



LEGOified

Building Blocks as Media

Edited by Nicholas Taylor & Chris Ingraham



B L O O M S B U R Y

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NICHOLAS TAYLOR AND
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Introduction

Clickable Media in a Plastic World

Nicholas Taylor and Chris Ingraham

How Does LEGO Matter?

LEGO pieces are plastic. The modular building toy's success is rooted in the LEGO Group's ability to fashion a chemical medium—in most cases, an oil-based plastic called Acrylonitrile Butadiene Styrene (ABS)—into a massive array of shapes that not only interlock but do so with a satisfying synthetic click. LEGO's status as the world's preeminent construction toy can be attributed to its insistent branding as a medium for personal expression, pure play, and unbridled creativity, not to mention its aggressive pursuit of transmedia licensing arrangements. But at the same time, the sensuous dimensions of LEGO pieces—the feel of the hard but slightly yielding polymer as we stack pieces together, the slight indentations its studs make on the flesh of our fingertips (or feet), the clatter made when a box of pieces is spilled on the floor—are what quite literally matter to our experiences of it.

In this book, we think through what follows from treating LEGO in these terms, as material media—and not only as a global transmedia phenomenon that has had enormous cultural impacts the world over (Wolf 2014). LEGO is a modular and recombinatory medium people engage first and foremost with their fingers, experienced as a clicking together and snapping apart of an increasingly vast array of small, hard, interlocking elements. In this immediate and embodied sense, LEGO's vaunted manufacturing process for creating stacking plastic bricks makes it one of the first, or at least one of the foremost,

clickable media. Indeed, part of LEGO's resilience in the face of competitors offering cheaper alternatives—even (and particularly) toy systems capable of interlocking with LEGO bricks—is in the material resilience of its bricks. LEGO elements not only come together with a click but also come apart with a snap. A sometimes satisfying, sometimes surprising, amount of physical effort is required to separate them, whether supplied by fingers, walls, floors, feet, teeth, or, as LEGO would prefer it, the patented bright orange “brick separators” that come with larger sets. Indeed, it is this grip, remarkably consistent across a tremendous array of pieces—its distinctive “clutch,” as LEGO aficionados call it—that offers a quality more primarily *felt* than *seen*, setting it apart from other toy construction systems.

Tactility matters greatly to the LEGO Group. They have spent tremendous amounts of time and resources perfecting, and attempting to legally protect, the tactile and material qualities of their brick. The presumed inviolability of LEGO blocks was the subject of the LEGO Group's multiyear legal battle with Canada's Mega Brands, creator of Mega Bloks and, at that point, one of LEGO's largest competitors. In 1999, the European Union ruled in favor of Mega Brand's claim that, because the technical functions of the brick (its interoperability) could not be considered a trademark, the LEGO brand effectively had an illegal monopoly over similar brick construction toys. As a result, other entities may now legally produce objects that interact with LEGO products, leading to a whole host of construction toys that materially connect to LEGO bricks as well as to a related and vibrant market of LEGO-compatible paraphernalia: tape, books, and clothing, to name a few.

At the same time, the inviolability of the LEGO brick has transformed from a legal to a discursive and, in some instances, moral imperative. Of all the ways to play with LEGO, the implicit assumption is that you'll play nice, that is, not scrape, deface, modify, or otherwise manipulate individual bricks. The very plot and moral of *The LEGO Movie* makes just this claim: creativity and endless recreation are to be celebrated, so long as the physical integrity of the bricks is maintained. In this material, tactile sense, LEGO is plastic both in terms of its recombinatory potential and in the “brute facticity” (Packer 2013, 7) of its atomized elements.

The Worlds of LEGO

Long regarded as paradigmatic artifacts of (predominantly privileged, white) childhood, LEGO is having a moment. The explosion of LEGO across multiple media speaks to another kind of plasticity, one which has been aggressively

exploited in recent years by the LEGO Group, which is now very much a transmedia empire. Movie-goers and serious critics alike heap praise on recent films set in the “LEGO universe.” LEGO video games continue to attract players of all ages, a decade since the release of *LEGO Star Wars: The Video Game*, the first entry in the widely popular, multiply licensed series published by Traveller’s Tales (and over twenty years since the release of LEGO Island, the first LEGO game; Aldred 2014). There are similar appetites for LEGO-themed children’s TV shows, coffee table books, novelty gifts, and so on. This activity collectively represents a global corporation that employs more than 17,000 employees across 70 nations (The LEGO Group 2018), and remains the most prosperous toy company worldwide, far outpacing other toy manufacturers (Handley 2019).

