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Brick Journal

Issue 8, Volume 2 • November/December 2009

people • building • community



CASTLES!
Large and Small
Reviews, Instructions
AND MORE!



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**THE MAGAZINE FOR
LEGO® ENTHUSIASTS
OF ALL AGES!**

BRICKJOURNAL magazine (edited by Joe Meno) spotlights all aspects of the LEGO® Community, showcasing events, people, and models every issue, with contributions and how-to articles by top builders worldwide, new product intros, and more. Begun as a digital-only publication in 2005, the **NEW PRINT VERSION** (Vol. 2) of BrickJournal launched in 2008, and is available in both print and digital form. **PLUS:** Print subscribers get the digital version **FREE!**



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Spotlight on **CLASSIC SPACE SETS** and a look at new ones with **LEGO SET DESIGNERS**, **BRANDON GRIFFITH** shows his **STAR TREK MODELS**, plus take a tour of the **DUTCH MOONBASE** with **MIKE VAN LEEUWEN** and **MARCO BAAS**. There's also coverage of **BRICKFEST 2009** and **FIRST LEGO LEAGUE'S WORLD FESTIVAL** and photos from **TOY FAIR NY!**

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BRICKJOURNAL #7 (Vol. 2)

Focuses on **LEGO ARCHITECTURE**, with a look at the new sets designed by **ADAM REED TUCKER!** There's also interviews with other architectural builders, including **SPENCER REZHALLA** and **JASON BURIK**. Then, we take a look at a **LEGO BATTLESHIP** that's over 20 feet long, and present event reports from **DOUBLE BRICK FEST** in **Russia** and other events worldwide! **PLUS:** Our usual indispensable building tips and instructions, and more!

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BRICKJOURNAL #8 (Vol. 2)

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! There are interviews with other castle builders, and more surprises, along with a report from **BRICKWORLD** in **Chicago!** Plus still more instructions and building tips for beginning and advanced builders alike!

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Right: John Langrish's Nottingham Castle.
Photo by Joe Meno.



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www.brickmodder.net

www.rustyclank.com



From the Editor:

80 pages seems to be a lot, but it isn't. Every issue usually ends up being a few pages over, and this is no exception. This issue is Castle themed, and we've got a lot of Castle stuff!

This isn't a bad thing, mind you — it's nice to have material that will be available for next issue, but it's a disappointment for the writers and contributors who find out that their article got delayed to next issue. It's

a tough thing for me to do, but I have to make things fit. For that I apologize.

On another subject, *BrickJournal* got a few more contributors this issue! Welcome these new voices to the mag! Some are from the community, but others are writing about and looking at the community for the first time. I'm very happy with this, as new voices give us new views. We now have an **FIRST[®] LEGO[®] League** column as well as a new building column with a young talented builder, which will give you more insights to building and the community!

There will be more growth happening too with the magazine and beyond, so keep an eye out online at BrickJournal.com and on *BrickJournal's* Facebook page - it's an exciting time!

Joe Meno
Editor, *BrickJournal*

P.S. Have ideas or comments? Drop me a line at admin@brickjournal.com. Or go to www.lugnet.com and leave a comment on their forums! 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! You can check out the news there or look at the event calendar and see what is happening near you!

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)

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

SNOT (Studs Not on Top)

LUG (LEGO Users Group)

LTC (LEGO Train Club)

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BrickJournal and its staff would like to thank the LDraw community for the software it makes available to the community, which we use for making all of the instructions and renderings in this magazine. We would especially like to thank Kevin Clague for his continued upgrades of the LPub tool that is a part of the LDraw suite. For more information, please visit <http://www.ldraw.org>.

TECHNIC Sensei Yoshihito Isogawa



Article by Nathan Bryan

Photography by Takuto Harajo (BrickZen.com)

If you build with TECHNIC® or MINDSTORMS®, participate in FLL (FIRST LEGO® League) or have browsed “The NXT Step” home page (<http://thenxtstep.blogspot.com/>), you probably have heard about Yoshihito Isogawa or seen one of his creations. Author of the “NXT Orange Book” and downloadable “LEGO TECHNIC Torano-Maki” (<http://www.isogawastudio.co.jp/legostudio/toranomaki/en/index.html>). Isogawa-sensei creates models that are wacky and functional, awkward and elegant, complex in their simplicity.

Although his building techniques are all very modern and high-tech, Isogawa-sensei always dresses in very nice traditional Japanese Kimonos and stands out in any crowd.

Yoshihito Isogawa has been building with LEGO elements for over 40 years. One of his first recollections is getting his finger pinched by some LEGO gears, and he has had his hands fully on them since. His studio is filled with MOCs big and small.



Above: Yoshihito Isogawa in traditional Japanese Kimono at his LEGO Studio.

Right: Some of Isogawa-sensei's many creations.



