

The Nature of the Firm and the Nature of the Farm

Lucasfilm, the Campus, and the Contract

J. D. Connor

In “The Nature of the Firm” (1937) Nobel Prize–winning economist Ronald Coase asked the foundational question of why firms exist at all. “If production is regulated by price movements, [and] production could be carried on without any organization at all, well might we ask, why is there any organization?”¹ The answer is uncertainty. In an uncertain environment there are costs to reaching the right conclusion (searching for answers, making mistakes). Price regulates competition between firms; within them, the “entrepreneur coordinator” allocates resources. If it is more efficient to organize internally, firms that leave organization to the market will be at a disadvantage. If it is more efficient to allow the market to rule, firms that internalize such decision making will be at a disadvantage. At the margin, then, the entrepreneur has to decide whether to “make or buy.”

What Coase casts as a theoretical question is, for the studio—particularly for the post-*Paramount* studio—a recurring, practical problem: should this transaction be internalized or farmed out? Own or lease? Build or rent? Develop or acquire?² As those decisions accumulate, they congeal in patterns of action, and those patterns become characteristic of the firm for those who work there and those who work in its orbit. Those patterns compose a great deal of a studio’s “corporate culture.” At the same time, such decisions leave behind material residue even as they marshal material support. Such material concerns exert a degree of power over the firm’s decision making. Sometimes they seem decisive; other times they are intentionally ignored; and still other times they are taken into account but ultimately granted only a limited influence on the events that make up the studio’s course of action. In this essay I explain how that fundamental, iterated contingency and its attendant patterns of material and social deposition have taken form

in postwar studio facilities. While there has been productive work on the legacy studios in Los Angeles—particularly Stephanie Frank’s study of Fox—I concentrate on the history of Lucasfilm as an independent company, from its origins in temporary spaces in the mid-1970s through its Bay Area—constellations in San Rafael, Skywalker Ranch, and the Presidio.³

At the core of this approach is the claim that ultimately the spatial dispositions of modern studio facilities figure evolving contractual relations—the socialized materializations of creative labor and its attendant supports. To be sure, those dispositions are inflected by a host of other forces operating more or less visibly across longer and shorter timelines. Technology changes; communications infrastructures are built out; communities of practice (“scenes”) form and dissolve; labor becomes tractable or resists; governmental agencies undertake regulatory operations; and the whole assemblage interacts with an ecological “base.” All of these factors have shaped the sorts of places Lucasfilm has made and been part of, and we might approach the studio through any one of them in particular. But by combining corporate history with economic geography, we gain a better sense of why it might be that Lucasfilm has taken the forms that it has, what made them possible, and what converted those possibilities into actualities.

A theory of the firm here joins a theory of “the farm,” understood in two dimensions. First, and most essential to the operation of Lucasfilm, is farming as an industrial practice, in which service firms are contracted to provide inputs to the central corporation, usually by working in parallel with other, similarly positioned firms as a deadline looms. “Farming out” exists in any number of industries, but in Hollywood it is particularly associated with the allocation of a specified number of shots to particular visual effects houses. Those houses compete for more shots, and that competition—regulated by price but also disciplined by quality standards and specializations (e.g., dust, light, model-building)—allows contracting studios to remain lean. Lucasfilm would find itself on both sides of that negotiation, as both the contracting studio and, increasingly, the contracted house. The second dimension of the farm lies in its connotations of a durable connection to the land and its nonurban location. This dimension will *brand* the studio, and yoke its identity to Lucas’s own whims. Unlike the world of contract, which seems both placeless in its flexibility and fictively placed (Hollywood), the farm—or, in this case, the Ranch—allows the studio to partake of a discourse of *real* emplacement. As we will see, Skywalker Ranch brings together the ideas of the American West as a place of unoccupied land, of ranching as a kind of agriculture that allows that land to perdure largely undisturbed, and the particular resonances of Northern California viticulture, including artisanality, long lead times for cultivation, fine discrimination, and consumptive leisure. If we more regularly associate oenophilic cinephilia with Frances Ford Coppola, it is nevertheless true that Coppola gave Lucas the vines that would start his own vineyard. (They died in an “unseasonal frost” and

were replaced.)⁴ Finally, both dimensions of the farm offer ways of imagining systems in place and across time, less abstract and more socialized than Coase's initial framing.

Yet in the case of Lucasfilm the central explanation for what we might term its spatial career has been cast in individual and ideological terms: because George wanted it this way. That discourse owes a great deal to long-standing histories of New Hollywood cinema, ideas of "independence," and an industrial fascination with biographical detail. The argument can be distilled into an equation: Lucas's commitment to his own independence plus his devotion to technological innovation plus his investment in narratives of nostalgia equals Skywalker Ranch. The Ranch is, as Lucas explained, "that part of the *Star Wars* universe which juts up above the top layer of the myth, into the real world."⁵ How that vision of the studio—its discursive shell—took hold requires investigation.

Yet at the same time we should recognize that the terms of Lucasian individualism and technostalgia float like a cloud city above the gas giant they mine. If the thing was built on the money generated by *Star Wars* (etc.), that money spun off in very particular ways and itself depended on an industrial and cultural configuration that shaped the possibilities of the Ranch throughout. The revolutions at the heart of the Lucasfilm configuration are threefold: (1) temporally, Lucasfilm rides on the radical disarticulation and then scrambling of the phases of motion picture production, particularly in the arenas of sound design and visual effects on which the company would concentrate; (2) conceptually, Lucasfilm benefits from the persistent industrial and cultural prominence of the cinema long after the everyday dominance of television had become a simple fact; and (3) strategically, Lucasfilm successfully pivots from Lucas's idiosyncratic, synthetic nostalgia to a tantalizingly nonpublic exercise in worldbuilding opened to its audience via a delimited, participatory maker-culture typified by reconstruction (e.g., *Star Wars Uncut*) and encyclopedism (e.g., Wookieepedia).

