already fallen. Both the Franklin & South Manchester and the Gorre & Daphetid dwell on loss and decay. Like the arcades, they contain “the refuse of a discarded past,” yet unlike the past embedded in the arcades, which Benjamin excavates with the care of an archeologist, the past embedded in these layouts is reconstructed in their makers’ present. Rather than expressed as “traces,” the “after-history” of the railroad is expressed on these layouts as a reconstituted whole that is always already in shambles.

Conclusion:
Medusa's Head and the Afterlife of Mechanical Reproduction

By the late 1950s, the steam-to-diesel transition on American railroads was essentially complete, and automobiles and airplanes had eclipsed trains as the preferred mode of transport. The popularity of model railroading first crested as a kind of lament for a passing era, and then fell into decline during the 1960s. The baby boomers, who were in large measure responsible for the hobby's swelling ranks, got older, and new toys like slot cars began to gain market share. But the hobby started to rebound in the 1970s and, despite competition from remote control cars and planes, and then the computer game industry, entered a new golden age that has spanned the last quarter-century.¹ Stilgoe asserts that at the beginning of the twenty-first century, "the greater railroad enthusiast movement is one of the more muscular popular history phenomena." The model railroad hobby, with an estimated half-million families operating layouts and readerships of each of the larger magazines reaching a quarter-million, is a multi-billion-dollar industry. The hobby is joined by the rail fan movement, which "supports multiple magazines, a video industry, perhaps two hundred historical societies focused on extant and long-vanished railroads, and a tour effort that now shapes economic development priorities in remote towns adjacent to high-interest railroad history or contemporary activity."² Other popular cultural phenomena, like the success of Thomas the Tank Engine, attest to the renewed popularity of toy trains. As Posey puts it, "Thomas is big business. A feature film in which he starred has grossed over \$50 million."³ The Thomas & Friends brand sells everything from train sets and other toys to books, games, CDs, DVDs, clothing, room decor, school supplies, and party supplies, and it has opened theme parks in the United States, Great Britain, and Japan.⁴

And so the question emerges of how scale has again been called upon to make sense of historical rupture, in this case the ruptures produced by the conditions of late capitalism and globalization. Jean Baudrillard defines simulation as "the generation by models of a real without origin or reality." He argues that "nothing separates one pole from another anymore, the beginning from the end; there is a kind of contraction of one

over the other, a fantastic telescoping, a collapsing of the two traditional poles into each other: *implosion*—an absorption of the radiating mode of causality, of the differential mode of determination, with its positive and negative charge—an implosion of meaning. *That is where simulation begins.*”⁵ In his discussion of cloning, he asserts that “[t]here is a precession of reproduction over production, a precession of the genetic model over all possible bodies. It is the irruption of technology that controls this reversal, of a technology Benjamin was already describing, in its total consequences, as a total medium, but one still of the industrial age—a gigantic prosthesis that controlled the generation of objects and identical images, in which *nothing* could be differentiated any longer from anything else—but still without imagining the current sophistication of this technology, which renders the generation of identical *beings* possible, though there is no possible return to an original being.”⁶ While crediting Benjamin with having to a certain extent anticipated the postmodern moment, Baudrillard nevertheless announces that with postmodernity has come “the end of the dialectic.” As I have argued throughout this essay, *scale* offers a way to revive the dialectic. Not unlike the ways in which Benjamin found the ur-forms of 1930s Europe in the Paris Arcades, I see in 1950s model railroading an “ur-form” of our present.

“The twentieth century began with a futuristic utopia and ended with nostalgia,” argues Svetlana Boym in *The Future of Nostalgia*. “Optimistic belief in the future was discarded like an outmoded spaceship some time in the 1960s. Nostalgia itself has a utopian dimension, only it is no longer directed toward the future. Sometimes nostalgia is not directed toward the past either, but rather sideways.”⁷ As I have shown, the history of model railroading is of a piece with this larger historical process. Indeed, model railroading fell into decline during the same period in which “optimistic belief in the future was discarded like an outmoded spaceship.” Boym proposes that the term “off-modern,” as opposed to “postmodern,” is perhaps more applicable to the present historical moment. “The adverb *off*,” she writes, “confuses our sense of direction; it makes us explore sideshadows and back alleys rather than the straight road of progress; it allows us to take a detour from the deterministic narrative of twentieth-century history.”⁸ I would argue that, like the word *off*, the word *scale* carries with it a range of historical

and theoretical implications. Whereas the usefulness of *off* stems from its directionality, the usefulness of *scale* stems from its dimensionality.

In his 1969 book, *Antique Collecting for Men*, Louis Hertz states that “men prefer toys manufactured of substantial materials and either or both displaying in themselves or reflecting from the prototypes from which they are derived mechanical ingenuity and industrial progress. Thus, not unexpectedly, probably the most widely collected category of toys is that of toy trains.”⁹ Many of Chris Burden’s installations and sculptures seem to substantiate Hertz’s claim insofar as they often feature, on the one hand, industrial objects like ships and planes, and on the other, toys and models like military miniatures and model railroads. But Burden’s work is at once comical and thoroughly political, and he uses objects like these to turn narratives of “mechanical ingenuity” and “industrial progress” inside out. According to Robert Storr, “The biggest, most complicated, most monstrous of all Burden’s exercises in microcosmic-macrocosmic inversions is *Medusa’s Head* (1990).”¹⁰ A jagged mass of plywood, concrete, rocks, and model trains and tracks, *Medusa’s Head* is suspended two feet off the ground by a heavy chain, weighs five tons, and measures fourteen feet in diameter (figure 46). The tension between its massiveness and the scale models that cover it works, not unlike Allen’s *Gorre & Daphetid*, to unsettle the body’s normal relation to the miniature and the gigantic. “The sculpture suggests the remnant of a violent interplanetary clash, something that might be more at home in a museum of natural history,” writes Roberta Smith in her *New York Times* review. “But as one approaches the work, it becomes so fascinating that it can elicit a childlike Christmas-morning glee. You almost can’t get close enough to it.”¹¹

Smith goes on to explain: “On the tracks are dozens of model trains hauling all kinds of raw and refined materials, from wood and iron ore to steel girders, across numerous bridges and in and out of soot-covered tunnels. The trains, which come in five different scales and use seven gauges of track, are not actually moving, but they create an illusion of ceaseless activity. The suggestion of a big festering skull encouraged by the work’s title never entirely disappears. Nonetheless, once the myriad railroad details pop into focus, the work’s scale jumps from the merely enormous to a panorama of Spielbergian proportions.”¹² Noting the “*theatricality* of all miniatures,” Stewart describes a “double effect” whereby “the object in its perfect stasis nevertheless suggests

use, implementation, and contextualization,” and, at the same time, “the representative quality of the miniature makes that contextualization an allusive one; the miniature becomes a stage on which we project, by means of association or intertextuality, a deliberately framed series of *actions*.”¹³ In the case of Burden’s sculpture, where the miniature and the gigantic are held together in one object, each of these categories of scale amplifies the other, which results in a multiplication of the actions and meanings viewers project onto it.

Storr writes that “the impetus [for *Medusa’s Head*] came from a rhetorical inflation, and... the focus is ecological hysteria. In the nineteenth century, so Burden learned, some observers who saw the advent of railroads as signaling the unrestricted penetration of industrialization into the naturally balanced realm of pastoral economies and small urban centers hypothesized that if their growth were to continue unchecked, they would turn the world into an outlandish labyrinth of track and tunnels.” With *Medusa’s Head*, “Burden realized with a vengeance a sculptural equivalent of the worst case scenario that materially illustrates the implications of wildly abstract speculation.”¹⁴ As the caption for the images of the sculpture puts it, “In an obvious reference to the terrifying Greek goddess, Medusa, the sculpture is a metaphor for a world engulfed in its own technology.”¹⁵

Like Smith, who calls *Medusa’s Head* a “scarred and craggy meteorlike mass,” Joshua Decter calls it a “meteoric conglomeration of cement, rock, and toy trains.” Decter describes the sculpture as “a twisted child’s vision of terrestrial apocalypse. The gaping wounds on the object’s contorted surface doubled as tunnels for the immobile toy trains—atrophied, self-circulating travel refusing to proceed around a globe of materialized entropy.”¹⁶ Indeed, these meteor and planet metaphors aptly describe a sculpture whose “six satellites” include “the five *Moonettes* and *Medusa’s Flying Moon*.” In a 1995 exhibition proposal, Burden refers to *Medusa’s Head* and its satellites as a “gargantuan, bizarre ‘solar system,’” and *Medusa’s Flying Moon* even “contains an internal electric motor and drive mechanism that enables it to rotate, much in the manner of a traditional desk top globe.”¹⁷ In the same proposal, Burden expresses his wish to exhibit *Medusa’s Head* and its moons in the main exhibition room along with *Pizza City* (1996), “a 70-foot-long by 30-foot-wide model of a miniature city and its surrounding

landscape.”¹⁸ “The whole room,” he writes, “will be energized by the interplay between the levels of detail, between the benign and ideal and the apocalyptic and captivating.”¹⁹

Medusa's Head makes some of the same aesthetic moves and taps into some of the same apocalyptic sentiments as Allen's *Gorre & Daphetid*, but it pushes them even further. Taking the form of an industrial wasteland, the sculpture depicts “a planet being strangled by an unsettling combination of human ingenuity and human neglect.”²⁰ Echoing both Stewart and Benjamin, Philipp Blom asserts that “the sanitized miniature world of the train set with its polished engines and little station houses, its evergreen trees and its tiny rosy-cheeked passengers can... become a utopia that holds a powerful attraction above the world outside, and the control over the timetables of an old Märklin set stands in stark contrast to the powerlessness we cannot help but feel when faced with time itself. It embodies the simpler passions and the smaller world of childhood, even though the very need for it testifies to the complexities, the innumerable failures and compromises of adulthood.”²¹ Yet Burden's sculpture turns this conventional association between model railroads and utopian desires on its head. While *Medusa's Head* does indeed “testif[y] to the complexities, the innumerable failures and compromises of adulthood,” it extends these even to the presumably safe dream world of model railroading.

A dark commentary on the after-history of the industrial age, Burden's sculptural “layout” serves to update the Medusa myth for the late twentieth century. Smith points out that “[t]he sides of the tracks are sometimes piled with goods awaiting transport, but they are more often strewn with miniature tires, metal debris and the carcasses of wrecked trains.”²² This foregrounding of the detritus of railroad modernity recalls Benjamin's effort to construct a “materialist philosophy of history” out of the remains of the Paris arcades. As Buck-Morss explains, “The short half-life of technologies and commodities, the rapid turnover in style and fashion, was experienced in high capitalism as extreme temporal attenuation. Those early bourgeois artifacts which managed to survive in the aging arcades where, ‘for the first time, the most recent past becomes distant,’ were the archaic residues, the petrified ur-forms of the present.”²³ Indeed, Benjamin's notions of fossilization and history gathering dust help form an interpretive framework within which to locate Burden's sculpture.²⁴ Smith describes Burden's mix of

steam and diesel locomotives, as well as old and new construction materials and technologies, as “encyclopedic.” Seen thus, *Medusa’s Head* simultaneously compresses industrial history into a mass of rock, concrete, and model trains and projects this history onto an apocalyptic future, if not an apocalyptic present.

Like Benjamin, who rejected the idea of “history as a teleological progression,” Burden “brush[es] history against the grain.”²⁵ In an effort to dispel “the mythic metaphors of progress that had permeated public discourse,” Benjamin mined the historical records for “counterimages that rubbed harshly against the grain of the semantics of progress, with its unmediated identification of technological change with social betterment.” Buck-Morss goes on to note, “Where Marx himself had fallen under the spell of the discourse of progress, identifying revolutions as ‘the locomotives of world history,’ Benjamin countered: ‘Perhaps it is totally different. Perhaps revolutions are the reaching of humanity traveling in this train for the emergency break.’”²⁶ Aside from the thematic appeal of these train metaphors, they offer another way of thinking about Burden’s sculpture. The trains of *Medusa’s Head* are frozen in place, as if all of the engineers in this miniature world overdetermined by industry had simultaneously reached for the emergency break. “It’s not a cheerful sight,” Smith concludes, “nor is it one in which the forces of progress are easily distinguished from their opposite.”²⁷

And yet, as fears revolving around environmental ruin and the effects of deindustrialization have intensified in the last two decades, the railroad has increasingly been touted as an environmentally sound, nation-*rebuilding* technology. “Rumbling faintly in the distance,” writes Stilgoe, “trains return as the key shaper of the United States built environment. From near oblivion, from a past too long romanticized or simply ignored, trains roll into the attention of those who know how to pause, look around, listen carefully, and see how present events skew the near future.”²⁸ In addition to reading the landscape for signs of the railroad’s reemergence, one can also look to the recent advertising campaigns of railroad companies.

