

Bright bricks, dark play: on the impossibility of studying LEGO

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Introduction

My first LEGO set was 6363 Auto Repair Shop. My dad had bought it for me. He is an architect and probably thought it would be nice to teach me about bricks. I must be around 3 or 4 and I can't remember how I played with that particular set but looking at the tooth marks on the bricks (they are in such a shape that I can still recognize them) I probably didn't play with them as he intended. (L)

It is generally recognised that the pleasures of Lego do not end once the instructions in a particular set have been followed and the model depicted on the box is accurately realised. Generations of children have – just as the manufacturers intended – pulled apart the pristine model and begun again, making new vehicles, environments and creatures. The new set joins the larger box of LEGO full of older bricks, and is mixed and hybridised. This hybridisation has become particularly evident in recent decades where licensed and themed sets (space, homes, *Star Wars*, *Harry Potter*, *Friends*, etc.) and their specific colours, decals and shapes get jumbled and repurposed.

But if the vast majority of time spent playing with LEGO does not follow the instructions, how can it be studied? These emergent worlds are almost never preserved, displayed, or photographed. Their dynamics are often as much to do with the play of construction, the narratives or scenarios the children conjure up as bricks are connected and moved. Moreover, this kind of play is more likely to be pursued without adult attention – once any necessary help with the instructions has been offered, adults will happily leave children to their engrossed activity, paying little or no attention to the nature of this play. Like the dark matter that constitutes the bulk of the universe, but which cannot as yet be detected or examined, this dark play constitutes the reality of LEGO as lived and played. This chapter will acknowledge the impossibility of fully accounting for LEGO play, but it will offer some approaches to it, some hints at this lost multitude of transitory gameworlds and constructions. Through ethnographic studies of contemporary play and memory-work with older children and adults, it will trace particular instances of the interactions between the materiality of LEGO and the phantasmagoric worlds of play it affords.

Resources for the LEGO historian or anthropologist do exist such as the LEGO

company's own documentation, critical writings in both the press and literature, and online discussions and databases such as brickset.com. The ever changing design and construction of the bricks and sets themselves can be studied, their material properties - particularly the affordances and constraint of the LEGO System of connection, the clicking together of stud and tube - at the very least *suggest* certain kinds of play and construction. Yet, as we'll see, LEGO is nothing without its open-ended, imaginative and hence unpredictable potential, and as none of these resources engage directly with everyday play in any sustained fashion, these discursive assumptions and material suggestions are far from exhaustive of the possible and actual structures and worlds built.

The questions

To address the lived and moment-by-moment events of LEGO play requires ethnographic research with children and / or memory-work. This chapter works mainly with the latter (see Giddings 2014a for further ethnographic work on LEGO), but also draws on some press accounts and interviews and from literary memoirs and cultural criticism, where the latter addresses directly the experience of LEGO play. The bulk of the material explored here though is from the computer game studies community. Through the Games Network discussion list I asked for memories of people's own childhood experiences of LEGO, and if possible those of any children in their lives. Did they follow the set instructions or immediately make their own inventions? What kind of worlds or models did they build? Did they keep themed sets intact or did these sets get mixed up with others? Did they play on their own, or with siblings, friends, adults? I was interested in the experiential or phenomenological aspects of these memories: how did it feel to play and build? Did they remember the sound of rummaging through a box of LEGO? What about the frustration of not finding a necessary piece? Did they attempt to match colours, to create fantastical or realistic objects? Was the LEGO integrated with other toys? For older respondents: did they prefer the early 'abstract' bricks or the newer themed and franchised sets? I made it clear I was not interested in LEGO videogamesⁱ, adult collection of or play with LEGO - unless with children, *Mindstorms*, *LEGO Serious Play*, and so on: just everyday children's play with the plastic bricks.

I have worked with twenty detailed responses. Whilst I have made no attempt to produce any kind of representative sample and I'm not interested here in making any claims for generality or universality, the respondents turned out to be a diverse group with professions including psychologist, school teacher, historian, game scholar, game designer, educationalist, and media scholar. Nationalities ranged across Europe and North America, with twelve male and eight female respondents. Not everyone gave their age but their biographical accounts suggest a range from mid-20s to early 50s. I have resisted the temptation to connect individual accounts to biographical details (beyond those necessary - e.g. parenthood, siblinghood, etc.) and play styles. A number identified themselves as AFOLs - adult fans of LEGO - and demonstrated expert knowledge of the history and sets backed up by catalogue numbers and links to online databases. This adult fan culture is fascinating, but

beyond the scope of this essay so I have only drawn on their accounts of their childhood play or their play with children. Other respondents were less invested in LEGO expertise, but were clearly conducting internet searches as they typed their responses and found the bricks or sets they were remembering listed on sites such as Brickset.

I'm a 1976 baby, and looking at the issue dates on the sets I guess I was still very young when I had them, but I was treated to a whole load of Lego Space stuff, I would guess over the period of a number of birthdays and Christmases. Looking at <http://www.brickset.com/browse/themes/?theme=space>, I definitely had a Command Centre, one of the spaceships (couldn't tell you which for certain), and I think the Mobile Rocket Launcher (I remember the grey hinged piece). There were also some bits of crater terrain and a landing strip, although I don't know if they were part of sets or not. Pretty soon after that, I got interested in Technical Sets, and I had the 1970s-issue Car/Auto Chassis and the Go-Kart from <http://www.brickset.com/browse/themes/?theme=Technic>. (E)

Claims for creativity

A key challenge to studying LEGO as actually played is a direct product of its distinguishing characteristic: its *openness* as a toy. Its design and material characteristics, the LEGO System with its insistence on the interconnectability of all pieces regardless of theme, and the company's own marketing and self-presentation all facilitate and emphasise the possibilities for open-ended play, the exercise of imagination and creativity.