Combined, the discourse of the Ranch and its corporate strategic environment give rise to a particular history. This history offers the organization along with its professional and consumer audiences a rhythm of spatiocontractual crises set against a persistent background utopia of the campus. For as iconic as Skywalker Ranch has become, it represents only one of several instantiations of the Lucasfilm "studio." By correlating the history of those locales with the history of the company's divisions, we see the materialization of a central tension between the centripetal forces of institutionalization and the centrifugal forces of contract labor. Placid institutionalization as a framework for socialized creativity? Campus. Eruptions of contractual contingency among the company's articulated divisions? Crisis.

As a matter of industrial geography, San Francisco's unique promise of cutting-edge independence *outside* Hollywood went hand in hand with a drive for maximal efficiency and a relentless questioning of what businesses Lucasfilm should be

in. Within that geography, at the corporate scale, Lucas was determined to avoid the boom-and-bust cycles of Francis Ford Coppola's Zoetrope, and to do that, he concentrated his studio-building efforts on what he hoped he could forge into more reliable areas of the revenue stream such as sound, editing, and effects. Thus, at the subcorporate level Lucasian discourses of innovation and micronetworks of collaboration reinforce the campus model of studio. At the same time, the rationalization of moviemaking that was required to farm out chunks of a production allowed for further and further division. As a result, Lucasfilm has become almost as famous for the divisions that have been spun off or shut down (Pixar, THX) as those that remain (Industrial Light and Magic [ILM], Skywalker Sound). The management of that segmentation over time forms part of a larger way of discussing the studio that I call Ranch Discourse.

RANCH DISCOURSE

The first public discussion of Skywalker Ranch in any detail appeared in *Variety* in June of 1980. In what had even then become a standard story, Lucas narrates his career as a series of near-miss catastrophes and slights, vindicated by last-minute megasuccesses. Then he delivers a moral judgment about the powers that be in Hollywood: "They're rather sleazy, unscrupulous people. . . . They don't care about people. . . . I don't want to have anything to do with them. . . . That's why I'm trying to build the ranch." This is news to Jean Vallely, the interviewer:

JV: The ranch?

GL: Yeah, I bought 2000 acres in Lucas Valley, California [no relation]—to build a kind of creative-filmmakers' retreat. The idea came out of film school. It was a great environment; a lot of people all very interested in film, exchanging ideas, watching movies, helping each other out. I wondered why we couldn't have a professional environment like that.⁶

The poles are already set: the contract vs. the campus. Only in Lucas's version, instead of moving forward in time from the campus to a world of cutthroat contracting as he did biographically, the Ranch will allow him to wind the clock backward, a move that depends on the ability of a space to become a campus. To make that happen, of course, takes money. *Star Wars* had paid for the land, but to pay for the buildings, Lucas believed he would need to undo the relationship between the company and its environment. He would take the profits from *The Empire Strikes Back* and what was still called *Revenge of the Jedi* and invest them in "outside companies" and then use the profits from those investments to build the Ranch. "It's just the opposite of how studios work. Basically, what we're doing is using the profits of other companies to subsidize a film company, rather than a film organization subsidizing a conglomerate."⁷

The projected constellation of buildings resembles in many ways what the Ranch would become. There is “a big, simple farmhouse” at the center; “shingled outbuildings for the filmmakers and editors”; a version of what would be the Tech Building with a screening room, recording studio, and editing rooms; a special-effects building; and a “little guest house for visiting dignitaries.” The farmhouse would be not just big but, as a house, enormous. That scale would then allow the buildings with more specific purposes to appear as mere “outbuildings.” Still, such optical legerdemain would not suffice to make the Tech Building seem small. Instead, it would be, as we will see, a tech building in disguise. Unable to hide its bulk, it hides its function. Even this early in the process, Lucas is certain that whatever their individual roles, the buildings’ most important aspect will be their relationship to each other: “off to the side, sort of tucked away on a hill,” and “way over on the side of the property.”⁸ The idea of a “filmmakers’ retreat” would be programmatic: no major building within sight of another.

All the pieces were still in play that October when *Fortune* ran “The Empire Pays Off.” At the dawn of the Reagan era *Fortune* was disinclined to tout Lucas’s artistry but found a comfortable irony in the relationship between his “distrust of big business” and his own knack for it. Lucas elaborates the same do-si-do of capital, now in a slightly more coherent, sound-bitey form: “I’m trying to turn the system around. The studios use films they don’t have the vaguest idea how to make to earn profits for their shareholders. I’m using my profits to make films.” In particular, he pledges that he will be making avant-garde “abstract, experimental films that interest *him*”—not more blockbusters.⁹

Yet even this early in the elaboration of Ranch Discourse the organizational inversion can look like a split—a stall in the company’s unification. However coherent the vision, the reality is not (yet) as integrated. It is as if the *promise* of spatial unity is an end state that renders the current incarnation essentially *incomplete*. “Until the ranch is completed a few years from now, the business Lucas runs will remain as divided as its boss.” This is the material reality of the present. Lucas’s personal headquarters are still in Marin County at “a three-house complex” near but not collocated with the “two divisions of the company devoted to making movies.”¹⁰ That split, though, is modest compared with the division between the (personal) Bay Area moviemaking operations and the corporate operations in Los Angeles. Lucasfilm in LA is run by CEO Charles Weber. And unlike the genteel home office up north, the southern arm had, in 1980, recently moved from trailers into “a lavishly renovated former egg warehouse”—the kind of upscale adaptive reuse that would be as emblematic of the 1980s as Ralph Lauren’s ersatz and eclectic historicism.¹¹

The Lucasfilm split pervades the *Fortune* article, but it is best emblemized by the contrasting in situ photos of Lucas and Weber. Lucas’s is the larger, naturally enough. He stands at the center of the image, feet spread, wearing cream jeans, a white shirt, and a navy blazer. His sneakers—perhaps his favored Tretorns—are

dirty. A host of massive, unmanned Caterpillar graders line the edges of the frame, receding into the distance. These are the AT-ATs of the impending Ranch. In the distance tan hills splotched with deep green trees rise into sky, frosted with unthreatening clouds. Lucas commands machines and the very land itself; he looks un-awkward and in-process.