Union Pacific’s “Building America®” ad campaign, for example, taps national narratives of the frontier in order to link the nation’s future to a romanticized past. According to the company’s website, “For the last 140 years, Union Pacific has contributed to the building of a nation. Abraham Lincoln envisioned a transcontinental

railroad that would connect America, east to west, contributing to the economic development, stability and security of the nation. And along with the development of a country, came the growth of one of America's most important companies.” Actor Sam Elliott, known for his cowboy roles, baritone drawl, and handlebar mustache, narrates the television commercials. “Majestic landscapes, filmed on Union Pacific tracks near Moab, Utah and Santa Maria, California,” explains the company’s website, “fill the screen as Mr. Elliott makes a connection between Union Pacific and this nation's way of life. The overall message and theme for the campaign focuses on what the men and women of Union Pacific have been working toward for almost 140 years... “Building America®.”²⁹ The print ads, which appeared in national publications like *The Wall Street Journal*, *Business Week*, and *Fortune* in the early 2000s, feature expansive vistas of the American West paired with messages like “THE TIES THAT BIND A NATION” and “THE ROAD TO THE FUTURE ISN’T A ROAD ALL.” The text that accompanies the first of these two ads reads: “It’s 33,000 miles of timber and steel that connect America—from Portland to New Orleans, from Chicago to Los Angeles. It’s the backbone of our economy and in turn, the backbone of our nation.” And the text that accompanies the second: “In the 1860s, we connected a nation—east to west and west to east. Today we carry America’s way of life, from raw materials to finished goods, in a cost-efficient, environmentally friendly way. Though 140 years have passed, we’re still connecting a nation—past to present, present to future.”³⁰ Evident in this ad campaign are the durable narratives of American exceptionalism: national identity is rooted in the landscape and a mythic past; the American way of life is built on tenacity, ingenuity, perseverance, and technological know-how; and the beauty of the land and the grandeur of American cities are testaments to our national destiny. The railroad, in this case the Union Pacific, is cast as a natural feature of both the American landscape and the American psyche. Indeed, recalling the body metaphors used to define the nation, Union Pacific’s 33,000 miles of rail form “the backbone of our nation.”

Warren Buffett’s recent purchase of the Burlington Northern Santa Fe Railway puts a spotlight on the return of the railroad to the national stage. In his *Wall Street Journal* article, “Men of Steel,” which is largely a recounting of railroad and corporate history, T.J. Stiles compares Buffett to “Commodore” Cornelius Vanderbilt, calling the

former “a worthy successor” of the latter. “Mr. Buffett’s wager,” writes Stiles, “is on a Vanderbiltian scale.”³¹ Whereas Stiles’s article focuses on the human and historical aspects of scale, Dan Barry’s *New York Times* article, “Awesome Train Set, Mr. Buffett,” uses model railroading metaphors to make sense of the scale of Buffett’s purchase. “For \$50 or so, you can buy a Thomas the Tank Engine train set and feel as powerful as Sir Topham Hatt, the somewhat wooden overseer of the mythical North Western Railway Company,” writes Barry. “Or, if you are the investor Warren E. Buffet, you can purchase the complete set of the Burlington Northern Santa Fe Corporation, for \$26 billion or so.” Buffett’s “train set” “[c]omes with 40,000 employees, 6,700 locomotives, and access to hundreds of thousands of freight cars. Some assembly required.” According to Buffett, trains are again the future. “Another reason for his purchase, he joked, was that ‘my father didn’t buy me a train set as a kid.’”³²

The use of these train set metaphors underscores some of the key ways in which scale has been seen to function dialectically in this essay. The Brobdingnagian proportions of Buffett’s purchase seem to require Lilliputian models for intelligibility. Rather than a twenty-first-century railroad tycoon, Buffett is a model railroader with 6,700 locomotives and a layout that stretches from Los Angeles to Chicago. *The Great Transcontinental Model Railroad Race*, a self-published novel by former *Seattle Times* financial columnist Merle Dowd, makes these metaphors actual. In short, it is the story of Jackson T. Abernathy, Sr., a 75-year-old multibillionaire who spends \$3 billion building an HO-scale model railroad from New York to Los Angeles.³³ Dowd wrote his novel in his late eighties, and it might be said that it functions as his own old-age fantasy—a kind of literary model railroad. As Barry’s use of train set metaphors and Dowd’s novel suggest, model railroading has persisted as a remarkably durable cultural form. Since the hobby’s beginnings in the early twentieth century, it has been repeatedly called on to perform the work of translation: between the miniature and the gigantic, childhood and adulthood, individual subjectivity and national belonging, interior and exterior, history and popular cultural expression, and between the shifting scales we use to locate ourselves in the world.

Appendix: Images



Figure 1. Cover, *Lionel Catalog*, 1929.

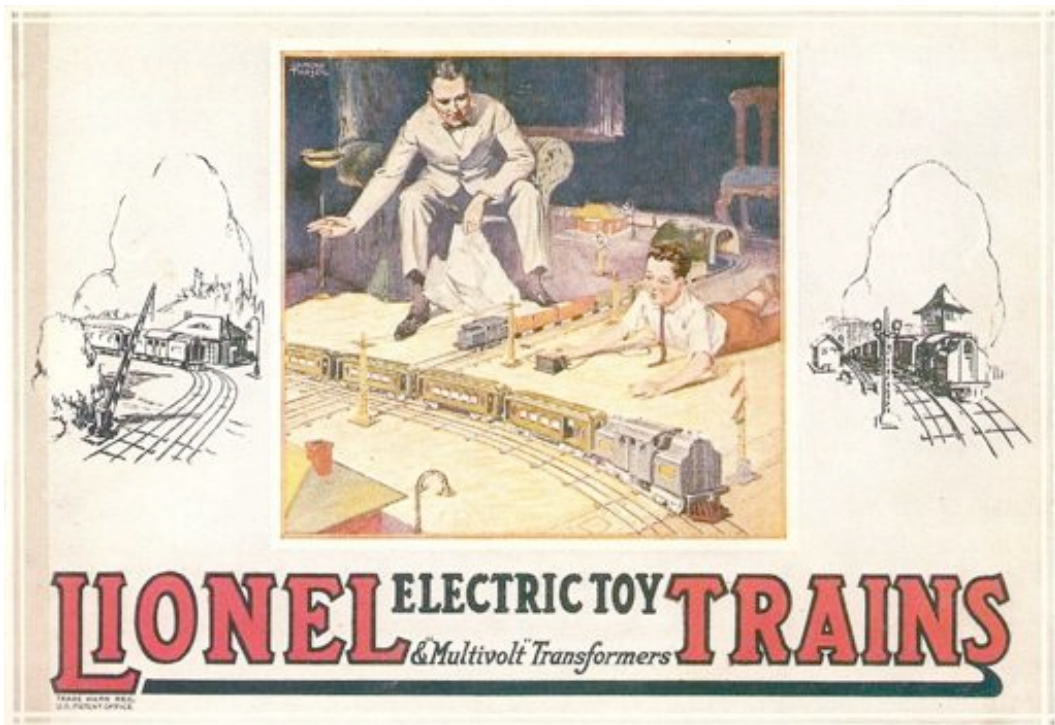


Figure 2. Cover, *Lionel Catalog*, 1923.



Figure 3. Cover, *Lionel Catalog*, 1931.



Figure 4. Cover, *Lionel Catalog*, 1932.



Figure 5. Cover, *Lionel Catalog*, 1933.



Figure 6. Cover, *Railroad Stories*, January 1937.



Figure 7. Inside front cover, *Lionel Catalog*, 1939.



Figure 8. Cover, *Lionel Catalog*, 1940.

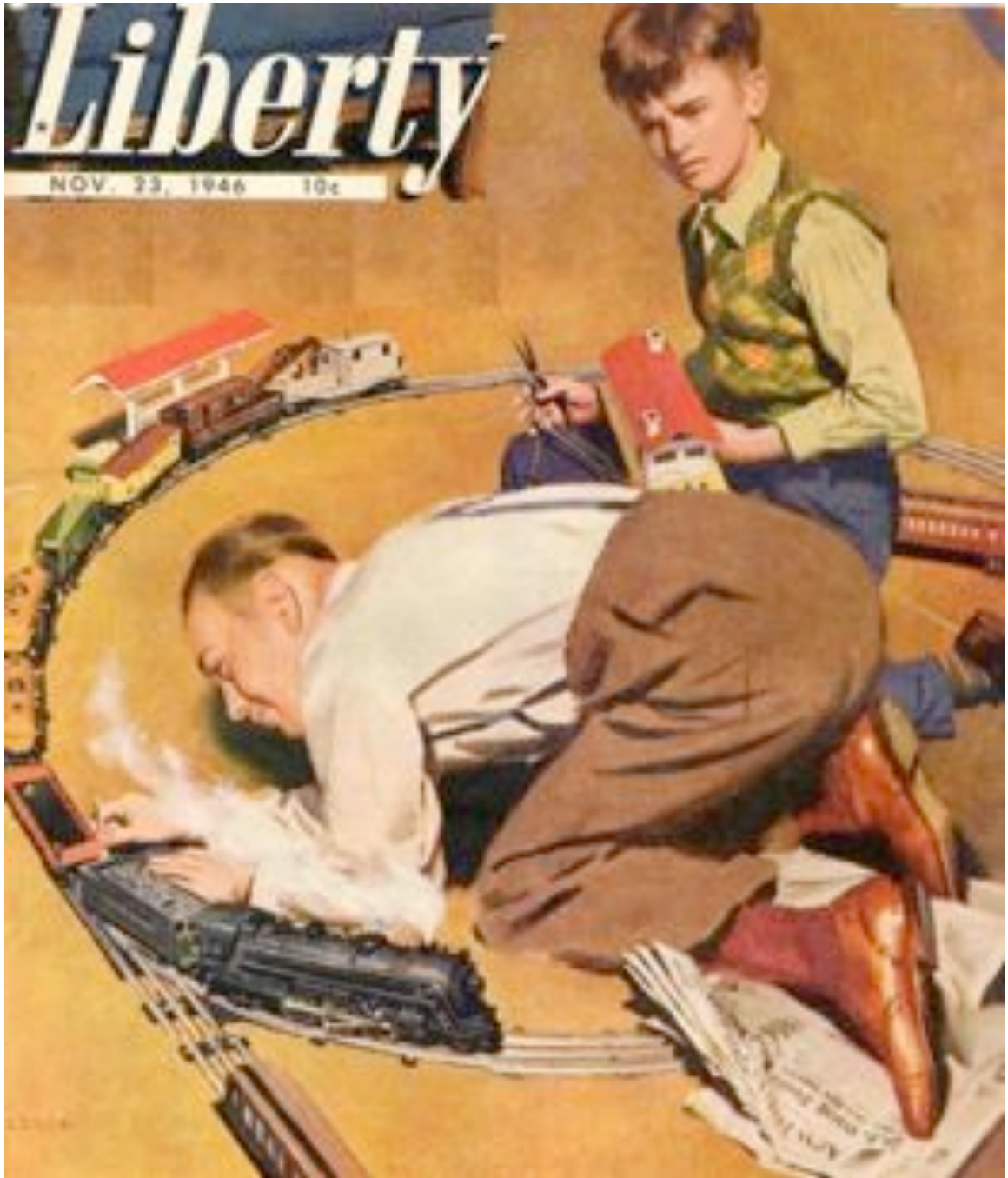


Figure 9. Cover, *Liberty*, 1946. Due to a postwar paper shortage, Lionel printed its catalog in *Liberty* as a 16-page advertisement. The magazine reciprocated by featuring this image on its cover.



So popular!
Super detailed
HO KITS
 by **AMBROID**

Fun to make—fun to operate!
 Realistic and authentic down to
 the last detail. And the biggest
 value ever offered.

HO gauge, precision-cut from
 preformed top-grade basswood.
 No paper parts. Designed and
 produced for Ambroid by Northeastern Scale Models.

All kits include a 2 oz. 25c tube of AMBROID, the Universal Liquid Cement, favorite of hobbyists everywhere. Ready to use, fast setting, holds for keeps. At your dealer. If he cannot supply you, kits mailed direct for 10c extra postage.

Figure 10. Ambroid advertisement, *Model Railroader*, March 1951.

What better way is there to start
 a lad down life's road? A constructive
 hobby . . . companionship . . . dad and son
 with heads together on a mutual
 project . . . and at home. Here is
 a boy you will never have to worry about.

"As the twig is bent . . ."

Gordon Varney



Ask your dealer about Varney . . . the
 only complete line in all HO.

Figure 11. Varney advertisement, *Model Railroader*, May 1952.