Its eye-catching red, yellow, white and blue pieces could be combined into infinite forms and shapes which delighted children and gave them unrestricted opportunities to employ their skills and imagination. Lego's chief Godtfred Christiansen claimed his blocks provided "unlimited" and timeless play, stimulated activity without violence, and were gender neutral. (Cross 1997, 220).

The LEGO company sets out the values and affects of its system of products as a set of qualities that include Imagination, Curiosity, Free Play, Fun and Learning:

Imagination:

Curiosity asks, "Why?" and imagines explanations or possibilities (if... then). Playfulness asks what if? and imagines how the ordinary becomes extraordinary, fantasy or fiction. Dreaming it is a first step towards doing it.

Free play is how children develop their imagination - the foundation for creativity

Creativity

Creativity is the ability to come up with ideas and things that are new, surprising and valuable. Systematic creativity is a particular form of creativity that combines logic and reasoning with playfulness and imagination.

Fun

Fun is the happiness we experience when we are fully engaged in something that requires mastery (hard fun), when our abilities are in balance with the challenge at hand and we are making progress towards a goal. Fun is both in the process, and in the completion.

Learning

Learning is about opportunities to experiment, improvise and discover - expanding our thinking and doing (hands-on, minds-on), helping us see and appreciate multiple perspectives.

aboutus.lego.com/en-gb/lego-group/the_lego_brand

In this, LEGO is the late twentieth century descendant of a longer genealogy of seriously playful objects for children – including the wooden block ‘gifts’ of the early nineteenth century educational pioneer Friedrich Froebel (Henning 2006) and the psychologist Margaret Lowenfeld’s therapeutic / diagnostic ‘world technique’ of play with sand and water (1991 [1935]) to the more symbolic architectural toy sets, modular toy towns and engineering construction sets such as Meccano and its own ancestors. The architect turned toy collector Norman Brosterman wrote of an exhibition of his architectural toys from the late nineteenth and early twentieth centuries that they were ‘boxes of possibilities,’ ‘potential architecture.’ Their relationship to the actual worlds of building and engineering is a material-conceptual one, more abstract or processual than any straightforward process of educating children in adult world architecture or engineering. If these toys are similar to other in that they are ‘abstractions of reality in a more comprehensible, miniature form,’ then building blocks are different, they are ‘another level removed. In their unbuilt form they are ideas for ideas of things’ (Brosterman 1991). He notes that the word ‘building’ is a verb as well as a noun.

This emphasis on the abstract and open-ended was not always present in the marketing of construction toys. Gary Cross notes that the Tyor wooden construction blocks at the start of the twentieth century were advertised as “constructive, scientific, amusing.” The Structo set was

clearly directed toward the boy’s ambition: “you don’t have to wait until you grow up to get training in mechanical building.” Structo bragged that “Fathers can’t resist the fascination of Structo, because it does the real things that big men do in real life. It is not a toy. It is a miniature of the mechanical world for boys” (Cross 1997: 61).

Unlike its early competitors in the construction toy market, there was a tension within the marketing of LEGO's openness. Though primarily understood as architectural, the bricks were from the start seen as having the potential for 'free play'. Thus, though imagination and creativity were at least in part at the service of learning and educational, an interplay between realist engineering and free imagination runs through subsequent and contemporary accounts of Lego play. The values ascribed to LEGO play and the assumptions about how LEGO is actually played with in everyday life in academic and popular literature are almost universally predicated on any particular take on this tension. The implication of some criticism of the theming and franchising strategies seem to be that the imaginative and creative potential of LEGO play is then only realised in its address to actual adult world industry and activity, not direct training as such but developing the child's cognitive and embodied understanding of design and construction. For others, the possible trajectories of construction play veer off from the pursuit of engineering and architecture into more fantastical and less instrumental modes of play. For Gilles Brougère for instance it is important that LEGO play precisely

should not be confused with learning the processes of construction used in the outside world [...] Construction toys give children opportunities for constructing their own instruments of play, realizing their own fantasies, symbolizing the real world according to their needs at any given moment. They are not really a means of accessing the building process of the adult world (Brougère 2006, 17).

Whereas toys shaped like people, animals, weapons, vehicles, real world environments etc. have all been subject to analysis and critique for their mediation of the world into children's play (Cross 1997, Fleming 1996, Machin and van Leeuwen 2009), LEGO has tended to be studied for its educational applications, and – as we'll see – cultural analysis has tended towards anxious accounts of LEGO's openness and 'free play' being closed down through the incremental introduction of themed and franchised sets.

Instructions and sets

Anxieties about the historical and cultural changes in LEGO accrete around changes to the toy's design and in particular the production of distinct LEGO sets from the 1960s to the present day. The first boxes of LEGO did not feature any specialised bricks nor even instructions for any particular model. Sets with instructions were not introduced until 1966. For Stephen Kline this was primarily a commercial decision that undermined LEGO's original ideals:

These predesigned models seemed to extend the time children were willing to spend at play and they added the element of learning to follow plans. The introduction of thematic sets no longer accorded with Christiansen's original philosophy of using bricks to build anything at all, but it helped reposition Lego in the market, and even though it was less open to children's innovation, it ensured their enjoyment and loyalty to the product line (Kline 1993, 159).

There are three points here. The first is the widely held but ultimately unhelpful assumption that any instructions, theme, box illustrations, and their 'pre-designed' models necessarily and inevitably restrict children's imaginative and poetic play with LEGO (I will return to this). The second is the importance or value ascribed to the process of learning to read and implement plans or instructions – again the value of this varies according to the critic's position on the true essence of LEGO play. Thirdly, and most interestingly, the introduction of instructions – Kline assumes - affects play in temporal terms, increasing the amount of time children were devoting to their LEGO. All of these points however are predicated on the 'reading off' of future play practices from the presentation of the sets and the components they include. Attention to *actual* not assumed play demonstrates a much richer and varied interaction between the material affordances of LEGO pieces, packaging, instructions, and the individual player's or groups of players' preferences, experiences and domestic environments:

When I got a new set I always followed the instructions first. If I liked it I kept it as it is for a while. If not so much I added its pieces to the general collection and used them to build [my own creations] or modify the sets I liked. Modifications varied. Some were very simple. For example I remember turning 6685 Fire Copter into a military copter by adding a gun to the bottom and rocket pods to the sides. Others could be bigger and much more complicated. I remember very cheerfully when I turned 6085 Black Monarch's Castle (my only big castle set) into Jabba's Palace by enlarging the back side, adding rooms to the sides, and covering up the ceiling. (L)

This broad pattern is not universal, but it is common, with many respondents recalling that they would usually make the pre-designed model, and then after a period of time - generally in direct proportion to the size or complexity of the completed model - break it down and make other constructions undirected by instructions.