The LEGO Group’s near-collapse in the late 1990s and subsequent rebound in the early 2000s has become a popular and well-circulated story of the power of bold, innovative corporate leadership (Delingpole 2009). In 1999, the company was floundering, beset by expensively manufactured products and an inability to develop its own successful intellectual property. Under new management beginning in 2003, the company underwent drastic corporate restructuring, and began aggressively expanding their franchise licensing arrangements. These started, most formidably, with *Star Wars*, before moving on to countless others. Its semiotic plasticity—the capacity for LEGO to become anything and to mean anything—has been exploited through a dizzying array of licensing deals and product lines. Beginning with *Star Wars* in the late 1990s, LEGO now produces licensed sets for (among others) *Harry Potter*, Disney princesses, both the Marvel and DC comic universes, *Sponge-Bob Squarepants*, *Minecraft*, and *Lord of the Rings*. No longer just a children’s toy, LEGO now brands itself variably as an educational product, a corporate communications tool, a transmedia content creator, an artistic medium, and a collectible hobby for adult enthusiasts. It produces specialized kits for wedding cakes, birthday parties, classrooms, corporate team-building exercises, architecture nerds, car buffs, and so on. And as a medium that invites endless reappropriation and expression, LEGO bricks are the focal point of numerous hobbyist practices, from stop-motion animation to amateur building events, from robotics competitions to art shows. We might therefore point to LEGO’s plasticity in our cultural imaginary, its capacity as a material, recombinatory, and *digital* medium to communicate almost anything. LEGO evokes both nostalgia and futurity; it is associated as much with do-it-yourself creativity as with hyper-consumerism; it generates pleasure and frustration, surprise and repetition; and it is at once ubiquitous in our everyday lives and near-invisible in terms of scholarly attention.¹ The well-trodden narrative of a corporation coming back from the brink through a combination of managerial restructuring,

savvy marketing, and aggressive pursuit of niche audiences (supported by transmedia product tie-ins), only scratches the surface of LEGO's current spike in popularity. It does not fully account for the increasing presence of unofficial LEGO-related products and creations, not just in our bedrooms and living rooms but in amateur craft and hobbyist retail platforms like *Etsy*, throughout social media feeds for various maker and DIY communities, and in art galleries and public spaces.

LEGO's ongoing expansion occurred in the wake of the company's 1999 loss of exclusivity rights to its interlocking brick, which has allowed the LEGO Group to maintain a near-monopoly, both in the marketplace and in our cultural imaginary, on toy building blocks. And crucially, LEGO has managed to cultivate a network of artists, entrepreneurs, hobbyists, and content creators, through a combination of benign neglect and outright encouragement. LEGO retail stores around the country increasingly host meet-ups for LEGO User Groups (LUGs) to collaborate on builds and share expertise, and the company has developed a whole line—LEGO Ideas—that solicits proposals for sets from hobbyist builders, which are then voted on by the community and, when/if they reach 10,000 endorsements, subjected to LEGO's own vetting and revision process before being released as new LEGO products. At the same time, LEGO takes a relatively lax stance toward the many small-scale entrepreneurs, artists, and serious hobbyists who sell their own LEGO creations, from jewelry to commissioned artworks to large-scale, highly detailed Second World War models.

Modular Media in the Making

There is a further sense in which it is salient to think of LEGO in terms of plasticity, malleability, and modularity. Posthumanist theorists talk of our continual "becoming" in relation to the objects, people, systems, ideas, places, and so on that constitute our day-to-day lives. Think about the child who spends her entire birthday playing with one LEGO set; or the adult collectors who dedicate multiple rooms in their home (and perhaps most of their discretionary spending) to their hobby; or the artists who express themselves exclusively in LEGO pieces, by the hundreds of thousands. Insofar as our wants, pleasures, abilities, and habits of mind and body are themselves malleable and mutable—plastic—could we not say that those who intensively engage with LEGO are *assembled by* as much as *assemblers of* the construction toy?

For us, this is more than a pithy provocation. Working very much as a kind of modular construction system of our own (albeit of ideas, not of plastic

bricks), this book presents an understanding of LEGO as a material medium that quite literally constructs the worlds of those who work and play closely with it. From the start, we have conceived this volume as more of a multi-authored book than an edited collection, each chapter working intentionally with the others to advance a more cohesive project when read front to back. Though the cover presents *LEGOified* as an edited collection, its conception and execution has been far more collaborative, and we hope it will be read that way. Rather than a consignment store of discrete chapters from different contributors with their own agendas, we think *LEGOified* will be most productively engaged as a book composed by (and comprised of) six researchers piecing together multiple, disparate, and most often interlocking observations, theories, conversations, and engagements with LEGO across multiple media and contexts.

If our shared conceptual starting point is that LEGO is a material medium, our common empirical starting point is the vibrant but thus far understudied culture of adult LEGO builders and enthusiasts. The mantle of Adult Fans of LEGO (AFOLs) designates a key demographic, a vital and heterogeneous community encompassing a broad range of identities, activities, events, and practices, all of which are characterized by a serious, passionate, and often quite professional engagement with what is conventionally regarded as a children's toy. The AFOL community is responsible for the large majority of aftermarket activities—fan expos, LUGs, and so on—that extend LEGO well beyond its conventional place in children's bedrooms (and floors). This community is also intensely loyal to LEGO and protective of its vaunted, if in some ways precarious, status among building toys. But while we acknowledge the vibrancy and vitality of this community, our work is keenly interested in documenting and making sense of forms of adults' engagements with LEGO that are often separate from, and even in tension with, the kinds of fandom practiced by AFOLs. The chapters in this collection pay particular attention to the practices and perspectives of LEGO artists, vendors, builders, and makers who often position themselves as AFOL-adjacent: in contact with AFOLs, but not always in agreement with them. These craftspeople work with and on LEGO as their medium, and their creations circulate in varied and often surprising places and contexts, including museums, gun shows, art galleries, and comic expos. Constituting a shared ground for AFOLs and LEGO craftspeople is a burgeoning convention scene, where artists, vendors, makers, and enthusiasts share their masterful creations and sell LEGO products to thousands of fans. These conventions span internationally. In the United States, the biggest conventions include Brickworld and BrickUniverse, each with multiple American tour sites, as well as BrickFair, which regularly gets over 20,000 attendees at its annual Virginia convention.