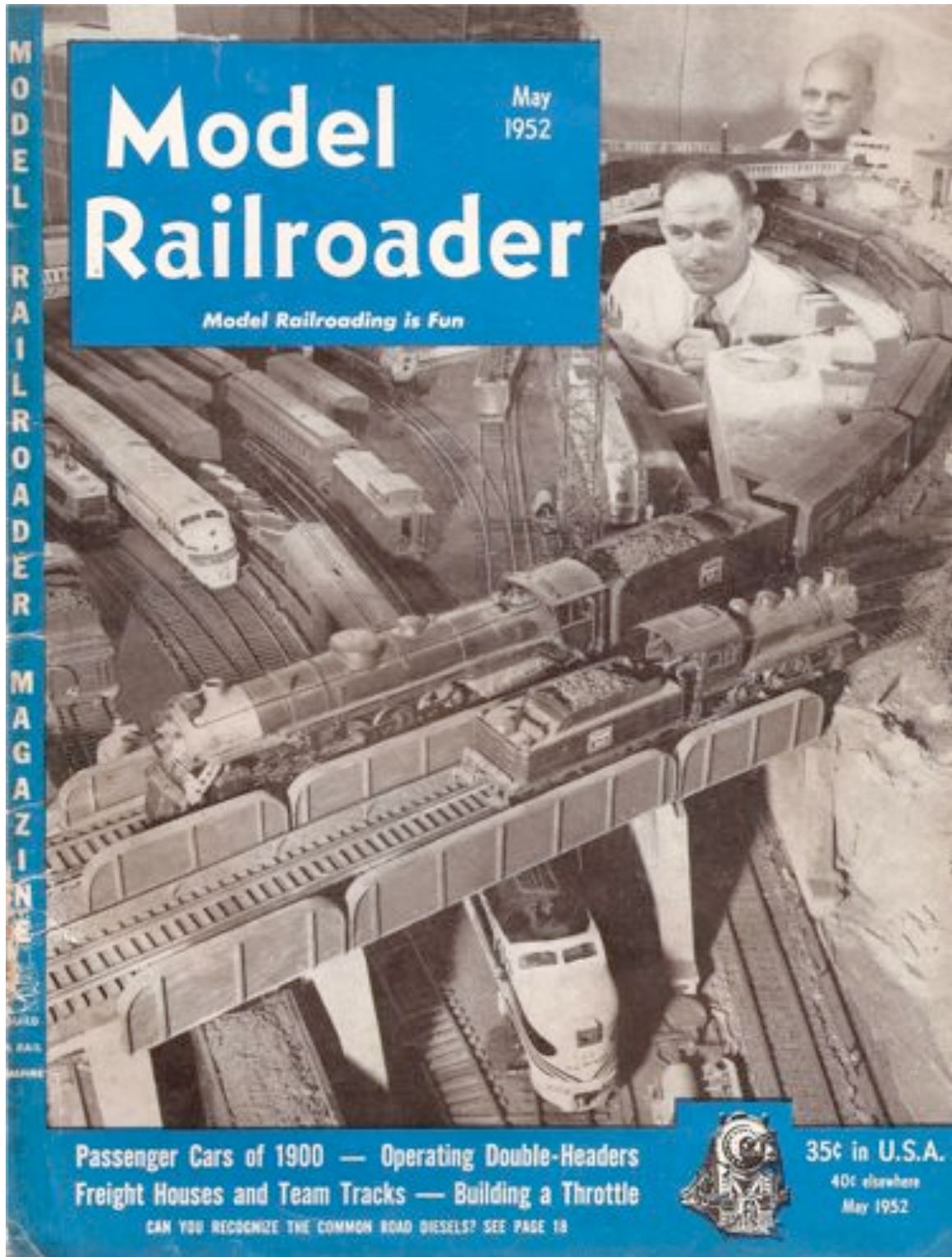


Figure 12. Cover, *Model Railroader*, May 1952. Modern diesel engines leave the terminal as two steam locomotives pass one another on the bridge overhead. While the two men in the image are not father and son but rather modeling partners, their O gauge Chicago, Burlington & Quincy Jr. RR offers a compelling instance of the conflation of generational and scalar relationships. As the caption in the introduction explains, they “have spent seven years fashioning the 28 x 30 ft. layout in ‘Papa’ Burlington’s image.”

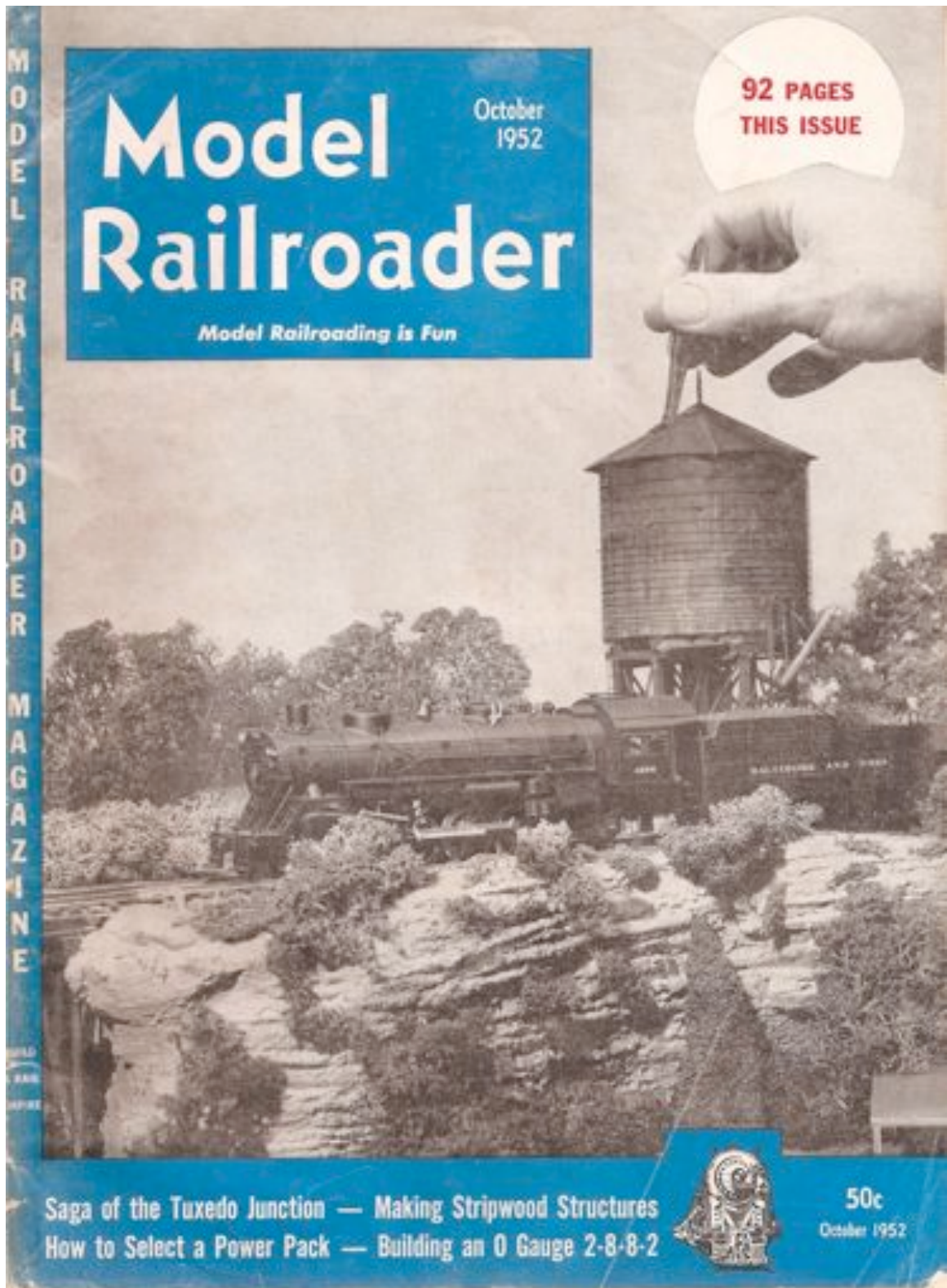


Figure 13. Cover, *Model Railroader*, October 1952.

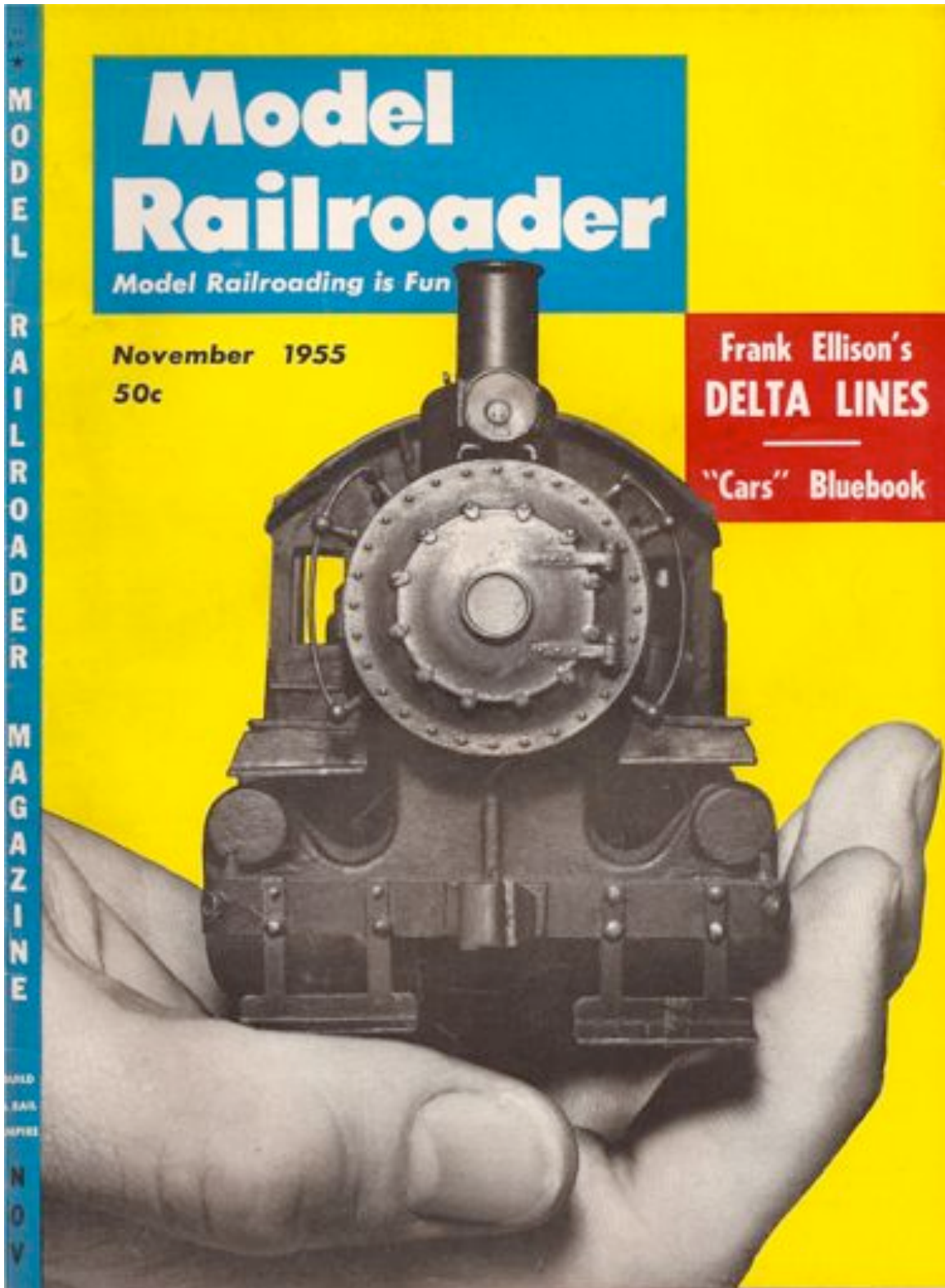


Figure 14. Cover, *Model Railroader*, November 1955.

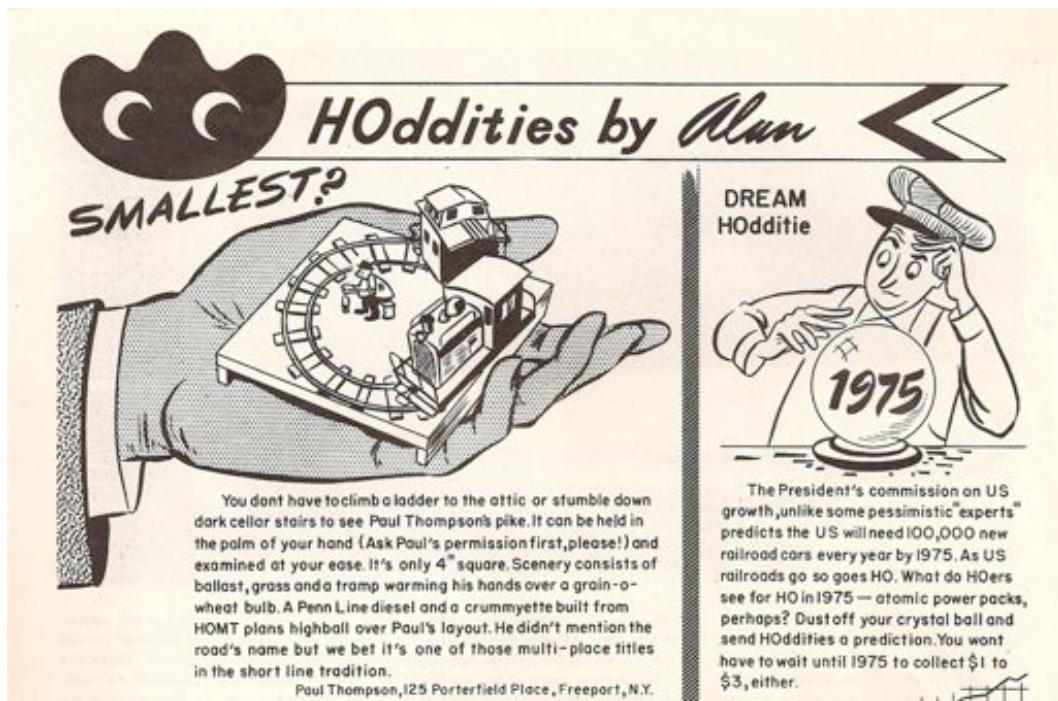


Figure 15. "HOddities by Alan," *HO Model Trains*, November 1952. On the left, Paul Thompson's 4 x 4 inch "pike." On the right, Alan encourages modelers to send in their "DREAM HOddities" for the future of the hobby. "As US railroads go," Alan explains, "so goes HO."



Figure 16. Cover of *Lionel Catalog*, 1952. In 1952 and 1953, Lionel also produced miniature versions of its catalog.



Figure 17. Cover, *Lionel Catalog*, 1954.



Figure 18. Cover, *American Flyer Catalog*, 1953.