In contrast, Weber stands in the corner of an interior balcony bounded by glistening polyurethaned lumber and overlooking constellations of corp-leisure wicker furniture arrayed beneath the Egg Co.'s newly enclosed atrium. Dark green walls and wood so tan it's almost yellow virtually scream 1980s. Large potted trees nudge up against the robust trusses supporting the new roof. Weber wears a tie but no blazer—the opposite of Lucas's corporate casual. His right hand is awkwardly hooked in his pants pocket; his left lies indecisively on the railing, and he seems entirely unsure whether to stand or lean, so he twists oddly. His light-blue shirt and dark-gray pants share nothing with the palette of the place. It is unclear what work he does or commands.

Weber justified the initial split by appealing to Lucas's mistrust of the legacy Hollywood system. By keeping the corporate headquarters in Los Angeles, Weber would be able to monitor the interfirm contractual relationships that were essential to the company's success. As Lucas described Hollywood at the time, "LA is where they make deals, do business in the crass corporate way, which is screw everybody. . . . They're not filmmakers."¹² Yet Lucasfilm's strategy was bound up with the industry both via its contractual relations with Fox for *Star Wars* merchandizing and via its investments in nonentertainment industry companies that were spinning off the capital necessary to build Skywalker Ranch.

Weber would inevitably be the figure at the heart of the company's first spatio-contractual crisis. Whether he actually had the temerity to suggest to Lucas that the Ranch was "a drain" or whether Lucas was offended that overhead had become ostentatious and uncontrolled—"We were one step away from the delivery boy having a company Porsche. We were up here living in poverty row and they had a palatial estate"—the dynamic had shifted.¹³ The Egg Co. had morphed from the surveillance outpost that would contain the contamination of Lucasfilm into the portal through which Hollywood "sleaziness" would enter the company. In the most detailed account, Weber had come north to meet with Lucas to discuss the company's course, ostensibly to get the go-ahead to shift its strategy toward more active control of its outside investments—to bring these nonentertainment firms *inside* Lucasfilm. Instead, Lucas hemmed and hawed, ultimately firing Weber. "On May 28, 1981, Lucasfilm Ltd. officially relocated its corporate headquarters from Los Angeles to Marin County, completing what a press release called 'the long-planned consolidation of the company.'¹⁴ Instead of being located in Los Angeles in order to keep an eye on Fox, Lucasfilm's corporate and licensing operations would now be brought north so that Lucas himself could monitor them. What had

initially been cast as a matter of defensive proximity was recast as a matter of hygiene.

The Ranch, then, was a locus of control, a safe distance from Los Angeles, and fundamentally discreet. It was always both on the horizon (it was not a lie to say that the consolidation was *long-planned*) and always *over* the horizon (those plans are put into motion, or not, in response to crises; ILM ultimately never moved there from San Rafael despite having decades to do so). The specific crisis, though, depended on Lucasfilm's unique activation of the possibilities of the Hollywood studio system it was attempting to supplant.

PRODUCTION SERVICES

The crisis over merchandising and investments is only able to emerge within the firm *as* a crisis resulting from the fundamental disarticulation of the components of then-contemporary media production. Indeed, Lucasfilm's efforts concentrated on those "chunks" of the moviemaking process that might reasonably be farmed out *by or to others*: effects, editing, sound work, and merchandising were joined by new media endeavors, including both videogames and digital effects (Pixar). What they were *not* joined by were facilities for principal photography: fabrication and art departments (except as related to effects), soundstages, backlots, or ranches of the classical Hollywood sort. Lucasfilm was thus an integrated studio with a hole at the center where the "studio"—defined in a particular way—would have been. Combined with Lucas's own resistance to Hollywood guild oversight, that donut-hole approach to filmmaking would routinely push the company's physical production to rented facilities in the UK and other locations, creating a shifting constellation of temporary, even more far-flung, outposts to the company.

If there was something novel about the company's commitments to excentric portions of the filmmaking process, the strategy nevertheless spoke to the persistent industrial question of the integration of the service firm. From the early days of classical Hollywood single-purpose effects houses (Williams and Dunning), camera equipment providers (Mitchell, Panavision), film labs, lighting companies, and promotional services would set up shop just outside the studios. David Bordwell, Janet Staiger, and Kristin Thompson were the first to build a history of the Hollywood system that moved the articulation of production services firms and studios to the center.¹⁵ Their effort to balance individual corporate histories against the role of collective organizations such as the Academy's Research Council and the Society of Motion Picture Engineers has been a tremendous spur to further work.¹⁶ Still, the question of the firm persists. The vertically integrated studios of the classical era, the diversified conglomerates of the 1960s and 1970s, and the reintegrated media megaconglomerates that have followed have all asked whether these pan-industrial services be brought into a particular studio or not.

Yet until Lucasfilm, even the most expansive visions of integration had not yet included a one-stop shop for effects work. Julie Turnock's *Plastic Reality* sets the stage for this revolution in capacity. "The independents had been performing the bulk of optical work for decades, while the studios tended to concentrate on rear-projection work in-house. Subcontracting was usually fairly small-scale, a few shots per film."¹⁷ In the wake of *Star Wars*' success, though, Lucas simultaneously formally incorporated Industrial Light and Magic as a separate division and brought it north from Van Nuys to Marin County. As Turnock has elaborated, in this period between 1978 and *The Empire Strikes Back*, ILM honed its particular form of photorealism "that favors closer meshing between the location shooting and the effects material."¹⁸ For my purposes, though, what matters more than the aesthetic that emerged from ILM was the spatial reconfiguration of the industry. As a complete provider, ILM would necessarily be brought into projects early on—at the concept art stage, ideally—and would be on a show until deep into postproduction. That early incorporation gave the firm an advantage in competing for work, but it also meant that it was able to demand a greater degree of organizational autonomy; that is, it could set up in the Bay Area because it did not need to scramble for work as a project reached its crunch time.

