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Brick Journal

Issue 35 • July 2015
people • building • community

History in Bricks!

*Interviews with
Ryan McNaught
Lasse Vestergård
Dan Siskind*

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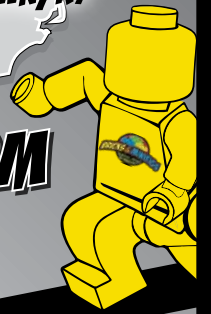
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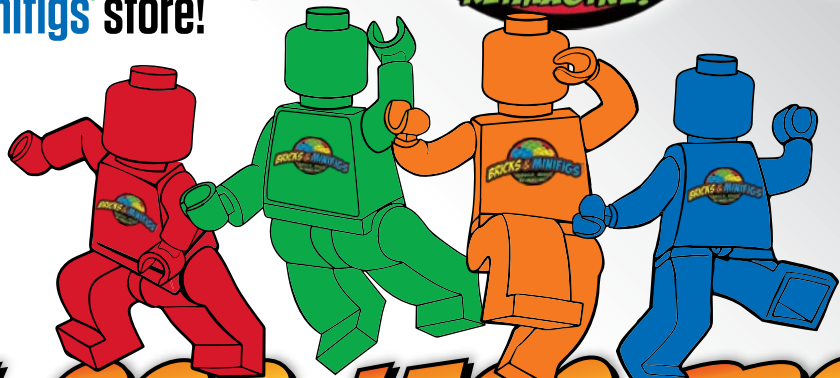
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Contents

From the Editor.....2

People

Ryan McNaught:
Building the Past and Present.....4

Lasse Vestergård:
History Builder.....10

Dan Siskind:
Brickmania!.....15

Building

Dream Garage:
Officina Super Sprint Classic Vespa
Workshop.....22

Model Spotlight:
Cologne Cathedral.....30

BrickNerd's DIY Fan Art:
Liberty Bell.....34

Minifigure Customization 101:
What Can We Learn
from Minifigure Customization?.....38

MINDSTORMS 101: Adding
Personality to Your Robot.....42

The SBrick Controller:
Beyond Power Functions!.....46

You Can Build It:
Saturn V on Launch Crawler.....47

Community

Launching the First International
Robot Mak3r Day!.....50

A Royal Project:
Two Mosaics in Two Weeks!.....56

The Gate of the Present.....62

Bruno Todd:
A Man with a Passion
and a Vision.....68

Students Turn Middlesex University
Crest into a Giant LEGO Structure!.....74

Family Time with LEGO:
Building Contests.....76

Community Ads.....78

Last Word.....79

AFOLs.....80



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Issue 35

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www.LUGNET.com, www.Brickshelf.com, www.peeron.com, www.brickmodder.net, www.rustyclank.com

About the Cover:

A view of Ryan McNaught's LEGO Acropolis built for the Nichol森 Museum in Sydney, Australia.

About the Contents Page:

A close-up of Ryan McNaught's LEGO Acropolis.



From the Editor:

Hi!

It just hit me a while ago how many issues have been released—*BrickJournal* is on issue #35, and before that, there were 9 digital-only issues of the magazine produced. The print issues average 75 pages of articles, and digital was quite a bit higher. Print alone totals 2,625 pages of published articles and photos. Digital-only was around another 900 pages (digital was a lot cheaper), so there's about 3,500 pages of information

about the LEGO community and hobby. That translates to about 175,000 words.

That's a lot.

But it's only scratching the surface. For every story I find or a staffer writes, there are hundreds more out there waiting to be discovered. And many of them will involve you, the reader. Many of you build, and many more want to build.

The act of building is discovering what you can do. Hopefully, this magazine will inspire you to build. And I hope that you'll end up in these pages with your creation, and your story. See you then!

Joe Meno, Editor

P.S. Have ideas or comments? Drop me a line at admin@brickjournal.com. I'm open to suggestions and comments and will do my best to reply.

P.P.S... Yes, *BrickJournal* has a website—www.brickjournal.com! Twitter? Yep, there too—<http://twitter.com/brickjournal>. Facebook? Yup—<http://www.facebook.com/group.php?gid=58728699914&ref=mf>. Or you can scan the bottom codes with a QR reader!

P.P.P.S. If you want info on a subscription, you can go to: http://twomorrrows.com/index.php?main_page=product_info&cPath=78&products_id=616 or scan below!

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Glossary

AFOL (Adult Fan of LEGO)

NLSO (Non-LEGO Significant Other)

MOC (My Own Creation)

TLG (The LEGO Group)

BURP (Big Ugly Rock Piece)

LURP (Little Ugly Rock Piece)

SNOT (Studs Not on Top)

POOP (Pieces—that can be or should be made—Of Other Pieces)

LUG (LEGO Users Group)

LTC (LEGO Train Club)

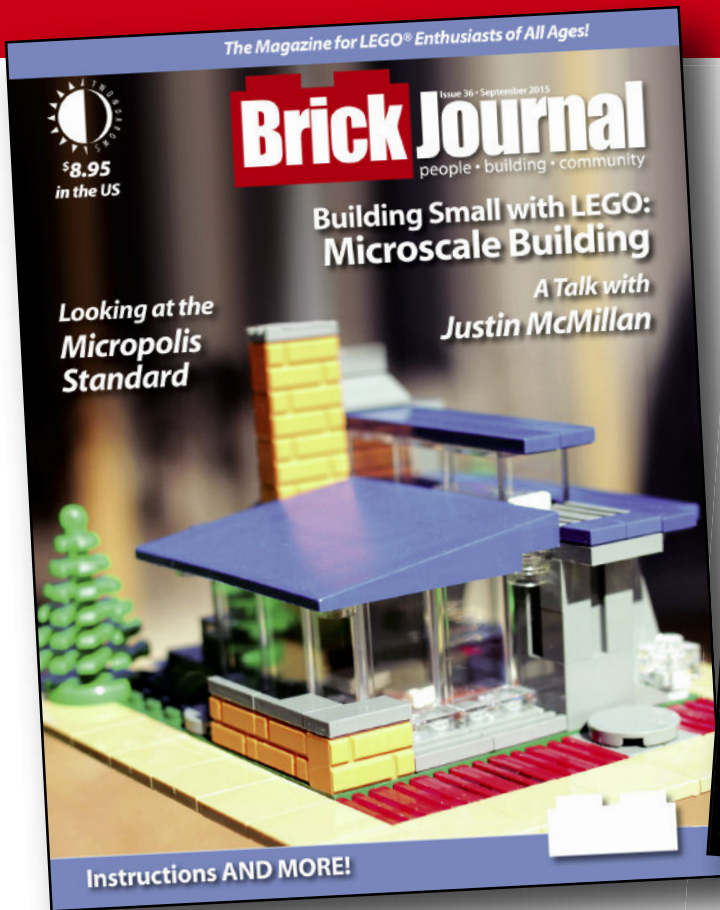
DARK AGES (usually teen years, when you drift away from building)

STUDS OUT (building where the studs on bricks face the viewer)

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Ryan's Pompeii display at the Nicholson Museum.

Ryan McNaught: Building the Past and Present!

Article by Joe Meno

Photography by
Ryan McNaught
and Joe Meno

Ryan McNaught has been in BrickJournal before (issue # 23) as the builder of Elvis, the Skycrane helicopter that was displayed in Australia. Before then, he had built other models that got him selected to be the first LEGO Certified Professional in Australia. BrickJournal caught up with him and talked about some of the models he has built and his displays.

BrickJournal: When did you start building?

Ryan McNaught: Well, way back when I was a youngster, I of course loved LEGO, and my Dark Ages started from when I was about 14 years old until our twin sons came along. Luckily for me, my mum had not thrown out all my old LEGO! So I got back into it in 2007.

What did you focus your building on?

Growing up I was into classic space, LEGO city and a good bit of LEGO trains, although they were always so very expensive, most of the time I'd build a set once, then of course use it for parts.

What's your favorite building style?

I guess back in those days it was all pretty simple; there wasn't much SNOT action or any of the advanced techniques we use today.

When did you start building big models? How did that lead you to building cutaways?

That was 2007, we took a holiday to Florida and of course discovered the LEGO brand retail store there at Downtown Disney. It really inspired me; as a kid growing up I really loved those cutaway books of planes, ships—you name it—so I figured that would really translate well into LEGO.

How did this lead to you becoming a Certified Professional?

It was Brickworld 2010, and I had made my cutaway A380 out of LEGO and filled it with a dozen or so MINDSTORMS-powered functions, and what I did was write some software to allow it to work with a touchscreen (which hadn't been done before) that allowed people to be the pilot and use all the functions. It was here that I met a whole heap of people from LEGO. They were pretty cool cats and when I got back to Australia they hooked up some interviews with the local LEGO team, and it went from there. I'd like to think it was luck, right people, right place, right time!

Ryan built a cutaway of the Pacific Princess (The Love Boat) for Brickworld 2011 that resulted in Gavin MacLeod, the actor who played Captain Stubing in the series visiting and signing the ship!



Ryan's A380 on display.



The interior of the A380.



The interior of the Pacific Princess.



The interior of the A380.



Some views of Pompeii.

Tell us about the Pompeii model—who requested it? How long did it take to build, and how many parts?

LEGO Pompeii is the third model we have done for the Nicholson Museum in Sydney. We did the Colosseum, then the Acropolis, and now the third Pompeii. They are a fantastic museum in Sydney with a whole heap of real artifacts, so it was neat to have the model displayed alongside them. It was a three-week build for three of us, and it's about 150,000 bricks, give or take.

How much research was done before you started building?

A lot; one of the historians, Dr. Craig Barker (who's a LEGO nut too) spent a day with us pointing out interesting features and things we should include in the model. That's one thing we really pride ourselves on: doing the research and adding the details into the model.

What else did you build that was historical?

We have done a few as per above. The Colosseum is one of my favorites; such a difficult thing to build, crazy oval shape, and then to give it the cutaway treatment was pretty insane. I really like



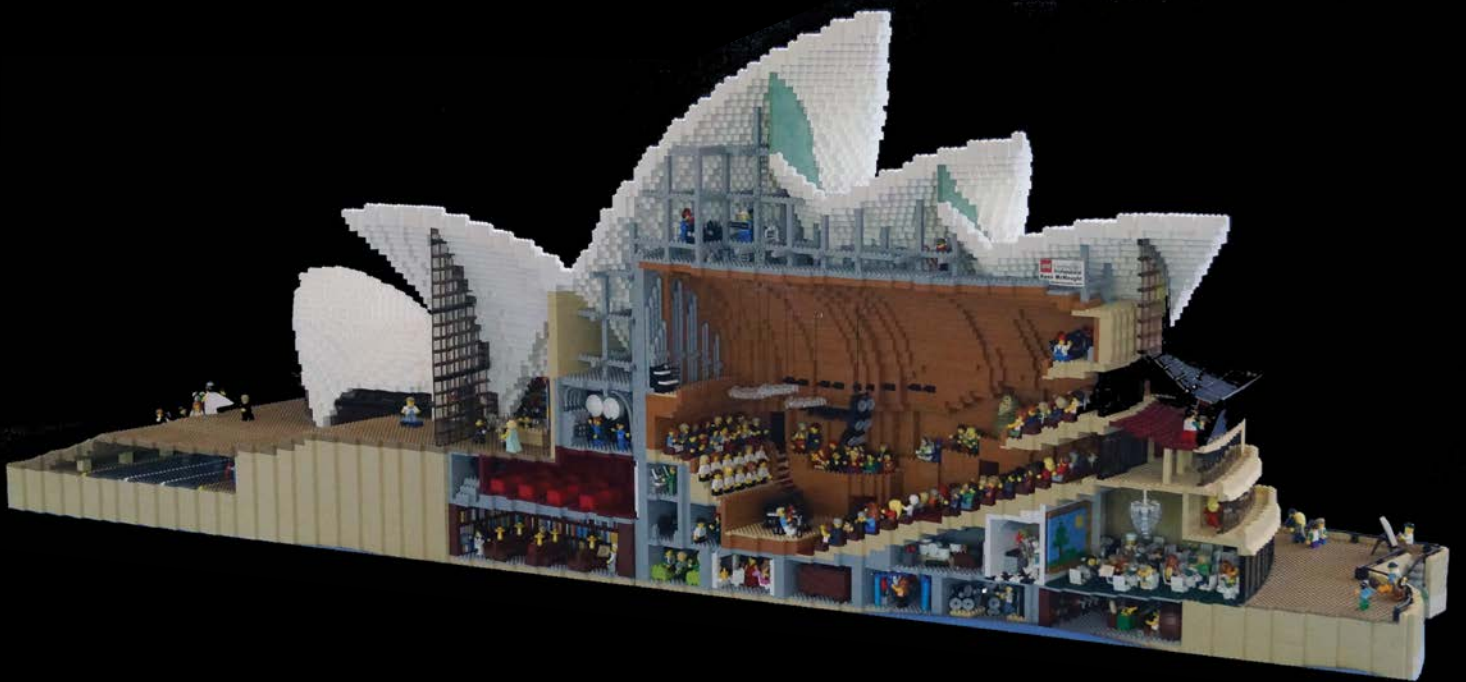


A look under Pompeii, before disaster struck.





Ryan's favorite build, the Sydney Opera House—and the cut-away.





Ryan behind his begonia.

doing these builds because we can add minifigs doing so much, and it also gives us the opportunity to put our sense of humour into the models.


What is the Brickman Experience—what does it have?

Being the first time I've ever managed to get most of my LEGO models back together, I've assembled over 60 large models which I've worked on since 2010 and combined them as a bit of a gallery collection. I've also got a couple of my trademark huge mosaics for the public to build; there are four, each using 170,000 bricks!

How many large-scale builds have you done? Which is your favorite?

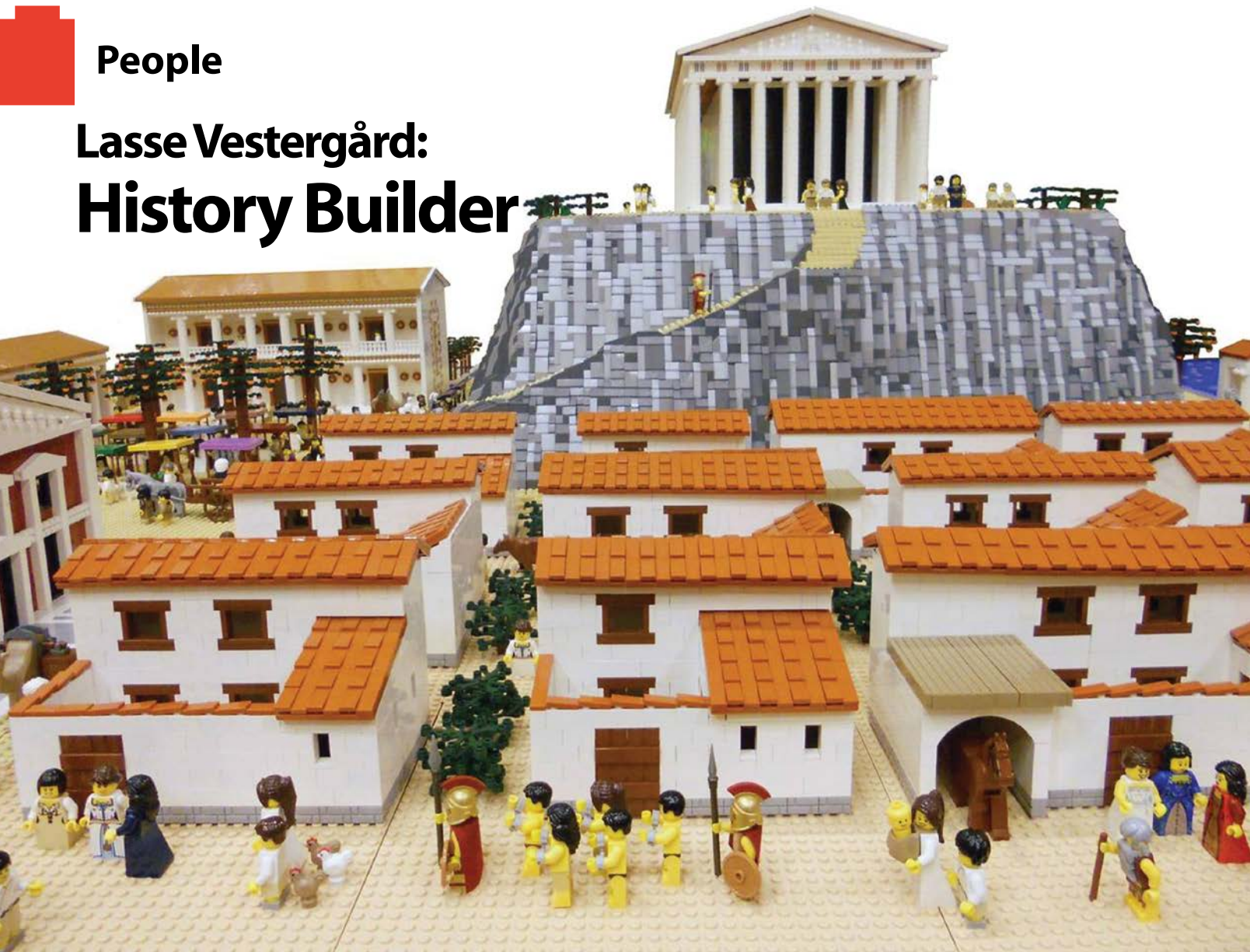
I've done dozens over the years. I've done a lot of LEGO minifigures for store displays. As much as I really didn't get into Chima, I did a huge Laval fig; he had this massive cape thing going on. It was an insane thing to build, but it came out okay. I think my favorite is the big cut-away Sydney Opera House that Erik Varszegi and I built; it's a truly insane thing to make out of LEGO.

What are some of your future plans?

Well, I've always got plans—never a shortage of things to build, that's for sure. At the moment I've been working on some nature-based models; the Giant Begonia we made is a good example of this. 

People

Lasse Vestergård: History Builder



Ancient Greek houses.

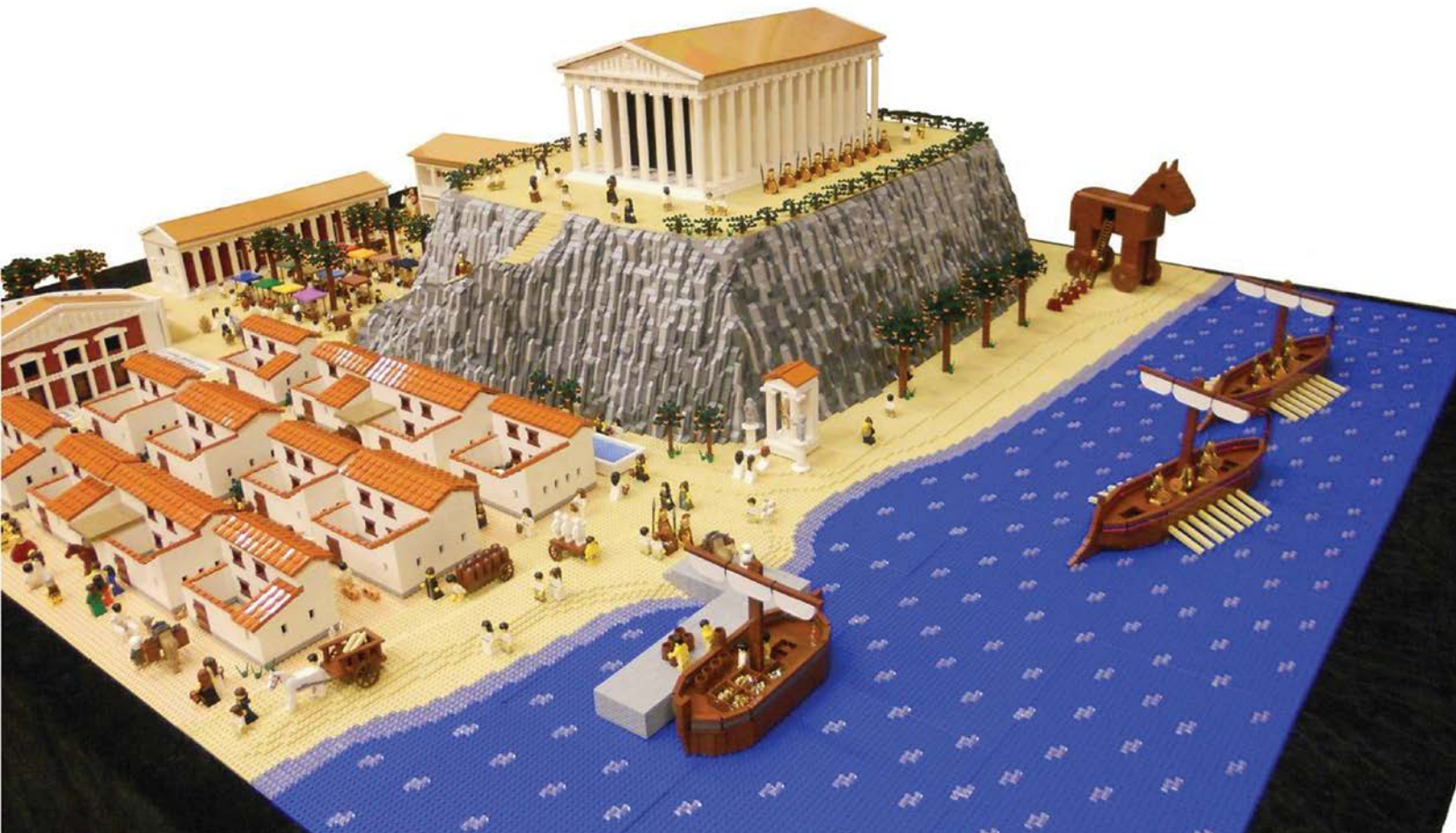
Article and Photography by Lasse Vestergård



*Overhead view of Lasse's
Greek layout.*

My name is Lasse Vestergård and I was born in 1995. I live in Roskilde in Denmark and am studying law at the University of Copenhagen.

I have been a LEGO fan all my life. When I was 10 years old, my mother (Anne Mette Vestergård) and I were visitors at a LEGO exhibition which was organized by the Danish LUG Byggepladen. That was the first time I heard about AFOLS. In 2007, my mother joined Byggepladen and we began to participate in the club's various activities. When I was old enough I also became a member of Byggepladen. In the beginning we were mainly collectors of LEGO sets. But in 2010 my mother and I began to build MOCs together. Today we are mainly MOC-builders.



A closer look at the seaside of the layout.



A harbor scene.



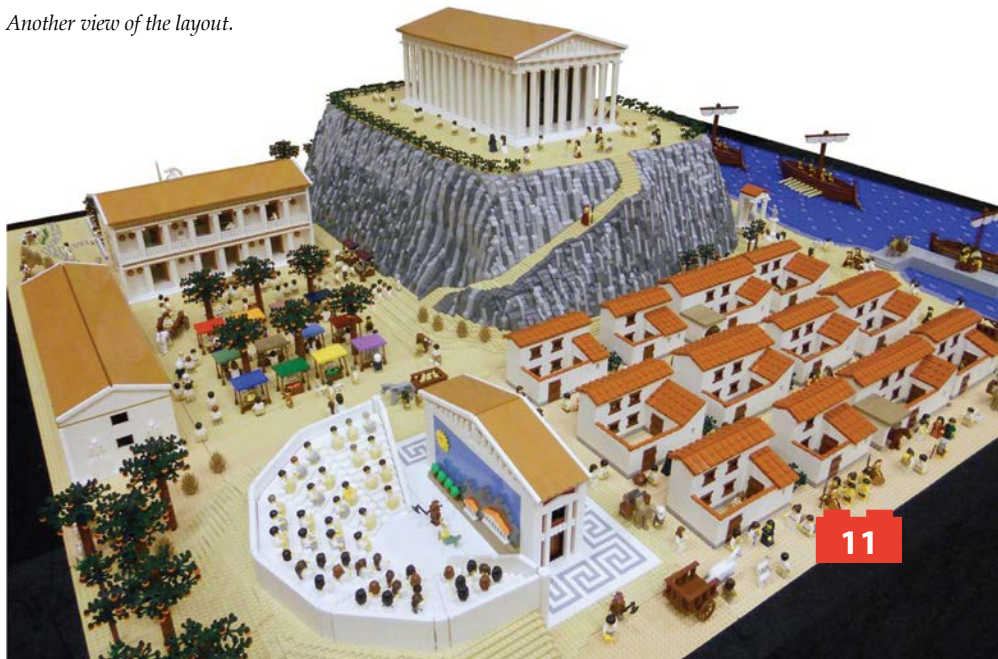
Greek ships.