The usual flow was: follow instructions, play with the set for a while, then slowly 'corrupt' it with other pieces and finally making it part of the collection of pieces of Legos that was re-assembled during play in different forms. The pieces were used to create things, mostly little cars, spaceships and houses (G).

I was given a LEGO helicopter and a LEGO fire-fighter ship, complete with keels to make it float, with very little customised pieces so I could build a variety of other stuff. It came with instructions, but I only used them for the first two or three times. Otherwise I would remember what they were or make up my own. I would mix all the stuff up and not keep them separate (D).

My play with legos followed a predictable pattern from what I recall. My parents would give me a new set. I would build whatever was intended by following the instructions. Then I would break it down and add the pieces to

"THE BOX" (C).

Like (C), more often than not the pieces would be before too long dumped into a large box containing all previous LEGO sets. However not all respondents followed this pattern, (J) for instance skipped the first step:

As a child I was obsessed with Legos and hated instructions. Where my younger (male) cousins always wanted me to build the exact models on the boxes, I immediately dumped all my legos into a bucket and built whatever I wanted with them, ignoring and throwing out the directions immediately (J).

This respondent seems to fit the LEGO critics' ideal player as she works only with her imagination:

I didn't have any lego people, although I did have sets with wheels, and used those to make cars, trucks, trains, open things that resembled dune buggies, and so on. Most of my creations were based on my imagination, not on anything "real" that I could see out the window [...] generally building complete three-dimensional buildings (houses, skyscrapers, bunkers) out of them with windows, solid walls, and doors. I think I made a space ship once or twice, as well (J).

These categories of player and play are not easily or clearly distinguished in observations and memories of everyday play however. As noted above, setting to work with the instructions might precede imaginative play, or the two may overlap and interweave – with variable levels of enthusiasm:

I have a 5 year-old boy and 9 year-old girl - we buy the 'model' boxes (e.g. cars, or Ninjago), but also have the Lego Creationary just with loads of pieces / bricks. My kids like to do both the models and the 'free building' (although my little boy's attention range with the models is shorter than with free building - it's taking us about 5 days to finish a 'simple' Ninjago snake-bike, because he gets tired of following instructions after 10-15m. He enjoys the building up as per instructions, and realising he is able to 'achieve' the intended results, but spends by far a lot longer just picking bricks and building his own stuff (easily 30m to 1h non-stop, sometimes more). (F)

For this child 'free building' proves more satisfying and absorbing than following instructions, whereas for (M) LEGO construction pleasures are varied, but even 'following the instructions' led to the creation of models that were then the basis for other imaginative play:

Alone time was mostly deconstructing & reconstructing my favorite sets and staging elaborate battles between various factions, more than free building. While I enjoyed free building, I loved and probably fetishized the intricacy, cohesiveness and narrative completeness of the sets. That said, I had a few long-running projects that I returned to over the course of my childhood Lego

'career': building working Transformers with Lego, using all my castle pieces on one massive fortress, and later, devising a kind of proto-battle/trading-card game with my favourite minifigures. (M)

There is a significant historical dimension to all these play modes, both those patterns assumed by critics and those observed or recalled by parents and players. As noted, instructions were introduced in the mid 1960s, and there has been an incremental refinement and specialisation of LEGO sets ever since. From substantial sets of mixed bricks with instructions for making a range of models to sets that were designed for the construction (initially at least) of one model – a fire engine or hospital for example, to the introduction and proliferation of specialised, model- or theme-specific bricks, to systems of related themed sets (notably LEGO Space in the late 1970s), to the current narrative and transmedia themes of Ninjago, Atlantis, and Friendsⁱⁱ, or the media franchises of *Harry Potter*, *Star Wars* and *Indiana Jones*. Some of my respondents remember the introduction of themed sets, and most of the popular and academic criticism of the changing nature of LEGO is based on this apparent trajectory of the closing off of open-ended possibilities through specialisation, direction and 'narrativisation.'

I was a free form girl! Much of the Lego I played with was before sets or instructions and I found these things to be quite limiting when they did emerge onto the market. I'm quite orderly though, so would enjoy building houses etc.(B).

Others however have found following instructions compelling and creative in its own way, the ostensible constraints on imagination affording instead an intellectual pleasure in the process of construction, inseparable from other playful, poetic, and imaginative activities:

My love for model building started when I was about five years old [...] and what excited me most was following the instructions. I loved watching how many small and simple steps resulted in a single beautiful and complicated piece. I found it thrilling that I could take the instructions—simple pieces of paper—and figure out what they were telling me to do. This feeling was similar to the one I got when my sister and I created treasure hunts for each other. We made clues that led around the house but always ended up with a treasure map. Following the map was my favorite part (Brave 1996, 159).

LEGO models – again particularly the more complex ones – might be seen as more closely connected for some players with the alternative construction toys such as Airfix kits. These require close attention to the rules and their creators generally display the completed model rather than playing with it.