Meanwhile, back in Van Nuys, John Dykstra's Apogee effects house moved into the space vacated by ILM. Apogee would be one of many firms attempting to emulate ILM's stem-to-stern approach to special and visual effects work.¹⁹ Up north, ILM occupied a collection of nondescript office buildings, hard against Kerner Blvd. and labeled "Kerner Optical" in a half-hearted attempt to deflect public attention. If the Ranch would be spatially isolated enough to hide itself behind a gate, ILM would go incognito as just another bland tenant of another bland industrial park.

OCCUPATION

In contrast, the Ranch itself would be boldly discreet. When it opened in 1985, Lucasfilm relocated the company's back-office operations right away. Lucas also hired sound editor Tom Kobayashi to oversee much of the construction of the Tech Building, which had yet to be built but would be finished in 1987. Lucas's invitation to Kobayashi was the bold part: "'George's famous comment,' Kobayashi says, 'was, 'We're going on a covered wagon West and we're going to be fighting a bunch of Indians.' I came up and looked around, and I said, 'It's a nice covered wagon.''"²⁰

By calling on a movie version of the US's settler colonial history, Lucas tied the effort to build Skywalker Ranch to earlier models of occupation. That historical relation was, again, discursive. Whatever the history of the First Nations on the parcel, Lucas was aligning the Indians with his Marin County neighbors and, perhaps, his competitors in Los Angeles. Still, the invocation of history *as such* was not simply an artifact of 1980s ersatz (as at the Egg Co.) or Lucas's own nostalgia.

Rather, it was a further exercise in worldbuilding, the fantasy of total specification that made the Star Wars films so compelling and that would separate the Ranch from ILM. In place of the banal office park, Skywalker would be *descript*. It would also be fictitious. Lucas imagined an elaborate family melodrama behind the Ranch's construction over time. The whole thing would begin with a sea captain; his children would possess varying degrees of piety and entrepreneurial skill. Together they would leave behind them a tastefully eclectic mix of buildings:

As a help to the architects, Lucas devised a fanciful quick history for each of the buildings. The main house, a large white mansion with a deep veranda, is in the Victorian style and dates from 1869, with a library wing added in 1910, he explained. The head of the mythical founding family added a gate house in 1870 and expanded it in 1915, when he also built a carriage house. The stable house dates from 1870 and the brook house (indeed built over a brook), which is designed in the Craftsman style Lucas frequently admired in houses in Berkeley, dates from 1913. The great brick winery, which is, in fact, the Tech Building that contains the postproduction facilities and the recording stage, is partly from 1880 but extended and remodeled in the Art Moderne style in 1934.²¹

Fiction and discretion went hand in hand. As Lucas historian J. W. Rinzler put it in a series of lengthy blog posts that have since been taken down: "Hidden technology was one of the themes at the ranch." Nearly every commentator notes the fundamentally hidden nature of its workings. "On Skywalker ranch, in fact, there are fourteen fantasy structures concealing a secret movie factory with all the most up-to-date, computerized film-editing and sound equipment that modern film-making has to offer."²² "Beneath the shaggy meadows is an elaborate power distribution system, masses of telephone and computer cables, and a self-sufficient irrigation and water distribution system."²³ "The buildings should intrude upon the tranquil landscape as little as possible, should seem to have belonged to the land for a long time, and should be invisible from the highway, the building clusters even out of sight from each other. The majority of the cars would be (and are) stashed out of sight in underground garages. All the utilities are also underground, combined in a huge master conduit."²⁴ Indeed, the disappearance of technological infrastructure is so pronounced it overwhelms its own absence. That gap actually *announces* the presence of the Ranch. According to Rinzler, you knew you had reached the property's entrance by "the sudden absence of telephone or electrical wires overhead—Lucas had paid to put them underground, to enhance the natural setting."²⁵

That emphasis on enforced discretion extends to the Ranch's fire department. Located down the hill near the entrance, the Skywalker Ranch Fire Safety Division resembles a small-town pumper station. As an extensive profile in *9-1-1 Magazine* made clear, the fire company has a mutual aid relation with Nicasio's public volunteer fire department. Just as the main house hides a large subterranean parking

garage, so the fire department is the front for Lucasfilm's security operation. "Confrontational situations are infrequent but aggressively handled. 'We have a desire to have a private, non-obstructive company out here and we would like people to respect that,' said [Assistant Fire Chief Matt] Gustafson. 'We don't have a lot of tolerance for people who don't respect that.'"²⁶

If the quaint fire department is the happy face on the aggressive security enforcement, that conflict was matched with a percolating battle with the Ranch's neighbors. Lucas's expansion plans were met each step of the way by objections. As Rex Weiner explained in *Variety*, "Though isolated geographically from Hollywood infighting and distractions, Skywalker Ranch is beset by local opposition to expansion of its operations, a factor stalling key components of Lucas's long-range plans."²⁷ The results of that stall are a continuing spatial dispersion. Rinzler goes on: "Lucas's goal had been to unite all of his moviemaking subsidiaries in one place, but Skywalker Ranch was zoned for only about 300 employees. The 1,000 or so members of ILM therefore stayed put in the industrial zone of San Rafael, about 25 minutes away, where they could also continue to make use of hazardous materials and explosives. The videogame branch, LucasArts, also kept its 350 or so people in a nondescript office building about 15 minutes east, next to the 101 freeway, for lack of space."²⁸

In the zoning battles the reality of the Ranch was on full display: rules governed how many employees each facility could host and how many car trips would be added by the construction and later by new jobs. Touring the Ranch, Patricia Lee Brown from *Architectural Digest* attempts to flatter Lucas by comparing the setting to "an idealized turn-of-the-last-century town in which the mayor happens to be a brilliant billionaire movie director." Lucas can't help but disagree, echoing Kobayashi's affect while admitting that what he has built is something else: "It's not exactly a small town," Lucas muses. "If anything, it's an industrial park. But it's a nice industrial park."²⁹