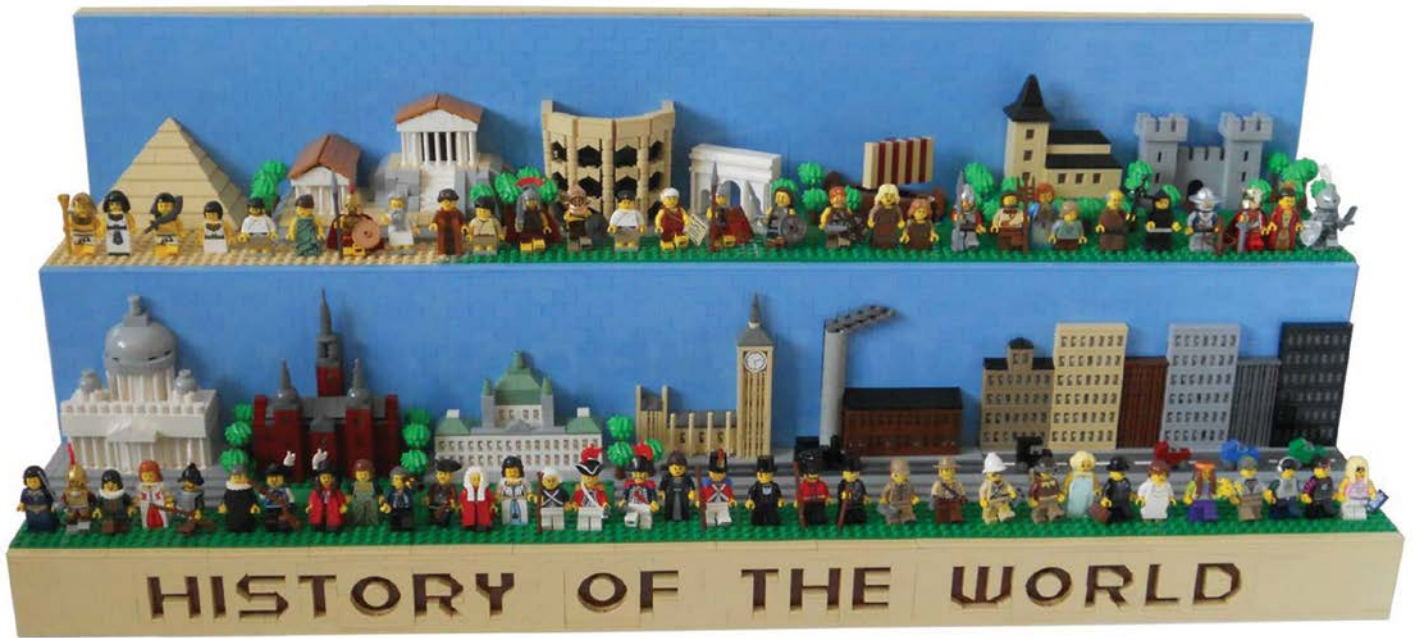


Greek agora ('gathering place') featuring a marketplace.

I'm interested in history, therefore I often build historical MOCs. In 2010, I was on holiday in Athens, which inspired me to build an Ancient Greek LEGO layout. My mother and I also had many other building projects, so I was too busy to start the layout before January 2012. The layout was finished in October 2012. At that time it was my largest MOC. The area of the layout is 2.3 x 2.8 meters. The layout shows a typical Greek town from around year 400 BC with a theater, an acropolis, Greek houses, ships, and a Trojan horse. After the layout had been exhibited at a number of LEGO exhibitions, the layout was disassembled at the end of 2013. I disassembled the layout to reuse the bricks in other MOCs.

Another view of the layout.





After I had finished the Greek layout, I thought a lot about what I should build next. Should I build an Ancient Roman layout, an Ancient Egyptian layout, a medieval layout or a Renaissance layout? I wanted to build it all, which is how I got the idea to build "History of the World" as a timeline with micro-scale buildings and minifigs from different eras.



Ancient Egypt.



Ancient Greece.



Ancient Rome.



The Viking Age.



The Middle Ages.



The Renaissance.



The Late Renaissance.



The Age of Enlightenment.



The Industrial Revolution.



Modern times.

The most famous building in Roskilde is the Cathedral (Roskilde Domkirke). The Cathedral is the burial site for the Danish monarchs and is known as the church in the world where most kings and queens are buried. Since 1995, it has been listed as a UNESCO World Heritage Site.



I'm also living in a historical city. Today Roskilde is the 10th largest city in Denmark. But Roskilde was the capital of Denmark during the late Viking Age and Middle Ages. The most famous building in Roskilde is the Cathedral (Roskilde Domkirke). Roskilde Cathedral contains architecture from the last 800 years. The Cathedral is also the burial site for the Danish monarchs and is known as the church in the world where most kings and queens are buried. Since 1995, it has been listed as a UNESCO World Heritage Site.



Stændertorvet, a local fountain.



The two characteristic spires on the towers were built around 1635.

In November 2012 I was exhibiting some of my MOCs at LEGO Fan Welt in Cologne. At the exhibition I bought *The Big Unofficial LEGO Builder's Book* written by Joachim Klang and Oliver Albrecht. The book inspired me to build something in 1:100 scale. At the same exhibition a large model of the Cologne Cathedral was exhibited. It inspired me to build the Cathedral in my hometown Roskilde. When I came home to Denmark I started building Roskilde Cathedral and its surroundings in 1:100 scale. It took 16 months to build the layout. In May 2014 the layout was exhibited for the first time at a LEGO exhibition in Roskilde.



The former Town Hall of Roskilde.



Copenhagen, with the Little Mermaid.



Another view of Copenhagen.



Sonderjylland (English: South Jutland) is an area in southern Denmark near the German border. The area is also known as Northern Schleswig.



The southern islands of Denmark.



Storebælt (English: Great Belt) is a strait between the Danish islands of Sjælland and Fyn. The islands are connected by the "Great Belt Bridge" (Danish: Storebæltsbroen).



An overall shot of the map.

You can see more of Lasse's work at his Flickr gallery: <https://www.flickr.com/photos/66344850@N06/> or you can scan the QR code below.





Dan Siskind on the deck of his current project, a model of the USS Missouri.

Dan Siskind: Brickmaniac!

Article by Joe Meno

Photography by Dan Siskind

Dan Siskind is something of a legend in the LEGO fan community. He's one of the first generation of LEGO fans to start showing and building, first online, then at displays. Nowadays, he designs and sells custom LEGO sets under his company Brickmania, which has become one of the most well-known third-party set sellers in the world. He also still builds, as you'll find out in the interview below.

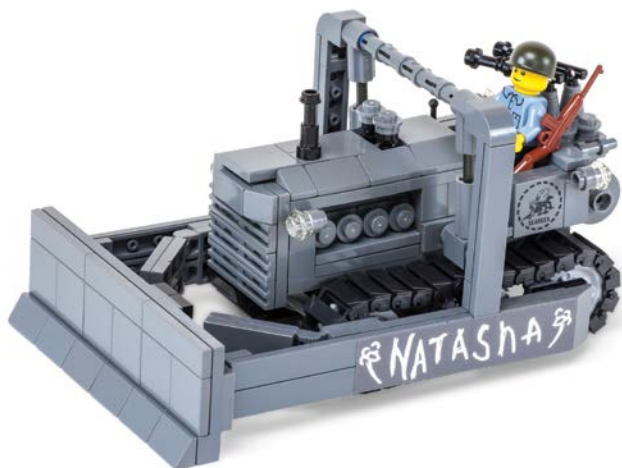
BrickJournal: When did you start building, and did you have a Dark Age? What was your first set?

Dan Siskind: My parents went to Europe in the early 1970s and brought home my first LEGO set. As far as I can deduce it was Universal Building Set 115 from 1973. I never really had a true Dark Age, but there definitely were times when building wasn't possible due to housing conditions or work schedule.

What theme did you start out building with?
I was in elementary school when the Yellow Castle came out. I was super excited to get one



Siskind's first design, the Blacksmith's Shop.



A more recent design by Siskind, the Natasha Seabees bulldozer. This can only be found at the Seabee Pride website (www.seabeepride.com).

and I asked for it as a Christmas present. Apparently it was sold out so my parents got me the Galaxy Explorer instead. All of my friends also had a lot of space LEGO so that was what we all mainly built and played with, but it wasn't really my theme of choice. I received LEGO sets for all of my birthdays and holidays my entire life, so I eventually ended up with a little bit of everything, including the early 4.5 volt trains. Twenty years after the fact I did eventually get my Yellow Castle. This is about the time I decided I wanted to make my own Castle sets...

When did you begin building military models?

My dad was a big collector of military history books and photographs, so I always remember being around them when I was growing up. When I was about seven he rebuilt the LEGO Sea Plane (set 371) into a Corsair and landed it on our coffee-table-turned-aircraft carrier. From that point on I was trying to build my own military models and had a pretty good repertoire of military builds dating back to 1970s and '80s. The biggest breakthrough happened when I received the big yellow Technic Bulldozer as a present and got my hands on my first tank tracks. My first tanks soon followed—never mind they were yellow. I always built a little bit of everything, but warships, airplanes and tanks were regular subjects all through my life. It wasn't until I started building them for sale that I got serious about being historically accurate. Looking back, I feel my early kits were pretty weak compared to what I'm building today.

In 2002, you designed the Blacksmith's Shop, which was a LEGO set. How did that come about?

I didn't actually design the set for LEGO. They approached me and asked to license it as the first in their "My Own Creation" series. The concept was to release fan-designed models to be sold as official LEGO sets. It turns out one of my first "Brickmania" kit customers was actually a VP at LEGO named Brad Justus. When I announced I was discontinuing that particular kit on Lugnet, he called me a few hours later with an offer to release it though LEGO. To this day I don't know if he was actually a fan of my work or if he was just scouting the community for release ideas. Regardless, I felt pretty honored by the offer and of course I agreed to let them do it. The set actually took about a year to be released so I knew about it long before the general public did. In the beginning there was talk of releasing a bunch of my other kits, but the whole program was slow to happen and went through a lot of changes before they released their second fan-created kit. For example, the Blacksmith Shop has my name on the box cover, whereas none of the following designers were given such recognition. Maybe they figured it was some kind of implied endorsement, so they stopped doing it.

When did you start thinking about making kits?

I made my first kit in 1999 and luckily only one of them actually made it into public circulation. It was a really clumsily built affair and I'd be pretty embarrassed if it ever saw the light of day. My first serious attempt at a custom kit (with proper box, instructions, etc.) was actually the Blacksmith Shop that would eventually be licensed by LEGO. I released it in 2000 and at the time I was big into building huge castles. LEGO wasn't doing any castle sets at the time, so I was making my own castle models from whatever stuff I could find on clearance sales. Being a work-at-home dad I had a lot of time on my hands to tinker with LEGO once the kid was in bed. With encouragement



A look at prototype models as of Spring 2015, including on the front row (left to right) a P-40 Warhawk, Hurricane, and Messerschmitt Bf-109. Top row (left to right) is an M26 Pershing tank, an IS-2, a M3 Grant, an A12 Matilda II, a Bren Carrier, a SDKFZ 10, a HUMMIV, and the Event Kit from World War Brick in Anaheim.

of friends, I not only build my own castle models, but also made some to sell to friends from RTL (rec.toys.LEGO Usenet group) and LUGNET.

What was your first kit? And how did it sell?

I made ten copies of the original Blacksmith Shop from parts I had accumulated from clearance sets. Back then there was no Bricklink or Pick-A-Brick to buy parts, so I had to find my parts from existing sets. I then made a simple e-commerce web site and purchased the domain Brickmania.com. I priced the sets at \$120 each and figured I'd be lucky to sell them all within a year. To my surprise they all sold out in a week or two, and people started asking for more.

When did you make the decision to go into set production?

I must have had a premonition that my kits would sell, because I had actually designed three follow-up companion models for the Blacksmith Shop even before it was released. Buoyed by the initial success of the Blacksmith Shop, I released three follow-up kits within a year. I still had a day job, so production of Brickmania kits was a relatively slow affair and remained a hobby business. In 2003 I actually decided to hang it up because it was becoming too much of a job and decided to go back to building for my own enjoyment. I actually managed to stay away from new kit production until 2008, when I was eventually pulled back mainly by the persuasive underground following I had acquired. In 2009 I quit my day job for good and by 2010 Brickmania was officially incorporated and I hired my first employees.

What is the production flow of a set from start to finish?

Research: First step is to immerse myself in research materials until I have an understanding of the subject and its particulars. Whenever possible I try to get multiple published sources for my research and will look at video material when I can find it. One nice side effect of all of this research is I've accumulated an amazing reference library.



Siskind's Sherman tank in a diorama.



Siskind's Panzer III model.



Siskind's model of the USS Nicholas.



A close-up of the anti-aircraft guns of the USS Nicholas.

Prototype: The second step is to build a prototype model based on my research. This often involves printing out schematics of the vehicle or weapon system so I can compare size and shape with my prototype as I build it. I always use real LEGO bricks to prototype, not any kind of digital design tools.

Feedback: Next step is to get feedback from co-workers and friends.

Prototype Rebuild: Based on critical response from the first prototype, I'll rebuild the model to fix any deficiencies. Sometimes this feedback and rebuild cycle happens more than once.

Digital Build: The next step is to recreate the model digitally. For this I use LDraw, which is the digital 3D model system created by the LEGO fan community. Once I have the model recreated in LDraw, I can generate the parts list and images for instructions.

Instructions Tests: Making instructions is not an exact science and lot of trial and error goes into figuring out what works for a particular model. I like to give the instructions to someone else to do a test build and find any bugs or confusing steps. I used to test build everything myself, but it's impossible to find all of the mistakes that way!

Parts Purchasing: I don't have a special relationship with LEGO, so like everyone else I have to go shopping to buy the parts I need for my kits. Back in the beginning I used to buy LEGO on clearance and bust up the sets for parts. Nowadays almost all of the LEGO parts for my kits are purchased via Bricklink. My weapons and minifig accessories are made by BrickArms and we have recently started producing our own custom injection-molded tank tracks, which are called Brickmania Track Links.

Kit Making: All of Brickmania's kits are still made in small batches and the parts are counted by hand. A batch usually consists of 50 kits, but occasionally we'll get outside jobs that are so big that we have to do batches of 100 or more at a time. Currently the crew are completing a 1500 kit order for a private company. We get outside jobs like that several times a year, sometimes for some very large companies.

Shipping to Customers: Let's assume there was some time in this process to let people know a set is being made. Hopefully I have received some orders by the time the kits are finished. Brickmania then ships the completed kits directly to customers all over the world, as well as various stores and resellers. I'm usually pretty good at gauging what my customers are looking for, and most kits will sell out the first batch within a month. Some kits are so popular that we'll make as many as 20 batches before we run out of a part and have to stop.

What is your present project?

Aside from designing 1-2 new kits per week for Brickmania, I'm working on a very large display model of the battleship *USS Missouri*. I'm building the "Mighty Mo" as she appeared at Tokyo Bay on September 2, 1945 when the Japanese delegation signed the formal surrender document on her decks. I'm building it at 1/35 scale—the same scale as the majority of Brickmania's WW2 kits. It's 25' 8" long and I believe that makes it the largest shop model to be built by a LEGO enthusiast. Right now I'm more than halfway through the project and my hope is to have it fully presentable by the end of June. The model will make



A British Spitfire.



Another Sherman tank model.

A selection of the 2015 set range for Brickmania, including in the front row (left to right) the Bren Carrier, a Renault Light Tank, the A12 Matilda, M4 Sherman, SDKFz 10, and Jeep. Second row (left to right): UN VAB, IS-2, GAZ AAA truck, Panther Ausf G tank, and HUMMV. Rear Row (left to right): Hurricane and P-40 Warhawk.





Some boxed sets.



appearances at events around the country commemorating the 70th anniversary of the end of World War II and our own event World War Brick.

Did you ever expect to be this successful?

No, of course not! The fact that I get to “play with LEGO” for a job is super awesome, but that also ignores the fact I had to work super hard to make it happen. Now I have a team of people working with me and we all work really hard to make Brickmania successful. I would be a fool and a liar to claim success was truly accidental, but on the other hand I never imagined I’d be doing this 15 years ago when I released my first kit!




Siskind's Red Baron set.



Colony Hotel built by Siskind for fun.

What are your future plans?

My hopes are that I will continue to be able to build historic and educational LEGO models both for public displays and for other people to enjoy in their homes and classrooms. This June we will be opening our first Brickmania retail store in the Mall of America. This will not only be a store, but also a place to show historical displays, and even host gaming tournaments and other activities. We are also taking our military building convention World War Brick on the road in 2015. We started World War Brick three years ago as an annual event in collaboration with BrickArms and GI Brick. It previously took place every year at the Brickmania warehouse in Minneapolis. Last year we reached capacity and figured we'd have to make changes to accommodate all of the people who wanted to come. Our solution is to take the event on the road and make it happen in other cities throughout the year. We had our first one in Southern California in February and have upcoming events in Minneapolis, MN (June 19-21) and Hartford, CT (July 24-26). We'll be announcing additional dates at worldwarbrick.com.

Thanks Joe, for the support and interest! 



Diorama of the Peleliu Invasion, built by Brickmania.

The USS Missouri, currently under construction.



Building

Dream Garage: Officina Super Sprint Classic Vespa Workshop

*Article and Photos
by Andrea Lattanzio
(Norton74)*





An upcoming issue of BrickJournal will feature cars and include some work from this builder. However, this particular diorama was too good to wait until the Car Issue to show off. BrickJournal was able to get in contact with the builder and get a personal tour of the diorama!

This year “Officina Super Sprint” turns twenty, and to pay tribute for this important anniversary I built the LEGO model of the “Officina.” My new MOC is called “Dream Garage” and is a follow-up to “Garage Life”, the oldtimer Volkswagen workshop I built and presented last year.

Officina Super Sprint is a Vespa specialized workshop. It was founded in 1995 by two friends; one of them is also an AFOL (Adult Fan Of LEGO) known as Norton74... yes, that's me!

I started building “Dream Garage” in November 2014 and finished it in March 2015. In order to design the workshop, I checked my previous VW Garage, and indeed the sizes are the same. It's just a little bit smaller for aesthetic reasons. It was clear in my mind the workshop would be blue and white, with a blue stripe all around. Blue and white are the Officina Super Sprint colors.

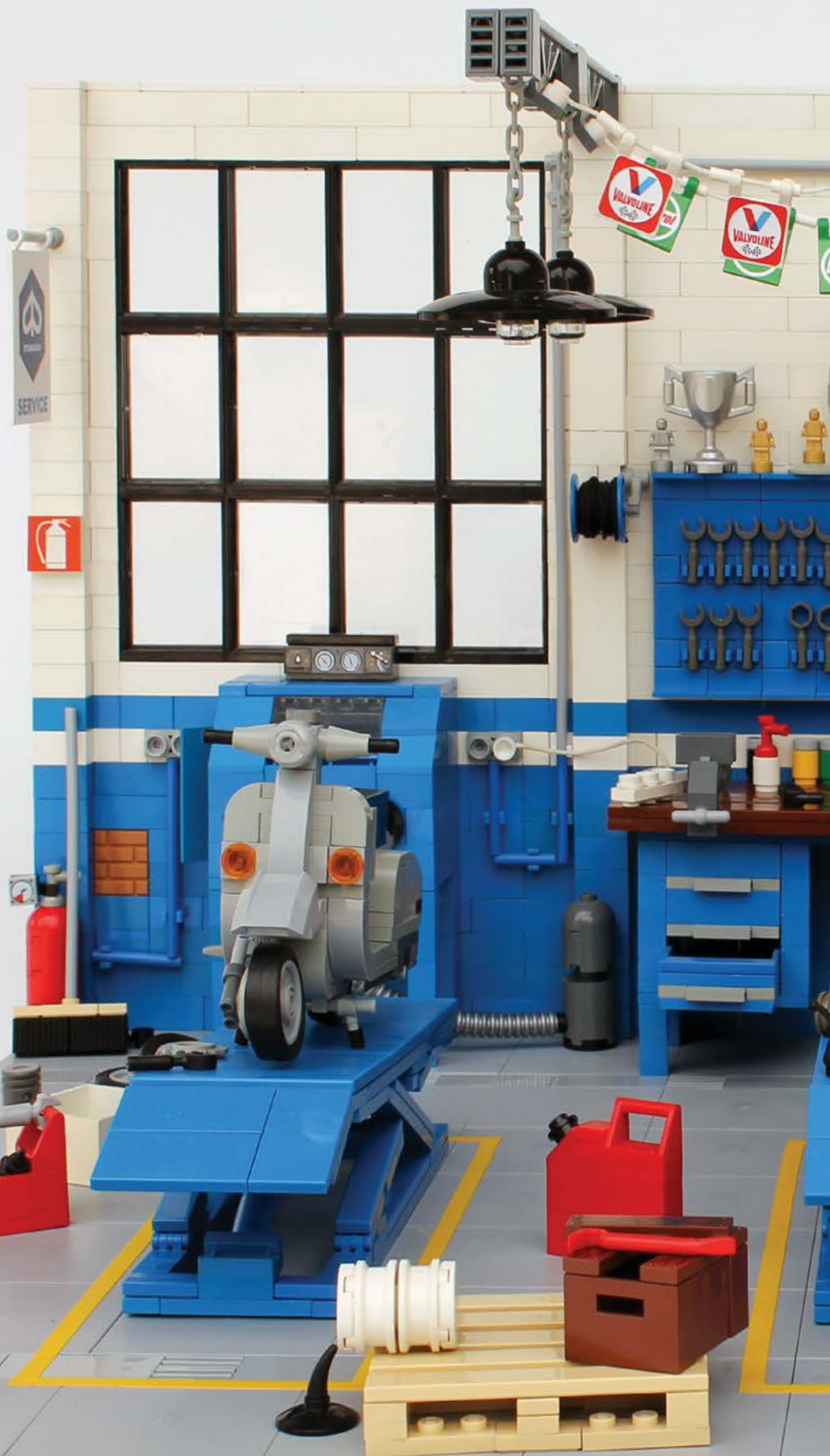
I'm an oldschool builder and I don't use LDD or other software; I prefer spending time building and taking apart rather than standing in front of a PC (or an iMac). Often I draw sketches on paper to get an idea of what I'm going to build.



Andrea Lattanzio on his Vespa.

“Dream Garage” features many tools and details. Let’s take a look.

Details are everywhere: checkered flags, advertising signs, trophies, extension cords and more...







Workbench and tools.



The sandblaster.

A wooden workbench, with wrenches and vise, is positioned at the center of the workshop. On the left of the workbench is the sandblaster. The sandblaster looks very realistic, even if it's made with classic bricks and slopes, and it's one of my favorite models. The sandblaster door on the side is an old 1x3x4 door.

I love using different parts from different LEGO series; the two Fabuland jerrycans are an example.

There are two wide windows made with old clear windows 1x4x5 (that probably comes from my old LEGO city airport #6392...) and two big sliding doors. If you look carefully at the top of the doors you'll see that I used the old steering wheels for the sliding system (I love this detail).