My eldest son, 14, has put together many sets and has kept them displayed on his bookshelf; in contrast to my approach of building and then dismantling after a few days/weeks, he has kept some of these completed sets for 6+ years on display. (R)

Construction to narrative

Critical claims that the originary purity of LEGO has been lost vary in their identification of the precise historical moment and distinct design / marketing change that marks this fall from grace. For some it was not the 1960s instructions but rather the themed sets of the late 1970s to mid-1980s. Gary Cross for example regards this development as a 'compromise' with the broader children's commercial culture of the 'American fantasy industry':

The claim that Legos offered unbounded creativity was increasingly hard to square with a sales program based on kits or "systems" designed to construct a single model. And the "timelessness" of Legos jarred against the sale of Lego Space Systems in 1984 [1979 in Europe]. [...] In the face of competition Lego had adapted to the all-pervasive marketing techniques of the noveltymakers, sacrificing its initial educational value' (Cross: 220).

Whereas Maaike Lauwaert situates the watershed moment in the mid 1990s with a shift in LEGO's industrial strategy from prescribing *construction* as the preferred or encouraged mode of play to *story-based* action and *role-play*.

These narrative toys allowed for both the development of more diverse products that did not necessarily have the brick and construction play at its core, and for the integration of these products with other media and other areas of the child's world. [...] The LEGO toys introduced between the late 1990s and the early 21st century on the other hand focused heavily on the playing with the construction once it was finished (Lauwaert 60).

This brand expansion was a strategic repositioning of LEGO within a newly dominant children's transmedia culture (Ito 2011, Giddings 2014a), what Hjarvard calls the 'mediatisation' of LEGO. If the original LEGO player was a proto-engineer, then

As mediatization progressed, heroes and values stemming from the media industry's repertoire of adventurous heroes gradually replaced the engineer. LEGO's new heroes are seldom occupied with the slow, laborious work of construction, but are much more devoted to fast action in exotic places far from civilization and increasingly engaged in different kinds of violent - yet morally legitimate! - destruction (Hjarvard 2004, 60).

As we've seen the perceived transformation of LEGO from educational or 'free' to narrative or prescribed is placed at different historical moments according to the specific concerns and values of the criticⁱⁱⁱ, however everyday play is not so easily periodised. Memories and observations of play rarely resonate fully with analyses that project imagined players and play from the toy design and marketing. The following account not only captures one aspect of change in a single family, it also highlights a key element in the analysis of LEGO play: the distinction between construction itself as play and play with the (more or less) finished model. Here the writer's parents bought her preferred 'traditional' sets, and her younger sister Space

LEGO:

I didn't understand their appeal because you could make only one object with each kit, with only minor possible variations. My box of all-purpose LEGOs had pieces of many colors; the space LEGO pieces were all gray and blue and made for specific purposes. My sister happily made her spaceships and moon vehicles and then would play for hours, driving her men around and completing different missions. I would help her build, and I enjoyed the challenge of seeing who could find the pieces first. But I did not enjoy playing with the finished product.

Our sets were even packaged differently. My traditional LEGO boxes had pretty pictures of simple structures. Space LEGOs came in boxes with pictures of the completed model in front of a lunar background. And Space LEGO models had decals, which imply permanence. Once they are applied, the piece they cover can be used in only one position. My sister's boxes included step-by-step instructions for completing a model. Even then, I thought that this defeated the purpose of a toy. As I saw it, space LEGOs didn't enable my sister to put anything of herself into her creations. (Eltringham 1990, 150).

In memories of actual play then we see a mixing up of types of LEGO, attitudes to play, preferences, and relationships. For instance, (P)'s recollections are an eloquent validation of LEGO as compelling engineering – the technics and mathematics of the bricks inseparable from their affects:

By the time I played with the set we had no instructions. I made my own inventions. I mostly remember building houses, cars, trains and geometric shapes [...] I remember the sound fondly! I used to spend a lot of time moving the pieces around to find the ones I needed. I mostly had the simple bricks and bases to build.

I had 1x1s, 1x10s, 1x2s, 1x3s, 1x4s, 1x6s, 1x8s, 2x2s, 2x3s, 2x4s (lots of them), 2x6s, 2x8s, corners 1x1x2s.

Also the parts used for roofs: 2x2x45deg, 1x2x45deg, 2x2x45deg inside, maybe the 2x4x45deg but I don't remember exactly.

[...]

A few wheels, but the ones they have on the LEGO parts site looks different from the ones I remember having. Ah, I found them. It was this

one: <http://www.bricklink.com/catalogItem.asp?P=4180c02>

And I had several of the train track pieces (P).

Interestingly, she was the only respondent to say that she matched colours:

Yes, definitely matched colors. Most of the objects I created were realistic. To this day I am not much of a fantasy person (P)^{iv}.

In other responses to my questions the mode of play cannot be so easily distinguished as 'engineering' or 'fantasy.' (O) for example reflected on the educational and creative benefits of following instructions versus more exploratory

engineering. On the one hand LEGO engineering for him is a fundamentally creative activity that ‘forces children to think about what they want to build and problem solve their way to creating that vision’ (O). On the other his own engineering, in collusion with his brother, resulted in ‘fantastical kinds of vehicles and submarines for the swimming pool in the summer.’ They also produced cars for demolition derbies, designed for destruction:

We eventually got good enough at building these cars that we started breaking pieces before the cars would give and the pips would fly apart. That was some real purpose-driven "engineering" (O).

Or more simply, the interplay of symbolic imagination and the demands of construction may just flow through the phases of making and playing. (A)’s 5 year old brother for instance

approaches it in a very matter-of-factly way most of the time, doesn’t refer to pieces as “Oh I need more scales to complete this dragon!” but rather just “I need a green, 4x4 one” or whatever, and he likes to build as fast as possible. Of course, he likes playing around with the pieces once they are completed (A).