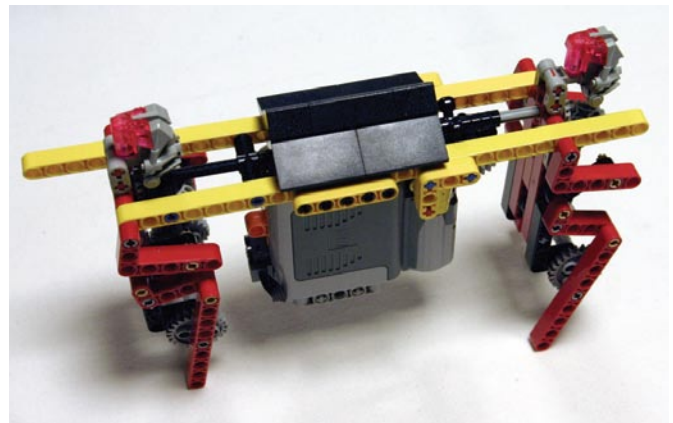
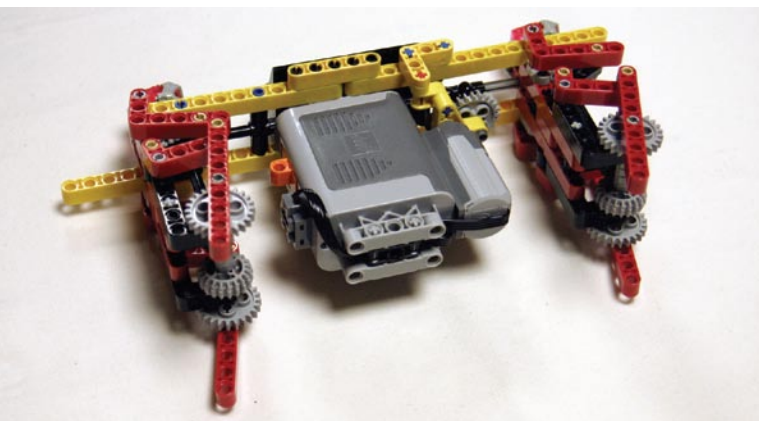
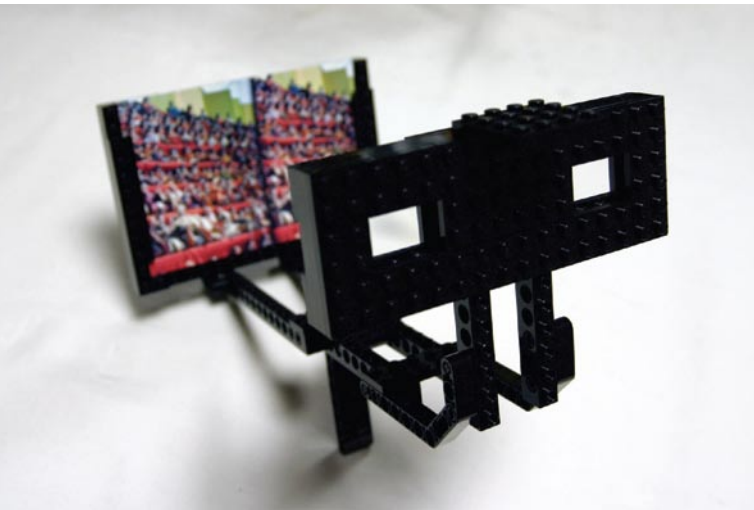
While trays and drawers of numerous LEGO parts (mainly TECHNIC parts) dominate his studio, there is also a large array of sound mixing equipment and numerous guitars lining the walls. Isogawa-sensei used to play in a band.

now, there are stands for calendars, glasses and iPhones, and large multi-moving constructions...all created with LEGO parts and ready to amaze when put into action.

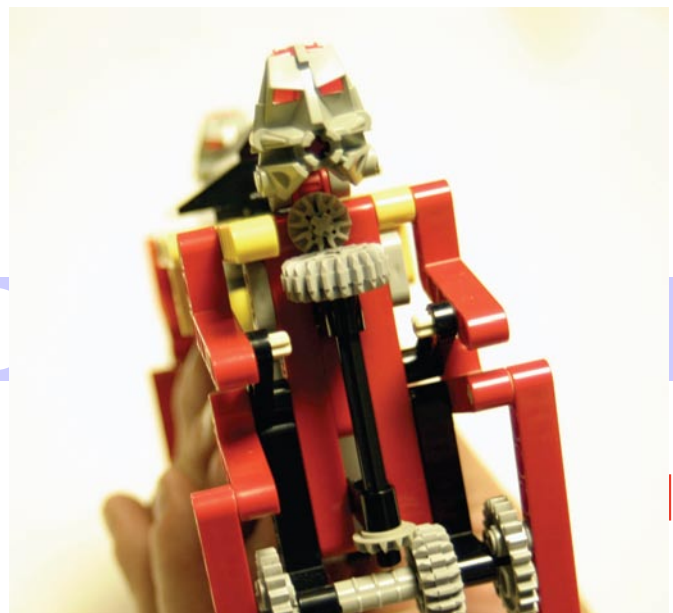
The moving machines are extremely vast and various. Two-legged walkers, many-legged insects, remote controlled wheeled vehicles that move on their own, or follow drawn-out lines, even a remote controlled vibrating box that mysteriously vibrates and moves in the direction instructed to it via a controller. The range and variety of the MOCs are really amazing to look at.

Since most of his MOCs are built with LEGO TECHNIC parts, pictures really do not do credit to his works. They are best seen in action in short movie clips on his home page "Isogawa Studio" <http://www.isogawastudio.co.jp/> (In Japanese or English).

But more than just building all of these amazing contraptions, one of the most wonderful things about Isogawa-sensei is that through his home page, downloadable PDF files and published books, he shares his vast knowledge and techniques with anyone that is interested in learning about them.



Top: Isogawa-sensei at his music area, with his LEGO models.
Center: LEGO stereographic glasses for viewing 3D pictures.
Above and Right: Two robots that carry their own battery pack!



Isogawa-sensei's Books:

Isogawa-sensei's "LEGO TECHNIC Tora-No-Maki" ("Tora-No-Maki" means "secret paper" in Japanese) a 215 page downloadable PDF (US\$10 Shareware) has been downloaded by people from all over the world.

Isogawa-sensei's idea in creating "Tora-No-Maki" was to make a "universal" book. It has almost no words or text and just uses visuals for navigation and explanation. He created original pictographs that are easy for anyone to understand, no matter what their native language is. These pictographs are used to break the book into sections so that one can locate a particular building technique. Instead of building instructions, each model is built with various distinct colorful parts and shot from various angles to show in detail how it has been put together and built.

From the numerous people that downloaded "Tora-No-Maki" many asked that he publish the PDF in hardcopy so that it would be easier to use in building. He took the original models that he had created for "Tora-No-Maki", added recent creations, and then split the models into three groups. He then published these as three "Books for Making Machines with Blocks". One book is devoted to "Spinning and Basic Contraptions," (the "Red Book"), another to "Running, Turning, Car Contraptions" (the "Blue Book") and the third to "Walking Machines and Difficult Contraptions" (the "Green Book"). Each book is filled from cover to cover with models and techniques that one will want to build right away and a treasure trove for people competing in FLL events.

First LEGO League (FLL) and Events

Isogawa-sensei works extensively with FLL in Japan and also creates many models for schools, museums, events and exhibitions. One of the things that he finds to be extremely challenging is creating models that will be used by many people, often children, over long periods of time without breaking, coming apart or wearing out. Models need to be made strong and sturdy for the rigors of use, but still light enough so that the motors do not burn out. Along w-No-Makiith LEGO events, Isogawa-sensei is also very active in other events dealing with Robotics such as the World Robot Olympiad. Recently he has even been consulting for the LEGO WeDo educational sets.