The floor is made with a lot of expensive 6x6 tiles and there also are a few water drains.

Four pendant lamps are hung on two dark bluish gray supports and are made with inverted 6x6 dishes (radar); take a look at the pirate hooks...



A look at the garage door. You can see the steering wheels at the tops of the doors.



The garage without any loose items.



A closer look at the lamps with the pirate hooks.



An overhead view.



The mobile cabinet and drill press.

There are also a mobile roller cabinet with four drawers, the air compressor, the oxy-acetylene welder, the electric welder, and the column drill press.

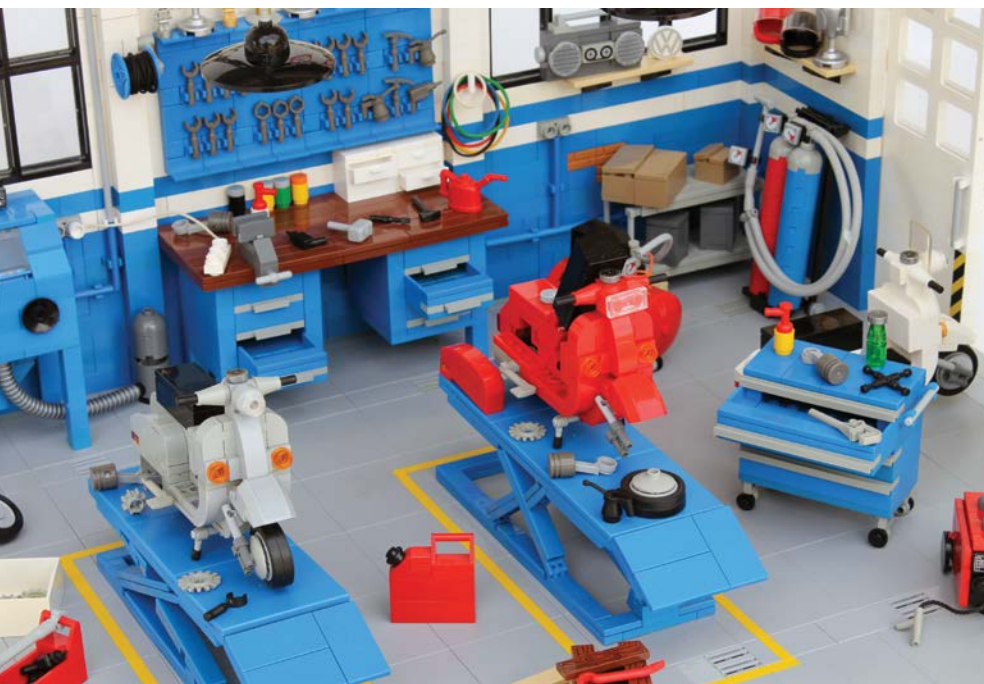
In the middle there are two hydraulic scissor lifts to work easily on the Vespas. Even the lift tops are made with large tiles, and below you can see the hydraulic shock absorber.



The lifts and Vespas.



Details like the radio and helmet shelf add a level of life to the diorama.



Another view showing off the diorama details.

A Volkswagen transport truck.



Technic figure helmets are on tan shelves—and what about the vintage stereo cassette?


In order to create the wall electric lines, I used many inches of rigid 3mm hose. They look great, at least to me.

Last but not least, the Garage features three Vespas: two Vespa PX scooters and one Vespa T5 (the one with the square front light).

The garage is made of approximately 2000 bricks.

All my models are made of 100% original LEGO bricks except some wires, and the stickers that I made myself with Adobe Illustrator and then printed on adhesive vinyl.

I used both my LEGO bricks and used pieces bought on a dedicated sell/buy bricks website (www.bricklink.com).

I usually build by night because during the day I work and I have to take care of my two little children and my wife. I love at the end of a night building session to take a look at the MOCs for a while before going to sleep. After building the LEGO models I take pictures in a professional manner: taking good pictures is very important! 

Andrea (aka Norton74) has been a fan of LEGO since childhood. He loves to build great scale models and especially trucks and vans. His models have been featured in many specialty magazines.

When he is not building LEGO models, Andrea spends his free time restoring classic motorcycles and bicycles (he is one of the founders of Officina Super Sprint). He lives with his Spanish wife and two children in Milan (Italy).



Loading the Vespas.



The furniture and other loose accessories in the diorama.



A Vespa waits for pick-up.

Building

Model Spotlight: Cologne Cathedral

Article by Joe Meno

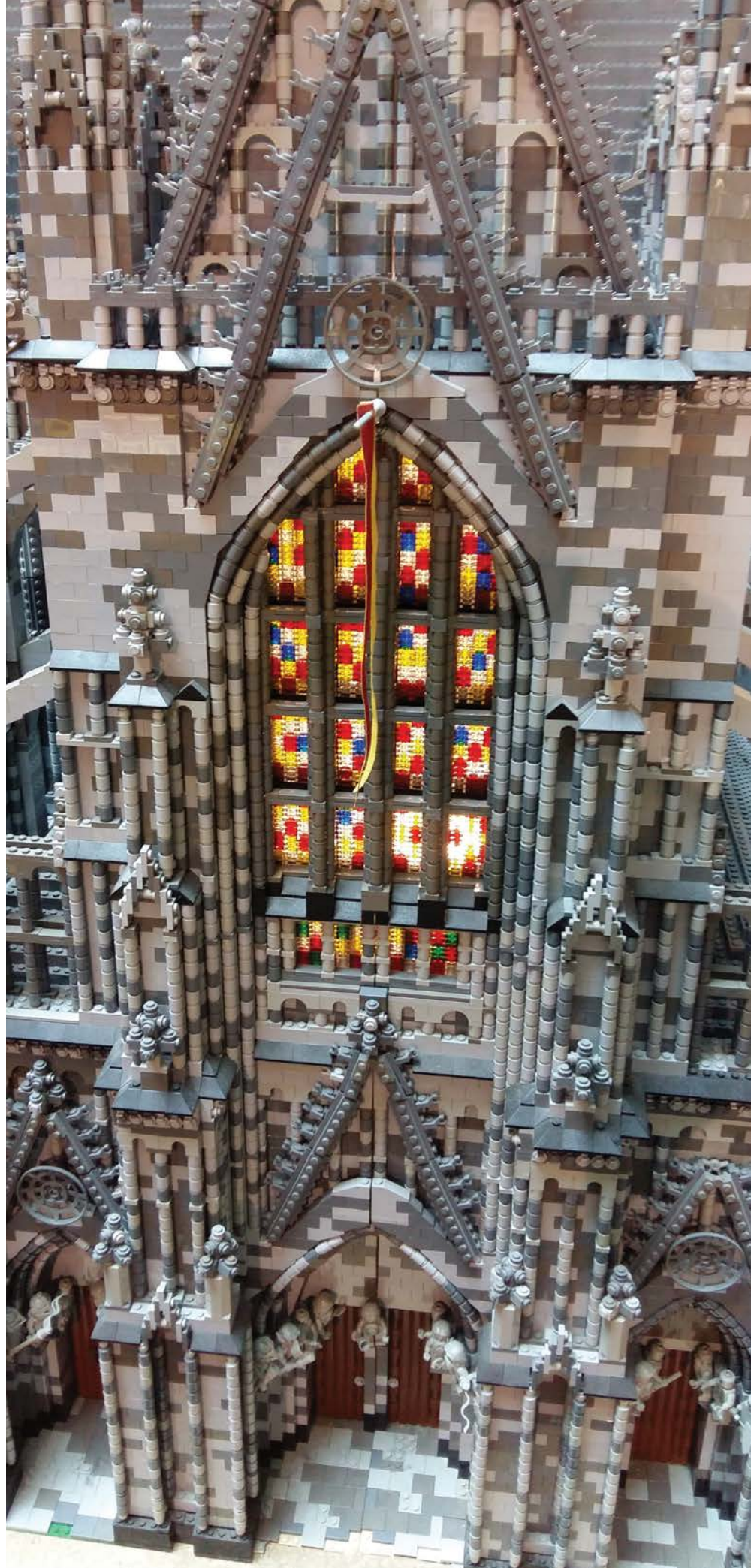
Photography
by Jürgen Bramigk



Making an outstanding model takes a combination of skill, resources and patience. Jürgen Bramigk, a German LEGO builder, was inspired by his interest in Gothic architecture and the Middle Ages to build the Cologne Cathedral and began the project in 2005. At that time, he was 35 and he spent his days landscaping. His nights and weekends were devoted to researching and building the cathedral. Starting with a ground plan and using many photos he had taken and seen online, he slowly started construction.

Three years later, he completed it, which became his largest model. Standing 3 meters (almost 10 feet) high, and 2 meters (6.5 feet) wide, the cathedral is a minifigure-scaled model, complete with interior details. His love of cathedrals is evident in the amount of detail that he built into the model. Individual bricks are dark and light gray, giving the building a mottled and aged appearance and a layer of authenticity. While building structures like flying buttresses is a challenge on their own, a closer look at the building reveals statues and other intricate stonework that was replicated by Bramigk. The South Tower, which is on the right side at the entrance, houses the bells of the cathedral. Viewers can see these through the open windows of the tower.

Some close-ups of the cathedral, including the windows and doorways.






Another detail that Bramigk is especially proud of is the stained-glass windows, which were built with transparent plates. When asked why he likes them, he explains, "It looks so beautiful when the light comes through!" He also is proud of the bells and towers.

Some more close-ups, showing the detail work that Bramigk added both to the exterior and interior.

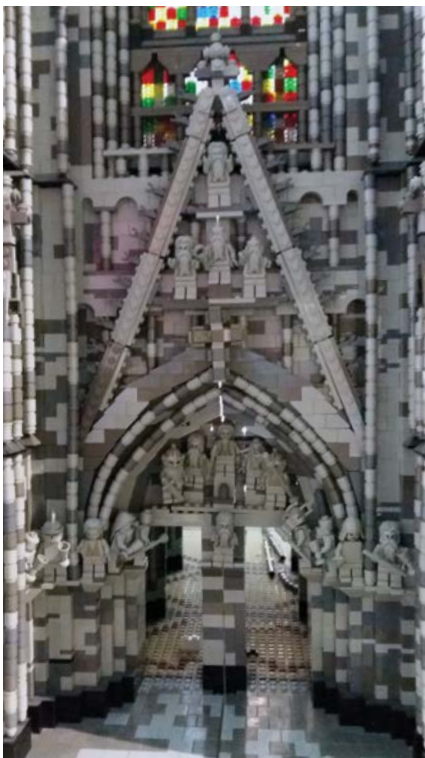




A look at one of the sides of the building, showing the windows and flying buttresses lining the walls.

It took more than a million bricks for Bramigk to complete the Cologne Cathedral. Since then, the model has been presented in displays at Portugal, LEGO Fan World in Germany, and Fanabriques in France. Public reaction to the model has been overwhelming—Bramigk explains, "People have called it great and awesome! All of them love the cathedral!" 

A doorway...



...and its upper stonework.



Liberty Bell

Design and Instructions
by Tommy Williamson




Tommy Williamson is no stranger to *BrickJournal*, having been featured previously for his Jack Sparrow miniland scale figure. Since then, he has gone farther into building, making some remarkable *Star Trek* props and other models. He's now doing a column for *BrickJournal: DIY Fan Art*. Here, Tommy

takes a little time out from his busy schedule at BrickNerd.com to make a model of his choosing for the magazine.

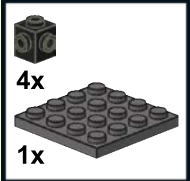
Parts List (Parts can be ordered through Bricklink.com by searching by part number and color)

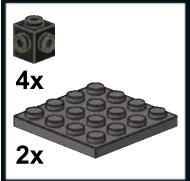
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4	3004.dat	Reddish Brown	Brick 1 x 2
1	3006.dat	Reddish Brown	Brick 2 x 10
2	3022.dat	Reddish Brown	Plate 2 x 2
1	3020.dat	Reddish Brown	Plate 2 x 4
1	3832.dat	Reddish Brown	Plate 2 x 10
2	3747a.dat	Reddish Brown	Slope Brick 33 3 x 2 Inverted without Ribs between Studs
2	3700.dat	Reddish Brown	Technic Brick 1 x 2 with Hole
12	3024.dat	Dark Bluish Gray	Plate 1 x 1
8	3023.dat	Dark Bluish Gray	Plate 1 x 2
4	3623.dat	Dark Bluish Gray	Plate 1 x 3
6	3710.dat	Dark Bluish Gray	Plate 1 x 4
2	4032a.dat	Dark Bluish Gray	Plate 2 x 2 Round with Axlehole Type 1
1	87580.dat	Dark Bluish Gray	Plate 2 x 2 with Groove with 1 Center Stud
2	3021.dat	Dark Bluish Gray	Plate 2 x 3
5	3020.dat	Dark Bluish Gray	Plate 2 x 4
10	3795.dat	Dark Bluish Gray	Plate 2 x 6
2	3034.dat	Dark Bluish Gray	Plate 2 x 8
14	3031.dat	Dark Bluish Gray	Plate 4 x 4
12	98138.dat	Dark Bluish Gray	Tile 1 x 1 Round with Groove
2	4150.dat	Dark Bluish Gray	Tile 2 x 2 Round
9	4733.dat	Black	Brick 1 x 1 with Studs on Four Sides
2	4274.dat	Technic Pin 1/2	Blue

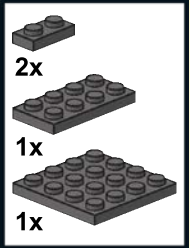
About this issue's model:


When I was working at the visual effects studio Dive in Philadelphia, I really enjoyed my short walk to work. Not only could I stop at my favorite street cart (Luckys, on the corner of 6th and Chestnut) but every day I passed Independence Hall and the Liberty Bell. So much history and it's right there to admire on a quiet morning walk. When Joe told me the theme of this issue of *BrickJournal*, my first thought was of this bell and what it represents. I hope you enjoy it. 


1

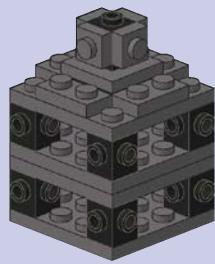
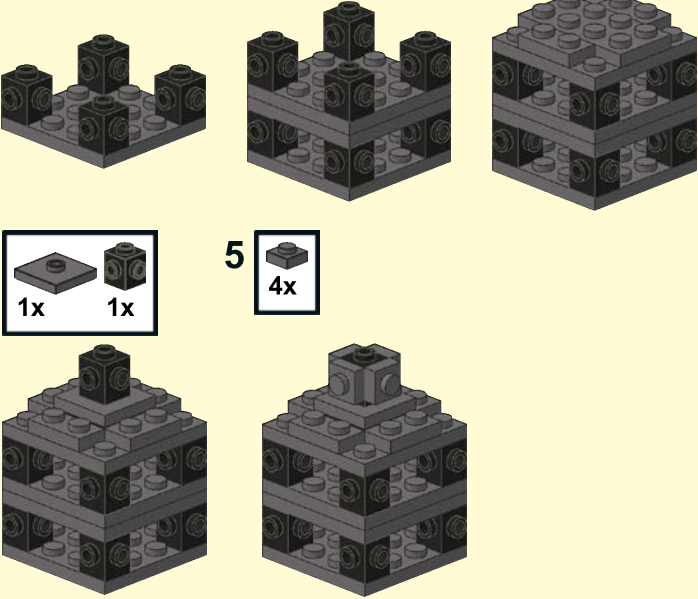
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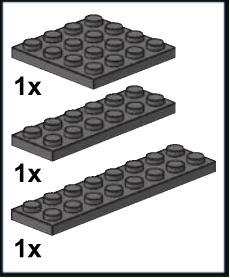
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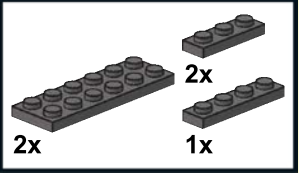
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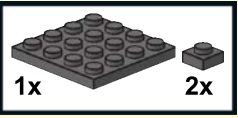
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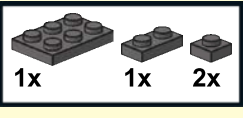


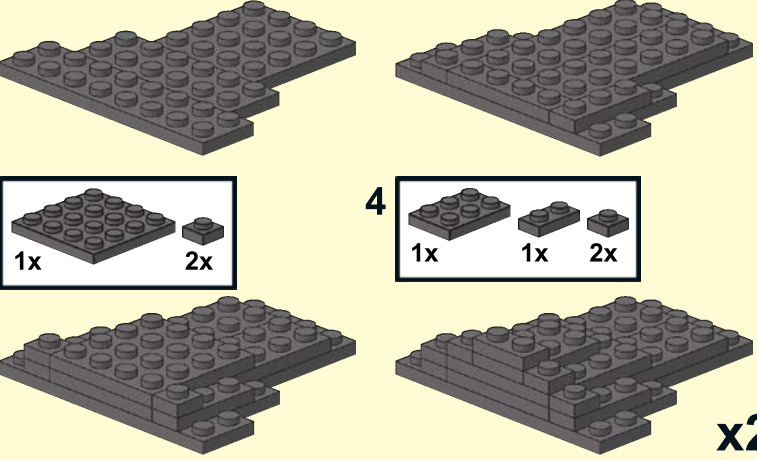
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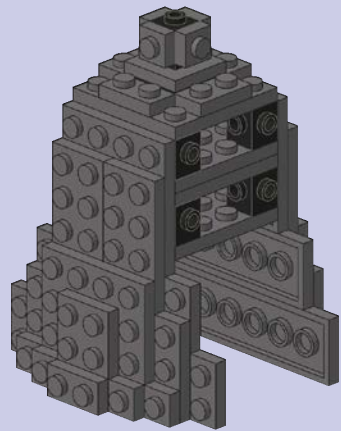
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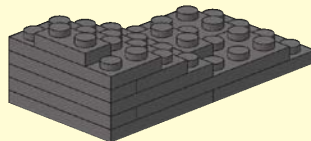
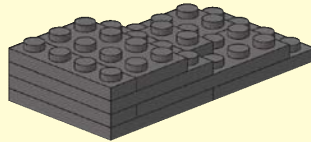
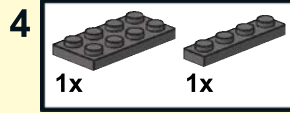
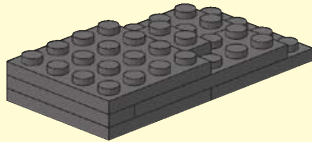
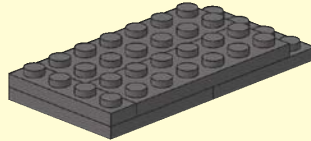
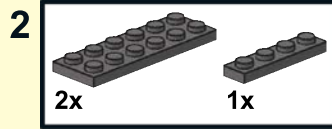
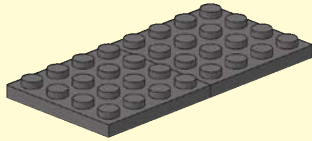
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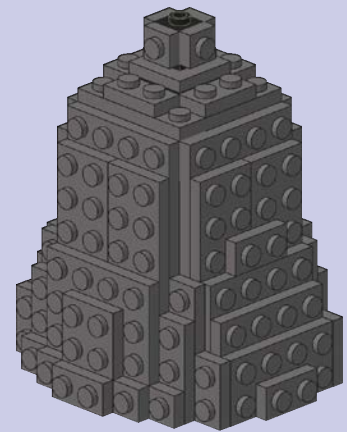
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Small Lights for Big Ideas™

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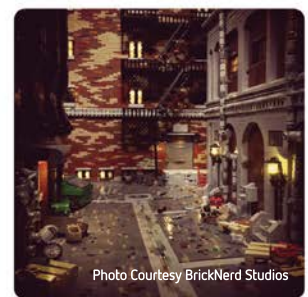
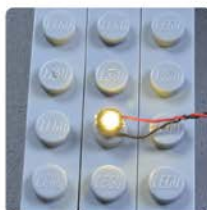
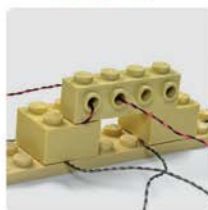


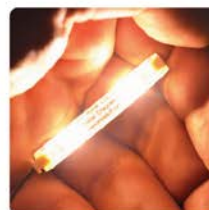
Photo Courtesy BrickNerd Studios



Pico Lights Fit Under Bricks, Plates and Tiles



Snap Bricks Onto Wires and Run Wires Through Bricks!



Flexible Light Strips Connect End to End

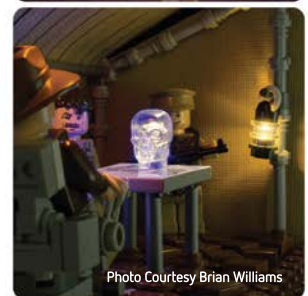


Photo Courtesy Brian Williams

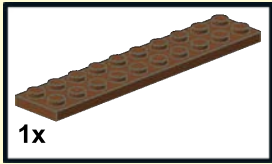
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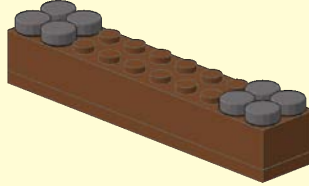
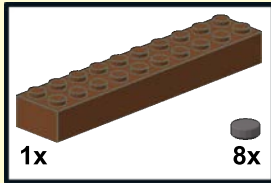
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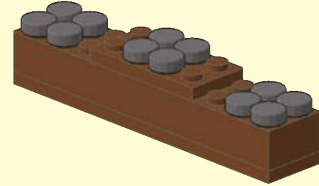
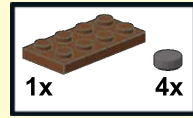
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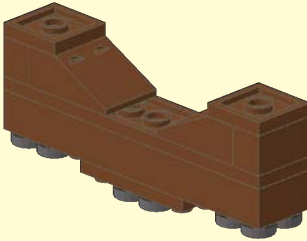
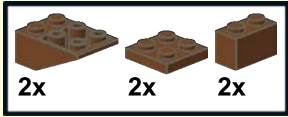
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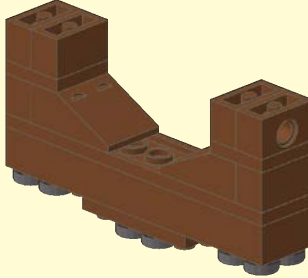
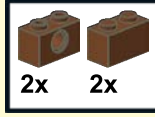
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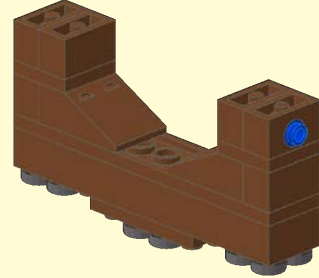
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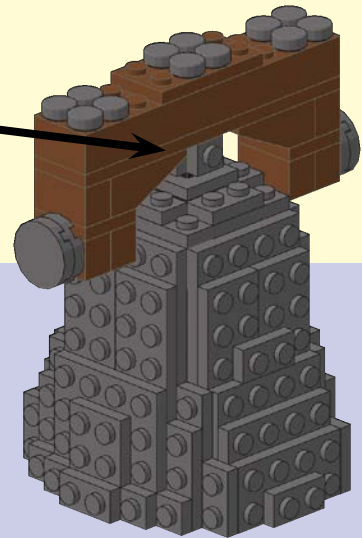
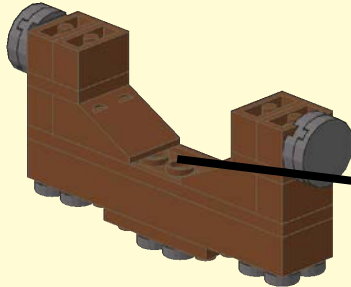
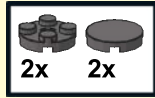
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Building

Minifigure Customization 101



Amelia Earhart.