These rich accounts highlight a dichotomy in critical assumptions about LEGO as a product for the fostering of imagination. Though both the austere simplicity of the early architectonic system and the semiotic frenzy of contemporary mediated sets necessitate imagination, the champions of each of these play patterns base their arguments on different understandings of the nature of imagination. For the former, imagination in LEGO play is most effectively extended through engineering and design: setting a material challenge (building a bridge perhaps) and imagining how the bricks can be connected to solve it. For the latter it is LEGO’s potential for the exercise of symbolic or performative imagination that is key. Children building towns or worlds through which to tell their own stories and invent their own characters would epitomise this preferred style of play. As a shorthand I will call these ‘engineering-imagination’ and ‘symbolic-imagination’ respectively. These rhetorics of LEGO play (pace Sutton-Smith 1997) share misgivings about themed and franchised sets and assumptions that they constrain each of their models of imaginative play.

Thus, despite the superficial similarity in their periodising or mythologising of transformational moments in LEGO history, there are contradictory values ascribed to the modes of play undergoing these changes. I will now address how imagination is mobilised in my respondents’ descriptions of play in the more recent themed and transmedia LEGO universe.

Stories, games, media and worlds

At first I mostly built Spaceships, as big as possible, then went on to pirate ships, sometimes buildings (castles, pyramids and such) and vehicles. What I

can clearly remember is that I always told myself the stories I was building while I was building – of exploration missions deep in space, of hidden treasures on secret islands and so on (T).

Stig Hjarvard calls LEGO's strategy of emphasising its narrative, media possibilities 'imaginarisation'. Placing this shift in the late 1990s and early 2000s he is concerned with the organisation and design of LEGO around specific media themes, genres, and specific 'imaginary universes'. These sets 'increasingly invite play in which storytelling is the crucial activity' and which – through the recent transmedia ambitions of LEGO – promote play across 'a whole range of media platforms' (Hjarvard 2004, 55). (R)'s 8 year old son, recovering from surgery, has been immersed in LEGO and the recent transmedia collections and connections have proved compelling:

He became acutely fascinated with the Hobbit/LotR [Lord of the Rings] sets and has put together most (if not all) of these Lego sets. For the most part, he keeps them whole after completing them, but he does modify them somewhat. He's progressed from struggling to follow the directions to truly mastering complex sets and doing them above his age level quite quickly. Additionally, playing with these sets has inspired him to begin reading *The Hobbit* (just began today, actually), and he wants to read it and the LotR books. I'd say his experience with Lego might be typical of many young kids who discover the beauty of creativity and are then inspired to take up a new hobby/reading based upon the themes of the sets (R).

This account demonstrates that these sets certainly anticipate and facilitate symbolic-imaginative play and story-telling, and – interestingly – have the potential to bolster reading amongst the transmedia mix. However as we will see, other accounts suggest that symbolic-imaginative play with media-themed pieces does not necessarily adopt the transmedia universe as its frame of reference. And it is certainly clear that all kinds of imaginative worlds have been clicked into being with pre-franchised LEGO or in mixes of non-themed and themed pieces:

Now, my eldest was introduced to lego with Mega Bloks [a competitor to the LEGO and Duplo Systems but designed to be compatible with them] and then proper Duplo. Initially she just build towers, then as she got older we would sit and build the Duplo sets into more complex objects. She had a *Toy Story* themed set, so we made trains and recreated the train scene from *Toy Story 3* a lot. Funnily enough, the youngest has followed a similar path - towers and trains! She just likes to stack them and call them trains or robots (Q).

That action, objects and characters from popular media emerge in all kinds of play is inevitable in a post-War media-saturated children's culture, whether licensed toys are involved or not:

I would often do this with my friend and I recall we were influenced by the film *Mad Max Beyond the Thunderdome* (C).

To reiterate the key methodological argument of this chapter: without direct observation or memories it cannot be known how these toys are played with, and what worlds they may generate. Moreover, as has already been indicated, once the pieces of any particular themed set are mixed up with the existing collection all kinds of worlds can be constructed, and different kinds of knowledge, from popular media to science, are brought to bear, explored, and mixed up:

I was heavily into space, I used to spend hours looking at a Moon atlas, and I liked things like Battle of the Planets and Star Wars, so I built rockets and spaceships (not just those in the Lego Space instructions). I also seem to remember trying to build some Transformers (although I'd have been older by then, this would have been 1984/5) (E).

The notion of narrative and story-telling does not exhaust the processes of symbolic-imagination in LEGO design, construction, and post-construction play. 'Imaginarised' play can flow along game/rule channels, or – very often – into the creation of worlds. It can also at times be thoroughly bound up in drawing as imaginative play^v:

Me and a group of 5 – 6 friends (all boys) in primary school (7 – 8 years old I think) would draw spaceships on pieces of paper every evening and effectively try to act out some sort of war between our drawn spaceships everyday in school. We would come into school each day with several pieces of paper, each with elaborately drawn ships and then try and determine who would win in a battle. The rules were essentially made up as we went along but it usually resulted in everyone thinking they had won because nobody would concede that their ship was the worst. One way this manifested though was every lunch time through Lego where we were lucky enough to have lots of it on hand at our school. We would attempt to build our ships and try and do battle in a more concrete form.

[...] If time permitted during the lunch hour (which is when this all took place) we would also battle the ships which usually involved smashing them together in the final moments of lunch time. In retrospect the Lego was probably a way to materialise our imaginative drawn ships in a way beyond paper and pencil. More than that though, I think the chance to battle our creations as we might play with traditional toys that you can hold in your hand was exciting in a way that our pen and paper ships, however elaborate, could never be (N).

Media stories (here generic SF) are inseparable from engineering and the affordances of LEGO for construction and destruction. This account returns us to the materiality of LEGO as a toy and a system. Both the drawings and the construction fabricate imaginative worlds and action, but clearly in different ways and with different pleasures and outcomes. Even in a transmedia landscape with images and stories flowing across books, films, TV and videogames, 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.

The box, and other Proustian moments

I find it heartbreaking to comb through the bricks of my childhood [...] the click of stud into hole promises a Proustian retrieval of lost bliss... (Lane 2002).