Mapping the (Brick)Universe

BrickUniverse is one of the more popular touring conventions for communities of US-based LEGO enthusiasts to showcase their builds (termed “My Own Creations” in LEGO fandom speak, or MOCs), sell their LEGO paraphernalia, and interact both with one another and with interested publics across the country. Much of the research done for this book was undertaken out in the “field” of BrickUniverse’s annual stop in Raleigh, North Carolina, between 2011 and 2017.² The Raleigh event, held annually in the city’s convention center over three days, draws thousands of people and offers something for everyone: the collector, the kid, the artist, the fan, the curious, the coder, the entrepreneur, the historian, and so many more. To enter for the first time is either to have found, finally, *your people*, the otherwise scattered and invisible universe of others who relish LEGO as much as you, or to be taken slightly aback, astonished really, at the sheer breadth of investment, devotion, and intensity of a culture that you may find hard to believe exists at such a scale. At times, each of us felt a little of both.

Visiting BrickUniverse Raleigh, you enter the event from above to behold a bird’s-eye vantage of a massive, 150,000 square foot showroom. It’s teeming with people of all ages (see Figure I.1). Men, women, and otherwise. They’re mostly (but far from only) white. Families and soloists, vendors, and builders, security guards. At the back of the room an inflatable corral, big enough to park three cars, is filled nearly a foot deep with miscellaneous bricks. Children tramp through and build and play. There’s a similar corral filled with the larger Duplo bricks for younger kids and their parents. Near the entrance there’s a place for folding chairs and round tables to sit down and rest while flipping through dozens of LEGO-centric books. There’s a snack bar. There are several long tables covered in LEGO pieces of all one color: one with red bricks, another with white, another with blue. It’s somehow part-patriotic and part-holiday spirit. Some people stop at these tables to build, usually adding on to a structure someone else had only started before something else caught their eye.

Around the perimeter are dozens of booths, some with music or flashing lights, most with large banners bearing names like “Citizen Brick” or “Brickmania.” Some sell custom minifigs: Hillary Clinton in prison clothes, Walter White from TV’s *Breaking Bad*, and many other famous politicians, characters, athletes, and celebrities besides. Other booths sell single bricks, some rare and collectible, some vintage, some custom-made by entrepreneurs and hobbyists, some perhaps just that one last piece you need but can’t manage to find for that build you’ve been doing for weeks now at home. There are booths promoting programs that use LEGO for teaching or team building. There are booths that do printing, some that do molding, some that do modifying. None



FIGURE I.1 *Descending to the floor of the 2017 Brick Universe Raleigh. Photograph courtesy of Nicholas Taylor.*

of them are staffed by official LEGO representatives, but rather by LEGO enthusiasts, entrepreneurs, and artists who, in the spirit of fandom or profit (often both), are creating new ways for people to engage their idiosyncratic and creative passion.

And all that's just the perimeter. The molten core of Brick Universe is the builds. Rows and rows of them. Architectural reproductions of the Eiffel Tower, the Sydney Opera House, the Empire State Building. Entire skylines are there. Now-and-then builds of row houses in a pre- and post-gentrified Brooklyn. Cars and airplanes. There are fantasy worlds, too: a whole section devoted to *Star Wars* and other franchised LEGO product lines, but also an invented land of castles and dales and rivers and flowers, countless tiny flowers, done with such detail that builders will distinguish not just between their colors but also between their types. Many of these builders are from LUGs in the area. Others have followed Brick Universe across the country, some from as far afield as Europe or Canada. For each event, they disassemble, pack, and load their builds in chunks—these masterful creations that took months, sometimes years, to realize—and then unload, unpack, and reassemble them all over again for the next event in another state. It's got to be tedious and meticulous work. Some of their builds are the size of an icebox, others a refrigerator; some are the size of pool-table, others a swimming pool. Many have incorporated moving parts and lights into diorama-like displays: circus

tents, burlesque shows, movie scenes, superhero hideouts. The historical recreations may be the biggest draw. There's a famous battle in Vietnam, a Second World War aircraft carrier, an enormous recreation of D-Day, and the beach at Normandy. The detail is staggering: fallen soldiers, blood splatter, huge divots from bombs, underground tunnels visible through a fiberglass window, and so on.