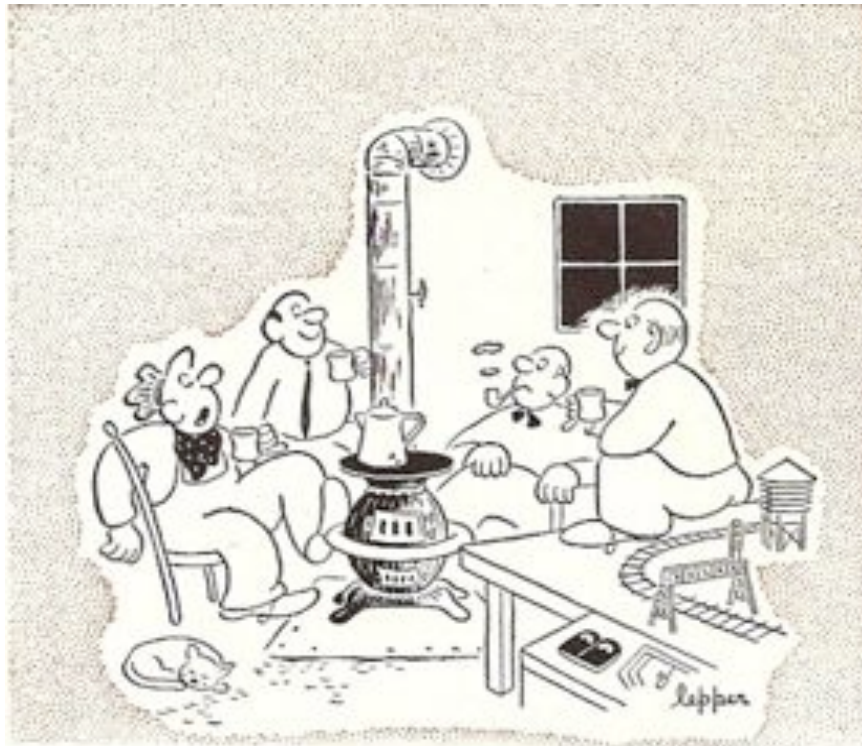


Figure 19. “Bull Session” graphic, *Model Railroader*, September 1954.

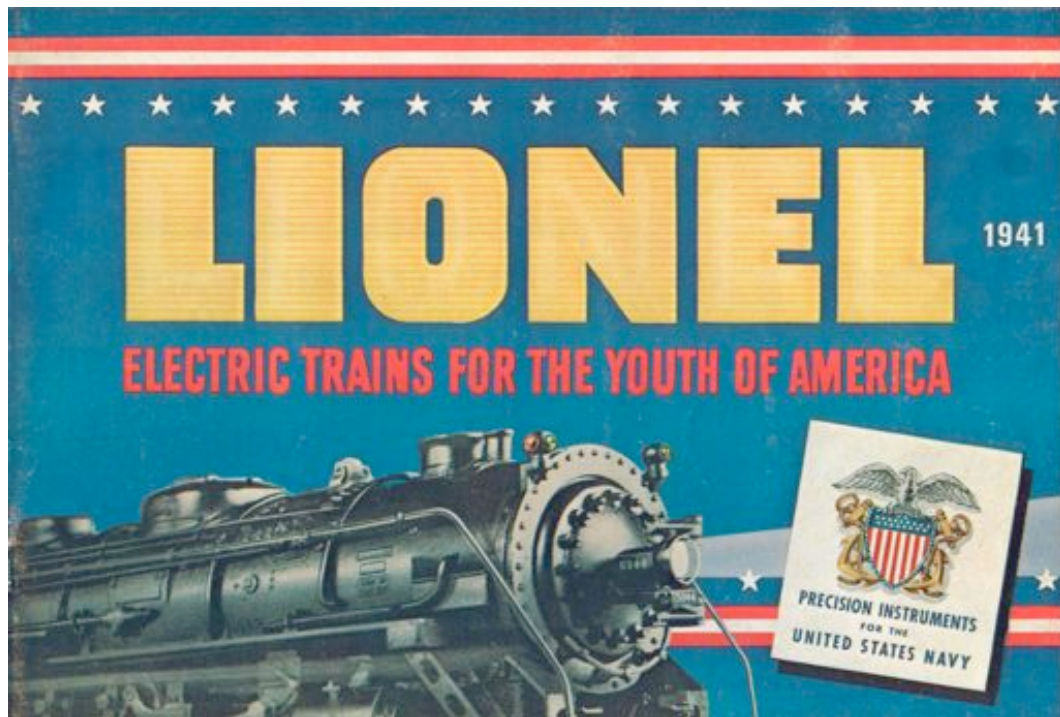


Figure 20. Cover, *Lionel Catalog*, 1941.



Figure 21. Cover, *American Flyer Catalog*, 1941.

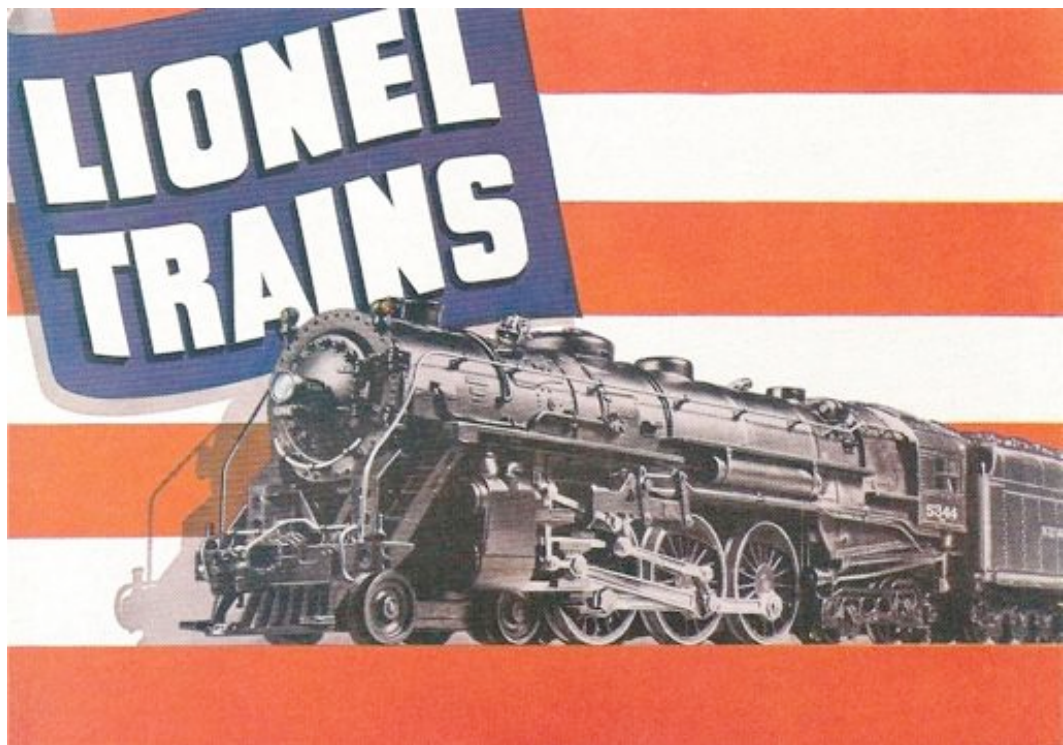


Figure 22. Cover, *Lionel Catalog*, 1942.



IF YOU'RE WORKIN' ON YOUR RAILROAD
 You'll Want this Unusual Gandy Dancer Bunk Car Kit

They may not be "castles" but they're sure home to thousands of railroaders whose muscles and skill keep American rail lines and roadbed the safest and quietest in the world.

Whether you are just beginning or have a pike that attracts visitors from miles around . . . you can be sure that this new Bunk Car will give you a conversation piece you can be proud to show.

As you'd expect from Mantua, it's authentic from

ventilator louvres to stove-pipes. The detail is rivet-perfect. Molded Styrene body with all-metal die-cast floor and underframe, NMRA couplers, of course. Painted Gray with black trim. Road name, Pennsylvania. Also available Union Pacific. Yellow with Red trim, Black lettering.

211A - U.P. Price only **\$1.98** Complete Kit
 211B - PRR

HAVE YOU SEEN THE NEWEST 1000 KITS

Ask your dealer to show you the Central Pacific Box Car and the Central Pacific Platform Car Kit. Authentic and fine size and detail. NMRA couplers. 2179 Box Car, \$2.75. 2188 Platform Car, \$2.35.



Get your copy of MANTUA Catalog from your dealer or send 15c to Mantua Metal Products Co., Woodbury Heights, N. J.



MANTUA
 FIRST IN HO

SEE THESE MILES-AHEAD MANTUA KITS AT YOUR DEALER'S TODAY

Figure 23. Mantua ad, *Model Railroader*, July 1958.

V Now . . . the HO Train of the Year! Here it is, fast! Look at this string of new Varney gondolas, the newest and handiest cars in the hobby. Look how they are winding their way back of that tough, sweet-running Casey Jones 10-wheeler! Those cars are handy for any load. They are a cinch to assemble. And they're yours at a budget price — only \$1.50 each, kit, complete! The Varney engined loco is authentic to the last detail. (A Dockside will pull this amazing-running string, too.) Ask your dealer about Varney, and get this train on your job.

PHOTO BY JOHN ALLEN

Golden Varney

VARNEY

U. S. MADE IN U. S. PAT. COPY.

Ask your dealer about VARNEY . . . the only complete line in all HO!

Figure 24. Varney ad, *Model Railroader*, September 1952. Photo by John Allen features Varney’s “HO Train of the Year,” a string of gondola cars pulled by a “tough, sweet-running Casey Jones 10-wheeler.”

WHAT A MARINE (EX-M.R.) THINKS ABOUT!

BUT

We'll bet one of those new silver pennies that if he is in Maine or California, Kiska or Cairo, he would like to be planning his post-war pike.

Why not forward him a MANTUA catalog NOW? It contains a wealth of information for the novice or old-timer. HO gauge Handbook and 1942 catalog —ONLY 25c.

MANTUA METAL PRODUCTS CO.
(Pioneer and leader in HO gauge)
 (Now engaged exclusively in War Production)
 WOODBURY HEIGHTS ● NEW JERSEY

Figure 25. Mantua ad, *Model Railroader*, November 1943.

TOPS EVERYWHERE
Superdetailed
HO KITS

by **AMBROID**

Figure 26. Ambroid ad, *Model Railroader*, November 1953.



MAÑANA... and squirrels

Squirrels aint nuts. In periods of plenty they lay aside for long winter months.



Right now during this fine summer weather is the time to lay in supplies for the happy winter months

ahead. But don't say "Mañana" (tomorrow). Right now is the time



to order these hard-to-get items. Go to your dealer now while he can get what you want.

Gordon Varney

Ask your dealer about

VARNEY

Figure 27. Varney ad, *Model Railroader*, August 1948.

Once upon a time

a mysterious, oriental-looking character told us a weird tale of a wonderful all-purpose adhesive.



"Even stronger than Walthers' Goo," he said (knowing no greater superlative). The only difficulty was that no one could get it out of the container.

Well, Walthers' Goo comes out of the container — but after that, **look out!**

Heard tell of a fellow who got his fingers stuck together with Goo and never was able to count any higher than **one** from that day forward.

Frankly, there is nothing else like Goo; you have to try it to be convinced.

Ask for it at your dealers.

New, large tube35c

Wm. K. Walthers, Inc.

227A E. Erie St.

Milwaukee 2, Wis.

Figure 28. Walthers ad, *Model Railroader*, October 1952.



CONGRATULATIONS
MODEL RAILROADER

**25 Years Heap
Long Time!**

FLOQUIL BURY PEACE PIPE
SMOKEM HATCHET

All best Braves choose Floquil war paint for
Model Railroads. You be big chief, too.
Askem for Floquil Feather at dealer.



FLOQUIL PRODUCTS
COBLESKILL, NEW YORK

Figure 29. Floquil ad, *Model Railroader*, January 1959.

Better flat car . . . less money! This flat's new—and better! Move detail. Noater. All plastic. Low hung, easy rolling, simply beautiful! No paint needed! Look at those *Admiral* smoke pockets and wide deck! Then look at this new, lower price: Kit, \$1.00. Also, dig that Lill Joe, the workhorse loco. Many layouts have too! Kit, still only \$1.50

John Varney

*Super-detail fans, note: John Allen, who took this great photo, see he got this weathered appearance by rubbing newspaper with his hands to give wood grain texture. Then powdered black. Then varnished. If paint is used, John suggests flat pans, and varying shades on different boards to give individual plank look.

VARNEY

© 1953 VARNEY INDUSTRIES, INC.

Ask your dealer about VARNEY . . . the only complete line in all HO!

Figure 30. Varney ad, *Model Railroader*, September 1953. Photo by John Allen.

...are 'Tight Curves' giving you trouble?

Tru-Scale Roadbed CURVES...

... are milled .006" extra in track gauge width . . . to prevent excessive wheel binding!

Tru-Scale "Quality Roadbed" has both track and raised embankment COMPLETE IN ONE PIECE!

AT YOUR DEALERS. Write us for free catalog and sample.

SYMBOL OF AUTHENTICITY

Tru-Scale Models

SAN DIMAS CALIFORNIA

Figure 31. Tru-Scale ad, *Model Railroader*, July 1953.

THE ONE TRULY COMPLETE LINE IN HO . . . COMPARE!