I played with first set of LEGOs on the shag carpet of my playroom with sunshine streaming through the high windows. [...] (Eltringham 1990, 151).

I remember hurting my fingers on the little spiky cogs you got in the technical kits (E).

My question about the sound of LEGO rummaging met an enthusiastic response, and was matched by the serendipitous appearance of the rattle of bricks on different BBC Radio 4 programmes whilst I was researching this essay. One appeared as a few seconds of a 'favourite' sound recorded by a listener to a news magazine programme. It was the 'sound of his childhood in the 1970s and 80s' familiar again now with his own children. The other featured in a Reith Lecture by the artist Grayson Perry. He brought a box of LEGO and shook it for the audience:

And I brought this along because I want to rustle this Lego here - this incredibly evocative sound. This is the noise of a child's mind working, looking for the right piece. I think it's almost creativity in aural form. I wanted to bring that along. I love that noise (Perry 2013).

It is funny you mention the sound, to this day I love that noise as you desperately search for that last flat single you need! (Q)

The sound is not universally loved however:

My parents became annoyed of the sound of me rummaging through LEGOs especially at night so they bought sorting boxes, which ended up being very practical and quiet (L).

Like Proust's cake and tea, the memory of the sound can unlock a wealth of related sensory and affective material:

the sound and incredible feeling on fingers & palms from raking through a full drawer of pieces; doing so when someone else (friend or parent) was doing the same thing, in the same pile, and getting into occasional 'turf wars' ("you look on that side, I'll look on this side", as if pieces obey those demarcations);

using my teeth to pull pieces apart (I preferred the occasional bloody gum to chipped & hang nails); dumping all the pieces of a new set on the ground; stepping on pieces; other people stepping on pieces; building on a hard table and having pieces drop off to skitter along the floor; the anxiety & relief of anticipating a missing piece in a new set, and then finding out that they're all there (M).

The sound and the 'box' of LEGO are bound up together, and the box itself featured in many recollections:

When I was a kid, the Lego was kept in a plastic box, I think something left over from when I was a baby which had been used to store 'baby stuff' – it might even have been some kind of Johnson & Johnson thing. It was grey and white, anyway, with a lid that opened and had a suspended tray with little compartments, above the body of the box. This was great for Lego – you could find the little bits you were after and put them in the tray, so you could find them easily. The box lid got broken when I was around 7 or 8 by a friend of mine, who stood on it to look out of the window. We kept the box, though. (E)

The ubiquitous box then is by no means merely storage – as well as an evocative object in its own right it was, and is, integral to modes of construction and play - a technology in itself, holding all the pieces but also randomly generating suggestions for unexpected juxtapositions and new lines of flight for the imagination:

It was an early 80's or late 70's Lego City - the whole town, with all buildings, cars and everything. But it all went in pieces into a big drawer under my bed, 4 x 3 feet long and wide and about a foot high, and there it remained for the next years. I remember very well rummaging through that treasure chest that seemed gigantic to me then, searching for the right bricks for my creations, sometimes for hours (at least so it seemed to me) (T).

I would occasionally think about sorting the pieces and storing them in different containers but never did it. I recall much pleasure was looking for pieces in the box and finding the target piece or finding a completely different piece which took me in a different building direction. I never put too much consideration into color -- it was more about structural integrity (C).

'The box' as an evocative focus for a multiplicity of memories, and the wellspring from which many LEGO play events emerge, and its collection or absorption of numerous sets negates critique of themed sets and instructions as constraining. Not only does the box mix up beyond any retrieval initially distinct sets, it often originates in, or has incorporated, LEGO from older siblings, relatives or second hand shops and jumble sales. LEGO, particularly in the amounts needed for fully satisfying play, is not cheap, and old and new pieces and boxes often move through families and communities and down through generations. A couple of respondents had still

raw memories of their rash selling-off or giving-away of large collections (generally as the collector enters adolescence). On the other hand, (I) recalls a wonderful communalism of LEGO:

Lego was a big deal where I grew up - I lived in a tight-knit neighbourhood in part of a bigger city. Lego wasn't just passed down between siblings, but between families and neighbours as one home collectively grew past the toy. When 'the collection' made it to me, there were no fixed sets any longer, just 6 bins that I kept in my closet. I would use Lego (and Construx) to build houses for all of my dolls (I).

My grandfather bought a LEGO set in Germany as a gift for my brother. The set has stayed with the family. Even to this day, my nephews and nieces have access to it (P).

As so often with ritual objects, toys can become imbued with and imbue social and familial relationships and activities:

The history of the Lego is that it was the same Lego that my friend played with as a child in the same living room, and playing with her nephew in the same space felt like passing on the knowledge of creation and sharing similar memories (K).

Social and inter-generational play

In many of the accounts it is impossible to separate out individual preferences for play as the context is the social world of siblings and sometimes parent and child (as in a number of examples above). Compromise, dominance, all the social dynamics of sharing, as salient constraints and affordances as the technicalities of the bricks or the attraction of imaginary and media scenes.

My first memory of lego was a space lego set I was given when I was around 6 or 7. My dad and I built it together [...] When Technic Lego came out, my dad and I would spend hours building clever machines and vehicles that had geared moving parts. I fondly remember waking up one morning to find he had made a lego speeder bike (complete with a starwars speederbike pilot from my starwars toy collection! (Q)

As a single child I was mostly alone while building; but I played with my friends and parents when I finished a project. So I used LEGOs like other toys while playing with others but didn't share the building experience with them (L).

Playing can unfold through rivalry or power relations as well as collaboration and cooperation:

When I was a little older, I got a Lego pirate ship for Christmas – this was one of my favourite presents, which is still at my parent’s house, and I quite liked the fact my brother was jealous of it as he had a smaller governor’s ship! I can remember having fun playing with them on the carpet using the cannons to attach the other ship – though captured pirates would end up in the governors’ fortress (H).