As we noticed across our field notes, any attempt to write "thick description" (Geertz 1973) of this scene devolves quickly into incomplete lists. There's just too much. It's too rich, too dynamic, too manifold. The excess is of a kind with a crate of LEGO dumped out on a kitchen table: amid the variable array, where to begin? Just as the networks of people, practices, technologies, and so many bricks that constitute and coalesce into BrickUniverse are so much more vast than the "field" itself (Burrell 2009), the ways and places in which we can approach LEGO as a world-building medium far exceed even the convention hall where we spent so many dazzled hours making sense of the scene. At different times, after all, and often together, we have also enjoyed LEGOLAND parks, shopped for LEGO sets, used LEGO pieces as teaching tools in our classrooms, and of course played with bricks on the floors of our homes or offices.

Connections and Diffractions

How, then, do we hope to make sense of this dizzying multitude of builds and bodies? Our strategy has been to embrace a multiplicity of approaches to building knowledge, and to resist a single perspective. Of the numerous methodological traditions we are indebted to here, probably the most important are "connective ethnography" and "diffractive analysis." Insisting on the insight that things are never so easily contained as the conventional anthropological construct of "the field site" would have us believe, connective ethnography is the practice of following actors—whether people, organizations, ideas, or even individual LEGO bricks—as they appear across multiple interconnected sites, both offline and online (Hine 2007; Marcus 1995). In a world in which we inhabit multiple spaces, often simultaneously (think of the online gamer in her dorm room or study; of the foodie Instagramming his every bite), and in which physical spaces become places, in part, by the flows of data that pass through them and are produced by them, it becomes increasingly untenable for research with a given community to be contained by physical boundaries. Instead of thinking of the "field site" as a singular, bound place—for instance, the floor of the BrickUniverse convention—we can think instead of our

excursions to these annual conventions as nodes, albeit very central ones, in a network of relations that also include social media forums, theme parks, archives, stores, classrooms, and our own living rooms and dens.

At the 2016 and 2017 BrickUniverse events, we conducted IRB-approved, audiotaped interviews with over a dozen content creators and vendors, ranging from Duplo artists to retailers of custom-made weaponry for LEGO minifigs. These interviews were most often conducted with two of us interviewing a single participant, and unfolded as conversations about their craft, their experiences in various LEGO enthusiast and artist communities, and their histories with LEGO. We also recorded our own individual impressions, interactions, and observations as field notes, which we shared with each other to understand how we experienced and interpreted the conventions. As our first among multiple research sites, BrickUniverse figures largely in our collective exploration of the artists and enthusiasts who work with LEGO as a material medium, but like them, we do not stay put for very long; each chapter follows them and their creations along the multiple networks of activity and meaning that they introduced us to at BrickUniverse. Some routes led us to consider the histories of plastic, as in Chris's chapter; others led us through the complicated process of generating LEGO set instructions, as in Jessica's contribution. In order to do justice to the complexity and dynamism of these brick universes, we have tried to maintain a "diffractive" understanding of these phenomena.

Diffractive analysis, as articulated primarily through the work of feminist scholars of science and technology (Barad 2007; Taguchi 2012), is a strategy for approaching and describing phenomena that resists any singular, authoritative reading. Like a beam of light passing through a prism and splitting into multiple colors, diffraction is a "mapping of interference" (Haraway 1992, 300): it is a practice of understanding how differences are made and why they matter. For us, a diffractive understanding of LEGO as material medium has meant attending to the multiple, complicated, and often contradictory ways in which communities of adult enthusiasts, artists, and entrepreneurs work with it. Diffraction, for these communities of plastic world-builders, means recognizing rather than erasing the tensions and disconnects within and across them: for instance how "purity" can mean something vastly different for a LEGO collector than for a LEGO artist, or how "sustainability," in practice, involves a very different relation to land for a plastic toy company than it does for an environmental activist.

A crucial element of our diffractive analysis is acknowledging that the instruments we use to examine phenomena have a hand in producing them as well—and those instruments also certainly include ourselves (Haraway 1988), and own unique histories and commitments as scholars, builders, collectors,

partners, parents. Through offering multiple takes on the same set of phenomena—on the work adult LEGO enthusiasts do alongside (but more often distinct from) what we imagine as children’s play with LEGO, and centered around (though by no means contained by) the BrickUniverse event—we hope to offer a diffractive mapping of a complex subculture that has yet to be directly engaged by academics. Over these years of research, a panel presentation at an academic conference, a series of group meetings, and many less formal conversations, we bounced ideas off of each other, we revisited interview transcripts, and we returned to our own and others’ field notes. We followed the actors (Latour 2005), people, ideas, infrastructures, and of course, LEGO bricks, sets, and MOCs, starting on the floor of the BrickUniverse events we attended, but ending up in quite different places. Much like the kind of children’s LEGO play Seth Giddings has described in his important work on the toy (2014), we dumped all of our pieces on the floor, sat around the mess, and began puzzling out its potentialities by simply seeing how things might stick together. We swapped stories and ideas; we occasionally argued about what should go where; and we incorporated elements of our own individual (conceptual and linguistic) collections into ours and others’ builds.

For adult LEGO artists and enthusiasts themselves, the sites of LEGO are multiple. They constitute online fora and paratexts, LEGO sets, works of art, MOCs, LUGs, archives, books, flagship stores, amusement parks, movies, video games, clothes, factories, shopping malls, schools, and so much more besides. If all of this is somehow embodied and distilled in microcosm at BrickUniverse, that only makes it a site of copious potential and multifarious interest—a potential and interest we have both sought to contain (to make it manageable) and to set loose (to maintain its allure). This tension is what being “LEGOified” is all about.