Fleischmann

... DeLuxe "HO" designed to give you more and better of everything!

| Item No. | Name | Price |
|----------|------|-------|
| 1 | 315 | 3.00 |
| 2 | 317 | 3.00 |
| 3 | 318 | 3.00 |
| 4 | 319 | 3.00 |
| 5 | 320 | 3.00 |
| 6 | 321 | 3.00 |
| 7 | 322 | 3.00 |
| 8 | 323 | 3.00 |
| 9 | 324 | 3.00 |
| 10 | 325 | 3.00 |
| 11 | 326 | 3.00 |
| 12 | 327 | 3.00 |
| 13 | 328 | 3.00 |
| 14 | 329 | 3.00 |
| 15 | 330 | 3.00 |
| 16 | 331 | 3.00 |
| 17 | 332 | 3.00 |
| 18 | 333 | 3.00 |
| 19 | 334 | 3.00 |
| 20 | 335 | 3.00 |
| 21 | 336 | 3.00 |
| 22 | 337 | 3.00 |
| 23 | 338 | 3.00 |
| 24 | 339 | 3.00 |
| 25 | 340 | 3.00 |
| 26 | 341 | 3.00 |
| 27 | 342 | 3.00 |
| 28 | 343 | 3.00 |
| 29 | 344 | 3.00 |
| 30 | 345 | 3.00 |
| 31 | 346 | 3.00 |
| 32 | 347 | 3.00 |
| 33 | 348 | 3.00 |
| 34 | 349 | 3.00 |
| 35 | 350 | 3.00 |
| 36 | 351 | 3.00 |
| 37 | 352 | 3.00 |
| 38 | 353 | 3.00 |
| 39 | 354 | 3.00 |
| 40 | 355 | 3.00 |
| 41 | 356 | 3.00 |
| 42 | 357 | 3.00 |
| 43 | 358 | 3.00 |
| 44 | 359 | 3.00 |
| 45 | 360 | 3.00 |
| 46 | 361 | 3.00 |
| 47 | 362 | 3.00 |
| 48 | 363 | 3.00 |
| 49 | 364 | 3.00 |
| 50 | 365 | 3.00 |

WHAT'S NEW? SEND FOR CATALOGS TODAY

... INSIST—DON'T BE SWITCHED.

... If any dealer tries to sell you another brand, and tells you it's just as good and costs less . . . don't believe it. Other brands may cost a few pennies less, but compare the quality. Don't be switched, insist on Fleischmann and be ahead in the long run. It pays to buy deluxe quality . . . Fleischmann Quality!

Figure 32. Fleischmann ad, *Model Railroader*, January 1959.



Figure 33. Cartoon by Rob Gilbert, *Model Trains*, Fall 1961.

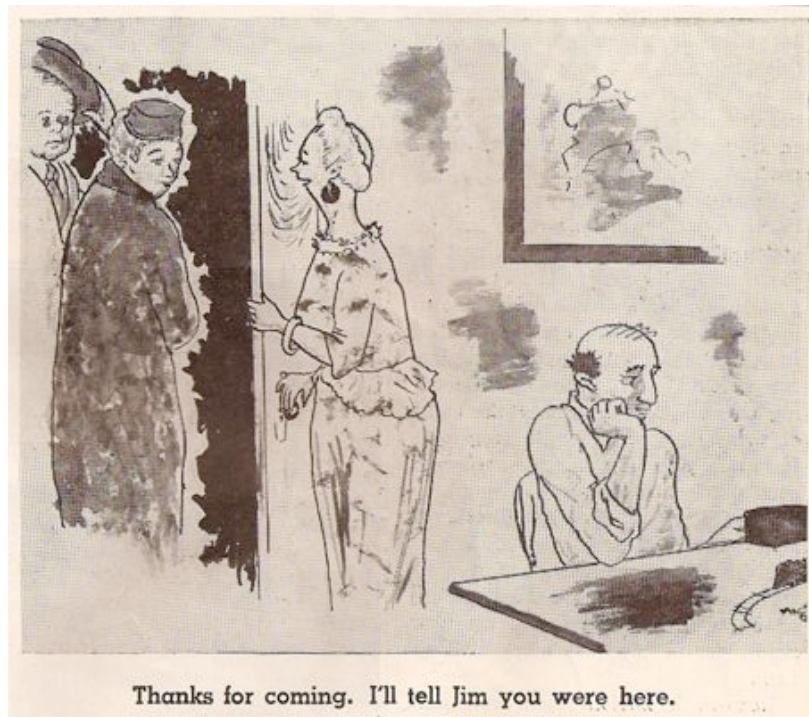


Figure 34. Cartoon in *The HO Monthly*, July 1950.



Figure 35. Cartoon by Hank Roesler, *Model Railroader*, November 1953.

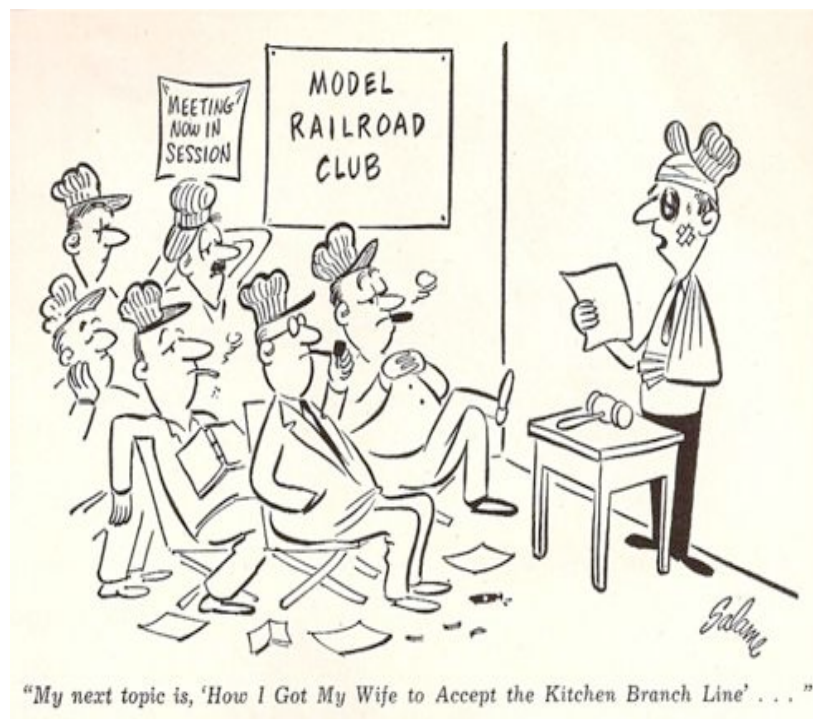


Figure 36. Cartoon by Joe Salame, *Model Railroader*, December 1952.

Tru-Scale Models

READY-BILT HOMES

REAL ESTATE SPECIAL

New modern "dream" homes . . . READY-Bilt . . . Illuminated and Landscaped . . . Nothing to assemble! Startlingly realistic . . . Large, beautiful landscaped lots with velvet-green lawns, and all kinds of flowers, vines, shrubbery, hedge and trees. Soft, indirect lighting, Finest and most expensive construction materials . . . Harmonizing decorator colors . . . Distinctive architectural designs . . . Exclusive residential district! Tru-Scale's mastery of "REALISM" in miniature! \$2.59 to \$2.95 each.

Figure 37. Tru-Scale ad, *Model Railroader*, January 1959.

THE SILVER PLATE ROAD By John Kalbach

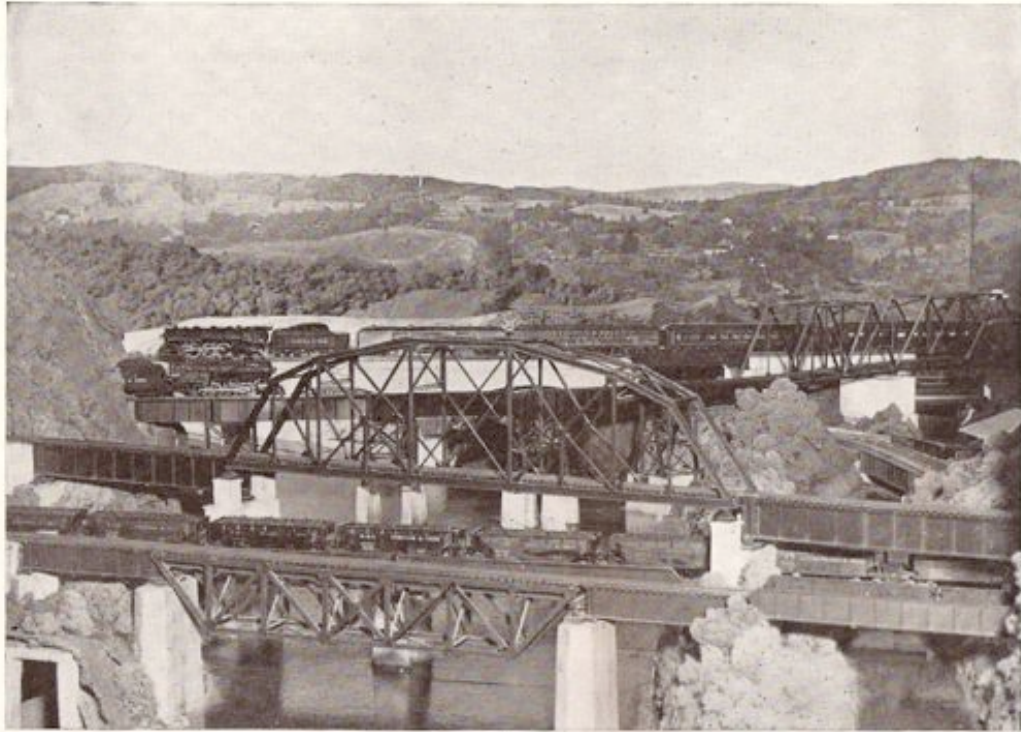
THAT FELLOW WHO VISITED THE CLUB LAST WEEK LIVES NEAR HERE, SAYS HE HAS HIS BASEMENT FULL OF RAILROAD. WE MIGHT AS WELL DROP IN AND SEE HIM, HUH?

AH, BERKSHIRE BOULEVARD. NOW, DID HE SAY TWO OR THREE HOUSES FROM THE CORNER?

IT MUST BE THIS ONE

John Kalbach

Figure 38. Cartoon by John Kalbach, *Model Railroader*, September 1942.



WATERGAP in mountains caused competing railroads to parallel each other here. Present Norfolk & Ohio is result of consolidation of competitors.

Figure 39. Carl Appel's Norfolk & Ohio layout, *Model Railroader*, August 1948. Photo by J. Richard Daub.



Board members of the corporation watch operations on the C&NG. On the right are the elevators of the Fant Milling Co. Woody yards are on the left.

Figure 40. Alex Tocquigny's Carrizo & North Grand layout, *Model Railroader*, November 1953. Photo by Allan Smith, Jr.

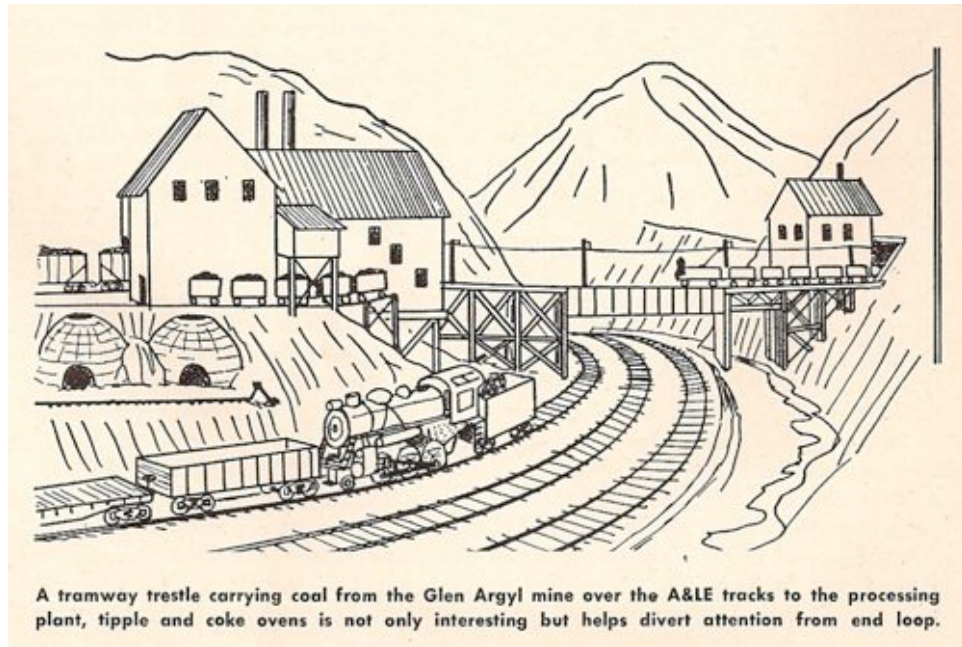


Figure 41. Drawing of hypothetical Allegheny & Lake Erie layout, *Model Railroader*, September 1952.