I was the younger sibling to an 8-year old sister, and thus was quite dominated in my play. I found her in possession of a LEGO house already, and there was some small form of car but do not remember instructions: so I would either copy her or make up my own constructions. (D)

Other worlds

For all its polymorphous potential, LEGO, and not only in its early incarnations, tends toward a relatively narrow set of construction types: buildings, towns, vehicles, and ‘worlds’. The variety *within* these types is infinite however, as the accounts documented throughout this chapter testify. The ‘world’ type of construction is particularly interesting. Though LEGO has produced sets for the production of expansive and topographical models, from the early Town and City sets to contemporary models that simulate scenes from films (e.g. Harry Potter example), these are necessarily large, expensive, and therefore rare. However many respondents remembered or described the creation of extensive cities or open worlds from the jumble of their LEGO box. Often these worlds are ‘sketched’ or mapped out in LEGO across a table or floor rather than built up from the careful construction of realistic buildings. For instance, Q’s daughter plays with the recently released *Friends* LEGO aimed at girls:

She loves the sets. We build them and about an hour later she destroys them to build little worlds and buildings that she actually wanted. She enjoys building them with me, but loves to freestyle! She builds little scenarios [and] her buildings are abstract, mostly just representational of what she wants. So a café is normally just a couple of doors, a few chairs and flowers and then the people. She does not worry about things like walls and roofs, they get in the way of actually playing! (Q).

Significantly she includes other toys to populate her worlds alongside the *Friends* figures:

Moshi Monsters, Barbies and more all become part of the story she is playing through (Q).

This is a widespread aspect of LEGO worlds that cannot be depicted in LEGO marketing and packaging: they are bricolaged from LEGO, other toys, and household objects, anything to hand that can build up a compelling gameworld. My own younger son and his friend would incorporate all sorts of other objects into dynamic microcosms that would spread across the bedroom or lounge floor, up and over

furniture. Wooden blocks were an economical way to quickly build architectonic and geographic features, as were sections of early LEGO constructions not completely broken up from an earlier game. LEGO was often secondary to the main game – an environment for Playmobil figures for instance, or for an elaborate re-imagining of the computer game *Age of Mythology* with toy soldiers.

There would be cities, forests, lakes and mountains built out of LEGOs, play dough, wooden and plastic cubes. Toy soldiers and plastic animals were also great to mix up with minifigures. I also used LEGOs to expand my play experience with other toys; I built buildings or vehicles for action figures for example (L).

I would use Lego (and Construx) to build houses for all of my dolls. The houses turned into sprawling communities that would ring my bedroom. I would bring up big bowls from the kitchen and fill them with water to make lakes and pools, and would lay out colourful clothes (much to my mum's chagrin) to signify grass, pavement, sand, and more. I would spend the better part of a day building my mini metropolis, and then it was allowed to remain erect for at least a few days more for me to play in it before the bowls were recalled to the kitchen and laundry needed doing (I).

LEGO phantasmagoria

Finally, most of the worlds and other creations discussed in detail in the recollections and observations gathered here are characterised by a profoundly unrealistic aesthetic and performative sensibility. From a distance they are familiar and mundane - buildings, cities, vehicles - but close up, and in the flow of play, they reveal a fantastical and nonsensical dynamism. Already we have encountered cities of roofless buildings, a mathematical dinosaur, stacks that are at once trains and robots, and the transformation of a medieval castle into an SF palace, as well as syncretic worlds of LEGO, Playmobil and domestic objects. The anthropologist of play Brian Sutton-Smith has called for a greater acknowledgement of the role of *phantasmagoria* - nonsense, obscenity and figurative violence - in children's imaginative play, noting that children's own stories 'portray a world of great flux, anarchy and disaster often without resolution and with 'a preference for rhyme and alliteration', and characterized by nonsense, obscenity, and 'crazy titles, morals, and characters' (Sutton-Smith 1997, 161). The following two accounts perfectly capture different registers of a phantasmagorical interweaving of everyday reality with imaginative fabulation, the mixing of pleasurable nonsense with the child's reaching out to, and pulling back from, the outside and adult world that characterises so much of children's play. As such they are worth quoting at length. The first is a seriously surreal world shaped by familial relationships and collusion as well as plastic bricks, the second is characterised by a 'warlike theme' but one that is played 'harmoniously and dynamically' (Wegener-Spöhring 1994: 86).

We spent the afternoon constructing different buildings and vehicles with the

boys, mainly the 4 year old but the 2 year old would play with the constructed vehicles now and then. The first vehicles built were mainly trucks, and then my friend (the boy's aunt) started building on other parts and the stories in the world changed. The vehicles were seen by the 4 year old as response vehicles (Australian specific ones), and the strange contraption my friend made became part of a more complicated water hydrant system. Various buildings were constructed including a hospital, a shop and a house. The hospital because the bricks were white and red, a shop as there were some lego drawers and shelving units. The four year old ended up calling the town 'Crazy Bamboo Town', which shocked everyone as no one realised he knew what bamboo was, but on further discussion it turned out he had read about pandas and bamboo recently so it seemed to be a way for him to try out new words. This was true of other words he would use in the game's narrative that were related to Australian slang culture and he had started to pick up in other conversations. It was also a chance for him to explain Australian specific animals and emergency services to me as a non-Australian visiting the country.

Much of the story was driven by the four year olds imagination and involved running people overhand taking them to hospital or taking them places in the trucks, or putting out fires... (K).

Three children [5 years of ages, in a kindergarten in Germany] are in the process of building spaceships and rockets, they say, out of Lego blocks. Martin flies his rocket against his head and simultaneously makes flying sounds: "Ui, ui; oo-pf, oo-pf"; he then makes sounds like a German ambulance siren: "Tatoo-tata, tatoo-tata."

Martin: "I have an extinguisher rocket" and makes motor sounds, "Humm, humm, neeh."

Anja: "The rockets can only fly this way." She demonstrates this with her hand and simultaneously makes loud noises, "Teeha eeha, teeha eeha. My rocket can turn."