LEGOfication

Our qualitative observations at BrickUniverse—and, more informally, at trips to LEGOLAND in Carlsbad, California and Billund, Denmark—were guided both by the whim of experiential immersion and by more deliberate methods of data collection through informal conversations and recorded interviews. In the course of this work, one conversation stood out for us in particular, and it’s what gave rise to this book’s title. Late in the second day of the 2016 BrickUniverse convention, Nick and Jessica had the chance to talk to the entrepreneur behind “Clone Army Customs.” Like a handful of other businesses we encountered, Clone Army Customs sells LEGO minifigs that have been transformed, via

sophisticated printing techniques, from their nondescript factory form into any of a number of unlicensed cultural referents. One example here is a LEGO Iron Man minifig (available from any number of sets in LEGO's licensed Marvel Universe theme) imprinted with the palette of Buzz Lightyear. In our interview, the owner/creator repeatedly referred to his work as "LEGOifying," at one point stating, "When you LEGOfy some things you really turn something that LEGO theoretically would never make into something that instantly is identifiable or enjoyable" (Custom Minifig Maker 2016). When we asked if this was "kind of a process of translation," he responded, "Exactly. That's really a good description of that. We're basically translating products and things that we love into a LEGO type thing." LEGOfication—the playful process of translating something using the recombinatory grammars and material dimensions of LEGO—is at the core of how we understand LEGO as media. Like all media, LEGO is transformative; LEGOfication describes how those transformations are shaped as much by the physical properties of LEGO bricks as by LEGO's status as an influential transmedia empire. Building from this, we can see how LEGOfication might not only describe how to turn bricks into "something that LEGO theoretically would never make" but also account for the processes by which such transformations are possible: the "conditions of possibility" (Packer 2013, 13) through which LEGO creations can communicate. In keeping with a productive strain of media studies work that looks to the infrastructures, platforms, and materials required to create, send, and receive messages (Packer and Wiley 2012), what if we looked at the entire apparatus required to produce, say, the Iron Man-Buzz Lightyear minifig as a LEGOfication machine—a set of techniques that produces not only minifigs but also new relations between and among people and things, new ideas, new careers and sources of capital, and new kinds of people? As the owner/creator of Clone Army Customs explained to us, the work required to enact this transformation involves his training in image manipulation software; his business arrangements with printing facilities in Taiwan, imbricating him into global manufacturing networks; his precarious legal relationship to LEGO; his insistence on using LEGO minifigs, rather than much cheaper knockoffs; and so on. His work—his *world*—is LEGOfied: it has been configured to make use of the material and semiotic properties of LEGO. In our effort to think through such cases with an eye for what LEGOfication might be and how it might work, we searched for an analogous term from the extant scholarly record as a guide. What we found instead of analogies to help us understand LEGO was that LEGO has the metaphorical richness to help us understand so much else. LEGOfication accordingly denotes the reciprocal phenomenon whereby LEGO can be translated into material worlds and material worlds can be translated into LEGO.

Technicities of the Brick

When we began thinking critically and then writing about LEGOfication, we noticed right away how rich LEGO is with metaphorical implication. As modular media, LEGO bricks suggest a world-making process that is aggregative and assembled, consisting of discrete parts that, together, add up to a completed whole. They also imply a recombinatory logic: the supposition that all world-making is provisional and capable of revision, deconstruction, multiple configurations. Moreover, and more materially, as bricks with both “female” and “male” parts, the generative and regenerative affordances they offer lend to a metaphorical implicature that invites interesting and sometimes provocative ways of thinking through concepts from critical media theory.

In our view, understanding LEGO-as-media offers us both a “freedom to” act in certain creative ways and a “freedom from” more constrained modes of power with their forceful, often patriarchal relations. Far from wishing to trace the long-standing distinction between “freedom to” and “freedom from” as it’s played out in social and political theory for decades, however, we read LEGO and the fan cultures it has spawned to offer both types of freedom. Yet, it is the freedom to *make* worlds that, we suggest, invites a tacitly feminist approach to thinking about the role of LEGO in social behavior and play. As Elizabeth Grosz asks, “Is feminist theory best served through its traditional focus on women’s attainment of a freedom from patriarchal, racist, colonialist, and heteronormative constraint? Or by exploring what the female—or feminist—subject is and is capable of making and doing?” (Grosz 2010, 141). For Grosz, the more urgent question is the latter, particularly insofar as it leads to “exploring the subject’s freedom through its immersion in materiality” (141). The materiality of LEGO is nothing if not immersive. Consider the reach of the LEGO empire—its amusement parks, movies, television shows, video games, clothing lines, books, keychains, boxed sets, trading cards, and countless other products and partnerships—and the immersive materiality of LEGO should be self-evident. Play of any kind offers (or purports to offer) its own immersive freedom from the obligations of work and daily life. Those who engage with LEGO bricks or other artifacts also express their own freedom to explore their own sense of invention and creative capability.