SPACES

The dream of the Ranch, however unfulfilled, stood in stark contrast to the long industrial legacy of the studio ranches of the greater Los Angeles area. Those ranches were set up across the San Fernando Valley to provide a range of open landscapes, particularly for westerns, within the "Thirty Mile Zone." By staying within the zone, the studios could shoot "on location" without incurring substantial extra costs. Disney had the old Republic ranch in Golden Oaks in Placerita; Fox in Calabasas; Paramount near Agoura Hills; RKO in Encino; and Warner Bros. in Woodland Hills. These were joined by numerous independent ranches such as the Spahn, the Iverson, and Corriganville. But as Laura Barraclough explains, after World War II a culturewide shift away from westerns and the construction of the

freeway network made the studio ranches less viable. That process accelerated as the studio system dis-integrated. The ranches were either developed or purchased by localities to preserve “open space” and made into parkland.³⁰

Lucas’s extensive real estate investments thus bucked the broader industry trend. Even the core backlots of the legacy major studios were being radically reshaped. The broader economic shift toward “flexible specialization” was decoupling the studio from its spaces.³¹ MGM’s lot was sold for real estate development as was much of Fox. Columbia left Gower to join Warner Bros. in Burbank. That space itself would now be controlled by “The Burbank Studios,” while Columbia’s former facilities would become Sunset Gower Studios. The trend was not universal. Paramount had purchased the former RKO lot from Desilu in 1967 as part of a larger real estate strategy, and Universal retained its Burbank lot. Indeed, the multiple options are further evidence that what emerges in the late 1960s and early 1970s is not an absolute *demand* that studios shed their real estate holdings but *the question* of whether they should shed their real estate holdings (exchange value vs. use value in Stephanie Frank’s terms). Lucas’s position here is thus doubly distinct. Not only is he pursuing the less common strategy of investing in real estate, but he does so precisely *not* with an eye toward the eventual development of the acreage but with the aim of controlling its nondevelopment.

If the RKO ranch really was a place with horses, Skywalker Ranch allowed Lucas to bring his own spin to what Louise Mozingo has called “pastoral capitalism.” In her history of the suburbanization of the corporation—particularly its managerial and research functions—Mozingo emphasizes the rhetorical role of the campus: “By 1960 the term *campus* or *campus-like* became shorthand for corporate facilities in the suburbs that included at least some trimming of green around low-rise buildings.”³² That campus model was brought to California in the Ramo-Wooldridge Research Laboratories, but the crucial contemporaneous analogue for Lucas’s efforts was IBM’s Santa Teresa Laboratory:

In 1977, as its software market became as essential as computer hardware, IBM consolidated 2,000 programmers into the West Coast Programming Center. . . . IBM defined the intent of the new center in this way: “A campus-like cluster of identifiable buildings is desired that blends with the natural environment in a pleasing and reserved fashion. The offices should be conducive to productive and creative work.” On a property of over 1,000 acres extending from the edge of the Santa Clara Valley floor up into the Santa Cruz Mountains, the flat 90-acre project site nestled at the base of hillsides covered with seasonal grasses. Remnant fruit orchards surrounded the parking lots, and buildings clustered around a precise, central quadrangle—actually a roof deck over a large computer facility and library.³³

Located a hundred miles south of Skywalker Ranch, IBM’s new programming center occupied a similarly tiny portion of a vast landscape. The proportions might have

been similar, but the configurations of actually existing corporate campuses highlight the distance between the reality and the rhetoric of Lucas's "campus" model. There is no "central quadrangle" at Skywalker Ranch. Moreover, the design plan, with its diverse styles and its fictional backstories for each building, had little in common with the corporate campuses Mozingo discusses. Given the centrality of the Victorian house, Skywalker Ranch has more in common with the "estate" version of the headquarters: "an imposing building complex arrived at by a coursing entry drive through a scenically designed landscape of 200 acres or more. . . . Corporations used the corporate estates' image as a public relations tool in communicating with employees, local residents, stockholders, competitors, and bankers."³⁴

Skywalker Ranch offered a version of Mozingo's "splendid pastoral isolation."³⁵ Unlike other estates, which might be centered on a lake (Deere Company) or give onto a sculpture garden (PepsiCo), Lucas's Ranch was decisively shaped by its Bay Area surround: among the cluster of high-tech buildings, but not within the vast undeveloped backcountry, Lucas would plant some grapes. It is hard to overstate the importance of viticulture to the cultivated gentility of the greater Bay Area. And while Marin County was not an ideal location for a winery, Lucas attempted to follow in Coppola's Napa County footsteps. Wineries are exceptionally good menders of rhetoric and practice. They combine an apparent harmony with the landscape—an acceptance of its climatic givens—with an experimenter's faith in serendipity—the chance of a good year—to produce a low-pollution, high-margin commodity. In the immediate wake of "The Judgment of Paris" in 1976 that placed California wines at the top of the world rankings, Lucas's tripartite land division was thus even more a configuration of its era.³⁶

If the overarching land-use pattern at the Ranch was typical of Marin County and other Bay hinterlands, the commitment to high-tech moving-image cultural production was as well. Years later, Lucas would enter the publishing business directly, launching *his* imprint with two volumes that are seemingly about the world Lucas made but that seek to ground that world in traditions. *George Lucas's Blockbusting* (2010) takes its readers through the history of the Hollywood blockbuster, one profitable story at a time.³⁷ Lucas's films appear not only among the all-time lists and all-time franchises but also (with *American Graffiti*) in the list of films with the biggest return on the "small" (under \$10 million) budget. But if that is the book about how Lucas changed Hollywood to the south, *Cinema by the Bay* puts Lucas in his geographic context.³⁸ Far from the first filmmaker to set up shop in the region, Lucas is simply the most profitable. Still, the book tells the interlocked stories of five studios and a dozen directors in an effort to demonstrate the continuing tradition of filmmaking in San Francisco.