Bernd: "I have a spaceship. Fire!! Crack, boing, boing" (loud sounds, with a great deal of playful emphasis).

Martin: (Flies his rocket in Anja's direction) "You'd better watch out that it doesn't smash your rocket."

Anja: "I have a crocodile."

Martin: "I'm going to hit you one on your head. I'm taking my axe with me."

Bernd: "I'm taking my metal saw and: rickeracke, rickeracke."

Anja: "Yesterday there was the show with the mouse" (a television program).

Bernd: (Sings) "Spaceship, spaceship, once upon a time Lila, lula, once upon a time."

(Wegener-Spöhring 1994: 85-86).

Violence and destruction are key elements in Sutton-Smith's phantasmagoria, and appear deeply embedded in brick play: a common early game for toddlers (and by which a certain stage of child development is professionally measured) is the repeated building – and subsequent demolition - of block towers. Often too in the play of older children, particularly that of boys, LEGO pleasures lie as much in destruction as construction:

When I had friends over we free built, often creating dioramas using a specific theme, and then enacting narratives using our favorite minifigures. Most narratives resulted in the catastrophic destruction of the diorama. Favorites were castle and car racing themes. (M)

I began my building houses, castles, and helicopters, pretty standard stuff, and then, with one of my schoolmates, I developed a favorite LEGO game: we each built structures and then smashed them against each other to see which one would break up first. Usually we played to what we referred to as "total disintegration" (Chu 1992, 156).

There is always something phantasmagorical or surreal about children's play. The animation of dead matter by hands and minds, the translation of real world phenomena and events into a playful microcosm (whether engineering- or symbolic-imagination), and young children's interpretation of the phenomenal, adult, or media worlds around them all yield marvellous results. Play serves its own pleasurable and logical-illogical purposes – as Crazy Bamboo Town proves. Even in the play of older children, the realistic and the fantastical may not be opposites:

The LEGO people I put in my world had distinct personalities, realistic jobs and normal lives. The normal lives of my LEGO people demanded realism and performance from my constructions. I was in total control and I learned the basics of design and construction. With practice, I could achieve realism with increasing complexity. I added doors, hallways, second and third floors, and backyards to my buildings. I added furniture [...] I reveled in increasing detail. If my LEGO world was not realistic it seemed of less value.

When I received a Space Set I built a moon colony with a base, rockets, land rovers. [...] Most satisfying to me was that each member of the space colony had a personal identity. I had men and women who had marriages and children.

The space base was built next to a medieval world, with a king, queen, prince, two guards, horses, swords, [153] and flags. I set up the scene suggested by the manufacturer: the royal family enjoying a joust. But I twisted time and culture: I dismantled the horses and gave the king a car. [...] To achieve other levels of fine detail, I declared war between the medieval and space worlds. (Liu 1990, 153-154).

I would be fascinated to know whether LEGO play was more or less phantasmagorical in its early days, predating the accounts gathered here, with the simpler sets and less pervasive children's media culture of the 1950s to the early 1970s. Did the open-ended nature of the bricks facilitate unfettered fantasies or did their architectural simplicity tend towards the exercise of engineering-imagination? Sutton-Smith's work suggests a long history of nonsense, scatology and semiotic hybridity in children's play that surely even early LEGO could not have escaped entirely. Perhaps play with scientific and construction toys has always been characterised by the realist and the fantastical - and all their combinations?

Conclusion

The memories and observations collected and discussed here demonstrate that it is possible to study everyday LEGO play, but only partially and not without difficulty. The respondents, and the other ad hoc LEGO historians I have drawn on, document attitudes, emotions, relationships, tactile and intellectual affects, environments and technics – demonstrating vividly the rich and complex character of everyday play with and around LEGO. However, key aspects are hinted at within these accounts but not fully brought to light. Imaginative acts and dramas are alluded to, play patterns sketched out, but more often than not the detail and texture of any particular moment of play, any particular world or narrative, are lost, evaporated like a dream on waking. It is striking that memories of respondents' own childhood play are often sharp in the tactile, sensory detail of boxes and bricks but vague on the details of particular symbolic or narrative imaginative content - the stories told or worlds created. This is a significant challenge in the search for the lost times of LEGO and children's culture more generally.

Moreover, I have so far found no accounts from earlier than the late 1970s, around the time that the first dramatically themed sets (LEGO Space) appeared. Though people remembered and played with the simpler, unthemed LEGO as well, or instead of, for these generations the earlier bricks can only be discussed or understood in relation or opposition to the newer, 'imaginarised' sets. What worlds did LEGO facilitate when it was just architectural? Did it then fit the assumptions of critics of more recent LEGO – was it more imaginative, more open-ended? Was this engineering-imagination or symbolic-imagination, or both? Did the phantasmagoria of children's media culture – less pervasive perhaps in the 1950s and 60s, but certainly in existence – impinge and shape the animation of the plastic bricks and the rise and fall of their worlds? Was childhood imagination and its expression significantly different before the round the clock TV channels, videogames, and the ubiquity of transmedia systems?

I would argue that these questions go beyond the immediate challenge of studying one particular, albeit paradigmatic, construction toy. They address something of what it means to be a child, to imagine, learn, share and engage with ideas,

materials and possibilities.

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Notes

ⁱ I have written on LEGO videogames however, see Giddings & Kennedy 2008, Giddings 2007, 2014a, 2014b)

ⁱⁱ the LEGO Friends range is designed and marketed for young girls, and is unrelated to the popular television sitcom.

ⁱⁱⁱ And it might be tentatively suggested, in relation the critic's own age and ludic biography.

^{iv} Most didn't even attempt colour matching:

I remember finding the right piece shape was the main point, colours were all over the place - I never had enough pieces for whatever I wanted to build, I couldn't be too picky with colours (G).

^v See also Giddings 2014a, Giddings & Kennedy 2008