What can we Learn from Minifigure Customization?

Article by Jared K. Burks

*Photos by
Michael "Xero" Marzilli*

As the title states, what can Minifigure Customization teach us? Specifically, what can it teach us of history? The old saying goes, "Those who do not learn history are doomed to repeat it." The origin of this quote is up for debate, but many credit it to George Santayana, who stated, "Those who cannot remember the past are condemned to repeat it." So what does this have to do with Minifigure Customization? Well, everything. Every trick or new method we try allows us to create new figures. Many of these customization tricks are quite old, and it takes digging to uncover them as they have been lost, but that is a topic for another article. The article today is what can Minifigure Customization teach us?

How about history?

When I was in school taking history classes, which was some time ago, it was always dry facts and dates. The occasional war would catch my imagination, but for the most part, there was nothing to *do* to learn about history. It isn't biology, where you can dissect an animal to learn about the circulatory system, or chemistry, where you can mix chemicals and measure a reaction. It isn't physics, where force can be measured, or even like math, where problems can be solved. Recent history is a touch easier; you can go to the video. However, history before cameras is a bit more difficult. To explain the point I am belaboring, let's briefly talk about how we learn.

Essentially there are three main types of learning styles: Auditory, Visual, and Kinesthetic. Auditory learning is simply listening to others tell you stories or explain how things work. Visual learners would prefer to watch someone perform a task; YouTube is full of videos for just this sort of learner. Kinesthetic learners learn through doing or hands-on experience. Historically these learners would be apprentices of skilled individuals, and this still occurs today in the skilled labor world.

The point I am trying to get at is that we can actually learn history by doing. "How is that possible? History is in the past," you ask. Well, we can recreate history by recreating figures in history. Using custom minifigures we can help bring history to life in a safe and yet effective way. Research must be performed to find out physical characteristics about the historical figure in question, clothing must be researched (remember, this is before cameras were around), and details about the historical figure must be identified. I know it seems a lifetime ago, but in 2007 I hosted a contest to create Historical figures using nothing but official LEGO parts. The contest was a *smashing* success as there were 247 legitimate historic figures created and 8 fictional characters entered into the contest. The rules were simple and included below, as well as a link to the contest photos, which while great for the contest are not great for reprinting. Please be sure to visit the link, as I have made it as short as possible.

<https://flic.kr/s/aHsiRugAGc>

RULES:

1. Figure constructed must be historically significant, i.e. pick up a history book and read about them.
2. Figure must be constructed from "OFFICIAL" LEGO elements ONLY, no decals, no custom parts.
3. Contest is open to ANY and ALL, WORLDWIDE, so spread the word. The only ineligible person is ME, Kaminoan.

Noah.



Charlie Chaplin.





Joan of Arc.



Paul Revere.

4. You are allowed to submit as many FIGURES as you like, only limit is ONE ENTRY PER POST. If you have multiple entries you must make multiple posts.

5. Submission must be accompanied with a link to reference material on that figure, example WIKI or some other online encyclopedia.

6. Picture submission will be via the forums, in the contest thread. Pictures must be formatted to 400 pixels x 400 pixels and posted in the appropriate forum. Limit of 1 picture per Historical Figure!!! You may link your one picture to a gallery, but your figure will be judged solely on this ONE photo.

7. The Contest will start as soon as you start Constructing, but submissions will be accepted from Midnight (US Central Standard Time) on September 1st, 2007 to Midnight (US Central Standard Time) on October 1st, 2007.

8. The historical figures will be initially judged by a panel of non-LEGO people, of the FC selection, to identify the top 5 figures. Once the top 5 figures have been identified, voting in the forums will commence approximately one week after the submission deadline to select the best historical figure.

9. All decisions by the FC are final. The FC reserves the right to disqualify any submissions for any reason.

I had kids submitting several figures, which meant that they were engaged and actively looking up historical figures that they could actually recreate. They had to have known a bit about each one, so this was a learning experience for them, and clearly the gallery still serves to be one as it is one of my most visited Flickr galleries. Of course this exercise could be continued with the brick by having young historians build objects from that historical person's timeframe to showcase the figure in the correct context. Use the LEGO figure to engage your mind and see what it can teach you. The most telling thing for me is viewing which figures all lived at the same time. Growing up I viewed history as disjointed: this happened here, and that happened there, and I never got the fact that they were actually

Pancho Villa.




Wyatt Earp.





Sacagawea.

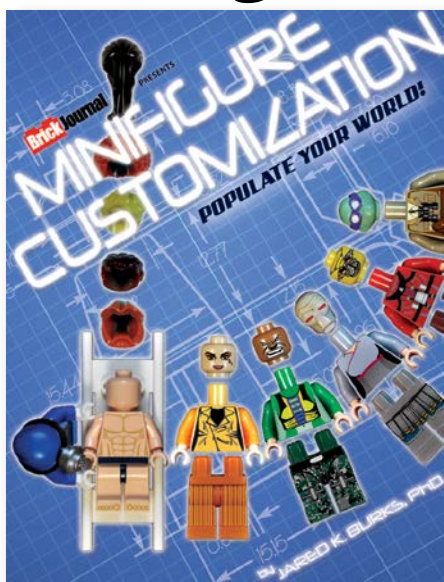
happening at the same time and were caused by the same issue. If you build figures that help illustrate what has happened at the same time across the world, it can change a viewer's perspective by demonstrating just how different the world and all its many cultures are, and how they develop quite differently. Who knew LEGO minifigures could be used to teach interactive history? 



You can view Jared's webpage by going to <http://www.fine-clonier.com/> or scanning this QR code!

Come back next issue for more Minifigure Customization!

Get both books on minifigure customizing!

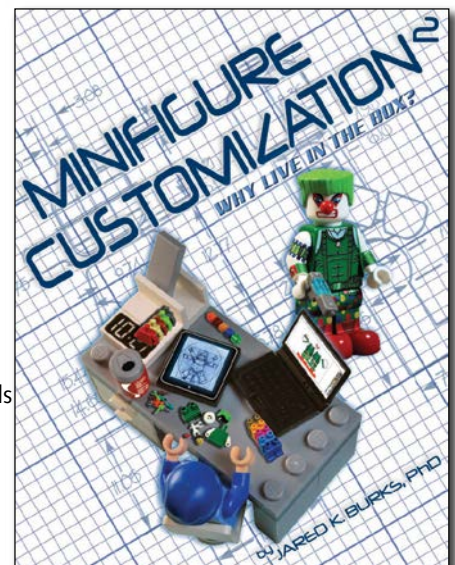


BRICKJOURNAL columnist JARED K. BURKS' book **MINIFIGURE CUSTOMIZATION: POPULATE YOUR WORLD!** shows a wide range of techniques you can use to alter the lovable LEGO® Minifigure. And the sequel, **MINIFIGURE CUSTOMIZATION²: WHY LIVE IN THE BOX?**, offers even more techniques to alter minifigures!

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Building

MINDSTORMS 101:

Adding Personality to Your Robot!

Article and art by Damien Kee

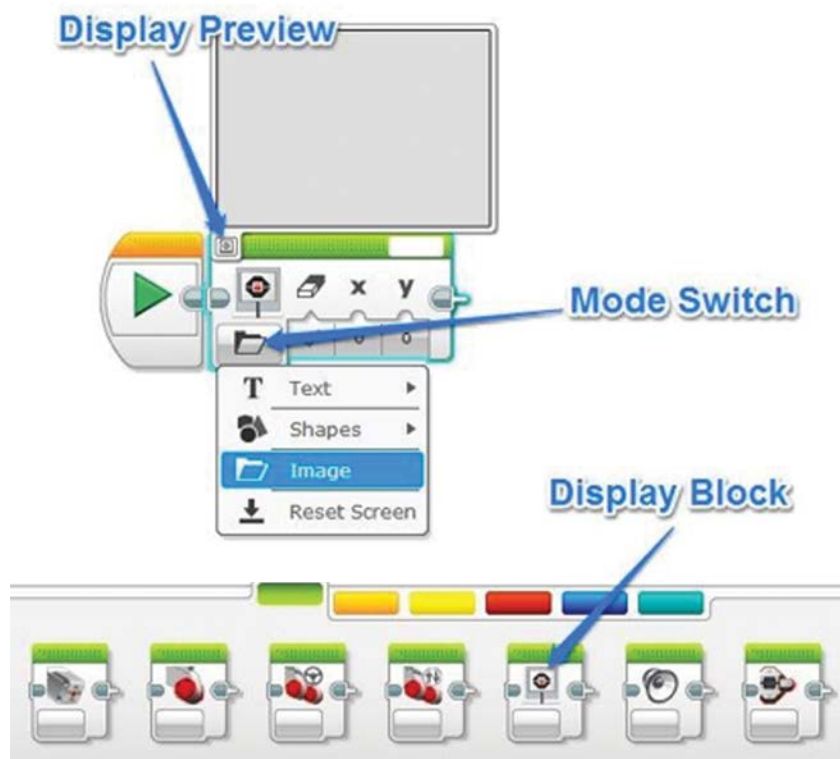
Damien Kee returns from a brief absence for another MINDSTORMS tutorial. In the last installment of our MINDSTORMS tutorials we talked about the perils of dead reckoning. This time, we look at something different...

While it's a great achievement to get your robot up and moving, and an even better achievement to have it reacting to its surroundings, sometimes it's just plain fun to give your bot a little personality. I'm going to outline two different ways you can achieve this.

The Display Block

The Display Block controls the screen of your robot. If you don't use it, then the screen of your robot just says something boring like *Mindstorms*, *ProgramA running* (or something similar).

The Display Block allows us to change what is on the screen either by adding some pictures or some words. You'll find the Display Block in the Action palette (Green Tab). Click on the Display Preview button to see what image will be placed on the screen. Use the Mode switch to choose either Text-Grid or Image. There are other options, but I'll leave them up to you to discover!

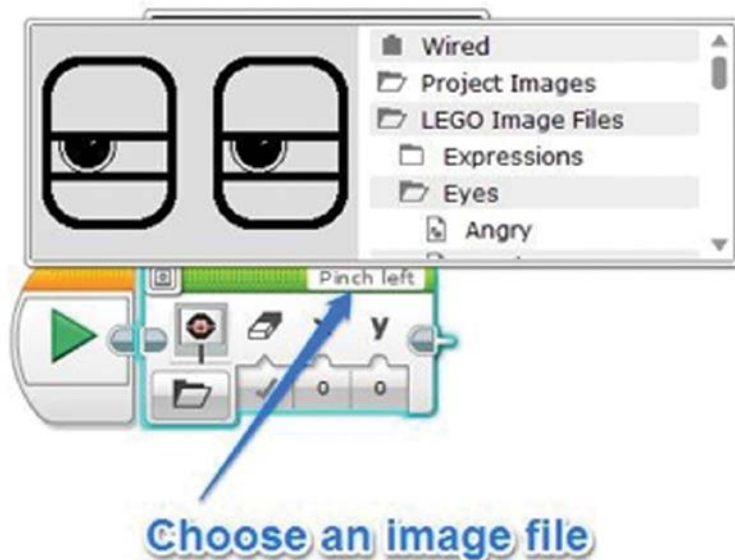


Display Block/Image Mode:

Select an image file from the list of pre-loaded LEGO Image files.

The Display Block has a set of buttons beside the mode switch. Here are the button functions from left to right:

- *Clear Screen (eraser)*: If set as TRUE (with a check mark), it will wipe anything on the screen before displaying the new image. When set to FALSE, it will overlay the new image on top of any previous image.
- *x*: Sets the left-hand side of the image. Can be from 0 (very left of screen) to 127 (very right of screen).
- *y*: Sets the upper edge of the image. Can be from 0 (very top of screen) to 127 (very bottom of screen).

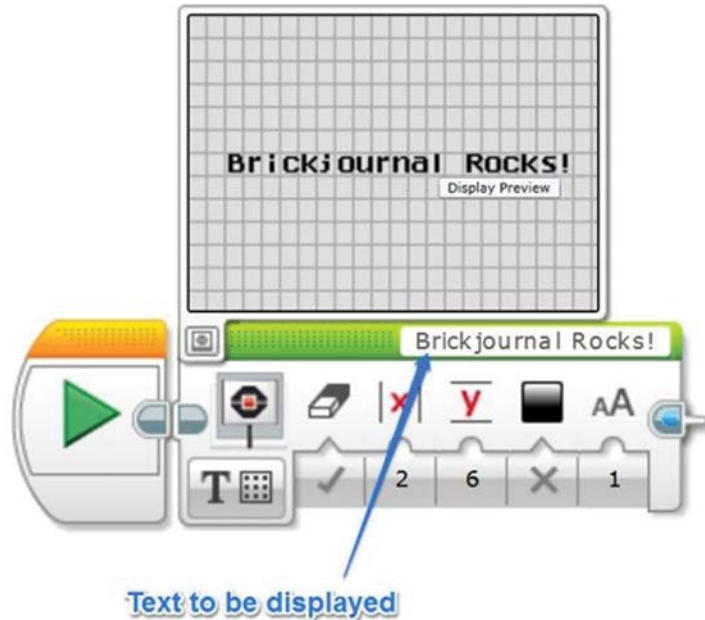


Display Block/Text Mode:

I'm using the Text -> Grid mode setting here which allows me to place specific text in a set place on the screen.

When the Display Block is in Text Mode, there are some new buttons that appear. Here are the buttons from left to right:

- *Clear Screen (eraser)*: If set as TRUE (checked), it will wipe anything on the screen before displaying the new image. When set to FALSE, it will overlay the new image on top of any previous image.
- *x*: This sets which column the text should start. There are 21 columns when in grid mode.
- *y*: This sets which row the text should start in. There are 11 rows when in grid mode.
- *Color*: Do you want black writing on a white background or white writing on a black background?
- *Font*: There are 3 fonts available; normal, bold and extra large. I prefer extra large as it is much easier to read (although you can't fit in as much writing!).

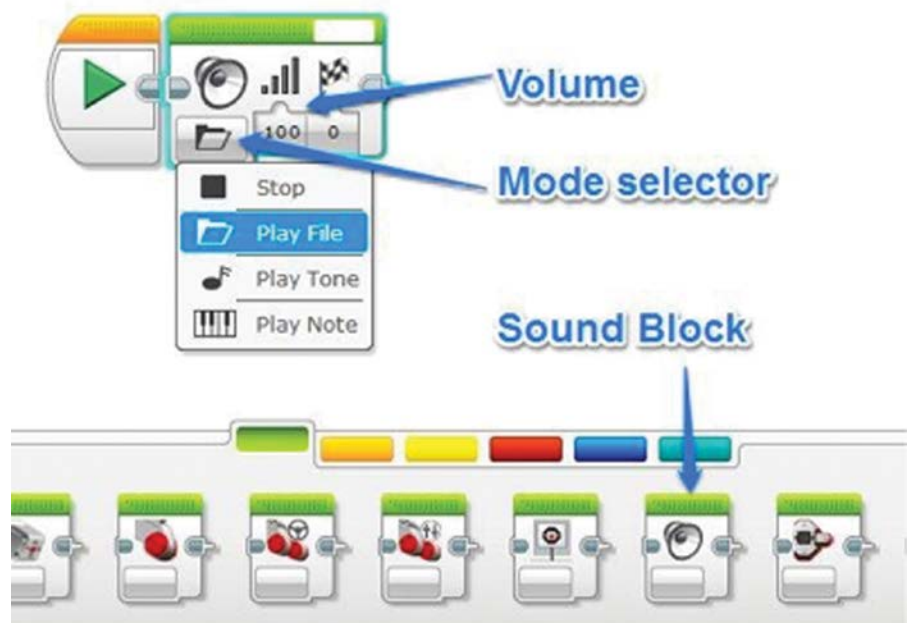


TIP: The screen will keep the display you have given it until a new Display Block is run. If the display block is the very last block in a sequence, there is no 'next block' so the program shuts down. This means that the Display Block is active for only a fraction of a second and you will barely be able to see it.

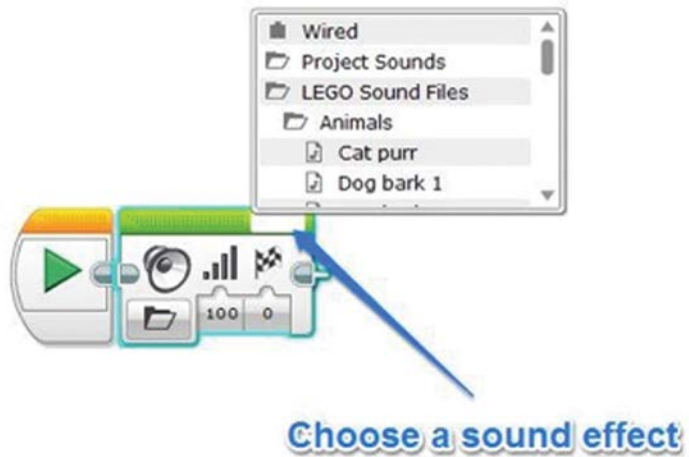
Sound Block

While it's cool to be able to see some images on screen, it is far cooler to have your robot speak! The sound block can be used in 1 of 3 different modes:

- *Play File*: Select from a list of pre-recorded sound clips.
- *Play Tone*: Set a specific Hz value for a note.
- *Play Note*: Choose a note from a piano keyboard.

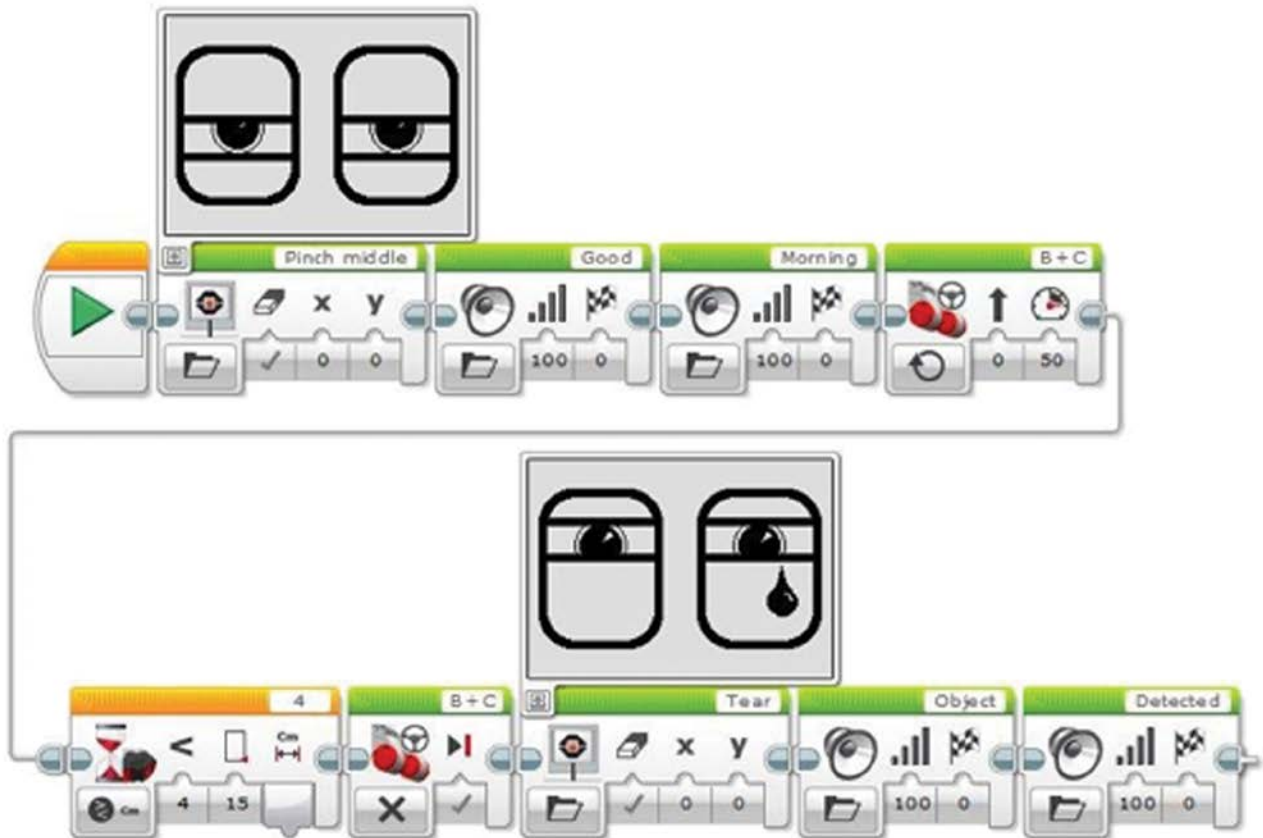


The one I prefer most (as do all the kids I've ever worked with!) is the Play File mode. There are countless different fun sound effects that are pre-loaded into the EV3 software which kids love to scroll through and find the most appropriate (and often very inappropriate) sounds for their programs.



The Display Block and Sound Block at Work


Here's a simple program that will say "Good Morning", show some eyes and then start driving. When it encounters an object it will stop, draw a tear in its eye and say "Object Detected."



Debugging

The immediate fun of putting a bunch of pictures and sound effects into your robot cannot be beaten, but there is a more important reason for including these blocks. Often we find that our programs are getting quite large and it becomes increasingly more difficult to find and fix mistakes. The sounds and display are a great way for the robot to convey information back to us about where in the program it is currently up to. In the above example, if I started my robot and it immediately said "Good Morning Object Detected", then I could see that there was probably a problem with the Ultrasonic sensor and that it was being triggered early. Without any sounds or images, all I would have would be a robot that didn't move, but no way to understand why.

Have fun with them, but also use them to help you understand how your program is progressing.

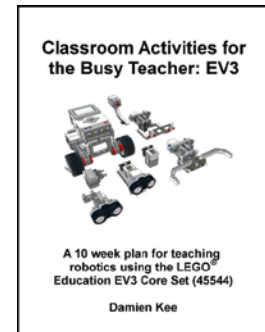
If you have an education-related questions (or any questions in general), don't hesitate to contact me! 



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Dr Damien Kee has been working with robotics in education for over 10 years, teaching thousands of Students and hundreds of Teachers from all over the world. He is the author of the popular Classroom Activities for the Busy Teacher series of robotics teacher resource books.

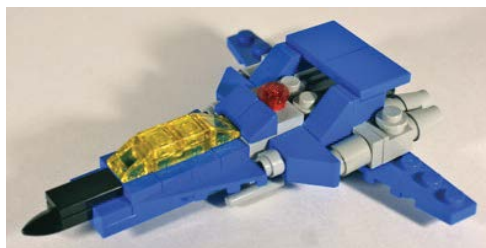


You can find more information at www.damienkee.com or contact him directly at damien@damienkee.com. Or you can scan the QR code at the left!



LEGO fans: You Can Build It!