Any organization in the midst of understanding its place among other, similar organizations—the usual terms are "ecosystem" when thinking about interdependence; "space" when thinking about markets—also establishes relations to its

supports, at every scale. In the case of Lucasfilm perhaps the most basic of those supports is the evolving ecoregulatory system of Marin County. The relationship between the firm and its site takes shape as a discourse of relative smoothness. At times, when the aims of Lucasfilm and its regulatory surround are in harmony, the discursive presences of the state and other interest groups will drop out, and Lucasfilm will appear to take up an almost unmediated relation to “the land.” The terms become individualist and aesthetic. This is the “because George wants it” form of evolving Ranch Discourse. At other times, though, the aims of Lucasfilm and its regulatory surround are more opposed, and the frictions in the process will give rise to a public petulance. Lucas followed the successful build-out of Skywalker Ranch with the development of a sister complex at Big Rock Ranch. Though delayed, that process ultimately succeeded.

A third phase of the project, however, at Grady Ranch, ultimately came to naught. At Grady Lucas intended to plug the hole in the studio donut by building a pair of soundstages. Local opposition was vocal, and despite support in the county government, Lucas was unable to build as quickly as he had hoped. Frustrated, he changed course and announced he would not be building studio facilities. Instead, he would pursue an easier course by building new housing. Not content to simply declare defeat and leave with a tidy profit, Lucasfilm issued an elaborately snide statement, pledging to work to build low-income housing. “We love working and living in Marin, but the residents of Lucas Valley have fought this project for 25 years, and enough is enough,” they said. “We hope we will be able to find a developer who will be interested in low-income housing since it is scarce in Marin. If everyone feels that housing is less impactful on the land, then we are hoping that people who need it the most will benefit.”³⁹ With the pursuit of new housing construction, Lucas found himself in the position the major studios were in at the beginning of the Ranch project.

LABOR

Lucasfilm’s siting and development are constrained by a contest for authority between governments and the corporation, and the discourse surrounding that emplacement oscillates accordingly. In contrast, Lucasfilm’s relation to its labor market and attendant technical supports takes the form of a durable network of suppliers and an insistent publicization of its own industrial preeminence. Most emblematic would be the feeder campus structure. As Turnock explains, “A number of Southern California ‘farm schools’ trained students specifically to enter particular entertainment job markets.”⁴⁰ As part of his regular recourse to the lost utopia of film school, Lucas would invoke “Room 108, where we had screenings going on all the time, and then we’d go out in the grassy courtyard and talk about films, share our ideas and help each other with our problems.”⁴¹ Perhaps nothing

could be less essential to the experience of film school than the number of the principal screening room, yet when USC built its new facilities—largely under the aegis of Lucas—the largest screening room was, again, Room 108. As the school’s most significant donor, it was no surprise that Lucas had ideas about architecture and design that he wanted to see realized in the new buildings. But the “easter-egging” of the screening room conveys the intensity of Lucas’s desire to shape the campus-to-studio pipeline according to the affective legacy of his time at USC. However technologically advanced the facilities, however innovative the work that would go on within them, they would still, ideally, inculcate that desire to dwell in the collective discussion of cinematic arts.

A room number is merely an emblem, but it is an emblem for a broad swath of labor relations that the Lucas companies rely on. These are the innovation hinterlands of Skywalker Ranch, and while they are far less integrated than, for example, the fire station, they are nevertheless part of the studio’s dance of incorporation. Two merit further specification. First is SIGGRAPH, the “Special Interest Group” of the Association of Computing Machinery dedicated to computer graphics. Following early work establishing standard graphic language, a journal, and a newsletter, the SIG launched its own freestanding conference in 1974. That conference grew more formalized, and for the 1977 conference in San Jose the group began strictly reviewing papers.⁴² Volumes of proceedings followed, and in keeping with the cutting-edge nature of the work being presented, the SIG’s publications became electronic early on. The growth of the SIG and the conference were astonishing, quickly reaching thousands, then tens of thousands of attendees. Such events serve as crucial nodes in the evolving labor and technology networks in an industry, a place where representatives of a firm are able to tout the company’s competence and recruit new talent.

Such dynamics work in multiple directions. For the 1980 SIGGRAPH in Seattle, Loren Carpenter produced a legendary short film, *Vol Libre*, as a sort of moving-image-resume to encourage Lucasfilm to hire him away from Boeing. Ed Catmull and Alvy Ray Smith, then running Lucasfilm’s Computer Division that would become Pixar, “offered him a job on the spot.”⁴³ In contrast, at the 1983 conference the division displayed “The Road to Point Reyes,” a “one-frame movie” that included asphalt and rock textures, particle-system generated vegetation, a double rainbow and depth cueing, and a partial reflection in a roadside puddle among its wonders. The image is regularly reproduced as an emblem of the state-of-the-art work at Lucasfilm, but it is also an incarnation of the sitedness of that work. However advanced Lucasfilm might be, the picture seemed to say, it was just around the corner from the Point Reyes National Seashore. The easy linkage between the ray-tracing work rendered in the image, the software program itself (called Reyes, a backronym for “Renders Everything You Ever Saw”), and the space it depicted is more than a mere emblem; it is an advertisement for itself.⁴⁴

Much of the talent that would converge at SIGGRAPH emerged from universities, of course, and in those early days new and perhaps unexpected institutions took the lead. One of those was the New York Institute of Technology in Brooklyn—across the country and about as far removed from the “Hollywood” sphere of influence as one could imagine. Still, the rise of Lucasfilm as a crucial site for innovative work in computer graphics reconfigured the labor market even for university-based researchers. Over time, Lucas and his division heads would lure many of NYIT’s key players. “Those who were interested in going to Lucasfilm would take interim jobs elsewhere—‘laundering’ themselves, as the group called it. Catmull would bring them in when he could. The plan went without a hitch.”⁴⁵

In the early days the migration from university campus to corporate campus was more conceptual than literal. Initially the Computer Division was located above an antique store in San Anselmo next to the office where Marcia Lucas was still overseeing design work for the construction of Skywalker Ranch. It then moved to a former laundromat, then to an industrial park in Novato, and in 1982 to Building C in the stretch of Kerner Boulevard in San Rafael where ILM and Sprocket Systems (the sound division) were located. The moves would continue: some of Pixar would move to the Ranch in 1986, just as Lucas was in the process of selling it to Steve Jobs. Pixar remained in San Rafael until 1990, when it was squeezed out of its space by an expanding ILM, whereupon it moved across the bay to Point Richmond and then to Emeryville.⁴⁶ Moving from one “nice office park” to another does not necessarily amount to a brandable moment or a threat to a corporate or individual identity. But in an industry where labor inputs and evaluations are configured along quasi-educative lines with campuses, conferences, and feeder schools, such moves are as fraught as any collegiate transfer.