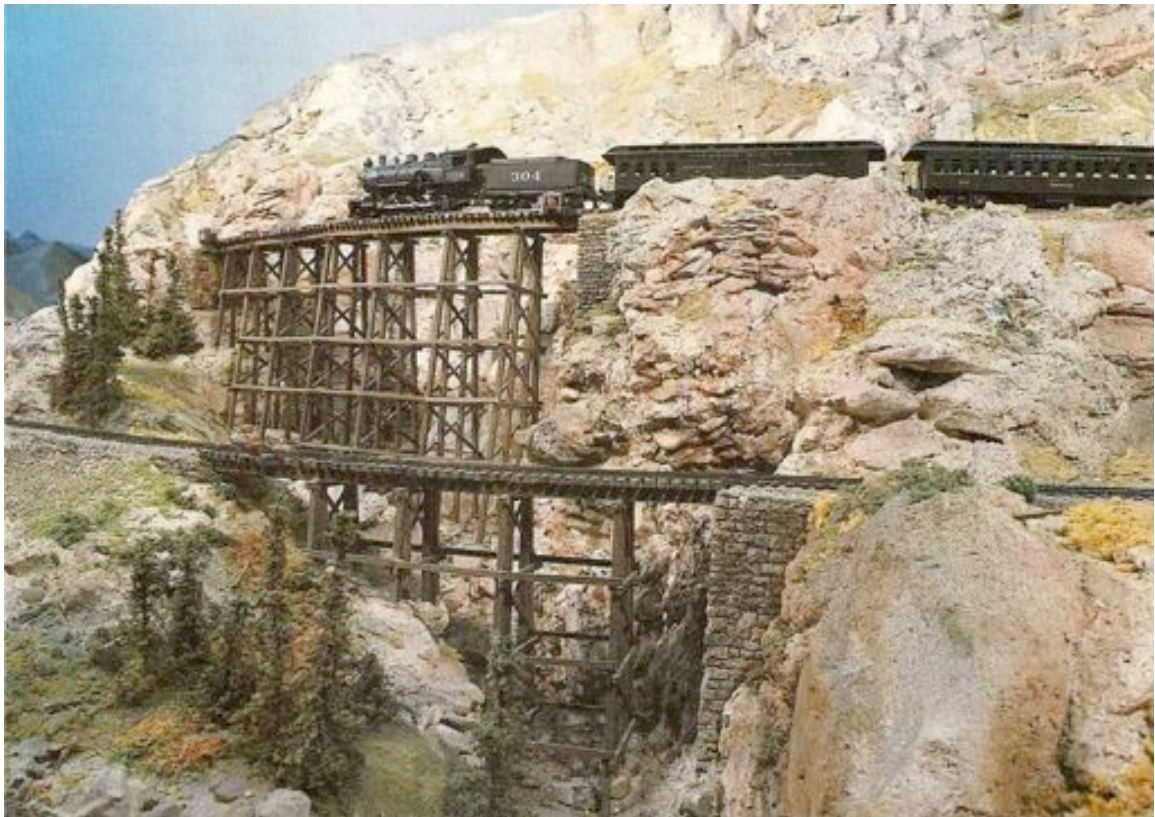


Figure 42. Sam Posey's Colorado Midland layout, *Model Railroader*, February 1995. Photo by Dave Frary.

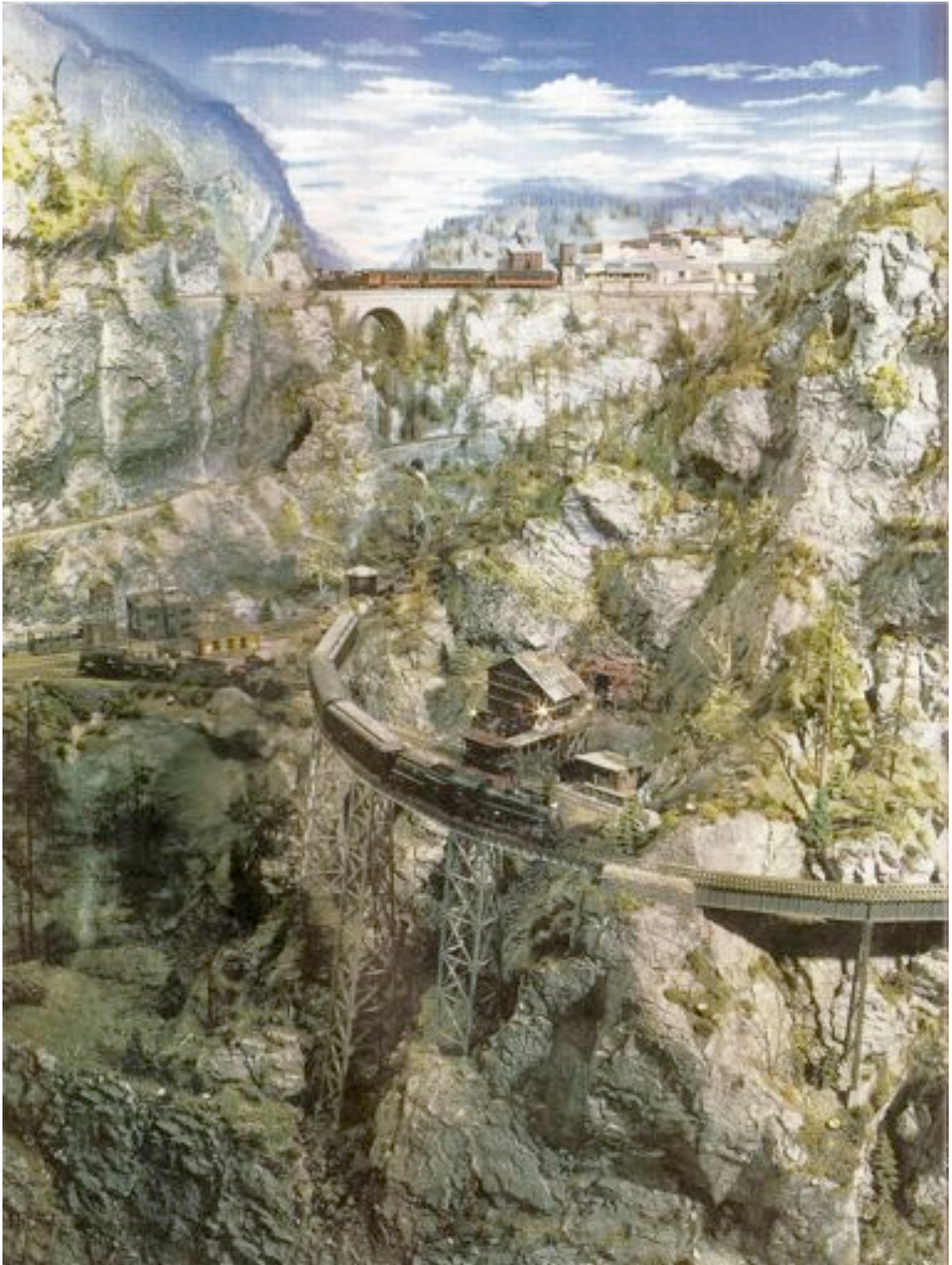


Figure 43. John Allen's Gorre & Daphetid layout, *Model Railroader*, January 2003. Photo by John Allen.



Figure 44. Varney ad, *Model Railroader*, November 1953. Photo by John Allen.



Figure 45. George Sellios's Franklin & South Manchester layout, *Model Railroader*, March 2011. Photo by Richard Josselyn.



Figure 46. Chris Burden, *Medusa's Head*, 1990. Plywood, concrete, rocks, model railroad trains and tracks, 14 feet in diameter, five-ton sphere. *Medusa's Head* is a 14-foot, five-ton sphere which is encrusted with intertwining knots of different scale model railroad tracks and trains and buildings. In an obvious reference to the terrifying Greek goddess, Medusa, the sculpture is a metaphor for a world engulfed in its own technology. © Chris Burden. Courtesy of Gagolian Gallery.

Notes

Introduction: The Dialectics of Scale

1. Tom Beresford, "You're Right!" *Model Railroader*, August 1953, 7-8.
2. When *Model Railroader* published its first issue in 1934, "there were only about 1,000 known model railroaders," taken here to mean adult, scale-model railroaders. Al Kalmbach, "At the Throttle," *Model Railroader*, January 1959, 31. But by 1952, the number of "model railroaders who enjoy their railroads the year 'round" had grown to roughly a quarter of a million. John Page, Larry Kumferman, and Jim Trask, "Pine Tree Central," *Model Railroader*, December 1952, 12.
3. Albert J. Churella, *From Steam to Diesel: Managerial Customs and Organizational Capabilities in the Twentieth-Century American Locomotive Industry* (Princeton, NJ: Princeton University Press, 1998), 3.
4. Sam Posey, *Playing with Trains: A Passion Beyond Scale* (New York: Random House, 2004), 200, 204.
5. Introduction, *Lionel Catalog*, 1930, 2.
6. Anna McCarthy, "From the Ordinary to the Concrete: Cultural Studies and the Politics of Scale," in *Questions of Method in Cultural Studies*, eds. Mimi White and James Schwoch (London: Blackwell, 2006), 21-22, 43.
7. Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge, MA: MIT Press, 1991), 289-290. According to Benjamin, "[The historical researcher must] give up the tranquil, contemplative attitude toward the object in order to become conscious of the critical constellation in which precisely this fragment of the past is positioned with regard precisely to this present."
8. Beresford, 7-8.

9. Buck-Morss, 210.
10. Walter Benjamin, *The Arcades Project*, ed. Rolf Tiedemann, trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA: Harvard University Press, 2002), 475.
11. Buck-Morss, 3.
12. Benjamin, 15.
13. Richard Flores, *Remembering the Alamo: Memory, Modernity, & the Master Symbol* (Austin: University of Texas Press, 2002), 160. Flores argues “that master symbols like the Alamo shape and inform a wide spectrum of social experiences and cultural meanings that often go unnoticed or uncritiqued,” and “that these forms work in tandem with other generative processes like those construed around patriotism, heroism, and the nation so as to further mark as delinquent any critique of or variation from the norm.” He goes on to assert “that the Western project of modernity emplotted in the Alamo as symbol is both project and place and that master symbols are precisely those constructions that coalesce around these articulations.”
14. Earl Cochran, “A Private Car for your Pike,” *Model Railroader*, February 1951, 50. Similarly, a 1953 Penn Line advertisement encouraged modelers to “build your own private road.” *Model Railroader*, August 1953, 58. And between 1952 and 1956, the cover of *Model Railroader* had a blue band running the length of the spine, in which appeared the motto, “BUILD A RAIL EMPIRE.”
15. Buck-Morss, 37-38.
16. *Ibid.*, 219.
17. *Ibid.*
18. Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Durham, NC: Duke University Press, 1993), ix.
19. Svetlana Boym, *The Future of Nostalgia* (New York, NY: Basic Books, 2001), 58.
20. *Ibid.*, 23.
21. Stewart, xii.
22. Buck-Morss, 274.
23. Stewart, 44.
24. *Ibid.*, 56.
25. *Ibid.*, 61.
26. Page, Kumferman, and Trask, “Pine Tree Central,” *Model Railroader*, December 1952, 14.
27. Stewart, 59.
28. Posey explains the difference between a train set and a layout in the following way: “If someone asked me if I had a train set, I would regard the questioner with scorn. A train *set* appeared at Christmas, after which it was put away. What I had, what my mother had designed and

commissioned a carpenter to build, was a *layout*. It was permanent. Mine even had a room of its own, on the same floor as the living room.” Posey, *Playing with Trains*, 7.

29. Buck-Morss, 221-222.

Scale of the Body: The “Lionel Engineer” and His Dad

1. William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991), 76.
2. Raymond Williams, *Marxism and Literature* (Oxford: Oxford University Press, 1977), 132-133.
3. John R. Stilgoe, *Metropolitan Corridor: Railroads and the American Scene* (New Haven, CT: Yale University Press, 1983), 3.
4. Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction,” in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1968), 223.
5. Stilgoe, *Metropolitan Corridor*, 11.
6. Introduction, *Lionel Catalog*, 1929, 2. Also quoted in Stilgoe, *Metropolitan Corridor*, 12.
7. Jean Baudrillard, “The System of Objects,” in *Selected Writings*, ed. Mark Poster (Stanford, CA: Stanford University Press, 1988), 10.
8. Stilgoe, *Metropolitan Corridor*, 51-52.
9. Posey, *Playing with Trains*, 6.
10. *Lionel Catalog*, 1929, cover.
11. *Lionel Catalog*, 1923, cover.
12. Posey, *Playing with Trains*, 6. See also: Ron Hollander, *All Aboard! The Story of Joshua Lionel Cowen & His Lionel Train Company* (New York: Workman Publishing, 1981), 6.
13. Stewart, 44.
14. Posey, *Playing with Trains*, 7.
15. *Lionel Catalog*, 1931, cover.
16. *Lionel Catalog*, 1932, cover.
17. *Lionel Catalog*, 1933, cover.
18. Introduction, *Lionel Catalog*, 1930, 2.
19. Stilgoe, *Metropolitan Corridor*, 11.
20. *Lionel Catalog*, 1939, 2-3.
21. *Lionel Catalog*, 1940, cover.

22. Stilgoe, *Metropolitan Corridor*, ix.
23. Buck-Morss, 81.
24. *Ibid.*, 154.
25. *Ibid.*, 154, 116.
26. *Ibid.*, 116.
27. Posey, *Playing with Trains*, 176.
28. Louis H. Hertz, *The Complete Book of Model Railroading* (New York: Simmons-Boardman Publishing, 1951), 35.
29. *Lionel Catalog*, 1934, 2.
30. Posey, *Playing with Trains*, 8.
31. *Ibid.*, 5.
32. Robert A. Ward, "Is Our Hobby Going to the Dogs?" *Model Railroader*, August 1953, 4-6.
33. A 1953 *Model Railroader* article explains, "Back in the 1930s, model railroading had what it called the 'Battle of the Gauges.' The battle was between OO and HO, and the objective of the battle was numerical superiority. The battle was won by HO." John Page, "At the Throttle," *Model Railroader*, August 1953, 15.
34. Posey, *Playing with Trains*, 118; Hertz, *The Complete Book of Model Railroading*, 32-34. According to Hertz, "It is often said that it was the appearance of the several model railroad systems on display at the Chicago World's Fair in 1933 and 1934 that really gave model railroading in the United States the one big boost that was needed to get it rolling, but this is somewhat of an oversimplification. A great deal more stimulation was provided at about the same time by the appearance of the two chief American magazines now devoted to the hobby, *Railroad Model Craftsman* (originally covering the entire model field as *The Model Craftsman*) in 1933, and *The Model Railroader*, in 1934." Hertz, 32-34. Posey asserts that "model railroading's unquestioned capital" is Milwaukee, home to both the W. K. Walther's Company and Kalmbach Publishing (which owns *Model Railroader*), "the twin pillars upon which the hobby of HO model railroading rests." He goes on to explain, "Walther's shelves contain the raw material, while *Model Railroader*, with a circulation hovering around two hundred thousand, is the hobby's cheerleader. Other model railroading magazines (about a dozen are published) are available by subscription or in hobby stores, but *Model Railroader* is the one seen on newsstands, its bright, graphic covers attracting newcomers as pollen attracts bees." Posey, 117, 125-126. Milwaukee is also the home of the NMRA.
35. "Prices Going Up," *Model Railroader*, June 1941, 288.
36. Harvey C. Vermilyea, "An Attic Layout: A Model 'Railroad Empire' is Built and a Tale of Experience is Unfolded," *The Model Railroader*, November 1941, 573.
37. Posey, *Playing with Trains*, 6. According to Ron Hollander, "Remote control became symbolic of the button-pushing and emotional distancing that would be required of men in the modern world." Hollander, 154. Also quoted in Posey, *Playing with Trains*, 10.