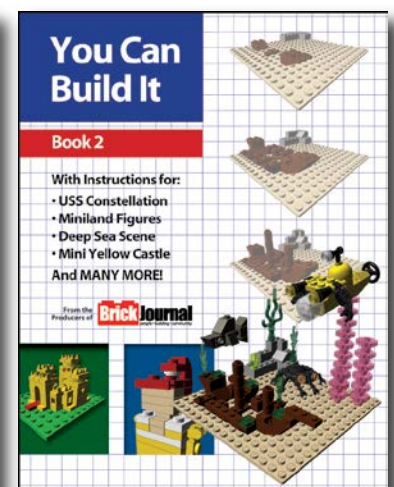
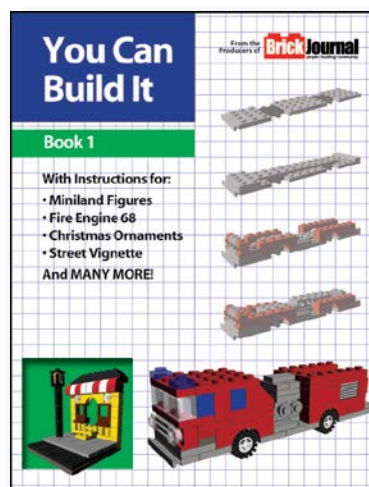
YOU CAN BUILD IT is a new ongoing series of instruction books on the art of LEGO® custom building, from the producers of **BRICKJOURNAL** magazine! Spinning off from BrickJournal's popular "You Can Build It" column, these **FULL-COLOR** books are loaded with nothing but **STEP-BY-STEP INSTRUCTIONS** by some of the top custom builders in the LEGO fan community. **BOOK ONE** is for beginning-to-intermediate builders, with instructions for custom creations including Miniland figures, a fire engine, a tulip, a spacefighter (below), a street vignette, plus miniscale models from "a galaxy far, far away," and more! **BOOK TWO** has even more detailed projects to tackle,



including advanced Miniland figures, a miniscale yellow castle, a deep sea scene, a mini USS Constitution, and more! So if you're ready to go beyond the standard LEGO sets available in stores and move into custom building with the bricks you already own, this ongoing series will quickly take you from novice to expert builder, teaching you key building techniques along the way!

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News

The SBrick Controller: Beyond Power Functions Controls!

Article by Joe Meno

Up until last year, controlling LEGO Power Functions elements was only done with LEGO infrared (IR) controllers and receivers. And while these controllers have progressed in function since they were first produced in 2007, most notably with the variable speed train controller, there have been limitations to the IR based system. Things have changed, though, with the release of the Sbrick Bluetooth control system.

The SBrick is a Bluetooth-controlled brick, which allows smartphones and tablets with the SBrick app to be able to operate the brick. This gives the SBrick many advantages over the LEGO IR controller, including longer range (up to 100 meters), more channels to run more bricks (the LEGO IR has four channels to use independently; the SBrick has sixteen channels it can run simultaneously), and operation in direct sunlight without interference. The Sbrick also has more power ports it can run at a time—the LEGO IR can run two motor ports, but the Sbrick can run four. The form factor of the SBrick is also different. Since it doesn't need an IR sensor, the SBrick is smaller than the LEGO IR receiver. Unlike the IR receiver, the Sbrick doesn't have an attached Power Functions wire, so a PF extension wire can be used. The result is a brick that is easier to build into a model.

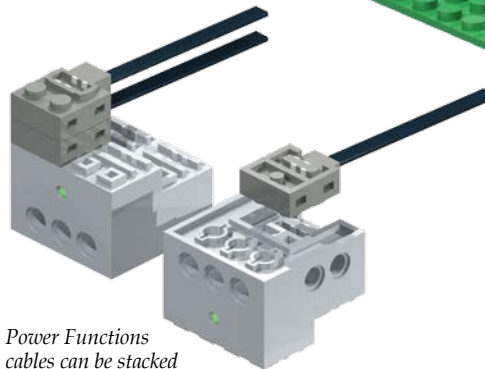
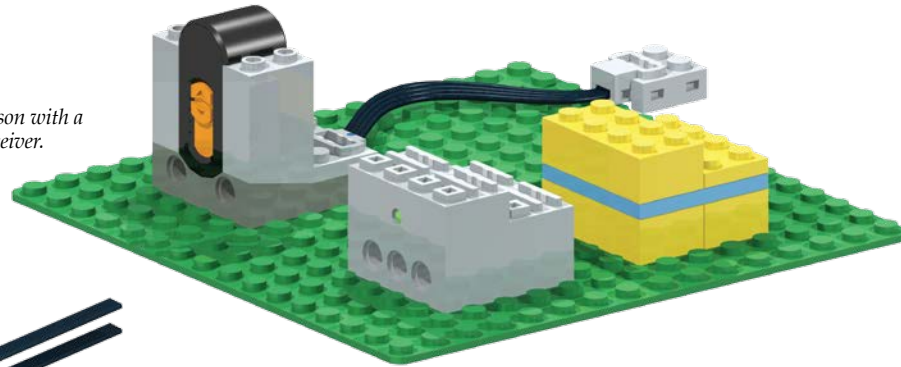
The SBrick app, though, is where the remote control shines. The app (both in iOS and Android) allows the user to create a profile to control the brick.

Control elements, such as speed sliders and thumbstick controls can be added to a




Driving a LEGO supercar is easy with an SBrick!

Size comparison with a LEGO IR receiver.



Power Functions cables can be stacked on the top outlets. A power cable from a battery attaches underneath the SBrick.

profile and then linked to one of the power ports on the SBrick. From there, the profile is linked to an Sbrick and the system is ready to use, allowing users to make custom consoles for their powered models. There is also an online profile designer in beta stage that will add even more features. Functions that are being planned include remote control from the Internet, child mode for easy controls, and sharing of profiles. Already, though, the apps and current functions are being used and improved upon.

Presently, the SBrick is available for purchase at www.brickpowerllc.com. The apps are available for iOS, Android, and Windows Phone. While the SBrick and apps have been released, the Profile Designer is in beta mode as of press time to allow for direct feedback from the SBrick user community. A full version of the Profile Designer is expected in the summer. 



The phone app lets you test each port and designate them to a profile like the one in the foreground.

With this magazine's theme being History, it wasn't that hard for me to figure out a model to build. This is a model that is actually one of the first microscale builds I built, way back in 2001...yipe, this model is older than the magazine!

In any case, I still have this model because it's a simple rendition of an iconic engineering achievement: a moon rocket. It's by no means accurate, but that is one of the challenges of microscale building: what to keep and what to remove in terms of design. I took the basic look of the crawler, tower and Saturn V and used mostly basic parts. With all the new parts that come out in the new sets, it's fun to have something that can be done with only a few types of parts.

Now to build the rest of Kennedy Space Center... 

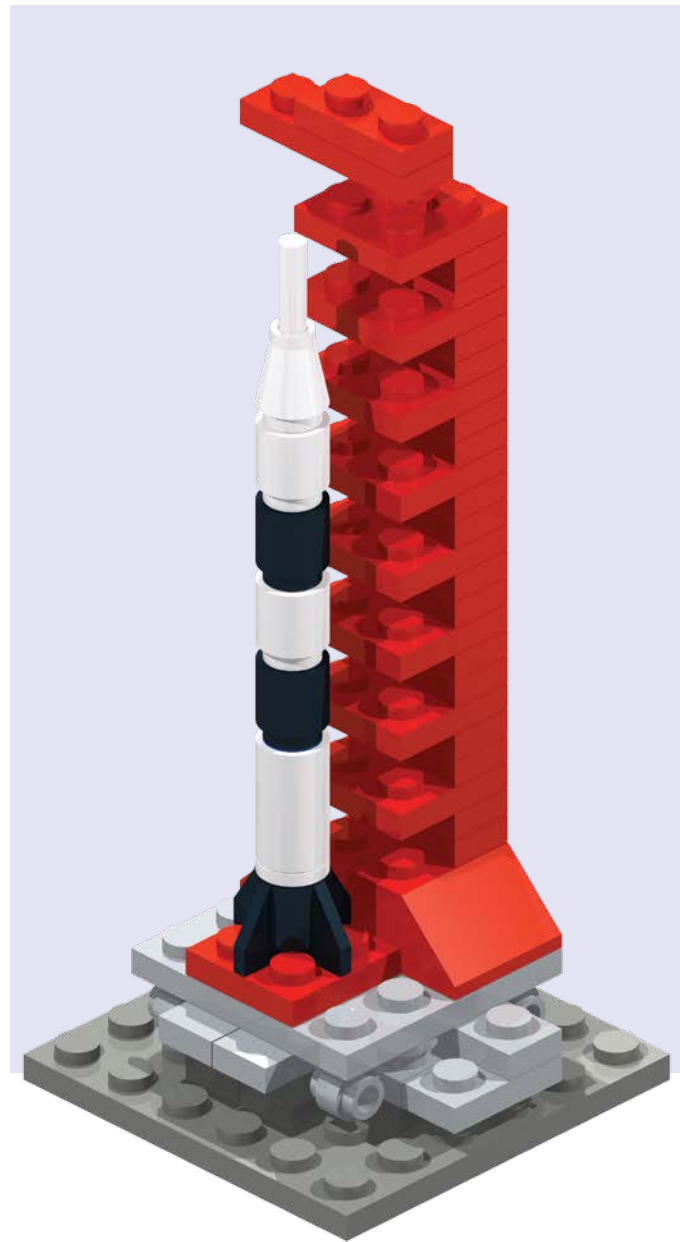
Parts List

(Parts can be ordered from Bricklink.com by searching by part number and color)

Qty	Color	Part	Description
1	White	30374.dat	Bar 4L Light Sabre Blade
2	White	3062b.dat	Brick 1 x 1 Round with Hollow Stud
1	White	4589.dat	Cone 1 x 1
1	White	75535.dat	Technic Pin Joiner Round
1	Red	4073.dat	Plate 1 x 1 Round
17	Red	3023.dat	Plate 1 x 2
1	Red	3623.dat	Plate 1 x 3
9	Red	3022.dat	Plate 2 x 2
2	Red	3039.dat	Slope Brick 45 2 x 2
2	Dark Bluish Gray	3023.dat	Plate 1 x 2
2	Dark Bluish Gray	3794b.dat	Plate 1 x 2 with Groove with 1 Centre Stud
2	Dark Bluish Gray	2420.dat	Plate 2 x 2 Corner
1	Dark Bluish Gray	3958.dat	Plate 6 x 6
1	Black	4588.dat	Brick 1 x 1 Round with Fins
2	Black	3062b.dat	Brick 1 x 1 Round with Hollow Stud
1	Light Bluish Gray	4073.dat	Plate 1 x 1 Round
4	Light Bluish Gray	4081b.dat	Plate 1 x 1 with Clip Light Type 2
4	Light Bluish Gray	3023.dat	Plate 1 x 2
2	Light Bluish Gray	3794a.dat	Plate 1 x 2 without Groove with 1 Centre Stud
1	Light Bluish Gray	3022.dat	Plate 2 x 2
1	Light Bluish Gray	3031.dat	Plate 4 x 4
1	Blue	4274.dat	Technic Pin 1/2

You Can Build It

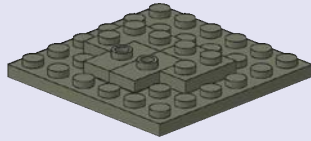
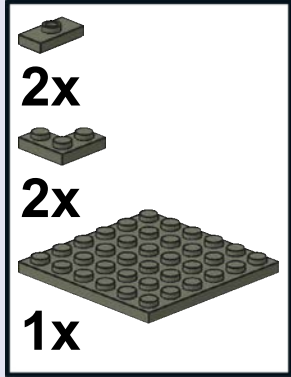
MINI Model 



MINI Saturn V on Launch Crawler

*Design and Instructions
by Joe Meno*

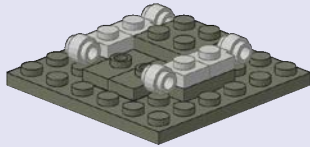
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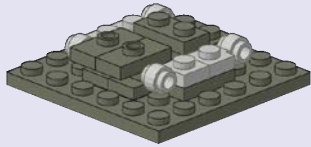
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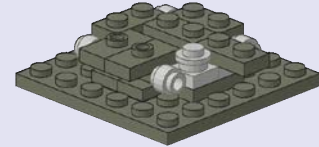
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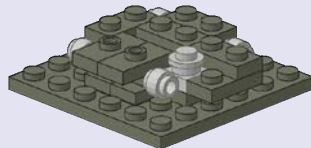
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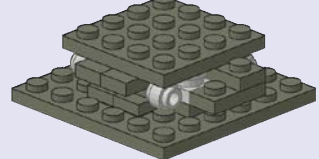
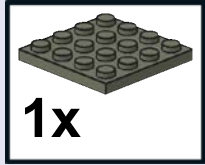
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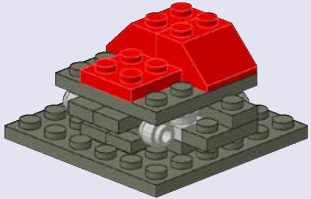
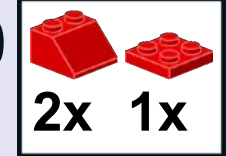
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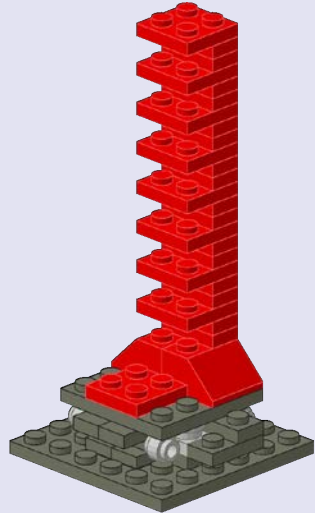
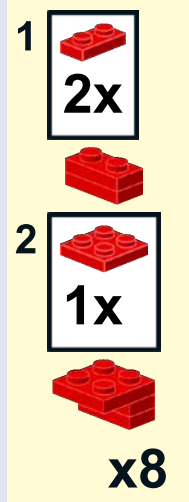
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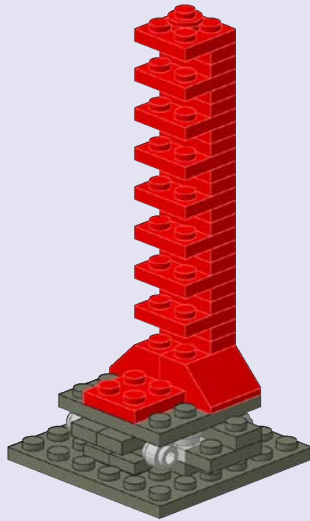
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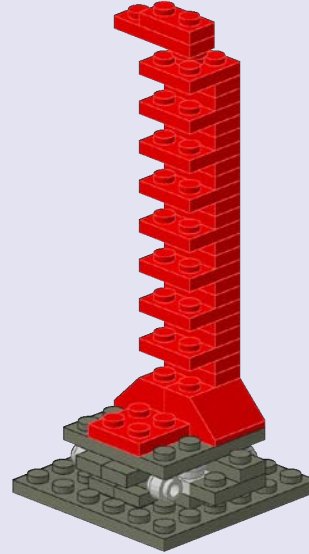
10




11  1x





12  1x
 1x




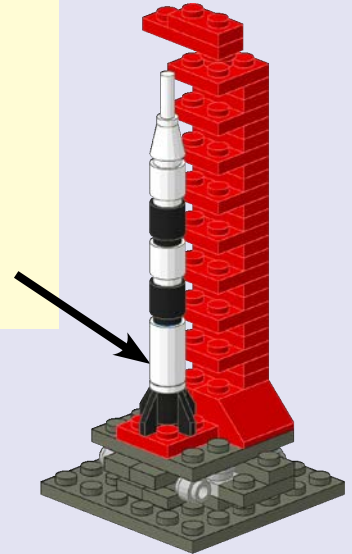
13 1  1x

2   1x 1x

3   1x 2x

4   1x 1x

5  1x



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Launching the First International Robot Mak3r Day!

*Article by the IRMD's founder,
Vassilis Chryssanthakopoulos*

*Edited by Marc-Andre
Bazergui and Joe Meno*

*Photography by the IRMD,
Vassilis Chryssanthakopoulos
and the Moraitis School.
LEGOLAND Florida photos
by Amber Rabbitt*



Hi, I'm Vassilis Chryssanthakopoulos, and I am the founder of The International ROBOT MAK3R Day. Our first event was held in Athens, Greece, on May 9th 2015. This live event and mega hangout lasted 2 hours and 48 minutes. I'm honored to be able to share with you here the story of how this event was born and how it has the potential to become the greatest annual party around robotics and LEGO MINDSTORMS makers, educators and enthusiasts in the world.

An Idea Hatches Into Being

The way in which an idea grows in your mind slowly and suddenly explodes to something awesome is a very well known process to all designers. My idea appeared early in 2010, where I had the vision of creating a unique yearly event that would bring some of the stars of the robotics universe to Greece. I remember having countless conversations about that with Steven Canvin and Camilla Bottke, who at the time were heads of the LEGO MINDSTORMS team at LEGO. Needless to say we had numerous crazy ideas but sadly, the critical stumbling blocks were always time and budget.

On a cold morning this past February, the idea of mixing a live onstage event with an online mega gathering and a worldwide live streaming suddenly crossed my mind. Little did I realize this would be the start of a great journey.

Not having any previous experience in organizing an entire event, I realized that the progress stages were similar to designing a new robot: When the idea is first born in your mind, everything seems easy and doable and you start with incredible enthusiasm. As you move to detailed design and implementation, though, things start getting harder and harder. There



Above: Lee Magpili and Vassilis Chryssanthakopoulos take the stage.

appeared to be way too many challenges, especially technical, as this concept was never tried before. Even the target date was daunting, as it was set just two months after the idea was born.

I was quite aggressive! I confess that there were times that I felt that everything would go wrong, but all the ROBOT MAK3Rs who I told the IRMD idea to endorsed it with great enthusiasm. They had become part of this vision and their willingness to contribute in the best possible way to make this initiative happen became my strength throughout this journey.

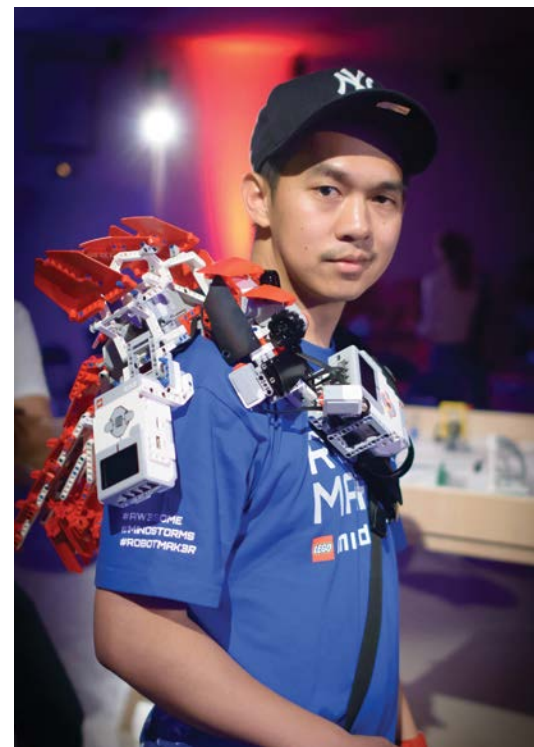
The mission of the International ROBOT MAK3R Day was clear: To inspire kids and adults in sciences and in the world of robotics by putting them in a mega hangout together, made up of a live performance and tons of robots from the most well-known makers, hackers, educators and organizations from around the world.

The Idea Finds a Home

Although I could have run this event with my local team in a big mall or another space, we wanted something that would reflect the scientific and educational aspects of the mega hub. I got an opportunity to use the auditorium of the Moraitis School in Athens Greece and realized that this would be the perfect place for the first International ROBOT MAK3R Day. Also, as the Moraitis School is a member of UNESCO's (the United Nations Educational, Scientific and Cultural Organization) associated schools network, the whole concept was endorsed by and organized in support of UNESCO'S 70th Anniversary Celebrations.

Taking advantage of the celebrations, we structured the IRMD content around UNESCO's four pillars of learning. We set up a special project with the help of the Greek LEGO Market Office. During the entire week before the IRMD, the students of the school built four huge castles out of 160,000 LEGO bricks. The towers were then named to know, to do, to be and to live together (the four pillars of learning) and used to decorate the hub at the IRMD.

Lee strikes a pose with his robotic sleeve..



It was funny and at the same time very flattering when Andy Milluzzi called me the Great Ambassador of the United Nations of ROBOT MAK3Rs. It was also very flattering when Filippa Malmegård, community manager of LEGO MINDSTORMS and Lee Maggpi, designer at LEGO Education both accepted my invitation to join us live at the hub in Greece. An excited Lee promised he would bring to Athens his two huge dragons that were already in the US for the 2015 FIRST Championship, held in St. Louis. However, just one week before the event, Lee informed me that his robots were stuck somewhere in Kansas and there would be no way that they would make it in time to Athens! This news was very disappointing, but big players like Lee always have a trick up their sleeves. In fact, in less than a week, Lee built a brand new dragon from scratch, a gorgeous light blue and white colored creature to match the colors of the Greek flag. Suddenly, I did not miss the green and red dragons anymore!

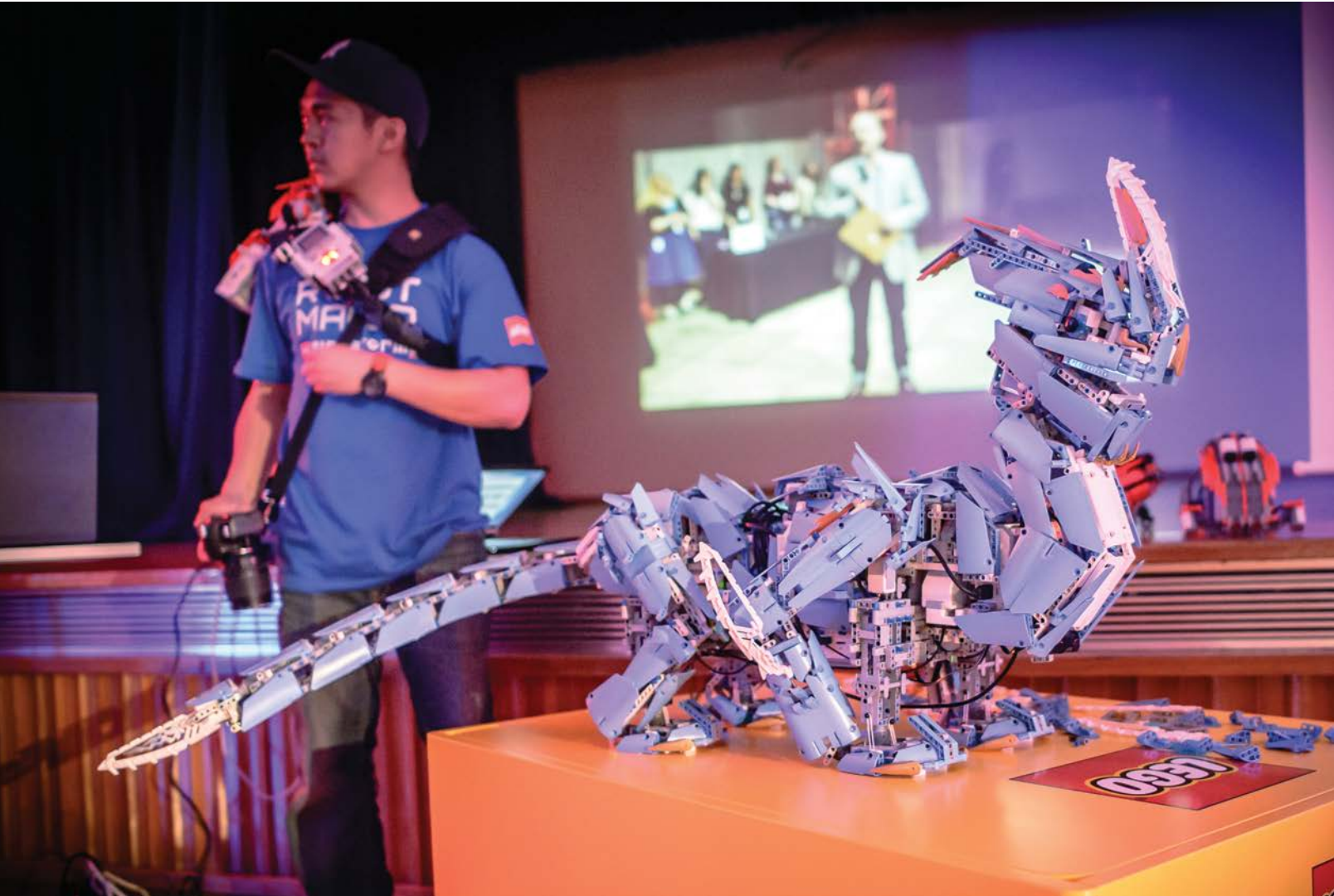
Lee's sleeve opens.