Zen Building

Isogawa-sensei has a very Zen way of looking at building. He sees all builders going through three stages when they are creating a MOC. The first is the "beginner" stage, when one has an idea for a machine and one creates a MOC that moves as one has imagined it to move. The second stage, the "middle" stage, is where one adds on new parts, or new movements to the MOC. Last is the "advanced or expert" stage, where one starts taking off "unnecessary" parts. One must maintain same movements or actions that one originally set out to do, but bring the MOC down to the elemental or least number of parts that are really needed for it to work. This is very difficult but leads to very elegant MOCs.



Above: A collection of Isogawa-sensei's books.

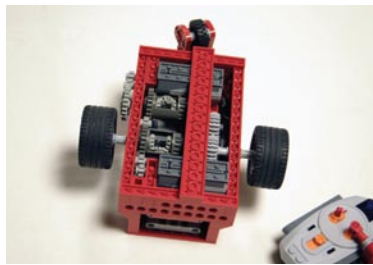
Right: A page from "Tora-No-Maki."



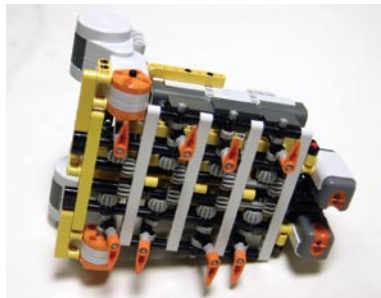
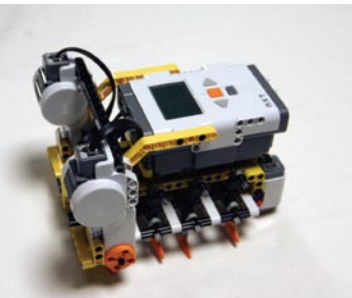
Isogawa-sensei at Tokyo FIRST LEGO League.



An assortment of "sample contraptions."




Simple remote control tricycle with differential gearing.



NXT Line walker.

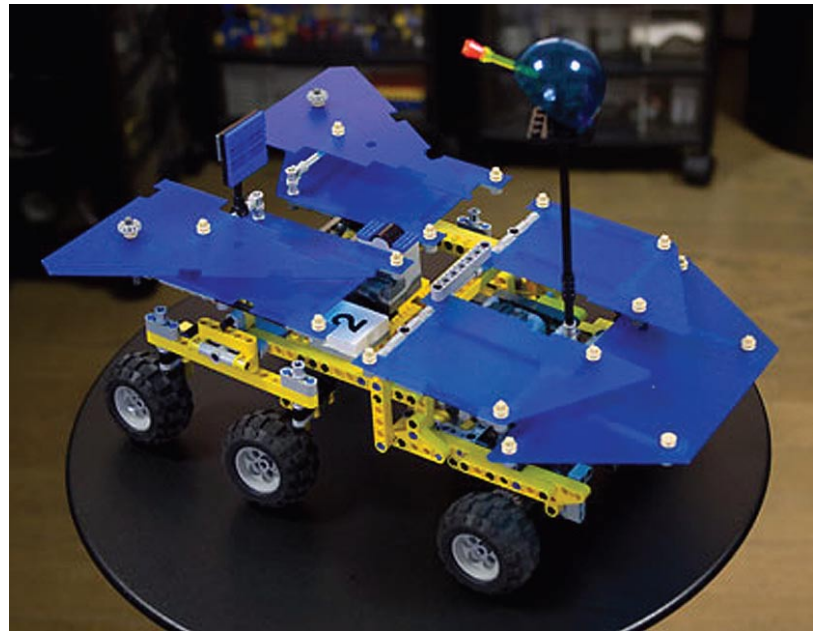
Sample Box

Isogawa-sensei has a box filled with many "sample contraptions." Whenever he has an idea, or even just a short amount of free time, he puts together a few pieces and makes many varied and interesting trial and error contraptions. Some of these might have as few as three pieces and some are much more involved and complicated. When he is building a new model he often checks his "sample box" to see if there is an interesting contraption that can be used for a particular movement. Often something put together weeks or months before will be the "key" element in getting a new creation to work as envisioned.

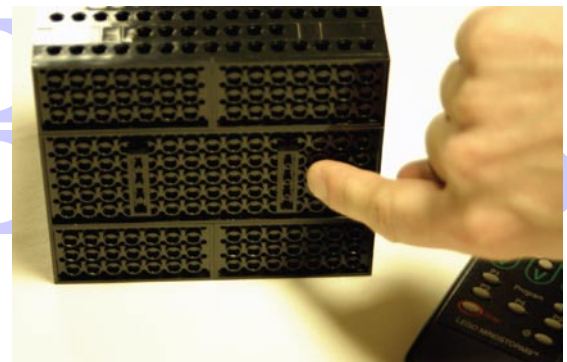
The things that one can do with LEGO TECHNIC and MINDSTORMS continue to get more and more elaborate. Their implications in the field of robotics become more complex with each set that comes out. Having someone that expands on this and shares his creations and techniques with the world is wonderful. There are sure to be many wondrous creations and contraptions coming out from Isogawa-sensei's LEGO Studio. It will be really interesting to see what he makes NXT. 

LEGOstudio Homepage:

<http://www.isogawastudio.co.jp/>



Space rover made for a Space Exploration Event.





The LEGO Group

12 Questions with Bjarke Madsen, LEGO® Castle Designer

Article by Megan Rothrock

*Photos courtesy
of the LEGO Group*

How long have you worked for the LEGO® Group, and how much of this time was as a Model Designer?

I have worked 12 years for the LEGO Group, and as a Model Designer from the beginning.

What did you want to be as when you grew up, and does working at the LEGO Group make up for not doing this?

I wanted to be one of those people who decide what things are going to look like. I found out that designers and engineers are among those people. I chose to become an engineer, but after I finished my study, I saw that LEGO was hiring designers, so thought I would try that out. I have been here ever since. So I have been very lucky to both have an education and a job that I wanted as a kid.

Can you tell us some of the themes and sets you have worked on?

Star Wars: Ultimate Snowspeeder 10129, Sail Barge 6210, Death Star 10188. Batman: The Batcave 7785. Spider-man: Origins 4851, Doc Ock's Lab 4857. Vikings: Fortress 7019. City: Police HQ 7237. Castle: Kings Castle Siege 7094, Dwarf Mine 7036, Troll's Fortress 7097.

Do you have a favorite from amongst these sets?

The Kings Castle Siege 7094, because it's a big castle with both good guys and bad guy, catapults, horse & dragon, so you really get a complete play[set] in this one.