We are therefore interested in the ways that conceiving of LEGO-as-media invite us also to acknowledge the oscillation between “freedom from” and “freedom to” that LEGO bricks are always enacting when people build worlds with them, or build fandoms and communities around them. What this enables us to do is to recognize that, while LEGO play can be a mode of world-making, it can also be a valuable mode of subject formation. For this reason, although

we are driven by a general interest in LEGO-as-media, this book is organized conceptually around a more particular interest in LEGO-as-technicity—or, what we think of as *technicities of the brick*. Because technicity is central to our thinking, we would like to say more about what it means to us and why we find the concept so generative. To do so, it's been helpful for us to engage with Gilbert Simondon's important work on the subject.

Gilbert Simondon was a French scholar in the phenomenological tradition who cast his interest upon the question of how things, human and not, come to be what they are through an ongoing and interconnected process. If ontology is the study of being, of what things are, Simondon's work was invested in ontogenesis, the study of becoming, of how things come into being. Among his many insights, the one that particularly compels our thinking is his understanding of technicity. For Simondon, humans and machines (the latter of which would include tools, technologies, and media such as LEGO) are ontologically equivalent. From such a standpoint, it neither makes sense to see the human as master of technology, nor to see technology as enslaving the human—the respective tenets of modernism and cyborg futurism. Instead, we should recognize a kind of “technical equality” between humans and machines, whereby each is constituted and comes into being with the other. It's this equality, this coming into being with the machinic that, as Thomas LaMarre has observed, is what Simondon means by “technicity” (Combes 2013, 92).

We see LEGO as illustrative of this notion of technicity because, as we observed firsthand during our time with the AFOL scene, both people and LEGO alike can become what they are capable of becoming—an artist, an entrepreneur; a castle, a historical recreation—when they do so *with* one another. Simondon wanted to study not just technical objects, but “the technicity of these objects as mode of relation between human and world,” a mode that, he realized, could not be understood in isolation, but must rather be known “in its relation to other modes of being in the world” (60). Similarly, our materialist approach to LEGO-as-media acknowledges that LEGO bricks are objects, but it also endeavors to emphasize those special technicities that make LEGO powerful for so many people as a freeing mode of relation with the world.

LEGO Scholarship

None of the extant scholarship on LEGO takes an approach quite like ours. That may be because *LEGOified* is as much a book about media materialism

as it is about LEGO themselves. Readers would be as justified in seeing this volume as a study of LEGO from the standpoint of media theory as they would be in reading this as a study of media materiality that uses LEGO as a running example. While scholarship in the growing field of media studies is old and vast enough that even specifically materialist approaches to media constitute too large a domain of literature to review here, academic attention to LEGO has been comparatively nonexistent until recently. *LEGOified* seeks in part to engage this nascent interest in LEGO as a topic of academic attention while steering it toward what, from our standpoint, is a generative emphasis on the material capacities of the brick and the technicities it makes possible.

The landmark edited volume, *LEGO Studies* (edited by Mark Wolf in 2014) accordingly serves as a point of discussion and departure for our work. The volume is framed as an examination of LEGO's transmedia empire, with the exigence being the company's concerted efforts to engage in licensing arrangements with other transmedia franchises, and to expand from plastic bricks into other media platforms such as games, books, and most recently, blockbuster movies. These concerns locate the volume and the majority of its contributions largely within traditions of American cultural studies and media studies, characterized broadly by their attention to questions of representation. The volume illuminates the complex processes of remediation as LEGO expands to include not just physical components, but virtual bricks, and as it exploits its modularity and malleability in its licensing agreements with other transmedia content creators. This vital project of critically engaging with LEGO's transmedia empire by analyzing its associated texts is further carried out by the forthcoming volume *Cultural Studies of LEGO*, edited by Sharon Mazzarella and Rebecca Hains.³

But *LEGOified* does something different. As we have indicated thus far, we think there is an opportunity to understand LEGO from the perspective of theoretical traditions that are less concerned with questions of representation and more concerned with questions of materiality and embodiment: with the physical, sensory, and affective dimensions of our relations to LEGO. Like Wolf does in *LEGO Studies*, we begin this book by asserting that LEGO is a medium (Wolf 2014, xxii); but, we are invested in a slightly different understanding of media or, more accurately, of how media matter. We follow other invocations of "materialist" media studies which do not ignore or reject questions of representation, but instead seek to reassert the importance of media in their physical properties and material manifestations: that is, not just in the messages they carry, but in the infrastructures, platforms, energies, and bodily and sensory capabilities that make such messages possible, that give them shape and form and motion (see Packer and Wiley 2012, for an overview of these positions).