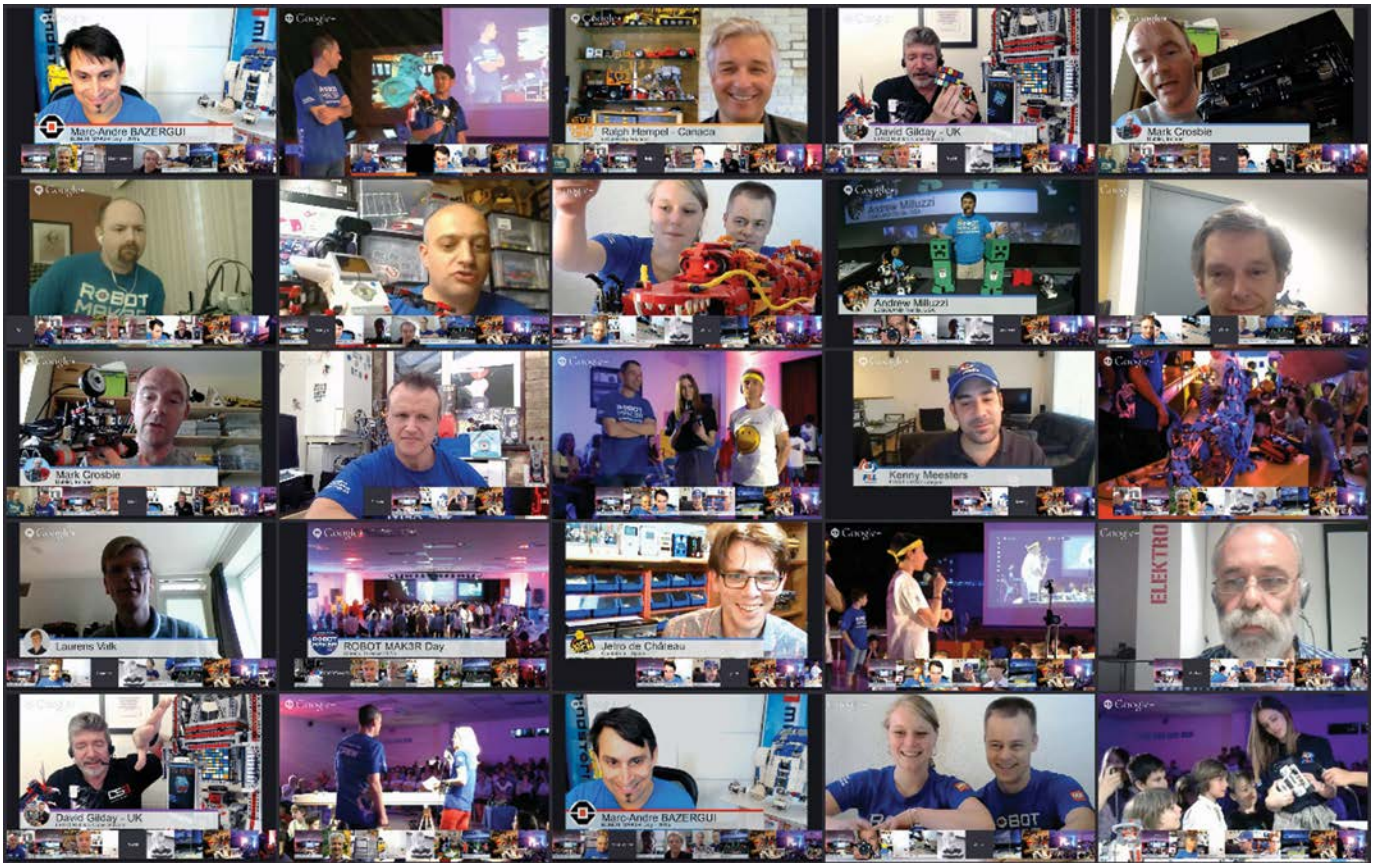


To prepare for the event, we ran a lot of hangouts with many of the ROBOT MAK3Rs in order to test, evaluate and tweak all technical parameters of the IRMD like lighting, sound, connectivity, image sharpness, etc. During this, I discovered the real magic from this testing process wasn't the fascinating and amusing online discussions we had together, but the joy we felt of being part of such an amazing team!

An example of this joy happened backstage. The auditorium was booked for countless other activities and there was actually no idle window to schedule a proper preparation and set-up process. In the rehearsal that was held just one day before the event, we had only two hours to decorate, test the equipment, the hangouts, the sounds, the lighting, and the robots, and then to uninstall everything and return the space back to its original condition. It's amazing how many things can be accomplished in such a short time when you are well prepared and your team (most of them students and professionals of the Moraitis School that were acting as IRMD volunteers) share exactly the same passion and vision with you. The story was repeated the next day, where again we had two hours to prepare and set everything up before having the first guests at the hub! And it wasn't that hard the second time!

Lee's dragon, made of MINDSTORMS and Technic parts.





“We’re live!”

The participants of the International Robot Mak3r Day all online: (from left to right, top row) Marc-Andre Bazergui, Vassilis Chryssanthakopoulos and Lee Magpili, Ralph Hempel, David Gilday, and Mark Crosbie, (Second row) Will Gorman, Martyn Boogarts, Annika and Arjen Brandsma, Andy Milluzzi, and Chris Rogers from Tufts University. (Third Row) Mark Crosbie, Simon Burfield, Vassilis with Antonia Psallida and the Robot Masters, and Kenny Meesters. (Fourth Row) Laurens Valk, Jetro de Château, the Robot Masters and Michael Brandl. (Bottom Row) David Gilday, Vassilis with Filippa Malmegård, Marc-Andre Bazergui, Annika and Arjen Brandsma, Antonia Psallida from FLL Greece.

The Idea Takes Flight

Hours before the 18:00 start time, the IRMD mega-hub was already full. The kids from the Moraitis School immediately started gathering at the amazing crash pad we set up with more than 30 robots that all guests could play with. Lee, wearing a very futuristic wearable robotic creation, started to operate his new-born Greek dragon. At the center of the auditorium, the great Greek FIRST® LEGO League (FLL) team ROBOT MASTERS, champions at the 2015 Greek FLL Tournament and 4th worldwide at the Robot Game of the 2015 FLL in St. Louis, demonstrated their robotics skills and their joy of participating in robotics competitions. Everything was in place with lots of action in Athens.

After sharing with the kids my personal story about how I met Steven Canvin and started working with LEGO on several robotics related projects, it was time for Filippa Malmegård to kick-off the first International ROBOT MAK3R Day mega hangout. That’s when the real magic began. LEGO MINDSTORMS

Filippa Malmegård gets ready to open the mega hangout.





The Robot Masters show off their winning robot onstage.



A look between two of the towers built by the students of the Moraitis School, the host of the International Robot Mak3r's Day.

gurus worldwide appeared on screen ready to broadcast worldwide their stories, experiences and passion around robotics.

Meanwhile, on the other side of the planet, Andy Milluzzi arranged something really special for this day. LEGOLand Florida streamed International ROBOT MAK3R Day in their 4D Theatre. During the entire day, Andy and the LEGOLand MINDSTORMS Team presented and shared robotics creations at the park. Marc-André Bazergui, my online co-host, helped me coordinate the limited video slots available in the hangout as the panels were really busy:

- **Creating ICONIC Robots:** Marc-Andre, Andy, Laurens Valk, Anika

Brandsma and her father Arjen Brandsma, Michael Brandl and Martyn Boogaarts kicked off the discussion about imagination, creativity and what makes a robot iconic. For the very first time, all generations of Marc-Andre's Wall-Es were together in a set along with his latest robots EV3LYN and R2-EV3.

- **Coding Beyond the Limits:** The hackers then conquered the screen! The Guinness World Record holder David Gilday from the CUBESTORMERS, shared his magical experience in making the fastest Rubik's cube solver machines in the world, while demonstrating a magnificent 9x9x9 cube solver. Ralph Hempel discussed with Will Gorman, Marc Crosbie, and Simon Burfield his EV3dev development. All agreed there

are no limits when coding with and for MINDSTORMS.

• **FIRST and the Value of Competitions:** Andy Milluzzi and Kenny Meesters discussed with the representatives from FLL Greece, the ROBOTMASTERS and Lee Magpili about the benefits and the value of robotics competitions. The result was a fantastic mix of online and live at-the-hub action.


• **Why Kids Learn More by Playing With Robots:** Our purely educational panel consisted of Jetro de Chateau, Martyn, Lee, Kenny and Chris Rogers, the Co-Director of the CEEO (Center for Engineering Education and Outreach, Tufts University) while Damien Kee (with a special video message) explained why he believes so much in quick builds for education.

• **Imagination and Creativity:** We ended the hangout returning to crazy robots, and Arjen, Anika's dad, showed us in detail the working of his LadyBug, and Marc Andre made a demo of his never seen before growing robot EV3Lyn.

Between these panels, we had inspiring video messages coming from Camilla Bottke (who greatly shaped the history of LEGO MINDSTORMS as Senior Marketing Manager from Fall 2010 to Spring 2013), from the crazy scientist and designer Daniele Benedettelli, and from Matthias Paul Scholz (with a Greek-speaking robot puppet).

Such a huge event with so many onstage and online guests from all around the world and a live international live streaming has never happened before in the robotics universe. Many things could have gone wrong, so it was stressful. At the same time it was an amazing experience. What everybody came away with was the knowledge and the joy of creating something fantastic, as well as leading the way to future events.

As the founder of the IRMD, my vision is growing. After all the experience gained so far, we know that we can make it much better and stronger. I'm already planning in Athens the next International ROBOT MAK3R Day in May 2016, with more activities and more robot interaction to be added at the Athens central hub. We're also going to replicate the magic that happened in LEGOLand Florida and so we're planning to have at least one sub-hub on each continent of the world. Beijing has already accepted the challenge.

Just imagine! In 2016, Athens will reconnect all ROBOT MAK3Rs and enthusiasts in a huge live party that will happen simultaneously all around the world! Will you be ready for it? 

You can see the official Facebook page of the IRMD by going to this website: <https://www.facebook.com/ROBOTMAK3R> or scanning the QR code below:



Andy Milluzzi hosts the LEGOLand Florida video stream.



Andy Milluzzi talks about his Minecraft Creep3rs.

A Royal Project: Two Mosaics in Two Weeks!

Article by Brian Korte
Photography provided by Brickworkz, LLC

Two Weeks to Bahrain...

When you create a portrait for royalty, details matter. That was the situation I faced when I was approached to create a LEGO portrait for Mohammed and Hamad al Khalifa, twin sons of the Crown Prince of Bahrain. The boys would turn three in 14 days. A LEGO-themed birthday celebration was in the final planning stages.

I had just arrived home from the beach—a long-overdue vacation that allowed me to recuperate from an incredible amount of planning and logistics for an on-site LEGO mosaic build in Orlando, Florida. The e-mail I received was simple. “Can you make a portrait of twin boys and do you ship to Bahrain?”

Our collaboration began over e-mail with a party planner from Dubai. From her e-mails I could tell that we didn’t have a lot of time at all, but that we didn’t quite have everything we needed to get started. Our deadline turned out to be just days away, not weeks. I changed our conversation to the things we could control in the very short time that we had. I suggested we make two 30” x 45” mosaics and get them built within days of receiving the photo.

DEADLINE: 10 Days

I received the photos of the boys with 10 days remaining. 2015 is my 9th year running Brickworkz, and in all of this time I had never been commissioned to create two portraits designed to display side-by-side. This would be a creative challenge.

The king of Bahrain has a large family with many sons and grandsons, with these twin boys among the line of succession. I felt I should make these portraits equal in almost every way. I designed both portraits together, aligning the facial features of the separate photos to ensure the completed portraits would be equal. I didn’t want one boy’s LEGO portrait to look weaker or smaller than the other’s when succession might be a factor. I even drilled the hanging wire through both frames together to ensure that one portrait wouldn’t hang higher than the other. They are as close to identical as I could make them.

DEADLINE: 7 Days...

Hamad's portrait was built quickly, thanks to some friends who answered the call for help. Mohammed's portrait took another few days. I took a day in between to work on the crate.

The crate I designed to safely haul these mosaics overseas could have handled any beating the mosaics would encounter. Specifically designed for the box size of these two portraits, it weighed in at more than 100 pounds and took most of a Saturday to design and construct. (My next one will be built much faster now that I know what I'm doing.)

DEADLINE: 5 Days...

On Monday, I learned that a shipper wasn't available to get the mosaics to Bahrain in time for the Saturday deadline. The new plan was that a member of the Bahraini Embassy would pick up the mosaics Thursday night in Richmond, about 20 minutes from my studio, and fly them to the Palace. I had two days to complete all of the finishing touches and was on-track to meet the deadline.

The portrait of Mohammed was completed Monday night. Now I could focus solely on framing the mosaics and getting them wrapped and shipped out.

DEADLINE: 4 Days...

On Tuesday, I received a call from Bahrain that had my heart racing. Because of the time difference, the Palace couldn't delay. Plane tickets were secured for Wednesday afternoon, in Washington, D.C. instead of Thursday night from Richmond as we had planned. I raced to the studio and worked all night. This wasn't 48 hours of work and a 20 minute trip to the airport anymore. This became a "finish whatever you have ready in the next 15 hours and drive it 130 miles to get it on a plane."

DEADLINE: ~~3 days~~ NOW!

On Wednesday morning, the crate was in my studio ready for packing and loading. That's when I got another call from the embassy that the crate was simply too heavy: No crate allowed. If we had more time we could have transported these mosaics as cargo, or even shipped them like traditional freight. There was no time to get the mosaics on the plane as anything besides "baggage." These portraits I had treated so gingerly these past few days now needed to be "tossed" along with the luggage of everyone else onboard.

Treating the portraits as baggage also meant that the weight had to be under 70lbs and meet the same size restrictions as luggage. I have shipped LEGO portraits all over the world in the same packing materials, so I wasn't terribly worried. I added extra padding and wrapped everything up to meet the deadline.

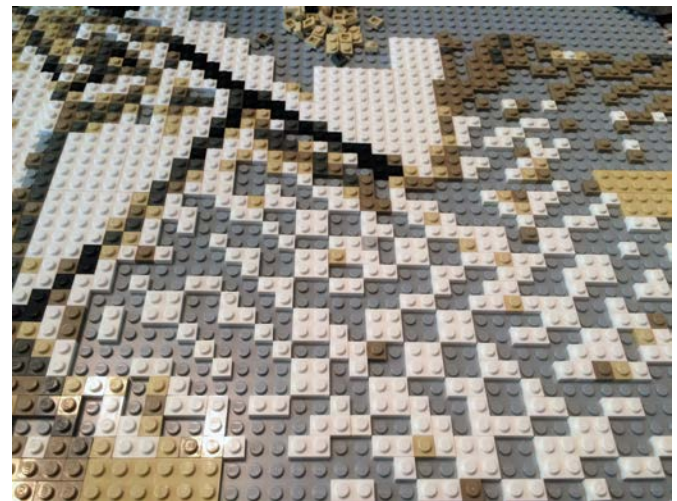
I loaded up a cargo van and drove up to Dulles Airport, picking up Amin, the Bahraini Embassy employee who had been selected to accompany the LEGO portraits. This guy knew everybody at the airport. Amin shook hands with the manager at the check-in gate. He hugged employees and their bosses. The district manager came over to greet us, but had to give us the bad news:

Our box was still oversized.

So there we were, in Dulles airport on Wednesday afternoon, cutting open my thoroughly-packed mosaics, removing extra padding, cutting and re-scoring the box to try and get the size reduced. Amin, dressed in a business suit, was tearing off packing



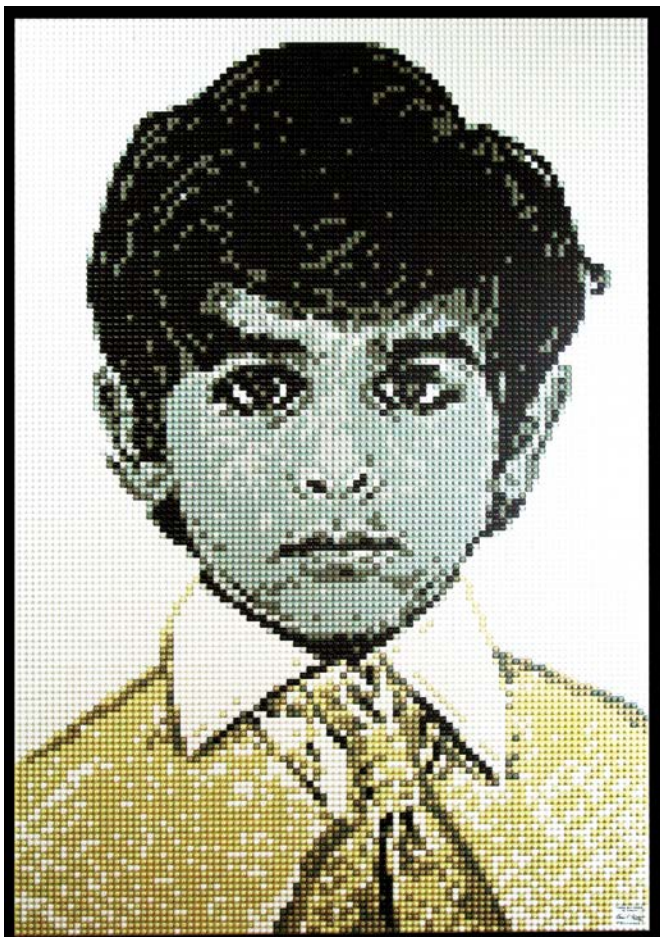
Lining up and matching portraits.



A closer look at one of the mosaics.



Amin (from the Bahraini Embassy) and Brian at Dulles Airport.



Mosaics by Brian Korte: (left) Hamad bin Nasser al Khalifa and (right) Mohammed bin Nasser al Khalifa. 7 colors. 13,824 LEGO studs each. 30" x 45"

tape with his teeth as I struggled to mash down the box lids. We got the size down to within a half inch of the requirements. The airline manager witnessed us sweating as we tore over the box with scissors and tape and graciously gave us a nod of approval. (After all, if these mosaics wouldn't get on a plane, Amin wouldn't either—there would be no point. Amin's only mission was to deliver the art to Bahrain.)

That was it. The manager waived the portrait box through with a wink. We saw our newly-sized box disappear down the baggage conveyor belt. More hugging ensued. Emotions were high. I threw in a few hugs as well.



Brian finishing up the mosaics.

Thursday, I was praying for good news, that the baggage handlers ("throwers," as they're called) would be gentle, and that the portraits would be well-received. After all, the Palace in Bahrain had only seen photos from my website. While I hoped to impress them, I wasn't sure if they knew what to expect.

Amin gave me a mild panic attack when he texted a photo of the mosaic box all shredded up in Qatar. "TSA wanted to inspect the box" said the text. My heart sank. Was this destruction part of the "before" or "after" photo? I received silence for the next few hours, while Amin flew on to Bahrain.

This project was one logistical challenge after another. I put anything I couldn't control out of my mind and focused on what I could do. The mosaics were built to last, so I had to hope that the TSA would fix what they pulled apart. And frankly, I didn't have the strength to worry any longer. It would get there, and it would be perfect. This was the royal family. It had to be.

My thoughts were confirmed early Friday morning when I got a text message from Bahrain. It was from my customer, the party planner, writing from the Palace. She said that it took about 20 minutes to unpack, but that everything looked great. The party would take place the next day. I asked what they thought as they unpacked the portraits. Her response was simple but put me at ease.

"Unwrapping them was very emotional. They love 'em." 

Brian Korte creates custom LEGO portraits for families and companies all over the world with his business, Brickworkz LLC. Learn more and see examples at www.brickworkz.com



Brick Journal

people • building • community

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We go to the Middle Ages, with a look at the **LEGO Group's CASTLE LINE**, featuring an interview with the designer behind the first **LEGO** castle set, the **YELLOW CASTLE**. Also: we spotlight builders that have created their own large-scale version of the castle, and interview other castle builders, plus a report on **BRICKWORLD** in Chicago, and still more instructions and building tips!

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BrickJournal looks at **LEGO® DISNEY SETS**, with features on the **Disney LEGO** sets of the past (**MICKEY** and **MINNIE**) and present (**TOY STORY** and **PRINCE OF PERSIA!**) We also present **Disney models** built by **LEGO** fans, and a look at the newest **Master Build** model at **WALT DISNEY WORLD**, plus articles and instructions on building and customization, and more!

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Discover the world of stop-motion LEGO FILMS, with brickfilmer DAVID PAGANO and others spotlighting LEGO filmmaking, the history of the medium and its community, interviews with the makers of the films seen on the LEGO CLUB SHOW and LEGO.com, and instructions on how to film and build puppets for brick flicks! Plus how to customize minifigures, event reports, step-by-step building instructions, and more!

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Go to Japan with articles on two JAPANESE LEGO FAN EVENTS, plus take a look at JAPAN'S SACRED LEGO LAND, Nasu Highland Park—the site of the BrickFan events and a pilgrimage site for many Japanese LEGO fans. Also, a feature on JAPAN'S TV CHAMPIONSHIP OF LEGO, a look at the CLICKBRICK LEGO SHOPS in Japan, plus how to get into TECHNIC BUILDING, LEGO EDUCATION, and more!