There are a lot of similarities between the current good guys' castle and the classic yellow castle, is that intentional or a result of similar starting points and aims?

Similar starting point and aims. I had the "Yellow Castle" (art. 375) as a kid age 10, and it was my favorite LEGO model. But I did not think about making a new version of that, and then I started out on art. 7094.

The brief was to create a big classic Kings castle with a twist of fantasy and details you haven't seen before in a LEGO castle. We tried to do that already in the first version (seen at left). When I created the 2nd version (seen at left bottom) after working on it 4-5 weeks, I suddenly realized that it had some similar details with the yellow castle. The entrance tower, and the gate under the highest tower



King's Castle Siege, version 1.



King's Castle Siege, version 2.



Dragon prototype. Done approx. at the same time as version 1 of the castle.



Skeleton horse prototype. The very first version of this was dated back to 1996, also to be used in a Castle theme. However, it was not the right time to launch it then.



Kings Castle siege: 3rd & final version.



Dwarf minifigure prototypes.

in the back, is the most obvious ones. And I thought, "That so cool. I want to keep that". I can add that the little tower with the blue pointy roof on the side of the largest tower is there, to give the castle this fantasy feeling. Same goes for the bridge between the towers.

Is there anything from the initial sketch models of the castle you wish had made it through to the final version, or anything you wish you'd done differently?

The only thing that did not make it through was a turning wall in the highest tower and I don't mind that. The pillars that hold the black Technic beams for open and closing the draw bridge should have been stronger. The same goes for the 2 small catapults (see photo on next page).

The Dwarf Mine is a great set, how did the idea for a mine come about?

At the kids test, the Dwarfs tested really well (pics 6,7 & 8), and we wanted to make a unique hideout for them. Mining is the most natural thing for the dwarfs to do, and the old Gold Mine from LEGO Western had been recieved pretty well, so that's how it started.

The mine is a very well thought-out model, did the set develop the individual play features organically as you built or was it a series of conscious decisions to arrive at the final model?

A very good design colleague of mine, made the first sketch model on a plate 16x32 with rails, wagon, entrance and 2-3 dwarfs (pics 10). That model came out as a winner when we tested some sets with children, so we knew, it had great potential. I then created a new version 2-3 times bigger (pics 11). We wanted it to look more like a mountain instead of just a tunnel. But if the model was going to be that big, it also needed great play value, so I came up with the transportation system for the crystals and the mining shaft. To also have confrontation, we added the trolls, and then the dwarfs needed a catapult to defend themselves. It took 4 to 5 months and about 3 versions before it became the final model (pics 12).

The Troll Fortress looks mean, any tips on how we can create 'evil' looking castles?

Colors are important. If you use black, any Castle will look evil. Other colors like dark red, dark green, dark brown and dark grey are also very useful. You can spice you castle up with evil details like spikes, spears, horns, chains, skull heads and animals like bats and spiders. If you make towers and walls very high and pointy, you also get a really evil look. Oh! And make sure to have several dungeons with prisoners. Kids just love that.

Were you worried the Troll Fortress would be too similar to the 'good' Castle and affect its sales?

Not really. But as a LEGO designer you have to make every model unique in terms of shape, color and play value. In this case, we did it by thinking "how would the troll build a fortress?" Well most likely, they would use a lot of different materials: wool, metal, clay, fabric, stone, bones, plant parts etc. And they would put their biggest and strongest guys in front to scare everybody off. So we put two elite trolls with tattoos and heavy armor in 2 little caves on each side of the gate. This way we archived a unique look (pics 13,14 & 15). A funny thing is also, that


the prison cell in the Troll Fortress is my prison number 11 in a official LEGO model.

Do you want to keep working on The LEGO Group's Castle sets and if so why is building castles fun/challenging?

Yes very much, because I still have so many ideas for LEGO Castle models that we have not done yet. Castles in different styles and colors and with different races and environments. New weapons and animals. I will say that with the element assortment and colors we have in LEGO, the possibilities to build new LEGO castle models are next to endless. There is so much we can still do here.

So any chance of a sneak preview of next year's Castle line? If not can you at least tell us if you're working on it? Maybe on a new Castle?

I will say that fans of LEGO Castle have something to look forward to.

Thanks for your time Bjarke! 



Above left: Troll prototype. Sculptured & handpainted. Top and above right: Painted dwarf minifigure prototypes.



Dwarf prototypes without using new elements.

Building Mines and Fortresses



The Dwarf Mine went through a number of versions before it was finalized. Above is the first version.



Version 2 is above middle - note that the runic signs on the building and shield are handwritten with a marker.



The 3rd and final version.



Troll Fortress version 1.



Troll Fortress version 2.



Troll Fortress 3rd and final version

The LEGO Group



The View from the Top

Talking with the LEGO® Group's Chief Executive Officer

Article by Geoff Gray
Photos courtesy of the LEGO Group
and Joe Meno

Every year, *BrickJournal* has interviewed the Chief Executive Officer of the LEGO® Group, Jørgen Vig Knudstorp. Each interview has been a great look at the state of the company, and this year, interviewer Geoff Gray (*BrickJournal* Photography Editor) takes a look at some of the daily production challenges the LEGO Group faces.

BrickJournal: Jørgen, it is good to talk to you again and to get some more insight into the business side of The LEGO Group. This is the fourth time we have had a formal interview, and I think the direction and progression of the interviews demonstrates how the company continues to evolve and adapt to the global economy and the pressures from competition. I would like to continue this discussion for a few minutes.

Jørgen Vig Knudstorp: Yes, it is great to get the opportunity again. To me these interviews are nearly like writing an informal annual report of how the company is doing.

Before I ask my first question, I want to give the readers an idea of the complexity of the manufacturing process to help understand the importance of the management aspect (for more information, see the article "The Real LEGO Factory" from Issue 5 of Volume 1). The LEGO Group manufactures 30,000 individual elements every minute and this process is running 24 hours a day, 365 days a year. There are a lot of decisions that have to be made about what elements to produce. For instance, when there is not a high demand for specialized pieces, then the plants shift gears into making elements that show up in all of the different themes so there are extras available. There is also the need to scale up manufacturing during rush seasons (like preparation for Christmas). This need led The LEGO Group to look at outsourcing some of the manufacturing, and then adjusting that outsourcing as the process matured (see JVK interview in Issue 3, Volume 2).