38. Leslie Paris, "Small Mercies: Colleen Moore's Doll House and the National Charity Tour," in *Acts of Possession: Collecting in America*, ed. Leah Dilworth (New Brunswick, NJ: Rutgers University Press, 2003), 193.
39. Buck-Morss explains that "the Arcades project was originally conceived as a 'dialectical fairy scene' (*dialektische Feen*), so that the *Passagen-Werk* becomes a Marxian retelling of the story of Sleeping Beauty, which was concerned with 'waking up' (as the 'best example of a dialectical overturning') from the collective dream of the commodity phantasmagoria." Buck-Morss, 271.
40. Walter Benjamin, "Old Toys: The Toy Exhibition at the Märkisches Museum," in *Selected Writings, Volume 2, Part 1, 1927-1930*, ed. Michael W. Jennings, Howard Eiland, and Gary Smith (Cambridge, MA: Harvard University Press, 2005), 100.
41. Buck-Morss, 23.
42. *Liberty*, November 23, 1946, cover.
43. Ambroid Co. ad, "So popular!" *Model Railroader*, March 1951, 4.
44. John R. Stilgoe, *Train Time: Railroads and the Imminent Reshaping of the United States Landscape* (Charlottesville: University of Virginia Press, 2007), 33-34.
45. Frank J. Menagh, "HO, Of Course," *Model Railroader*, September 1952, 4.
46. Ray L. Rhodes, "Bull Session," *Model Railroader*, January 1959, 92.
47. Varney Scale Models ad, "As the twig is bent..." *Model Railroader*, May 1952, 8.
48. John J. Benzing, "How I built the North Merrick & Indian," *Model Railroader*, October 1952, 35.
49. George Allen, "Saga of the Tuxedo Junction," *Model Railroader*, October 1952, 12.
50. Stewart, 70.
51. Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (London: Oxford University Press, 1980), 343.
52. *Ibid.*, 3-4.
53. Frank Norris, *The Octopus* (New York: Penguin, 1994), 51.
54. "HOddities by Alan," *HO Model Trains*, November 1952, 42.
55. H. O. Williams, "Burlington's Bobber," *Model Railroader*, November 1955, 42-43.
56. Leo Caloia, "How to conceal corners," *Model Railroader*, July 1958, 51.
57. Sam Posey, "My Colorado Midland," *Model Railroader*, February 1995, 73.
58. Pelle K. Søbørg, "Make your layout look picture perfect," *Model Railroader*, September 2009, 37.
59. Linn Westcott, *Model Railroading with John Allen* (Waukesha, WI: Kalmbach Books, 1989), 5, 136; *Model Railroader*, September 1952, 3.

60. Ibid., 17.
61. “This Month,” *Model Railroader*, March 1951, 3.
62. Posey, *Playing with Trains*, 27.
63. Westcott, 95.
64. Posey, *Playing with Trains*, 8.
65. Ibid., 86-87.
66. Stewart, 55.
67. Posey, *Playing with Trains*, 89.
68. Ibid., 207.
69. McCarthy, 27.
70. *Lionel Catalog*, 1952, cover; *Lionel Catalog*, 1954, cover. In 1952 and 1953, Lionel also produced a miniature catalog, which would presumably allow the “Lionel engineer” to carry his catalog around in his pocket. Away from his model trains, the images in the catalog could perhaps suffice as temporary substitutes. Indeed, catalogs in general present the viewer with scaled-down images of commodities, and these images work to further abstract commodities from the means of production, increasing their display value and making them readily available for visual consumption. Magazine images function along similar lines, and the March 1951 issue of *Fortune* cited in the introduction provides a particularly salient example. The short article Beresford includes in his letter to the editor serves as the introduction to “Freight Trains: A portfolio of paintings of modern rolling stock.” On the seven pages that follow the introduction is “a complete freight train, painted for FORTUNE by Lemuel B. Line.” Included in the train are thirty-one cars, including the diesel engine, each of which is accompanied by a short description. Placing an HO-scale boxcar on top of the painting of a boxcar included in the train produces a near-perfect fit. This is unlikely accidental, which suggests that the painting is meant to function as, or at least evoke, a model railroad. “Freight Trains: A portfolio of paintings of modern rolling stock,” *Fortune*, March 1951, 91-98.
71. Premier Sales Company ad, “Dad & Son Authentic Engineering Caps,” *Model Railroader*, December 1952, 47.
72. Darragh Models ad, “Railroad Neckties,” *Model Railroader*, January 1959, 73.
73. Gaston Bachelard, *The Poetics of Space*, trans. Maria Jolas (Boston, MA: Beacon Press, 1994), 180.
74. Ibid., 150.

Scale of the Body Politic: Modeling the National Family

1. Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006), 6-7.
2. Philip J. Deloria, *Playing Indian* (New Haven, CT: Yale University Press, 1999), 21.

3. Robert G. Lee, *Orientalists: Asian Americans in Popular Culture* (Philadelphia, PA: Temple University Press, 1999), 7.
4. *Lionel Catalog*, 1941, 6.
5. *American Flyer Catalog*, 1941, back cover.
6. *Lionel Catalog*, 1942, cover.
7. Stilgoe, *Metropolitan Corridor*, 11.
8. "War and Model Railroading," *Model Railroader*, January 1942, 3.
9. "The Model Railroader is Ready," *Model Railroader*, January 1942, 30.
10. M. Dale Newton Company ad, "Prescription for War Jitters," *Model Railroader*, January 1942, 33.
11. Varney Scale Models ad, "'BUY MORE WAR BONDS' box car," *Model Railroader*, August 1942, 387; Mantua Metal Products Co. ad, *Model Railroader*, September 1942, 435; Scale-Craft & Co. ad, *Model Railroader*, November 1942, 517; Lionel Corp. ad, *Model Railroader*, December 1943, 557.
12. Matthew Frye Jacobson, *Whiteness of a Different Color: European Immigrants and the Alchemy of Race* (Cambridge, MA: Harvard University Press, 1998), 8.
13. Allen, "Saga of the Tuxedo Junction," *Model Railroader*, October 1952, 13.
14. Westcott, 58.
15. Richard Slotkin, *Gunfighter Nation: The Myth of the Frontier in Twentieth-Century America* (Norman: University of Oklahoma Press, 1998), 10.
16. *Ibid.*, 11.
17. Stewart, xii, 101.
18. *Ibid.*, 99-100.
19. Mantua Metal Products Co. ad, "Gandy Dancer Bunk Car Kit," *Model Railroader*, July 1958, 2.
20. George Allen, "50,000 Spikes (Chapter 3)," *The Model Railroader*, November 1941, 553.
21. Stilgoe, *Metropolitan Corridor*, 215.
22. Michel de Certeau, *The Practice of Everyday Life*, trans. Steven Rendall (Berkeley: University of California Press, 1984), 23.
23. Stewart, 100-101.
24. *Ibid.*, 99.
25. *Ibid.*, 101.
26. Ray L. Rhodes, "Bull Session," *Model Railroader*, November 1953, 74.

27. Varney Scale Models ad, "Now... the HO Train of the Year," *Model Railroader*, September 1952.
28. "Trackside Photos," *Model Railroader*, April 1954, 35.
29. Mantua Metal Products Co. ad, "What a Marine (Ex-M.R.) thinks about!" *Model Railroader*, November 1943, 523.
30. Mantua Metal Products Co. ad, "What a Soldier (Ex-M.R.) thinks about!" *Model Railroader*, December 1943, 569.
31. Roundhouse Products ad, "Bettendorf Four Wheel Freight Type Truck," *Model Railroader*, October 1952; Roundhouse Products ad, "Bettendorf Four Wheel Freight Type Truck," *Model Trains*, November 1952.
32. Ambroid Co. ad, "Tops Everywhere," *Model Railroader*, November 1953, 21.
33. Varney Scale Models ad, "MAÑANA... and squirrels," *Model Railroader*, August 1948, 519.
34. Curtis Marez, *Drugs Wars: The Political Economy of Narcotics* (Minneapolis: University of Minnesota Press, 2004), 116.
35. Wm. K. Walthers, Inc. ad, "Once upon a time," *Model Railroader*, October 1952, 83.
36. Lee, 12.
37. *Ibid.*, 7.
38. Floquil Products ad, "CONGRATULATIONS MODEL RAILROADER," *Model Railroader*, January 1959, 90.
39. Deloria, 7.
40. *Ibid.*, 142.
41. Pablo Mitchell, *Coyote Nation: Sexuality, Race, and Conquest in Modernizing New Mexico, 1880-1920* (Chicago: University of Chicago Press), 2005, 3.
42. *Ibid.*
43. Lee, 64-65.
44. Patricia Nelson Limerick, *Legacy of Conquest: The Unbroken Past of the American West* (New York: W.W. Norton, 1987), 264-265.
45. Richard White, *"It's Your Misfortune and None of My Own": A New History of the American West* (Norman: University of Oklahoma Press, 1991), 116.
46. Varney Scale Models ad, "Better flat car... less money!" *Model Railroader*, September 1953, back cover.
47. Posey, *Playing with Trains*, 93.
48. Andrew Isenberg, *The Destruction of the Bison: An Environmental History, 1750-1920* (New York: Cambridge University Press, 2000), 3.

49. Tru-Scale Models ad, "Tight Curves," *Model Railroader*, July 1953, 62.
50. Wm. K. Walthers, Inc. ad, *Model Railroader*, August 1948, 572; Margo Kraft ad, *Model Railroader*, September 1954, 54.
51. Fleischmann ad, "THE ONE TRULY COMPLETE LINE IN HO," *Model Railroader*, January 1959, 107.
52. Ben Chappell, "Lowrider Style: Cultural Politics and the Poetics of Scale," in *Cultural Studies: An Anthology*, eds. Michael Ryan and Hanna Musiol (Oxford: Blackwell, 2008), 637.
53. Buck-Morss, 101.
54. *Ibid.*, 191.
55. William E. Lawrence Jr., "How to Be a Model Railroader Though Married," *Model Railroader*, February 1951, 49.
56. Rob Gilbert cartoon, *Model Trains*, Fall 1961, 49.
57. Mrs. Joyce A. Heaney, "Lady's Aid," *Model Railroader*, August 1948, 558.
58. "Meet Our Authors," *Model Railroader*, September 1952, 11.
59. Wilbur Johnson, "How I built The Cactus Gulch," *Model Railroader*, December 1952, 24.
60. Posey, *Playing with Trains*, 6-7.
61. Mrs. Wm. O. Arnold, "Share Hubby's Hobby," *Model Railroader*, July 1953, 8.
62. Burt Holman cartoon, *The HO Monthly*, July 1950, 9.
63. Hank Roesler cartoon, "Clinic," *Model Railroader*, November 1953, 85.
64. Joe Salame cartoon, *Model Railroader*, December 1952, 66.

Material Scale: "A Piece of Honest-to-Goodness U.S.A."

1. Jennifer Price, *Flight Maps: Adventures with Nature in Modern America* (New York: Basic Books, 1999), 114.
2. Raymond Williams, *The Country and the City* (New York: Oxford University Press, 1975), 122-124.
3. Stewart, 58.
4. *Ibid.*, 58-59.
5. *Ibid.*, 59. As one *Model Railroader* article puts it, "Mother Nature, please take note: We built the Tidewater Central's scenery with... Plaster and dry color." MR staff, "Plaster and dry color (Tidewater Central, part 2)," *Model Railroader*, January 1957, 62.
6. Williams, *The Country and the City*, 1.

7. Ibid.
8. "Track Plans of the Month," *Model Railroader*, August 1948, 540.
9. George J. Sennhauser, "Table-top Trolley," *Model Railroader*, April 1954, 38.
10. Posey, *Playing with Trains*, 164.
11. Ibid., 165.
12. John Page, "At the Throttle," *Model Railroader*, July 1953, 9.
13. Westcott, 17.
14. Stewart, 71.
15. Ibid., 61.
16. Ibid.
17. Westcott, 139.
18. Ibid., 67.
19. Ibid., 103.
20. Ibid., 74.
21. Ibid., 77.
22. Posey, *Playing with Trains*, 63.
23. de Certeau, xviii.
24. Ibid., 111.
25. Ibid., 112.
26. Stewart, 57.
27. Anne Whiston Spirn, *The Language of Landscape* (New Haven, CT: Yale University Press, 1998), 18.
28. Ibid., 173.
29. Jake Schultz, "Z scale in a briefcase," *Model Railroader*, April 2001; Jeffrey MacHan, "A layout built to travel: The Z scale Val Ease Central is a globe trotting hobby ambassador," *Model Railroader*, November 2004. In addition to Z scale, which originated in Germany in 1972, and, more than twice as small, T scale, which originated in Japan in 2006, the other two main scales smaller than HO are N (1:160) and TT (1:120), which stands for tabletop. HO_{n3}, or HO narrow gauge, is the same scale as HO, but rather than running on standard gauge track it runs on narrow gauge track. Also running on HO standard gauge track is the slightly larger OO (4mm:foot), which is HO's British counterpart. After OO is S (1:64), and then O (1:48), made popular by Lionel but considered a toy by scale modelers, and following O is G, for "garden railways." Then come the live steam scales, which range from 1:24 to "grand scale," which is 1:4. The gauge, or distance

between the rails, of T scale is three millimeters, while the gauge of grand scale is usually fifteen inches. A T-scale locomotive is roughly the width of a pencil, while live steam riding railroads, the descendants of mid-nineteenth-century miniature railways, tend to be in parks or the backyards of private homes. Between T and live steam are still other, niche scales and gauges, and it might even be argued that scenic, or tourist, railroads are scale models of sorts.