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TECHNIC hot rod builder PAUL BORATKO and editor JOE MENO diagram instructions on adding functions to your models, shop talk with LEGO TECHNIC designers, and more surprises to keep your creations moving at top speed! Plus Minifigure Customization by JARED BURKS, step-by-step "You Can Build It!" instructions by CHRISTOPHER DECK, BrickNerd DIY Fan Art by TOMMY WILLIAMSON, and more!
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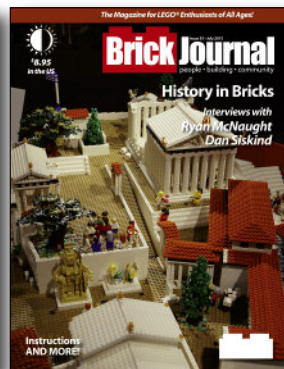
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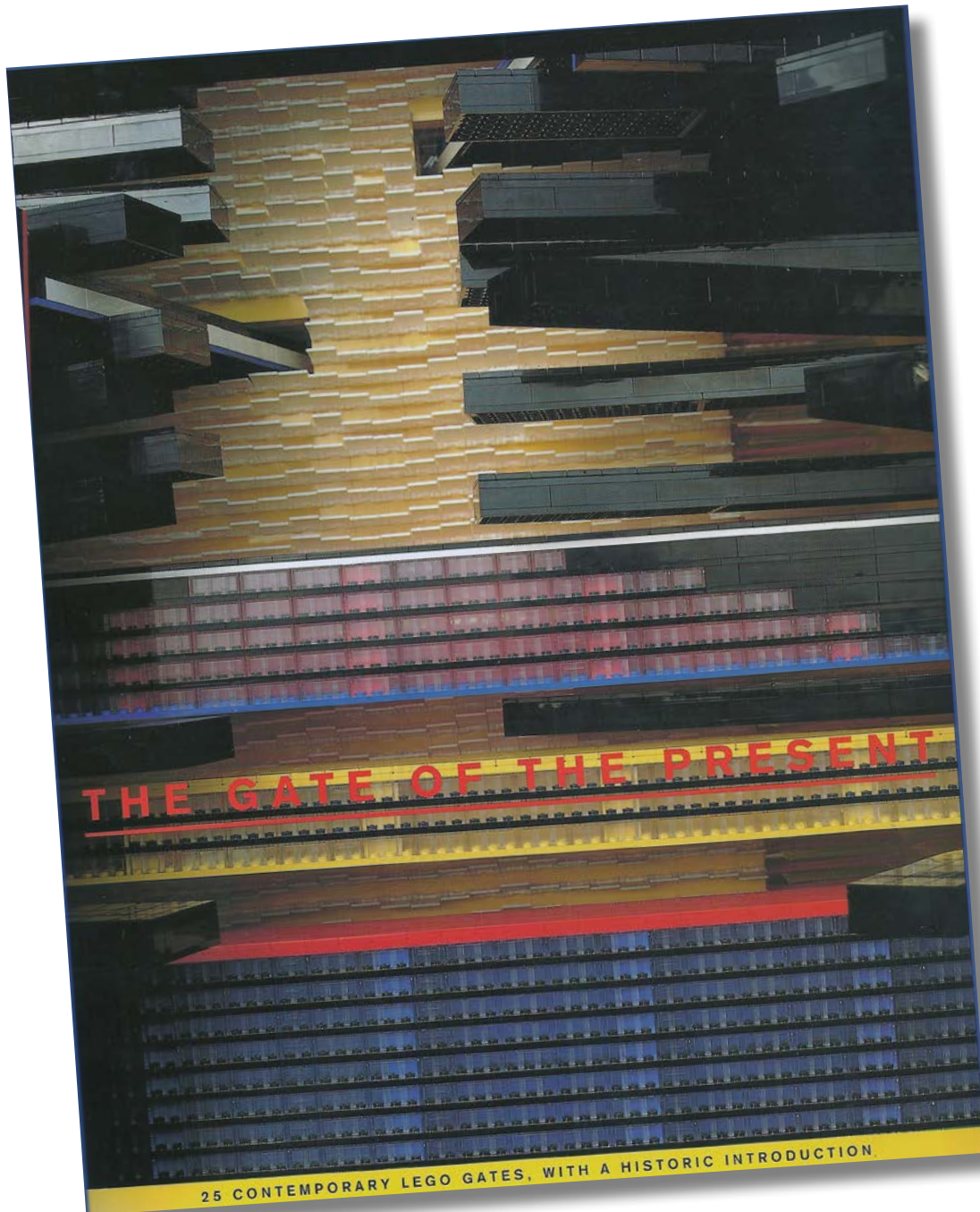
Before becoming a print magazine, there were nine DIGITAL-ONLY issues of BRICKJOURNAL produced from 2005-2007, which are still available as DIGITAL EDITIONS for only \$3.95 each at www.twomorrrows.com (NOTE: These are DIFFERENT ISSUES than the ones shown in this flyer.)

Architecture

The Gate of the Present

25 Contemporary LEGO Gates, With a Historic Introduction

*Article and Photography
by Geoff Gray*



It's no secret that LEGO bricks have had a profound impact on people all over the world. Throughout the company's history, the "System of Play" has been used for much more than just a kid's toy. It has had a place in architecture for decades. I have maintained a fascination for learning about how the colorful bricks get used to portray art and architecture.

Back in 2005, I was searching through eBay when I came across a book called *The Gate of the Present: 25 Contemporary LEGO Gates, With a Historic Introduction*. I had no idea what the book was, who had published it, or why it had been released. However, I was able to confirm that the book was legitimate, and it seemed to be fairly rare. I do not remember if I got my copy from that auction or from some other source, but I am glad that I managed to add it to my collection.

In this article, I will tell you a little bit about the book's layout and content, and I will share the entire text of the introduction from the book itself, which does a much better job of giving you the reason for the book than I could ever do. And before you ask, yes, I did reach out to The LEGO Group and received permission to reproduce it here.

This book, released in 1992 as part of the "Gate of the Present" exhibition, opens with a section called "Architectural and Cultural History of Gates" which describes some of the reasons for, and symbology of, gates. The authors (Anna Meseure and Volker Fischer) state that "The need for gates is born the moment boundaries are considered necessary." The next couple of paragraphs get a bit eclectic and very philosophical, but then the authors state "But let us avoid straying beyond the confines of the present subject: back to architecture again." They finish the initial thoughts and then spend the next 22 pages covering various different architectural periods and/or styles:

- Prehistory, Early Civilization
- Greece and Rome
- Central America and the Far East
- Islam
- Romanesque and Gothic Art
- Renaissance
- Baroque

"The need for gates is born the moment boundaries are considered necessary."



The photographs above show 24 of the designs printed on 15cm x 15cm postcards. The postcards were part of a set that could be purchased separately. The 25th design was not included because I could not make it fit. However, you can see that design on the next page ("The Gate of the Present," Rushcutters Bay, Australia).

- *Classicism and Historicism*
- *Romanticism, Jugendstil, The Moderns*
- *The Present*
- *Epilogue*

The book then presents each gate in its own section, with pictures, artwork, conceptual artwork and, in some cases, the thoughts of the architect about the design. Every entry contains the name(s) of the architect(s), the date of their birth, the dimensions of the scale model, and the count of LEGO elements in the model. The book ends with five different photos of the models being built, a section called “LEGO bricks—play and culture” and its colophon: a brief statement containing information about the publication of a book such as the place of publication, the publisher, and the date of publication.

All of the models were built in the LEGO Model Production Department in Denmark. Quoting from the final section of the book: “Now it was the task of our model builders to convert the architects’ visions into brilliantly colorful LEGO reality—and it was not always easy. But it was a challenge which the eleven model-builders welcomed, as they had to create, build, glue and, in some instances, interpret the ideas of others.”

The Book’s Introduction, Written by Albert Roskam

LEGO bricks have been in existence since 1949. You can make cars, boats and planes from them, but what could be more natural than using them to build a house? The LEGO range is constantly expanding, thus greatly increasing the scope of the original product. Not surprisingly, overtures were made towards the world of architecture. Already in the Sixties: in LEGOLand well-known buildings were built to scale.

In 1984 the scale of the activities was enlarged through the exhibition entitled *Architecture in LEGO* held in Rotterdam. Ten young architects, all from the Netherlands, were asked to make their design for a villa. Their models were built in LEGO bricks on a scale of 1:20. Inspired by the success of this exhibition, it was decided that the project would be repeated, but this time using thirty architects from ten West European countries. The exhibition *L’architecture est un jeu ... magnifique* opened in the summer of 1985 in the Centre Georges Pompidou in Paris. The exhibition travelled for three years through Europe and Japan, and was viewed by more than a million people. A formula for presenting architecture to a large public had been found.

The exhibition entitled the *Gate Of the Present*, which opened on the 11th of December 1992 in the Deutsches Architektur Museum in Frankfurt am Main, is a logical prolongation of this development. The basic principle remains the same. Once again a new crop of architects, this time representing twenty-two countries worldwide, has presented a design for a building which has been built to scale from LEGO bricks. The *Gate of the Present* consists of scale-models (approximately 1.35 metres wide, 1.35 metres high, and 70 centimeters deep), built by the LEGO Model Production Department in Denmark. In addition, a selection of about fifty technical drawings are to be shown. The architects have also been invited to explain their designs and to give an impression of the gate in the surroundings in which they would most like to see it constructed.

The theme, the gate, is an excellent example of symbolic architecture. Gates mark a transition from the one situation to the other. Their history is a long one and they change with the times, the place and the culture of their origin. The designs for the *Gate of the Present* reflect more than just the present, stretching back to our judgement of the past and our expectations for the future. The twenty-five scale models also serve as a commentary on contemporary architectural ideas. The presentation of the twenty-five designs is preceded by an extensive historical introduction to gates.

A project like the *Gate of the Present* cannot be accomplished without the help of a great number of people. I would like to extend my thanks to the experts from the twenty-two countries represented in the designs for their help in selecting the architects; the model-builders at the LEGO Model Production Department for the perfection shown in the execution of this rather unusual task; Anna Meseure and Volker Fischer for their historical review of the gate as a building, which forms the first chapter of this book; Petra Pijnappels for her conscientious editing work; and of course the architects whose creativity provides the central focus of this project. Finally, I would like to extend a warm vote of thanks to my LEGO partners Peter Ambeck-Madsen and Eva Lykkegaard and praise them for their outstanding cooperation.

Albert Roskam

Stichting Kunstprojecten

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RIGHT: Photographs of the two spreads that show the first gate presented in the book.

NEXT PAGE: Photographs of the two spreads for another gate, showing how the included details, concepts and information differed for each entry.



32
THE GATE OF THE PRESENT

The Gate of the Present

James Grose (1957), Nicola Bradley (1957),
Rushcutters Bay, Australia.

Dimensions 84 x 121.6 x 123 cm, ca. 92.660 LEGO elements.

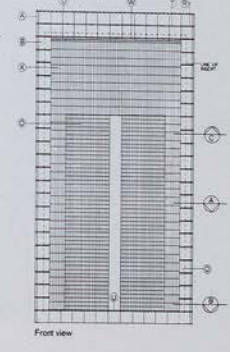
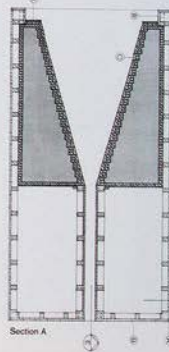
Civilization has reached a critical point. On the one hand, our design for the gate of the present is pessimistic and fatalistic; on the other hand it is optimistic, it is the so-called 'light at the end of the tunnel'. Throughout history, the power of the economy has replaced the power of the spirit. Now, as a result, we are faced with ecological disaster. Civilization now has only one chance for survival: to respect the ecology of the earth.

The Gate of the Present is civilization.

We can comprehend civilization - it is tangible, and it can be spanned by our study of history. Beyond that knowledge rests the unknown, the intangible, the source of our being. Our gate is tangible, a pure white elementary solid described by a grid; the universal unit of order, its vertical proportion in the Golden Section, the cosmic order of structure. White signifies purity, clarity and perfection; the colour by which all others are measured. As white contains all the colours of the spectrum, it embodies all possibilities. In modernist architecture, white has been the universal, the timeless, the global. The architectural form of the gate, the arch, is an icon of architecture. Its spiritual significance is universal - from the suggestion of the cave form to the triumphal bombastic arches of Europe - its structural significance is fundamental. The embellished reducing arch, representing declining civilization, terminates at the minimal arch. This minimalist arch, the result of a technically reductive, environmentally wasteful and financially expedient civilization, is the portal of the future - there is only one passage to follow.

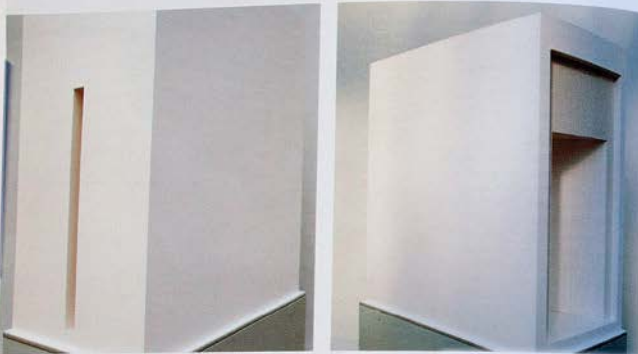
In Australia, we have been drawn into the global culture due to our European inheritance. We carry the 'baggage' of civilization, and we are poised at the journey to the future with few cultural options. Our economy is manipulated by the world powers, our course for survival depends on others. It is however, within this conundrum that we embrace the optimism of our design. We believe we are a society able to be guided by the spiritual qualities of our environment; we live hand in hand with nature in the oldest continent on earth.

For us the gate remains enigmatic, embracing both fatalism and optimism. Civilization has determined the future by its actions and the time has come for the destruction and exploitation of the past to be rectified. Is the Gate of the Present a tomb, or a passage to eternity?



33
GROSE/BRADLEY

"Gates mark a transition from the one situation to the other."



32
THE GATE OF THE PRESENT



Artist's impression

33
GROSE/BRADLEY



34
THE GATE OF THE PRESENT

The Gate of the Present, Vienna

Georg Driendl (1956), Gerhard Steixner (1953),
Vienna, Austria.

Dimensions 75 x 113 x 65 cm, ca. 8.360 LEGO elements.

1821-24 the *burgtor* was built up at the *wiener ringstraße* in the axis of the museums and the *hofburg*

1934 rebuilt and enlarged as a monument for the old Austrian heroes - *heldentor*

1991 our idea - conquer the history and consider this gate as a *basis*

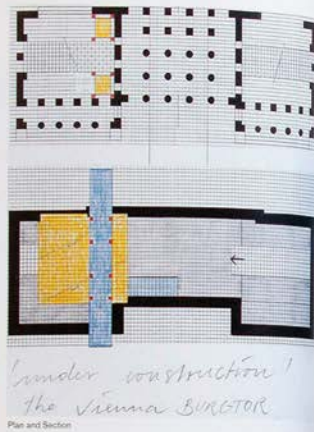
1992 clear up and set off

1993 the building site



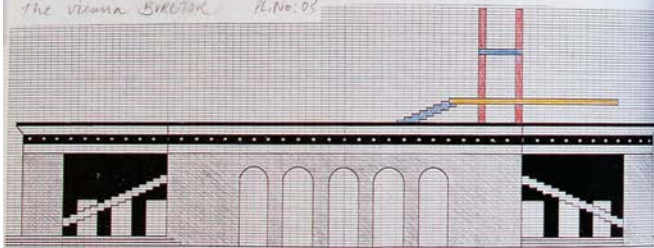
35
DRIENDL/STEXNER

The designs for the Gate of the Present reflect more than just the present, stretching back to our judgement of the past and our expectations for the future.



Plan and Section

under construction!
The Vienna BURGTOR P.No: 02



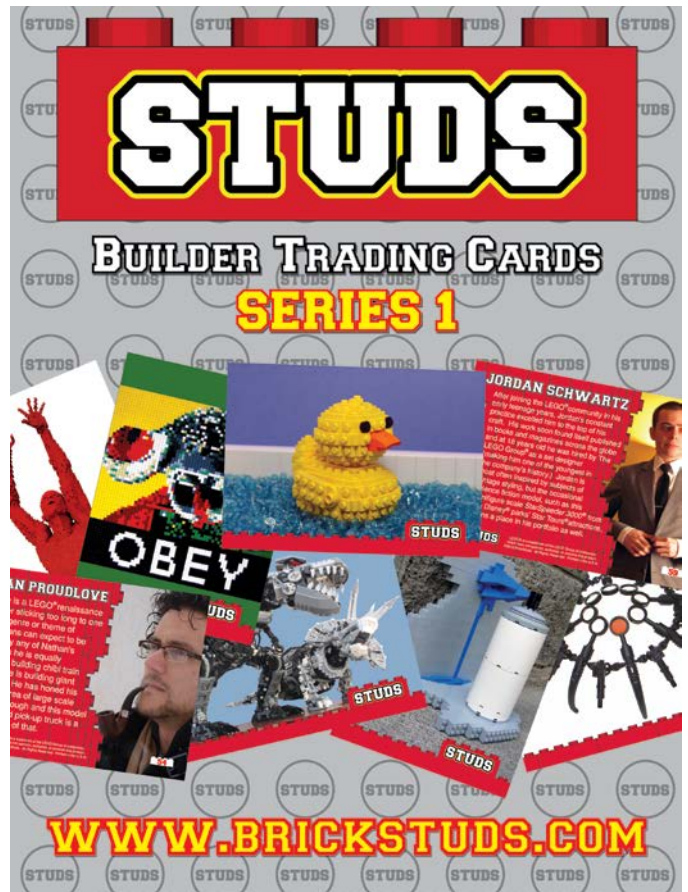
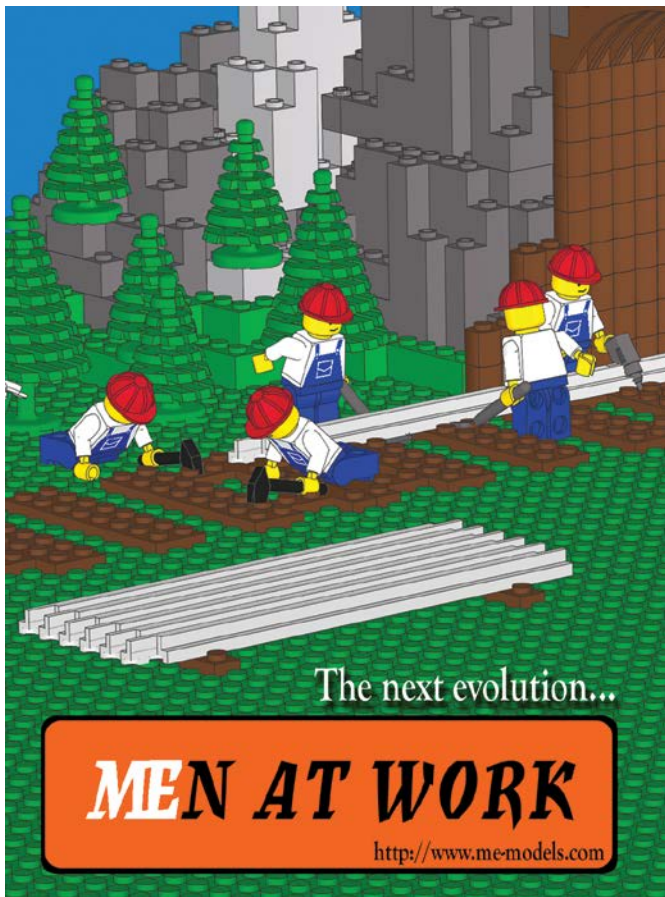
Rear view

36
THE GATE OF THE PRESENT



Artist's impression: using the gate of yesterday as a foundation for the vision of tomorrow.

37
DRIENDL/STEXNER



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Bruno Todd: A Man with a Passion and a Vision

Article and Photography by Bill Gowdy

One thing can be said with certainty if you're a member of SanDLUG (the San Diego LEGO User's Group) or even if you're a member of any of the surrounding groups (LUGOLA, SCLTC, etc.)—you know Mike Todd. But you may not know that you know him, because you know him by his nickname, his handle, his *nom de plume*: "Bruno."

Everyone knows Bruno. Bruno's Bricks. Bruno—Mr. LEGO.

I first met Mike, whom I shall call "Bruno" from here on out, in 2006 while buying items at LEGOLand Carlsbad's Big Shop. Here was a guy loading a cart (borrowed from LEGOLand's back room) with sets about to be discontinued and therefore on sale. Happy to see another adult clearly as obsessed with LEGO as I was, we struck up a conversation. He freely gave advice on how and where to get the best deals, and a brief bio of himself. We exchanged e-mail addresses and corresponded a few times.

Flash forward to 2009 when—thanks to the Internet—I discovered SanDLUG, the San Diego LEGO Users Group. I immediately joined and soon reacquainted myself with Bruno at my first meeting. It was then that I started hearing about his LEGO collection. "His is the biggest," I was told. "You think you have an idea of what to expect before you see it," said one member. "His collection makes all of ours look like nothing," another told me. After having seen a few other SanDLUGger's work areas and seeing that their collections were roughly the same size as mine, give or take a few thousand bricks and elements, I assumed he maybe had two or three times as much as the rest of us. After the first meeting at Bruno's remote north San Diego County abode, I realized just how wrong that assumption was...

Bruno in one corner of his large hallway, which serves as the nexus of his vast collection of parts.



Most of us have LEGO work areas. Maybe a table in a corner of a room, maybe a bench and drawers along an entire wall of a garage, or maybe (if our spouses are understanding or we're single) an entire room. Bruno has an entire house. You read that correctly. House. And not only the house, but several out buildings on the grounds as well.

At first you're thrown off as you enter his house through the kitchen and see no LEGO. It's as you enter the other rooms that your senses are overwhelmed by the immensity of Bruno's collection. You quickly realize the kitchen is the only room in the house that is LEGO-free. In the living room you see cabinets of classic LEGO from the '60s through the '80s. The rafters of the vaulted ceiling are spanned with LEGO trains, both official and MOCs. A retired library card catalog's drawers serve as hundreds of holding bins for thousands of small elements, the cabinet itself serving as a room divider.

Yes, Bruno is passionate about LEGO. He is a storehouse of knowledge about the toy and the company that created it. He can rattle off facts faster than you can keep up and will likely start answering your question before you finish asking it.

A large open hallway serves as the nexus of most of his bricks with drawers, plastic bins and see-through shoeboxes each holding bricks of mostly one size or one style covering every wall, floor-to-ceiling, as well as a wall of drawers and bins down the center essentially dividing the wide hall into two narrower halls.

Their daughter's room is home to the Duplo portion of the collection while Bruno's and Beth's bedroom and bathroom hide even more LEGO. The crawlspace is filled with dozens of unopened sets and sorted brick from classic sets of the '80s, while two sheds store hundreds of bins of transparent and specialized elements and multiple copies of many more recent "exclusives" including Cafe Corner series buildings, holiday sets and dozens of unopened boxes of every collectible minifigure series.



Just a few of the more than three dozen MOC and official LEGO Trains on display at Bruno's house.



Several figures from the LEGO Fabuland series (1979-89) grace one shelf of Bruno's home.



To paraphrase Benny the spaceman from The LEGO Movie: "Storage Bins, Storage Bins, STORAGE BINS!"

Bruno helps fellow SandLUG member Matt Armstrong (MonsterBrick on Flickr) find a few bricks needed for a current project.



Bruno and Beth take a break from a SanDLUG meeting to check the status of some pending eBay purchases.



The L-Gauge Museum logo atop an old brick-built LEGO logo.



Bins of specialized parts take up one wall of Bruno's large divided hall.

A small windowed side room serves as Bruno's and Beth's office where he and his gracious wife, Beth, search BrickLink stores and track the antique (read: pre-plastic) LEGO items they seek out and purchase via eBay from other collectors around the U.S. and overseas.

The dining room is surrounded by custom cabinets and retired LEGO Store fixtures housing many of these classic "pre-plastic" LEGO toys. It is these classic wooden toys and pre-"automatic binding brick" plastic toys that are presently driving Bruno's newest mission and passion.

And that passion is his current dream project, known as "L-Gauge" (<http://www.lgauge.org/>).

As described by Bruno, "L-Gauge is a place for those of us in the community to come together." It's a museum and a learning tool and, with its seeds recently planted within the San Diego community of Poway, it is beginning to grow.

Sparked by a conversation just before Comic-Con 2010 with Jim Foulds, The LEGO Group's Community Services Manager at the time, the idea for L-Gauge began when Jim pointed out that Bruno was as knowledgeable about LEGO as the most seasoned LEGO employee. And Jim knew Bruno owned enough rare items that he could practically start a U.S. LEGO Museum, not unlike the LEGO Idea House at the headquarters in Billund, Denmark. For those not aware of the LEGO Idea House, it is pretty much a historical exhibition of The LEGO Group. The building is mostly for employees and business relations, and represents a complete history of The LEGO Group from its humble beginnings as Ole Kirk Christiansen's wood shop to the latest toys and products.

Older classic sets still in their original boxes are just a few of things that make Bruno's collection so interesting to peruse.



Before making their mark in the world of plastic construction toys, LEGO was a leading European maker of wooden toys like these cat pull toys.

A little about Bruno's backstory and why he is the right guy to take on such an inspiring undertaking as launching the first public LEGO museum in North America...

Bruno received his first LEGO set at age five. "I saw an ad on a box of Velveeta Cheese, and convinced my parents to order it for me," he recalls fondly. Today he even owns a Velveeta box with the very same ad! Like all young boys he continued playing with LEGO until he entered his "Dark Ages" at age 13.

His first marriage brought him out of his Dark Ages at 23 when he had the desire to open the toys again and relive some memories from his childhood. "My wife hated the toys and thought I should 'grow up,'" he says. Not long after that he started finding LEGO sets at garage sales and elsewhere. At one yard sale he saw a bunch of LEGO sets stacked up and something sparked his obsession.