Given all of this complexity, there has been a need to develop and expand a very comprehensive computer IT and networking solution to monitor and control all of the different aspects of manufacturing, from element molding to decoration, to packing and even to shipping (in our last interview, you called this the "moving into optimization and stabilization". Please tell us some more about this and how successful this latest effort has been.

We are very pleased with the progress on this. The major results to look for is a better balance of supply and demand, freeing up capacity to produce what is actually in demand and thus increasing shelf (inventory) turns and increasing customer service. We have improved significantly in all of those areas. This raises our productivity, protects our cash flows and enables us to afford further investments in the future of our business.

When the company announced the availability of LEGO Factory a few years back, my first thought was "How cool is it going to be to design my own set and let my friends buy it." You mentioned last time that you were personally a little disappointed in the amount of traffic for this highly unique offering. The company continues to make this a core area of focus and has been working to improve the experience and to increase the amount of sales here. What changes have been made to help and how has this been going?

I agree the experience is unique, but with the limited amount of users it was almost too unique (laughs). However, there is

something very core and pure LEGO in the experience, and it is up to us to translate it into something easy and usable for children of all ages. We are looking to make several improvements. We are separating Pick-a-Brick online from LEGO Factory. We are re-emphasizing the designed-by-me experience this fall, and among the improvements are building instructions that of course are not entirely like the “handmade” ones we provide for actual LEGO® sets but they are generally of good quality. We are also thinking of how we might better be able to make the whole thing easier. The one thing we will not do, after some deliberation, is to automatically test the stability of what is being built.

It is extremely difficult to produce one-off sets designed by customers. You have mentioned that external suppliers are used to handling the packaging demands (as well as other part-time needs like packaging Belville sets and offering extra capability during peak manufacturing times). Have there been any changes to this process that help with the continued efforts of growing the Factory project?

We believe we now have the supply model for LEGO Factory, at least within the foreseeable future demand. Clearly manufacturing 500.000 sets of a particularly popular Star Wars set is a lot more cost-effective than a unique LEGO Factory set. But the pricing reflects this as well.

The company’s manufacturing and quality control capabilities are legendary in the manufacturing world. There are many other companies that wish to learn from your experience, and most of these are not competing companies. What kinds of interactions do you have with these companies, or with educational institutes that wish to teach about manufacturing?

We work with the best schools and institutions in the world. We have a very good collaboration with government authorities and independent audit and quality organizations. Here we share better practices, interpretations of law into standards and practices. Quality has moved from basic constructs to highly delicate and complicated matters that involved hard to trace chemicals with potential but not fully documented effects based on uncertain limit values per volume of material. This means that controls are getting harder and more costly, and causes cheating to become even more tempting and advantageous. Therefore we, as a quality producer, have a high interest in shaping the regulatory standards into something workable and safe for children, while encouraging the policing of those standards to the benefits of the industry, the quality based manufacturer and most importantly to the benefit of the children.

A case study is being prepared for Harvard and one is nearly completed for IMD, the world’s leading executive management program according to Financial Times (located in Switzerland). Copenhagen Business School (CBS) has just completed one. We regularly speak at conferences in Asia, US and Europe on topics like turnarounds, marketing, innovation, user involvement, communities, etc.

I do a lot of set reviews for the magazine, and one of the things I always look for is the addition of new elements to the collection of available parts. What type of business process goes into deciding when new parts will be allowed and what minimum standards exist for the design or usefulness of these elements?



Jørgen Vig Knudstorp speaking at Brickworld 2009.

“We (Jørgen and Kjeld Kirk Kristiansen) were really energized by it all (Brickworld). The magnitude, the creativity and energy and excitement in the rooms were fantastic, and the warm, hearty welcome touched us very much. To me it is like eating vitamins all day.”



Brickworld Coordinator Bryan Bonahoom, Jørgen Vig Knudstorp, Kjeld Kirk Kristiansen, and Brickworld Founder Adam Reed Tucker.

The creation of new elements is something we do not take lightly. There is a strong burden of proof on the designer to argue for the true need for a new element. We want to stay very conservative here for a number of reasons; the building experience, quality, user experience and manufacturing costs. We have an element forum that operates within guidelines set by top management, myself included. The forum gets to decide what can be made, and what cannot. Many decisions involve decorations or colors, as much as shapes. The mold cost can vary but is generally around \$100,000 US. The cost of actual manufacturing varies greatly and is based on a number of factors. The costs here are not disclosed for obvious competitive reasons.

Recently I got to participate in the grand opening of a new Brand Retail store just outside of Charlotte, NC (thank you so much for finally getting a store near me). This was on the heels of store openings in Raleigh NC and the overall addition of 13 stores total in the US in 2009 alone. This is more than half of the amount of US stores that have opened in the entire history of the company in the US (25 total stores as of January 1, 2009). There are also two more stores opening in Germany. What has prompted such rapid expansion, and what plan has the company used to insure the rapid expansion does not fail?

LEGO Stores have always been popular and cash positive, however five years ago we had expanded too fast and to some extent in the wrong places (due to deliberate decisions to achieve some learning). Then there followed a process of store closures and efforts to increase profitability of operations. Our operating principle is that

the stores must make a profit. It is not a marketing vehicle that only has a cost impact on the P[rofits]&L[osses]. The team has done an amazing effort of lifting the store experience and assortment over the past 3 years. With this, profits have followed and sales have grown strongly. We set some targets for them to achieve by 2010, but they achieved them already by the end of 2008. This allowed us to finance a faster expansion program. Now with the financial crisis even more attractive locations have come up, as many retailers are cutting back on the stores to weather the storm. So you can say we are leveraging our own improvement efforts in a difficult economic environment. In times like these, the strong get stronger. To do so we have had to upgrade our organization, and yes we have also increased our focus in Europe. However, we want to first service the opportunities facing us in the US.

Along the same lines, what is the best selling line of products right now and how much of the company's business does it account for? What kind of age distribution does the company see with respect to overall purchases?


The best selling lines have been remarkably stable over the past years. This year's bestsellers like last year will be LEGO CITY and LEGO Star Wars. In addition, Creator continues to expand very strongly. Also Power Miners does very nicely, above our own optimistic expectations. Finally, I am glad to note an increased interest in DUPLO. We don't know the actual age distribution of our users. Of course we know there is a significant adult community and we do see sets marketed as age 16+ are selling really, really well.

I can remember standing outside the front door of the Westin hotel outside of Chicago on June 19 this year, when a

limo arrived and Kjeld and yourself stepped out to join the crowd at Brickworld 09. I have seen you come to many of the fan events, and every time you seem to be really looking forward to being there, and are genuinely happy to see everyone. Please share some thoughts on your experience at the show this year.