30. Bill Peyreferry, "Build A Summer Home for Your Layout," *HO Model Trains*, July 1953, 7.
31. Tru-Scale Models ad, "REAL ESTATE SPECIAL," *Model Railroader*, January 1959, 85.
32. John Kalmbach cartoon, "The Silver Plate Road," *The Model Railroader*, September 1942, 437.
33. Westcott, 6.
34. Kalmbach Publishing Co. ad, "Trains Magazine," *Model Railroader*, January 1959, 83.
35. *Model Railroader*, April 1954, cover.
36. Posey, *Playing with Trains*, 23.
37. *Ibid.*, 45.
38. Westcott, 41.
39. Boomer Pete, "Old King Coal on the N&O," *Model Railroader*, August 1948, 525.
40. *Ibid.*, 526-528.
41. "Brass Hatting A Pike of Your Own," *Model Railroader*, October 1939, 491.
42. *Ibid.*, 492.
43. *Ibid.*, 491.
44. Alex Tocquigny, "How I Built the Carrizo & North Grand," *Model Railroader*, November 1953, 45.
45. Fredric Jameson, "Cognitive Mapping," in *Marxism and the Interpretation of Culture*, eds. Cary Nelson and Lawrence Grossberg (Urbana: University of Illinois Press, 1988), 353.
46. Posey, "My Colorado Midland," 73.
47. John Armstrong, "Operating the Allegheny & Lake Erie," *Model Railroader*, September 1952, 16.
48. *Ibid.*, 17-18.
49. Stilgoe, *Metropolitan Corridor*, 93; Armstrong, "Operating the Allegheny & Lake Erie," 19.
50. Posey, *Playing with Trains*, 68.
51. *Ibid.*, 70.
52. Posey, "My Colorado Midland," 73.

Historical Scale: The Twilight of Steam and Time Machines

1. Williams, *The Country and the City*, 297.
2. M. D. Thornburgh, "Thornburgh Builds an HO 1910 American," *Model Railroader*, December 1952, 32.
3. John Armstrong, "Next to the Biggest," *Model Railroader*, April 1954, 60; Posey, "My Colorado Midland," 73.
4. Hertz, *The Complete Book of Model Railroading*, 16.
5. Williams, *The Country and the City*, 297.
6. Stilgoe, *Metropolitan Corridor*, 144.
7. Stewart, 44.
8. Melandra Productions and Golden State Model Railroad Museum, *Train Play* (DVD), 2005. It is worth noting that the EBMES was founded in 1933, roughly the same time as the W. K. Walther's Company, *Railroad Model Craftsman*, *Model Railroader*, and the NMRA.
9. Stilgoe, *Metropolitan Corridor*, 218.
10. A. L. Schmidt, MR Staff, "Hear the Telegrapher," *Model Railroader*, August 1953, 37.
11. Stilgoe, *Metropolitan Corridor*, 218.
12. Anderson, *Imagined Communities*, 35.
13. Stilgoe, *Metropolitan Corridor*, 203, 205.
14. Hamilton Watch Company ad, "Who knows better than a railroad man," *Model Railroader*, April 1954, 11.
15. "Annual Model Contest Winners," *Model Railroader*, August 1948, 561. According to a survey cited by Louis Hertz, "the average model railroader is about thirty years of age, and... a large proportion are doctors, lawyers, teachers, executives, and skilled workmen." Hertz, *The Complete Book of Model Railroading*, 11. Another indicator of the class position of model railroaders is furnished by the following list of organizations that *Model Railroader* suggested show its new film, *Along the Right of Way*: "men's clubs, such as Rotary, Kiwanis, Lions, and American Legion, and PTAs, church groups and other such organizations." "Booking MR's New Film," *Model Railroader*, May 1952, 46.
16. "Meet Our Authors," *Model Railroader*, September 1952, 11; George Allen, "'First, you buys an HO rule!' (Tuxedo Junction, Part 10)," *Model Railroader*, July 1953, 31.
17. Westcott, 39.
18. "Meet Our Authors," *Model Railroader*, December 1952, 11.
19. Ronald F. Schilp, "Informal club," *Model Railroader*, June 1960, 6-7.
20. George Allen, "Harriman Had Nothing on Us (Tuxedo Junction, Part 3)," *Model Railroader*, December 1952, 21.

21. Posey, *Playing with Trains*, 87.
22. Stewart, 66.
23. Westcott, 110.
24. Ed Ravenscroft, "How to design a timetable," *Model Railroader*, July 1958, 28.
25. A. B. Bradley, Jr., "Scale Speed Operation," *Model Railroader*, August 1953, 45.
26. Westcott, 109, 111.
27. *Ibid.*, 109.
28. Posey, *Playing with Trains*, 18-19.
29. Stilgoe, *Train Time*, 34.
30. Slotkin, 3.
31. Amy Kaplan, *The Anarchy of Empire in the Making of U.S. Culture* (Cambridge, MA: Harvard University Press, 2002), 96, 102, 97.
32. "Variety, the Heart of Realism," *Model Railroader*, June 1941, 288.
33. "MR visits the Arizona, Nevada & West Pacific," *Model Railroader*, January 1959, 33.
34. Bill Rau, "Old-Time Wood Freight Cars," *Model Railroader*, August 1951, 18.
35. Central Lines Mfg. Co. ad, "Authentic Old Time Coaches," *Model Railroader*, November 1953, 11; "Trade Topics," *Model Railroader*, November 1953, 23-24; Dept. MR and Harvard University Press ad, "*Railroad Leaders, 1845-1890*, by Thomas C. Cochran," *Model Railroader*, November 1953, 64.
36. "Trade Topics," *Model Railroader*, April 1954, 16; "Pennsy old time inspection car," *Model Railroader*, July 1958, 57.
37. George Allen, "Harriman Had Nothing on Us (Tuxedo Junction, Part 3)," 20.
38. Michael Welch, "Across the continent in 1885!" *Model Railroader*, June 1960, 22.
39. *Ibid.*
40. Posey, *Playing with Trains*, 83.
41. *Ibid.*, 19.
42. Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994), 6-7.
43. Stewart, 57.
44. Posey, "My Colorado Midland," 73.
45. George Allen, "Saga of the Tuxedo Junction," *Model Railroader*, October 1952, 15.

46. Stewart, 58.
47. Stilgoe, *Train Time*, 33.
48. Ray L. Rhodes, "Bull Session," *Model Railroader*, July 1958, 58.
49. Tocquigny, 45.
50. "Meet Our Authors," *Model Railroader*, December 1952, 11.
51. Ray L. Rhodes, "Bull Session," *Model Railroader*, April 1954, 57.
52. Railway & Locomotive Historical Society ad, "Whistles West," *Model Railroader*, January 1959, 27.
53. Westcott, 5.
54. Ibid., 9.
55. Ibid.
56. Ibid., 50.
57. Ibid., 48, 54.
58. Boym, 33.
59. "Return Trip to the Gorre & Daphetid," *Model Railroader*, March 1951, 10.
60. Buck-Morss, 291. According to Benjamin, "It is not that the past throws its light on the present, or the present its light on the past, but [the dialectical] image is that wherein the past comes together with the present in a constellation." Quoted in Buck-Morss, 291.
61. Posey, *Playing with Trains*, 28.
62. Ibid., 165-166.

Conclusion: *Medusa's Head* and the Afterlife of Mechanical Reproduction

1. Posey, *Playing with Trains*, 118-119.
2. Stilgoe, *Train Time*, 34-35.
3. Posey, *Playing with Trains*, 176.
4. Thomas & Friends website, "The Official Shop," <http://thomasandfriends.hitshopusa.com/>. It is worth noting that the three countries that have Thomas theme parks are also three of the main centers of model railroading activity, with Canada and Germany also on the list.
5. Baudrillard, *Simulacra and Simulation*, 1, 31.
6. Ibid., 100.
7. Boym, xiv.

8. Ibid., xvi-xvii.
9. Louis H. Hertz, *Antique Collecting for Men* (New York, NY: Galahad Books, 1969), 242.
10. Robert Storr, "Immanent Domain," in *Chris Burden*, eds. Jon Bewley and Jonty Tarbuck (Newcastle upon Tyne, UK: Locus+ Publishing, 2007), 44.
11. Roberta Smith, "Review/Art; 'Medusa's Head,' Without the Snakes," *New York Times*, July 12, 1991, <http://www.nytimes.com/1991/07/12/arts/review-art-medusa-s-head-without-the-snakes.html>.
12. Ibid.
13. Stewart, 54. Providing an alternative perspective, John Allen believed "a model railroad should be more than a miniature scene to store a collection of model railroad equipment or merely a place to allow that equipment to exercise. It should be planned and constructed for operation, for otherwise it is like a museum, or a stage set without any play." Westcott, 78. It should be noted that this excerpt, written in 1965, comes from Allen's notes for the book he planned to write on the Gorre & Daphetid. Like Benjamin's Arcades project, Allen's book was never completed, and like Buck-Morss's *The Dialectics of Seeing*, Westcott's *Model Railroading with John Allen* is an effort to piece together what the book might have looked like. Before his suicide in 1940, Benjamin was said to have carried a "heavy briefcase" through the Pyrénées as he fled Nazi-controlled Paris. While the contents of the briefcase were never verified, some have speculated that it contained the *Passagen-Werk* manuscript (Buck-Morss, 331-335). Though less mystery surrounds the fate of the Gorre & Daphetid (it was destroyed when Allen's house burned down only days following his death in 1973), the overlaps, if haphazard, are intriguing.
14. Storr, 44.
15. *Medusa's Head* caption, *Chris Burden*, eds. Jon Bewley and Jonty Tarbuck (Newcastle upon Tyne, UK: Locus+ Publishing, 2007), 132. Philipp Blom explains that "Medusa, the beautiful maiden famous for her lovely tresses, was made into a monster with serpents for hair as punishment for violating the Temple of Minerva. From then on, she suffered terrible loneliness as nothing living could abide her sight without being turned into stone... Those who, like her, seek transcendence through things alone are condemned to suffer the same fate." Philipp Blom, *To Have and to Hold: An Intimate History of Collectors and Collecting* (Woodstock, NY: The Overlook Press, 2002), 157.
16. Joshua Decker, "Reviews; exhibition at Gagosian, New York, New York," *Artforum International*, June 22, 1993, <http://www.thefreelibrary.com/Chris+Burden.-a014156174>.
17. Chris Burden, "Proposal for the Chris Burden Exhibition at the Austrian Museum of Applied Arts (the MAK), Vienna, Austria," February 9, 1995, in *Chris Burden*, eds. Jon Bewley and Jonty Tarbuck (Newcastle upon Tyne, UK: Locus+ Publishing, 2007), 386; *Medusa's Flying Moon* caption, *Chris Burden*, eds. Jon Bewley and Jonty Tarbuck (Newcastle upon Tyne, UK: Locus+ Publishing, 2007), 139.
18. *Pizza City* caption, *Chris Burden*, eds. Jon Bewley and Jonty Tarbuck (Newcastle upon Tyne, UK: Locus+ Publishing, 2007), 340. The caption goes on to explain that "*Pizza City* contains the permanent accumulation of thousands of tiny European, Oriental, North African, American and futuristic sci-fi styles of buildings and other elements of an archetypal city. *Pizza City* is an imaginative fantasy, a spiritual model of Los Angeles. Like Los Angeles, its urban sprawl knows no bounds. City centers, complete with skyscrapers, suddenly appear at the very edges of the suburbs. Oversize office buildings are adjacent to small single-family homes... The thousands of model buildings and objects that have been collected and modified by the artist were produced and

originally sold as Christmas ornaments, paper models of historic buildings, collectibles, model train components, toys and fantasy war game accessories. The buildings and objects were produced by manufacturers to serve a need in society, to serve as touchstones to an idealized world. By accumulating and organizing the mass quantities of these pre-existing architectural models and objects, the rich and textured quality of Los Angeles is captured.”

19. Burden, 386.
20. Smith.
21. Blom, 156.
22. Smith.
23. Buck-Morss, 64-65.
24. Ibid., 95-96, 161.
25. Ibid., 243, 288.
26. Ibid., 92.
27. Smith.
28. Stilgoe, *Train Time*, ix.
29. Union Pacific Railroad website, “Building America Ad Campaign,” <http://www.uprr.com/brand/ads.shtml>.
30. Ibid.
31. T.J. Stiles, “Men of Steel,” *Wall Street Journal*, November 7-8, 2009, W1-2.
32. Dan Barry, “Awesome Train Set, Mr. Buffett,” *New York Times*, November 8, 2009, http://www.nytimes.com/2009/11/08/weekinreview/08barry.html?_r=1&emc=eta1.
33. Merle Dowd, *The Great Transcontinental Model Railroad Race* (Mercer Island, WA: Backwater Books, 2005).

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- . “‘First, you buys an HO rule!’ (Tuxedo Junction, Part 10).” *Model Railroader*, July 1953.
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