Of all the rich approaches to studying LEGO thus far, we are perhaps most inspired by Seth Giddings' considerations of the material capacities of LEGO as a medium. Drawing on interviews with colleagues and peers recollecting their childhood experiences with LEGO play, Giddings documents aspects of children's everyday physical interactions with LEGO bricks, from the sound of rummaging through a box of pieces to the incorporation of other toys into narrativized play. A passage in which he reports on his interviewees' emphasis on the material qualities of LEGO almost perfectly aligns with our own fascination for these aspects of it:

Even in a transmedia landscape with images and stories flowing across books, films, TV, and video games, LEGO bricks remain technological. The way they click together, the amount of pieces available, all shape possible constructions and play events at least as much as instructions, box illustrations, and media narrative frames. These material characteristics and affordances are also, the respondents evince, inseparable from the tactile pleasures and intense memories of LEGO play. (Giddings 2014, 255)

We accordingly see *LEGOified* situated somewhere in between *LEGO Studies* and the other edited volume of scholarly work on LEGO currently available, *LEGO and Philosophy* (Cook and Bacharach 2017), while also operating as a substantial departure from them. Like *LEGO Studies*, we are interested in LEGO as a medium that encompasses multiple modes of expression and creation, while also approaching it as *LEGO and Philosophy* does, as a tool for constructing theory. At the same time, though, we are less concerned, as both these volumes are, with the cultural significance of LEGO, and more concerned with exploring its *cultural politics*: the ways its capacities as a material medium allow for certain forms of activity, communication, and identity construction, and how these are, in turn, shaped by LEGO's connections to various domains and institutions, including the worlds of professional art, design, science, environmentalism, the military, entrepreneurship, and the Maker movement.

Book Organization and Objectives

LEGOified is organized into three parts. Part One consists in a single chapter so essential to laying out how we understand LEGO that it gets its own section. Kate's chapter articulates the concept of LEGO as a "materially digital medium," that is, a medium that embodies and expresses the fundamental characteristics of digitality: a process that is remaking our world in recombinatory, atomistic,

and plastic ways. Part Two includes a triad of chapters that each engages a different theme discovered through their author's investigations. The triad of chapters by Eddie, Jessica, and Sarah and Nick are concise explorations of particular topics encountered through our shared fieldwork and extrapolated further through their individual research. Respectively, they explore the practices of LEGO artists (Lohmeyer); the cultural politics of instruction-making (and selling) among the vibrant communities of LEGO enthusiasts who make, sell, and buy aftermarket LEGO themed around twentieth-century wars (Elam); and the surprising gender dynamics involved in the use of pink-colored pieces, both in official LEGO sets and in fans' MOCs (Evans and Taylor). Part Three presents a pair of longer chapters that draw the book to a close by engaging bigger questions about the ramifications of LEGO in a globalized world undergoing climate collapse. These exploratory chapters by Chris and Nick concern, broadly, notions of sustainability and purity as they relate to LEGO: the ways that the production of LEGO impacts our capacity to exist on this planet (sustainability), and, inversely, the ways that LEGO enthusiasts protect their collections from threats of outside contamination (purity), particularly as LEGO goes increasingly global in its manufacturing and marketing.

Like any decent LEGO collection, this one integrates different themes of different sizes. At least that's the idea behind how we've structured the chapters. We like to think that Part One resembles a big box of loose LEGO pieces that provide the foundation for any serious building project. Part Two resembles the medium-sized LEGO sets you get because you love the theme. And Part Three is like the enormous LEGO sets with thousands of pieces and umpteen numbered bags: the ones that when you start building, you may not be sure how all the various sections fit together. Though we don't claim to have the ingenuity of the designers that built "Welcome to Apocalypseburg!" (no. 70840) or "Ninjago City" (no. 70620)—two of our personal favorites—we hope that like those sets, the end result of each of our chapters will be an edifice that hangs together reasonably well. Perhaps, as with your own favorite sets, when you're done you can step back from these chapters and appreciate something that you maybe hadn't seen before.

And what that might be? What, in other words, does thinking about the cultural politics and technicities of LEGOfication enable us to do? To begin with, we hope it will open a vantage onto aspects of our realities that are typically unexamined, though consequential for how we live and how we understand our very modes of being in the world. To recognize LEGO as media, and not just as toys, in other words, is to alter and constitute the terms of our engagement with aspects of our lives that otherwise might be left unexamined or taken for granted. Childhood, play, gender, collaboration, invention,

fandom, storytelling, sustainability, all can be revised and revisited in light of LEGO's technicity. As John Durham Peters writes, media studies has "the task of exposing the unthought environments in which we live" (2015, 148). Certainly, as a global transmedia juggernaut, LEGO has become an agential part of our environments, however underfoot they might seem. But thinking about the materiality of LEGO bricks themselves, as a kind of media technology in their own right, can offer another way to see how playing with LEGO brings particular formations of individuality and subjecthood into being, making possible particular potentials and capacities, particular relations between people (and between people and things), all on the basis of a given brick's techno-aesthetic constraints and affordances. Even as tiny bricks, LEGO are an immersive media environment that deserves more scrutiny.

Another of our ambitions for this book is less academic. We hope it will engage with and celebrate the communities of makers, collectors, and craft-people that inspired us to write it in the first place. As we experienced firsthand, the adult LEGO enthusiast scene is vast and multilayered. It's more than just a fan culture or geekdom, more than just hobbyists or collectors, more than artists or craftspeople, historians or techno-futurists, profiteers or pirates. Though all of us who have contributed to this book are, to varying degrees, AFOLs ourselves, we also offer a vantage largely from outside the AFOL world. Without posturing as longtime insiders, yet on the basis of on-site observational fieldwork (and plenty of rigorous reading and research), we position ourselves as informed but humble fans, aiming to add a few more conceptual bricks to a marvelous construction that others have long ago begun, and which, by the end of these pages, will still remain unfinished.