Yes, and this trip was special to Kjeld and I. It was actually the first time since BrickFest in August 2005 we had the opportunity to travel together to a North American fan event, and then during a weekend, which makes the whole thing so much more relaxing for us. We were really energized by it all. The magnitude, the creativity and energy and excitement in the rooms were fantastic, and the warm, hearty welcome touched us very much. To me it is like eating vitamins all day. I am so inspired and enthusiastic after leaving. I remember the next morning when I had breakfast with Kjeld, I told him that I had been so tired after flying to Chicago, a long week at work and then Brickworld that I had slept like a baby. Kjeld responded that he had been so excited when he got back to the hotel (at midnight) that he had stayed up and been building stuff. That was how energized he was after a full day at Brickworld!

Thank you for the time for this interview. I usually wrap up these interviews with the question of “what can we expect to come out next from the company” This time I am going to shoot out a little further. Can you give us some thoughts on the long term future of the company, like the year 2015 and beyond?

Well, thank you for raising a question very much on my mind as well. We have already laid out the plans for 2015. We think the company will continue along its current track, which means even more expansion in new economies in Central and Eastern Europe, more expansion in all of North America, Mexico included. And finally a large step forward in China as well. On the product side you will continue to find the classic lines you know today, however you will also see exciting new themes such as Power Miners, and LEGO Games System that is being test launched this year in Germany and the UK (in full global launch in 2010). You will also see us expand with DUPLO in a number of countries. Finally and importantly we will step up our digital efforts, which also will benefit the LEGO® fan community. 



Kjeld Kirk Kristiansen, Jørgen Vig Knudstorp, and Tormod Askildsen of LEGO Community Development at Brickworld.

There is sometimes confusion with referring to the LEGO Group, which is a collection of divisions internationally. Here's a breakdown of the LEGO Group, as defined by Jørgen:

LEGO System Inc is the name of the LEGO legal entity in the US. LEGO System A/S is the Danish entity. LEGO A/S is the parent/corporate company, where I am the CEO and president. All companies (such as LS Inc and LS A/S) in the group are owned directly or indirectly by LEGO A/S. When we refer to all the companies under the corporation of LEGO A/S we call them “LEGO Group”



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Leo Verneulem and his wife Iris in Zwolle Holland, 2008.

Building Beyond Minifigure Scale

An Interview with Dutch Castle Builder Leo Verneulem

Article by Megan Rothrock

Photography

by Leo Verneulem,
Rob Beurskens and
Megan Rothrock

In a garage tucked away in the Netherlands sits a man building historic castles. His name is Leo Verneulem and for the past eight years he has been building, showing, and transporting his very large LEGO® castle models all over the Netherlands! Leo has been building most of his life, but unlike most AFOLs, minifigure scale is too small for this builder.

Finding the right scale to build in

When Leo was a child, LEGO was a new toy on the market and he received a box with windows and doors. He states, "I thought they were nice, but they seemed too small. So I thought why not try and build something twice as high and twice as wide? I built a little train station, and I liked that scale. When the minifigure came out I found them to be too small. Scala was too big, and not very sturdy to build big models, I found the LEGOLAND scale (and later Belville) to be just right. I decided to set the Belville figures on my models for the kids to see."

In and out of the Dark Ages

Leo entered his 'Dark Ages' at the age of eighteen when he went into the Dutch Military, bought his own house, and got distracted by girls. With no time for building with LEGO, he carefully packed it all into the attic.

Twenty years would pass until one day he was cleaning out his attic. Leo tells, "I picked up a heavy box and the bottom fell out of it-WHOOSH!" All of my LEGO bricks were everywhere on the floor! They looked so

nice I couldn't throw them away, so I cleaned them up, and looked up on the internet to see what I could sell them for. Upon my searching I came across some of the AFOL [online] communities, first LUGNET and later others. I thought that was fantastic! There were adults that were building with LEGO bricks! Deciding to keep my LEGO bricks I started to build again!"

Gathering inspiration

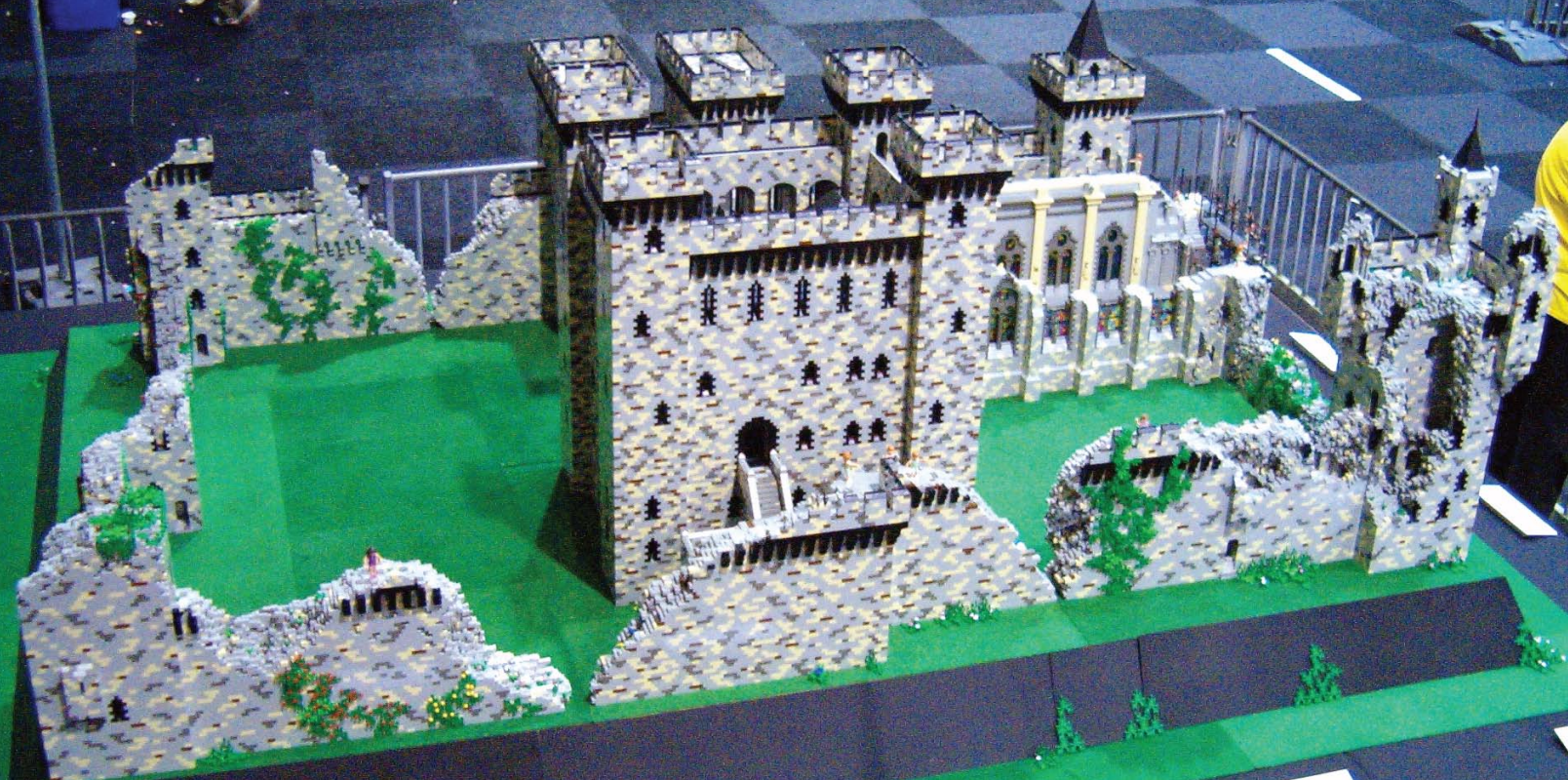
Leo attended a small exhibition in Germany, there they had built a small German town with a shopping center (mini-fig scale), and some larger buildings in a case all built out of LEGO bricks. This inspired him to build, as he describes: "I started to build 1-25 scale then and bought more bricks to build houses. I found some photographs of real houses online and built them. It was around that time that I signed up for The Bouwsteen." (the Netherlands' LEGO Club)