CONCLUSION

In the twenty-first century Lucas continued to shift his divisions, but a new dynamic appeared: a gradual reurbanization. In 1999 Lucas won the rights to redevelop fifteen acres in The Presidio in San Francisco as part of the public-private partnership tasked with taking over the facility from the federal government and making it self-funding. The 850,000-square-foot Letterman Digital Arts Center opened in 2005 as the combined home of ILM and LucasArts.⁴⁷ (The marketing, online, and licensing divisions moved in 2012.) In 2006 Lucas donated \$175 million to USC’s School of Cinematic Arts—with \$75 million of that earmarked for the construction of a set of buildings that might pass for studio architecture circa 1929. The new facilities opened in 2009.⁴⁸ In 2012 Lucas sold Lucasfilm to Disney, but a host of long-planned satellite “campuses” opened shortly thereafter. In 2013 Lucasfilm Singapore opened “The Sandcrawler,” a 240,000-square-foot, mixed-

use building that looks like the sandcrawler from *A New Hope*.⁴⁹ That same year, a small branch of ILM opened in Vancouver; London followed in 2014. In 2017, after a long, multicity search, Lucas (and the Board of Directors) chose Los Angeles for the Lucas Museum of Narrative Art, scheduled to open in 2021.⁵⁰

By the 2010s, then, all three revolutions that had driven Lucasfilm toward the Ranch and its contractual utopia had been recontextualized. Production temporality remained scrambled; cinema remained conceptually preeminent; and, strategically, the pivot to worldbuilding as a mode of durable audience enlistment was unquestioned. But it was no longer necessary to escape the city to forge those revolutions; every corporatizable aspect of Lucas's individual resistance to Hollywood had become constitutive of the contemporary, IP-driven, blockbuster-centric industry as a whole. Urban unions posed almost no threat to radical readjustments to the labor process. Adaptive reuse and citywide upscaling had become baseline assumptions in San Francisco and Los Angeles as those cities competed (and collaborated) with fellow global culture centers to maintain their prominence in the flows of capital. Lucas's organizational flexibility, his indomitable dissatisfaction with the corporate form, has become the emblem of the new culture city, not its enemy.

To be sure, Skywalker Ranch continues to be the home of Skywalker Sound (and vineyards).⁵¹ And, to be sure, the Letterman Digital Arts Center (LDAC), with its vast parking lot hidden underground, abuts the landscaped "Great Lawn."⁵² But the Presidio facility is decidedly an urban park, not a pastoral enclave. It and Lucas's other public-facing institutions thrive not on separation but on spatial collision. Such developments emerge from and exemplify a new configuration in which municipalities look for marquee partners to lead redevelopment projects and programmatically incorporate "mixed uses"—not simply industrially adjacent firms or support providers such as restaurants, daycare facilities, and so on, but also similarly high-wage, low-nuisance tenants such as financial firms (Mithril, Maverick, and Thiel Capital), tech developers (Zenreach, Revinate), and nonprofits. At the same time, Lucas's (and Disney's) commitments are always revisable. LDAC and these other "campuses" are flexible, able to respond as a Lucasfilm project staffs up or when a crisis hits. When Disney shut down LucasArts' game development arm and laid off those employees, the freed space could be rented to another tenant. Like Pixar and THX, which were both sold off, the ILM branches might be closed if there is insufficient revenue to support them. Until that happens, branding suffuses everything. The Yoda fountain announces ILM to the public; behind him stands LDAC's Building B, which has been named to evoke ILM's nondescript San Rafael complex. Against this nostalgia for functionalism, the "splendid isolation" of Skywalker Ranch now appears to be a dream of the past.