"It was 125 sets they let go for \$500 which filled the bed of my pick-up truck. It was then, as I was reassembling the 125 sets, that I realized I was obsessed with LEGO and decided to put my LEGO habit before any relationship."

A second marriage with similar results convinced Bruno he'd stick with his LEGO hobby and never marry again. Or so he thought!

LEGO was a factor in landing his third wife. Bruno wasn't planning on a third wife so "LEGO tolerance" was a criteria when he met his current wife, Beth (also known as "Mrs. Bruno" in SanDLUG circles). "I told her about my hobby and thought she'd roll her eyes and head for the hills. Instead, she asked me, 'When can I come over and build?' And at that moment I knew she was a keeper!" Right away Beth started helping Bruno find LEGO on eBay and other places and helped in his search for more LEGO—even before they were married!

An early LEGO storage box is among the more interesting items in Bruno's collection.



Even before the invention of the plastic brick we all know and love, LEGO made building blocks!



The Velveeta cheese box advertisement that launched Bruno's life-long obsession with LEGO, as well as the shipping box in which the LEGO was delivered, now on display in Bruno's dining room.



A model from LEGOLand, Billund, designed and built by Dagny Holmes, considered by many to be the first LEGO Master Model Builder.



The Ferguson tractor was one of the first LEGO plastic toys and one of the most successful, even more successful than the wooden tractors that preceded it.



Household toys like this wooden iron were among some of the toys made by LEGO during the years they manufactured both wooden and plastic toys, an era which ended when the wooden toy factory burned down for the third and last time.



Animated wooden pulltoys like this animated monkey were among the most popular and successful toys during LEGO's pre-plastic era.



LEGO Mascot Doll is a small rubber doll released in 1954. Bruno sometimes wears an identical outfit to LEGO events.

Bruno has been growing his collection for 20 years now and over that time outgrew several smaller homes, including one in which his collection was featured on the old "FX Collector's Show" as the ultimate LEGO collector. He has settled in his current north San Diego abode in which his collection now rests snugly, but he may soon outgrow it as well.

Initially Bruno struggled to find a venue that was willing to invest display space or time to such an undertaking. "During that time the museum existed in name only and solely as an occasional public display of MOCs by a small band of SanDLUG members who are L-Gauge supporters."

Finally, in 2014, after a chance meeting with the founders of the San Diego Toy and Doll Museum (<http://www.sdtoyanddollmuseum.org/>) Bruno was able to enter into a partnership that gave a portion of the museum to feature a historic display of selected LEGO products from the company's 80-plus years. The museum features a build wall where children (or adults) can use play brick to build on a bed of wall-mounted LEGO base plates. There are also rotating displays by professional LEGO builders. You can even purchase selected LEGO parts at the museum's gift shop!

Of course, the current arrangement is just a stepping stone on the way to a bigger, better L-Gauge. "My dream for L-Gauge is for it to be more than just a museum," Bruno says.

As he continues to seek a larger, permanent venue, he states, "My goal is a physical museum with history, housing classic LEGO toys from all eras, as well as LEGO art. With support from the community we will have an education center with classes and a LEGO Summer Camp for kids of all ages, from six to 99, using regular LEGO brick and elements."

Even Duplo (LEGO toys for smaller children) won't be left out of the equation, he says. "Duplo is being used today as a therapy tool for wounded warriors and senior citizens. They help restore fine motor skills for those who've lost dexterity due to injury or illness."

Education and therapy are just two other areas into which Bruno hopes to expand L-Gauge. "With support from the local LEGO fan community and the growing popularity of LEGO, there will be a much bigger facility to provide services like a LEGO Camp, art exhibits and even therapy."



The ever popular wooden LEGO duck, designed by Ole Kirk Christiansen (loaned to L-Gauge by Kevin Smith).



Bruno, dressed as the circa 1954 LEGO mascot, strikes a pose during the grand opening of the L-Gauge Museum, within the San Diego Toy and Doll Museum in Poway, California, a community north of San Diego.

In closing, Bruno says, “My hopes, dreams and desires for L-Gauge are that the museum grows to such a size that we are able to support the LEGO community with jobs, places where LEGO enthusiasts can give and take educational LEGO building classes, display their creations, and essentially be a place they can call their own—and ultimately fulfill the dreams of every kid who loves LEGO.” 🧱

Bill Gowdy is a member of SanDLUG and is a retired Navy combat photographer and public affairs specialist who now works as a Master Model Builder at LEGOLand California Resort in Carlsbad, California. If you ever visit LEGOLand’s model shop, be sure to bang on the glass and wave—he loves to wave back!

Bruno takes a break to chat with Bill Vollbrecht, a local LEGO Master Model builder and former LEGOLand designer at the L-Gauge Museum, within the San Diego Toy and Doll Museum in Poway, California, a community north of San Diego. The models on display at the right side of the picture are some of Bill’s amazing sculptural models.



A LEGO-built mosaic of the circa 1954 LEGO mascot, designed and built by Bill Vollbrecht, welcomes visitors to the L-Gauge Museum, within the San Diego Toy and Doll Museum in Poway, California, a community north of San Diego.



News

Students Turn Middlesex University Crest Into Giant LEGO Sculpture!

Article by Middlesex University



Students have turned English college Middlesex University's crest into a lifesize 44,000 piece LEGO sculpture to mark this year's National Student Survey (NSS).

The eye-catching sculpture, measures 1.9 metres (6.25 feet) high. It took almost 800 students two weeks to build the Middlesex county coat of arms, with distinctive three

seaxes, out of the plastic building blocks.


The University's theme for this year's NSS was 'complete me', with a number of games-related activities taking place across the Hendon campus based on things to complete. Students that finished the annual NSS onsite were given a LEGO

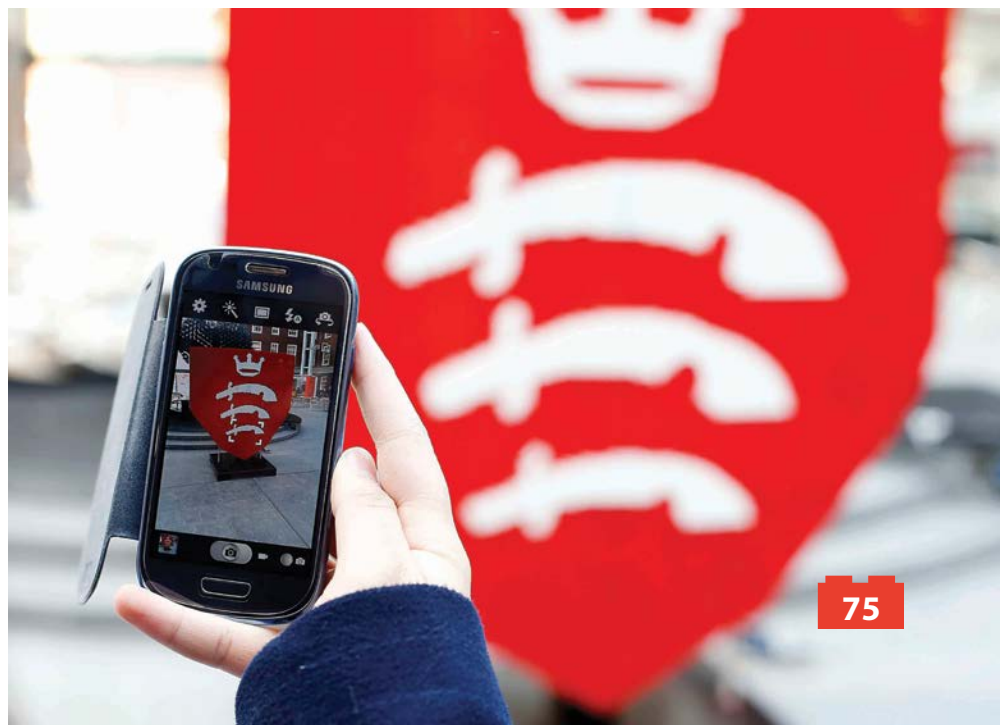
toy brick, which could be signed and personalized, to be added to the centerpiece.

The specially-made crest was designed by Duncan Titmarsh, the UK's only certified LEGO professional, and his team at Bright Bricks, who took just one week to develop the design. The team have made a series of impressive pieces including the tallest LEGO Christmas tree at St. Pancras International, and last year's Covent Garden festive installation featuring Santa and his reindeer.

The 'complete me' theme was carried across the campus, with Tetris-inspired lounge furniture built by Middlesex alumni, a 'bucket list' wall, and students had the chance to recreate art sculptures created by renowned geometric artist George Hart.

Ambika Kucheria, Head of Student Engagement Marketing at Middlesex University, said, "The National Student Survey is a fantastic chance for students to reflect on their time and experience here. We listen to each and every voice and use the feedback to continue to build on the student experience offered at Middlesex University."

Commissioned by the Higher Education Funding Council for England (HEFCE) and conducted externally by Ipsos MORI, the NSS is organized for final year undergraduates each year to find out about their overall university experience. 

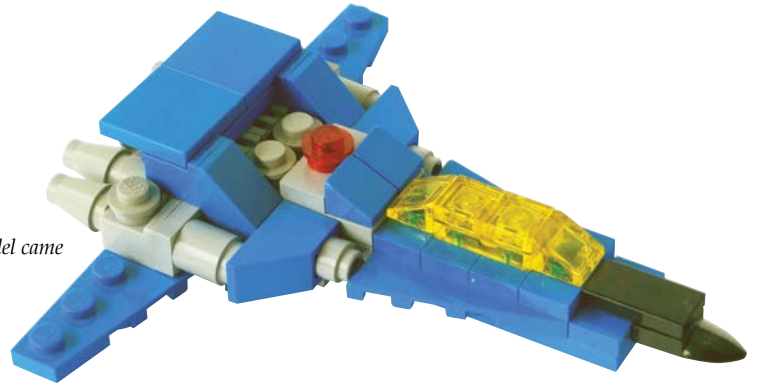
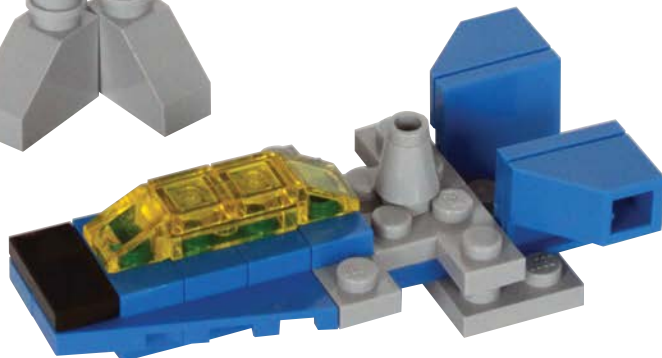


Community

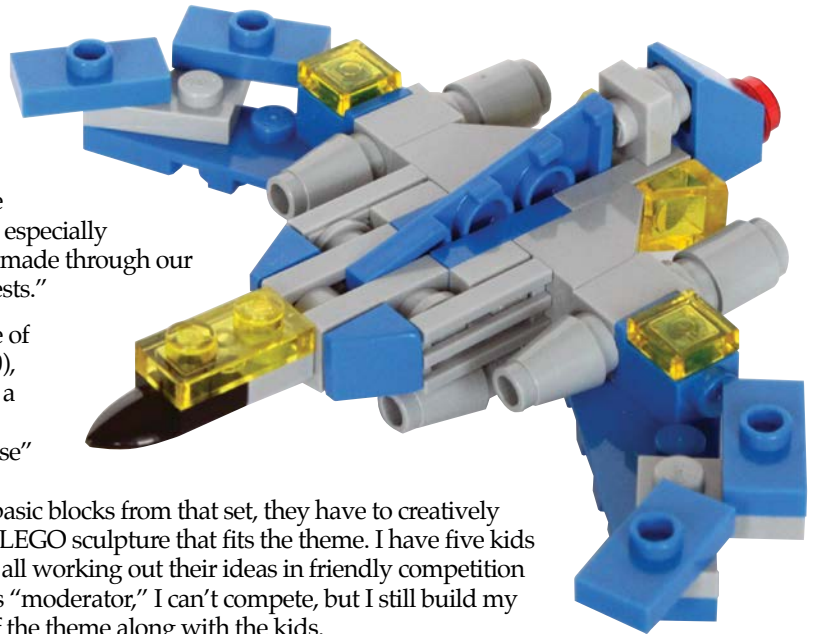
Family Time with LEGO: Building Contests

How many ideas can you make from a limited palette of parts?

Article and Photography by Gerry Kulzer



From this custom model came many alternate ideas!



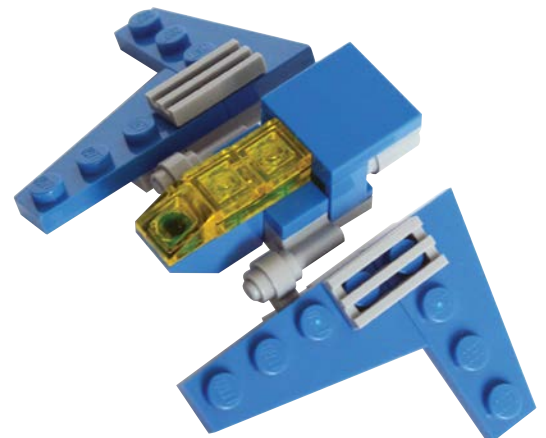
My whole family enjoys LEGO, but there have been some especially great memories made through our "Building Contests."

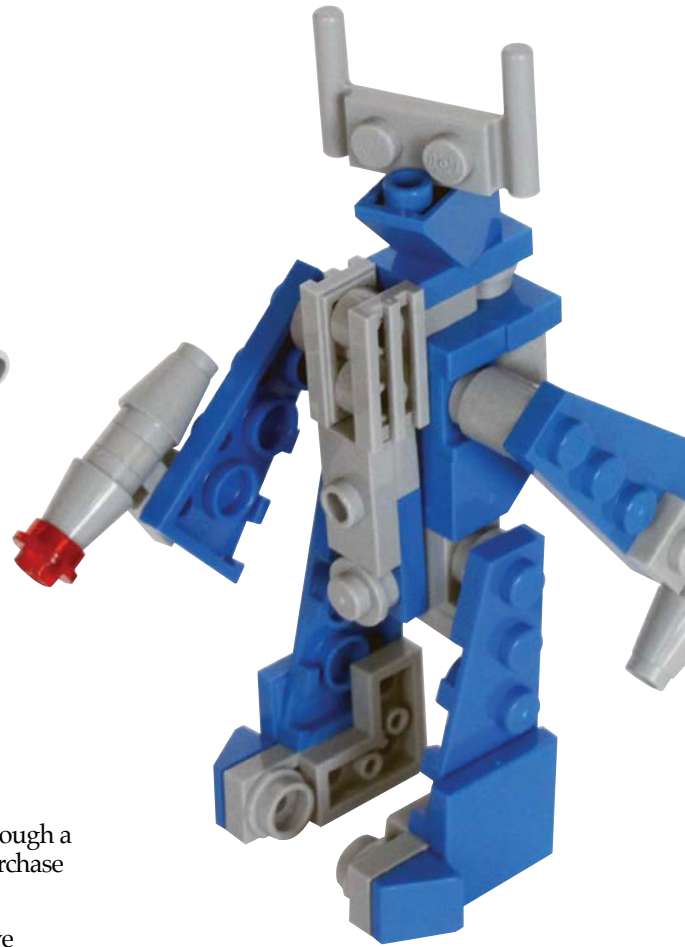
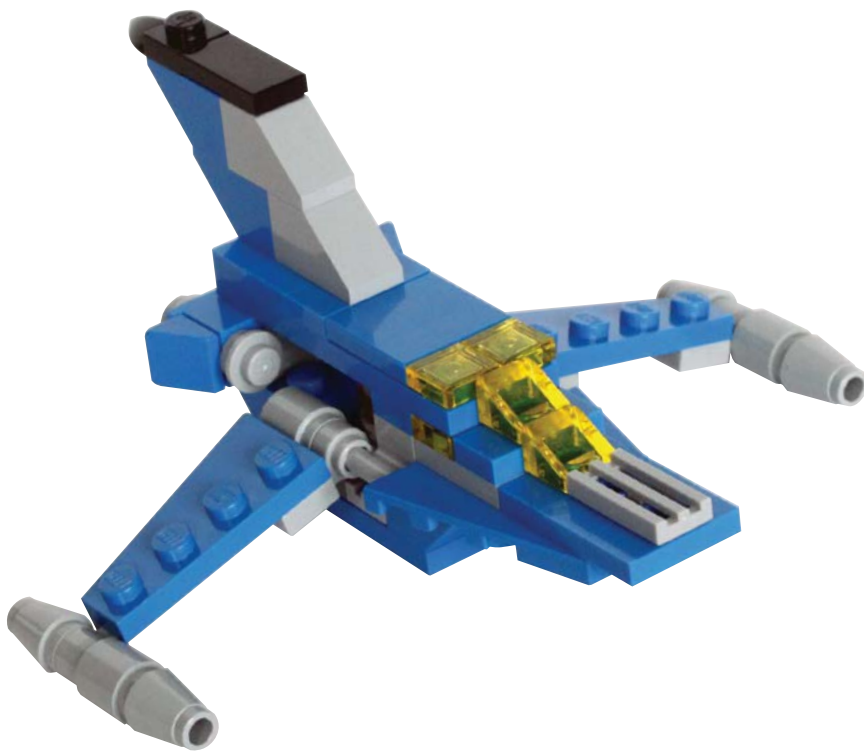
Using the Statue of Liberty set (3450), I'll give the kids a building idea or theme like "house" or "nature", etc.

Using only the basic blocks from that set, they have to creatively come up with a LEGO sculpture that fits the theme. I have five kids and to see them all working out their ideas in friendly competition is wonderful. As "moderator," I can't compete, but I still build my interpretation of the theme along with the kids.

It amazes me how, even though my children range in age from 6 to 15, it's not always the older builder who comes up with the most interesting creation. LEGO can be a great equalizer, in that one person's vision is just as valid as another's when built in LEGO blocks.


At the end of the specified time, a vote is cast as to whose creation was the winner. Winners get special LEGO pieces from my collection—sometimes a minifig, sometimes a polybag set, or some other treat. This facilitates more building contests until every one of my kids gets a prize.

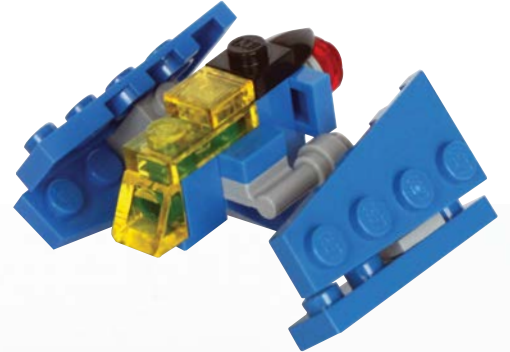




I've used a variation of this in my elementary school art lessons where, through a generous grant from our Parent Teacher Organization, we were able to purchase many basic LEGO block sets to explore lessons in sculpture.

These are all fun activities, but one of the longest running and most creative "contests" happened after purchasing a couple of Joe Meno's Blue Space Fighter sets through *BrickJournal*. My son Theo enjoys microscale building and has submitted one of his Microscale House MOCs on the LEGO Ideas website. After I gave him one of the sets, he challenged me to a building contest using only the pieces of the Blue Space Fighter. And so started our on-going building battle.

The images here represent a fraction of the 24 unique models we've made to date. Some of Theo's models even transform from spaceship to robot, thus making the MOC count even higher! I am amazed at the variations that have been made with such a small, 71 piece set. This is a testament to the "buildability" of the pieces included in the set as well as how a little competition can spur innovation and creativity. LEGO is a great hobby, great learning tool, but probably most of all, a great outlet for infinite creativity. 



To view the other Blue Spacefighter MOCs, visit: www.kulzerdesign.com/brickjournal/ or scan the QR code to the right!



Theo and Gerry Kulzer.



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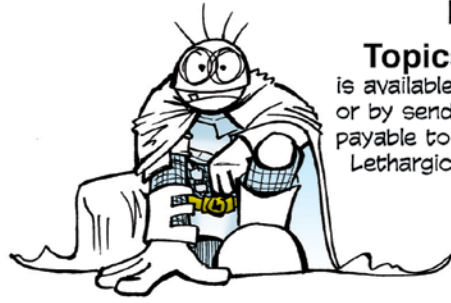
Hey Kids! Comics!

by Greg (AFOLs) Hyland

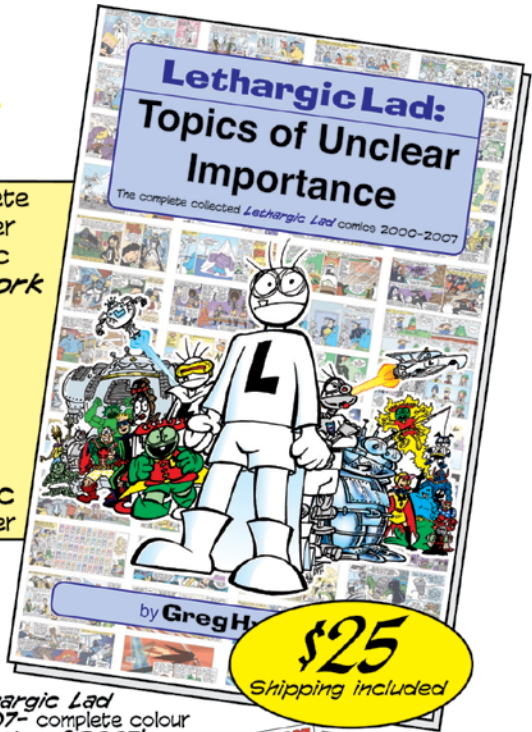
Lethargic Lad: Topics of Unclear Importance is a complete collection of seven years of Lethargic Lad comics! Presenting over 350 strips from the lethargiclad.com website and all the Lethargic Lad three-page comics that originally appeared in the pages of *Dork Tower* comics.

"Greg just gets it right: the situations, the ongoing storylines, the characterizations, the understated but gut-busting payoffs... Fans of the Lad are fans for life!"

-John Kovalic
Dork Tower



Lethargic Lad:
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is available exclusively at www.lethargiclad.com or by sending check or money order made payable to "Greg Hyland" to:
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Also:
Lethargic Lad 2007- complete colour collection of 2007's strips! \$20
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Last Word



Dan warms up before a morning telecast.

Well, this issue is finished. *BrickJournal's* birthday was June 1st, and if it was a person, it would be in school—it's ten years old! The first issue was a PDF that was uploaded and immediately shut down servers with the volume of people wanting to know what the mag was all about...

In the time since, a lot of the technology has changed—and *BrickJournal* changed too. The magazine went to print eight years ago, and went from quarterly to bi-monthly. And staff has changed too, with writers and builders coming from around the world. Many of the people who have written or been in *BrickJournal* have gone on to work for LEGO, and it's cool to see that happen.

However, one thing will not change. *BrickJournal's* mission to invite and inspire new LEGO builders to join our community is ongoing, and expanding as the magazine enters new markets.

So welcome! And see you next issue! 

PS. Many thanks to Brian Korte for writing his article within 24 hours!



Well, if the brick fits...

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The advertisement features five LEGO minifigures: a Clone Trooper, a female Clone Trooper, a Jedi Master with a lightsaber, a Clone Trooper on a motorcycle, and a female Clone Trooper. The background is a blue, futuristic setting.

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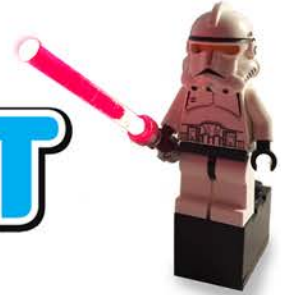
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