Building bigger, and bigger

Leo's buildings got bigger and bigger; in 2002 he built 'Kastel Werkeren' out of red LEGO bricks. The real castle is located in Zwolle, The Netherlands, and all that remains of this castle today are ruins. In order to research how it was originally built he worked from original city plans in Zwolle, found an old painting and was able to track down a professional archeologist. Leo explains, "I met with him and he told me how it would have looked and how the structure of it was. Then I built the model, it had 40,000 bricks in it. I took it home after LEGO WORLD, but it was too big to store, so I knocked it down."

Beginning of an English giant:

Soon after he built the Red Castle he wanted to build an English Castle. He chose Helmsley Castle in North Yorkshire and started with the keep. He wanted to build it as it stood - the full architecture of it from the inside out - with stairs and thick walls. Leo tells, "I'm very interested in Historic buildings. I combined my two passions, Historic buildings and LEGO!" Leo started with the gate around the castle. "I spent about a full year researching, building



An overview of the site, here you can see a part of the complicated access staircase.

and getting the LEGO bricks, at that time there were 40,000 bricks in the model." he explains.

"I am a Civil Engineer so I made some technical drawings before I began to build it. At this point it had around 100,000 LEGO bricks in it. I looked at the Castle again and thought it needed some exterior walls and corner towers. I began to add onto the model in my house, but soon had to move it out to the garage so I had some more building space!"

He continues, "I brought it to LEGO WORLD in 2003. It was a large structure and I had to rent a truck to get it there. After I had it set up in the hall I thought it would be nice for it to have the gateway with the bridge, tower, doors, and the crank for the drawbridge."

By 2005, the English Castle (now called Sokenniwell Caste) was HUGE (200,000 LEGO bricks), and far too big to fit in the back of a truck, so Leo built a trailer especially for it to transport it to LEGO events. "I built a stand for it to stand on as well, it is in 12 sections. For smaller LEGO gatherings I tend to bring only a small section of the castle."

As for the name of the castle, Leo explains: "I often get comments regarding the name Castle Sokenniwell. Sokenniwell is not really an English a word, but a



"Sokenniwell Castle" has not only been on display at LEGO shows. Here it was placed on a flower exhibition where local flower growers came to show their best products. The theme this year was "LEGO" and flower producers were there with their floral creations. The response was different from a LEGO event, as the LEGO models were in this case in the background. Most LEGO models were provided by the LEGO Group. The castle was one of the private building displays.



'John Swart and daughters' was the horticulture company with their flowers exhibited in front of the castle, and it was great that they won the first place! Maybe the background had something to do with it?

Some Information about Sokenniwell Castle:

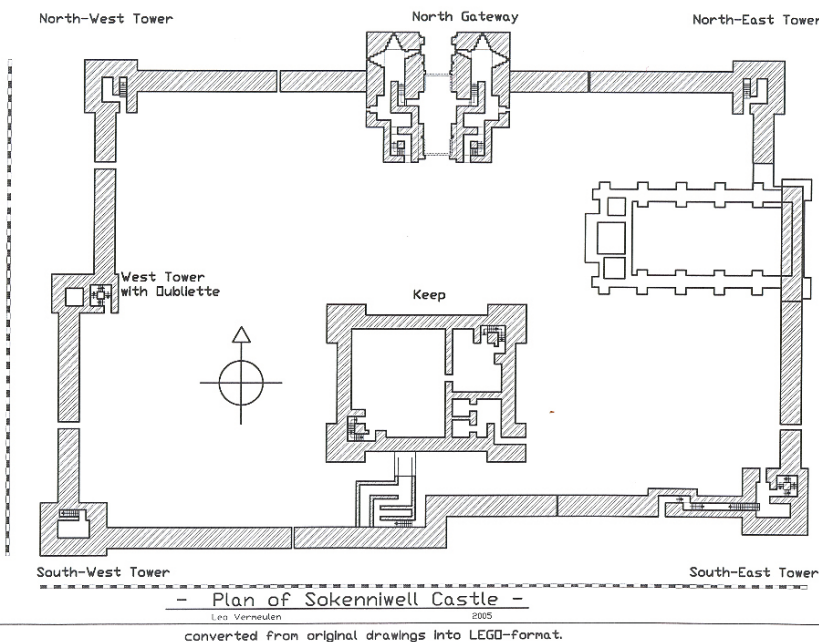
Total amount of bricks	285,000
Weight	ca 500 Kilograms (just over 1100 lbs)
Dimensions	2.4 x 3.6 meter (8 x 12 feet)
Height of the keep	1.3 meter (4 feet)
Average thickness of the walls	10 studs
Total building time	6 years

- Year 1. Research and study everything about castles, how they are built and how and why they are built.
Designing the castle and making drawings.
- Year 2. Building the Keep.
- Year 3. Building the Gateway.
- Year 4. Building the two corner towers and the front wall.
- Year 5. Building the other two corner towers and the rest of the walls.
- Year 6. Building the chapel.