Bibliography

- Aldred, Jessica. "(Un)blocking the Transmedial Character: Digital Abstraction as Franchise Strategy in Travellers' Tales LEGO Games." In *LEGO Studies: Examining the Building Blocks of a Transmedial Phenomenon*, edited by Mark J.P. Wolf, 105–117. New York: Routledge, 2014.
- Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press, 2007.
- Burrell, Jenna. "The Field Site as a Network: A Strategy for Locating Ethnographic Research." *Field Methods* 21 (2009), 181–199. DOI:10.1177/1525822X08329699.
- Combes, Muriel. *Gilbert Simondon and the Philosophy of the Transindividual*. Trans. Thomas LaMarre. Cambridge, MA: MIT Press, 2013.
- Cook, Roy T. and Sondra Bacharach. *LEGO and Philosophy: Constructing Reality Brick by Brick*. Hoboken, NJ: Wiley, 2017.

- Cross, Gary. *Kids' Stuff: Toys and the Changing World of American Childhood*. Cambridge, MA: Harvard University Press, 1997.
- Custom Minifig Maker. Interview by Nicholas Taylor and Jessica Elam, April 2, 2016, BrickUniverse Convention 2016, transcript.
- Delingpole, James. "When LEGO Lost its Head—And How This Toy Story Got Its Happy Ending." *Dailymail.co.uk*, December 18, 2009. Accessed April 13, 2019, <https://www.dailymail.co.uk/home/moslive/article-1234465/When-Lego-loses-head-toy-story-got-happy-ending.html>.
- Geertz, Clifford. *The Interpretation of Cultures: Selected Essays*. New York: Basic Books, 1973.
- Giddings, Seth. "Bright Bricks, Dark Play: On the Impossibility of Studying LEGO." In *LEGO Studies: Examining the Building Blocks of a Transmedial Phenomenon*, edited by Mark J.P. Wolf, 241–267. New York: Routledge, 2014.
- Grosz, Elizabeth. "Feminism, Materialism, and Freedom." In *New Materialisms: Ontology, Agency, and Politics*, edited by Diana Coole and Samantha Frost, 139–157. Durham, NC: Duke University Press, 2010.
- Handley, Lucy. "How Marketing Built LEGO into the World's Favorite Toy Brand." *CNBC.com*, April 11, 2019. Accessed May 16, 2019, <https://www.cnbc.com/2018/04/27/lego-marketing-strategy-made-it-world-favorite-toy-brand.html>.
- Haraway, Donna. "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others." In *Cultural Studies*, edited by Lawrence Grossberg, Cory Nelson, and Paula Treichler, 295–337. New York: Routledge, 1992.
- Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988), 575–599.
- Hine, Christine. "Connective Ethnography for the Exploration of e-Science." *Journal of Computer-Mediated Communication* 12, no. 2 (2007), 618–634.
- Hjarvard, Stig. "From Bricks to Bytes: The Mediatization of a Global Toy Industry." In *European Culture and the Media*, edited by Ib Bondebjerg and Peter Golding, 43–63. Bristol, England: Intellect, 2004.
- Kline, Stephen. *Out of the Garden: Toys, TV, and Children's Culture in the Age of Marketing*. London, England: Verso, 1993.
- LaMarre, Thomas. "Afterword: Humans and Machines." In *Gilbert Simondon and the Philosophy of the Transindividual*, edited by Muriel Combes, 79–108. Cambridge, MA: MIT Press, 2013.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005.
- The LEGO Group. *Annual Report 2018*. Accessed June 1, 2019, <https://www.lego.com/fr/www/fr/aboutus/-/media/aboutus/media-assets-library/annual-reports/annual-results-2018.pdf?l.r=-1161991047>.
- Maddalena, Kate. "Plastic Child-gardening Tools: LEGO's Nostalgia for the Open-ended Toy." *Technoculture: An Online Journal of Technology in Society* (2013). Accessed <https://tcjournal.org/vol3/maddalena>.
- Marcus, George. "Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography." *Annual Review of Anthropology* 24 (1995), 95–117.
- Packer, Jeremy. "The Conditions of Media's Possibility: A Foucauldian Approach to Media History." In *The International Encyclopedia of Media Studies, Volume 1: Media History and the Foundations of Media Studies*, edited by John Nerone, 1–34. New York: Blackwell Publishing, 2013.

Packer, Jeremy and Stephen B. Crofts Wiley. "Introduction: The Materiality of Communication." In *Communication Matters: Materialist Approaches to Media, Mobility, and Networks*, edited by Jeremy Packer and Stephen B. Crofts Wiley, 3–16. New York: Routledge, 2012.

Peters, John Durham. *The Marvelous Clouds: Towards a Philosophy of Elemental Media*. Chicago: University of Chicago Press, 2015.

Taguchi, Hillevi Lenz. "A Diffractive and Deleuzian Approach to Analyzing Interview Data." *Feminist Theory* 13, no. 3 (2012), 265–281.

Wolf, Mark J.P. (ed.). *LEGO Studies: Examining the Building Blocks of a Transmedial Phenomenon*. New York: Routledge, 2014.