NOTES

1. Ronald Coase, "The Nature of the Firm," *Economica* (1937) 4, no. 16 (1937): 388; see also Jacobsen, "On Robinson, Coase, and 'The Nature of the Firm!'"
2. For a crucial early registration of the "flexibilization" of the industry see Gustafson, "What's Happening to Our Pix Biz?" 574–86. While Gustafson is primarily tracing the forces behind conglomeratization, he is attentive to the shifting constellation of components within the New Hollywood companies, in particular the partial displacement of theatrical exhibition from the center of the firm: "the perennially risky theatrical distribution of films has become secondary to the more stable broadcast television sales of films and the lucrative new technologies of cable television and satellite transmission which also support the film industry. Warner Bros. has therefore found itself to be protected rather than devoured by its new conglomerate structure" (575).
3. Frank, "Why a Studio without a Backlot Isn't like a Ten-Story Building without an Elevator."
4. Champlin, *George Lucas*, 174.
5. Seabrook, "Letter from Skywalker Ranch," 195.
6. Valley, "The Empire Strikes Back and So Does Filmmaker George Lucas with His Sequel to *Star Wars*," 94.
7. Valley, 94–95.
8. Valley, 94.
9. Stratford P. Sherman, "The Empire Pays Off," *Fortune*, Oct. 6, 1980, 52–55, 53.
10. Sherman, 53.
11. This was obvious at the time. See John Morris Dixon, "Decade of Detachment," *Progressive Architecture* 71, no. 1 (Jan. 1990): 7. In addition to the stylistic trends, Dixon highlights the conglomeration of NIMBYism, particularly in San Francisco. Those forces would eventually provide a major restriction to Lucas's aims.
12. Valley, 93.
13. Pollock, *Skywalking*, 251.
14. Pollock, 253.
15. See Bordwell, Staiger, and Thompson, *Classical Hollywood Cinema*, esp. parts 4 and 6: "Film Style and Technology to 1930" and "Film Style and Technology 1930–60."
16. The flourishing of media industry studies and science and technology studies paradigms has resulted in a rapid increase in the historical literature on the Hollywood service companies across crafts. Crucial contributions that concentrate on organizational consequences include Turnock, *Plastic Reality*; Marzola, "Engineering Hollywood"; Marzola, "Better Pictures through Chemistry"; and Dootson, "The Hollywood Powder Puff War."
17. Turnock, *Plastic Reality*, 81.
18. Turnock, 213.
19. Turnock, 214–18.
20. Champlin, *George Lucas*, 179.
21. Champlin, 174.
22. Salewicz, *George Lucas Close Up*, 94–95.
23. Pollock, *Skywalking*, 259.
24. Champlin, *George Lucas*, 171.
25. J.W. Rinzler, "The Rise and Fall of Star Wars, Blog 5," June 30, 2017, blog discontinued but archived at the Wayback Machine, web.archive.org/web/20170705074345/http://www.jwrinzler.com:80/blog/the-rise-and-fall-of-star-wars-blog-5.
26. Randall D. Larson, "Safety and Security at Skywalker Ranch," *9-1-1 Magazine*, Sept./Oct. 1996. This model of the studio as minicompany town—one subject to particularly strained relations with its

host city—recalls the studio cities of the 1910s discussed in Jacobson, *Studios Before the System*, especially chapter 5.

27. Weiner, “Lucas the Loner Returns to Wars,” 186.
28. Rinzler, “The Rise and Fall of Star Wars, Blog 5.”
29. Patricia Lee Brown, “Tour George Lucas’s Office at Skywalker Ranch,” *Architectural Digest*, March 2004, www.architecturaldigest.com/story/george-lucas-skywalker-ranch-tour.
30. Barraclough, *Making the San Fernando Valley*, 147–48.
31. “Flexible Specialization” is a term coined by Susan Christopherson and Michael Storper and deployed in their foundational essay “The City as Studio; the World as Back Lot: The Impact of Vertical Disintegration on the Location of the Motion Picture Industry,” *Environment and Planning D: Society and Space* 4, no. 3 (1986): 305–20. They trace a double movement in which the studios in the 1960s increasingly shoot outside Los Angeles while other phases of production “reagglomerate” in the LA area. This pattern is only partially applicable to Lucasfilm.
32. Mozingo, *Pastoral Capitalism*, 90.
33. Mozingo, 93–95.
34. Mozingo, 12.
35. Mozingo, 96.
36. Taber, *Judgment of Paris*.
37. Ben Block and Wilson, *George Lucas’s Blockbusting*.
38. Avni, *Cinema by the Bay*.
39. The *Marin Independent Journal* offered the best, sustained coverage of the tussles between Lucas and his neighbors. See Nels Johnson, “Lucasfilm Stuns Marin, Pulls Plug on Grady Ranch Movie Studio Project,” *Marin Independent Journal*, April 10, 2012, www.marinij.com/2012/04/10/lucasfilm-stuns-marin-pulls-plug-on-grady-ranch-movie-studio-project. The low-income (and senior) housing plan faced similar resistance and was apparently abandoned without fanfare in 2016. Johnson, “Marin Says Zoning Allows up to 240 Units at Grady Ranch Owned by George Lucas,” August 18, 2012, www.marinij.com/2012/08/18/marin-says-zoning-allows-up-to-240-units-at-grady-ranch-owned-by-george-lucas; Valerie Veteto, “George Lucas’ Ambitious Affordable Housing Project in Marin County Appears Stalled,” *Livabl*, Nov. 16, 2016, www.livabl.com/2016/11/george-lucas-affordable-housing-marin-county-stalled.html.
40. Turnock, *Plastic Reality*, 292n53.
41. Audie Bock, “George Lucas: An Interview,” *Take One*, May 1979, 6.
42. Judy Brown and Steve Cunningham, “A History of ACM SIGGRAPH,” *Communications of the ACM* 50, no. 5 (May 2007): 54–61.
43. Price, *Pixar Touch*, 37.
44. Price, 43.
45. Price, 33. For an account of the importance of the University of Utah’s department see Gaboury, “Other Places of Invention.”
46. Paik, *To Infinity and Beyond!* 164–66.
47. David S. Cohen, “Building a Legacy,” *Variety*, Feb. 14, 2005, 58.
48. USC School of Cinematic Arts, Untitled [Giving Presentation Book], n.p. [6].
49. Kirsten Han, “Yoda and His 24 Billion Dots at Lucasfilm’s Singapore Headquarters,” *ArchiExpo*, no. 10, June 30, 2015, www.archiexpo.com/emag/issue-10/deconstruction-singapore-lucasfilm-sand-crawler-1018.html.
50. John King, “Lucas Museum Timeline: From Presidio to Treasure Island,” *San Francisco Chronicle*, Oct. 26, 2016, www.sfchronicle.com/bayarea/article/Lucas-Museum-timeline-From-Presidio-to-Treasure-10415341.php.

51. With the departure of the Lucasfilm corporate offices, Lucas has proposed converting much of the Big Rock Ranch complex to guest rooms. Nels Johnson, "George Lucas's Plan: 57 Overnight Guest Rooms at Big Rock Ranch under Review," *Marin Independent Journal*, April 27, 2016, www.marinj.com/2016/04/27/george-lucas-plan-57-overnight-guest-rooms-at-big-rock-ranch-under-review.

52. Watry Design, "Letterman Digital Center Parking Structure at the Presidio," n.d., <https://watrydesign.com/project/letterman-digital-center-parking-structure-at-the-presidio>.