By the 6th year the castle was still not finished. I wanted to build a bridge and a moat around the whole building, after the accident I decided to take it all apart.



Here is the castle as it stood on LEGO WORLD 2006, showing the front of the castle with the gateway and the corner towers.



Leo's technical drawing of Sokenniwell Castle.



The vault a bit closer and a more detailed view of the Chapel showing the renovation process.

variation of the Dutch saying 'So you know what' that phrase is often used when someone is exaggerating somewhat, larger or more expensive than necessary."

In ruins:

But LEGO tragedy struck on the way home after LEGO WORLD 2006. There was construction on the highway so he had to take some bumpy roads to get back home and the vibration caused the castle roof to collapse on the un-glued LEGO model. Leo had plans to build more onto it, but was crushed to see it so damaged! He tells, "It had real spiders living in it, and was dirty from all of the displaying and transporting, so I decided to break it down. That took me several months to take it apart!"

Back to building:

In 2008 Leo built a version of the Amsterdam Support from Harlem, Holland. "This one is all done!" states Leo. "I used the original drawings from the building plans and I might make some smaller things, walls, stairs and such; something that is easier to transport."

Future ideas:

Leo has future plans to build a Fantasy style Castle in white and pink, his inspiration comes from the Disney Castle and Zwanstien Castle in Germany. He plans to go there to visit for research. This will take some time as first they must move to a bigger house, with a bigger building area.

Sharing a passion for LEGO:

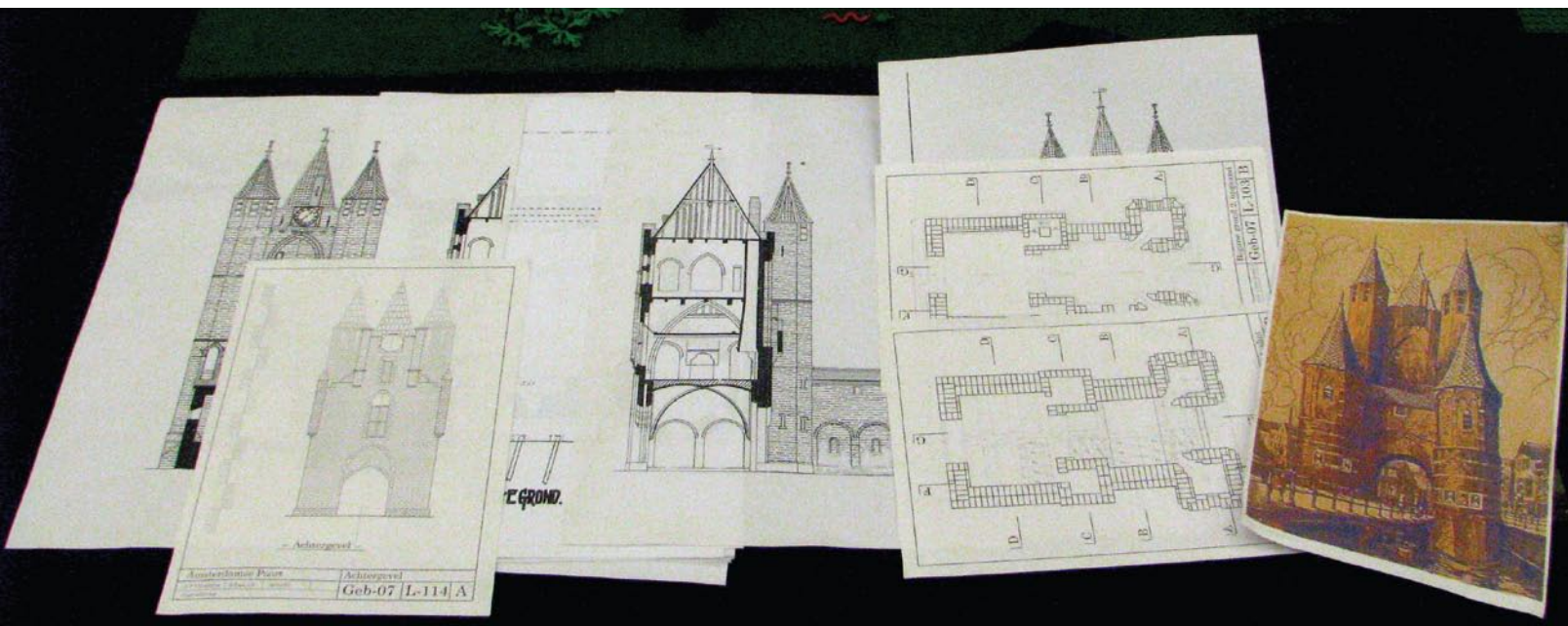
Leo is not alone with his LEGO hobby; he has been married to his wife Iris for over 40 years. I asked Iris what she thought of all of his building, and taking up so much space in the house with LEGO. Her thoughts are clear: "I think it's great! When we first met his passion was sailing. We both worked at the same bank; after we were married we got a small boat. I was scared to go, but after I learned how to sail it was great. In the end we had 3 boats! Ten years ago we sold the last one, and began to clean out the attic, and then it all started with LEGO bricks. As our passion for LEGO grew, our house and garage got smaller, but I was okay with that too. I didn't build the castle with him; I was more

support, bringing him coffee and food when he was out in the garage building. But I liked LEGO too. So I began to build sets and collect LEGO mini figures. Harry Potter, Star Wars, and the Statue of Liberty Shop at Home set have all been good to build! The Statue of Liberty set is very tall, and by the end I was standing on the dining room table to finish the build. We like to build in the same room. Sometimes we get so caught up, we lose track of the time. With both of us having a passion for LEGO we can support each other. In 2003 I had a stroke, so I can't really build right now and the instructions don't really work for me at the moment. So now I collect more mini-figures from Harry Potter. Leo has made a nice case for me to store all of them in, and sometimes I bring them to show at LEGO meetings. I also have the mini figure egg cup and timer that I use everyday to cook with."

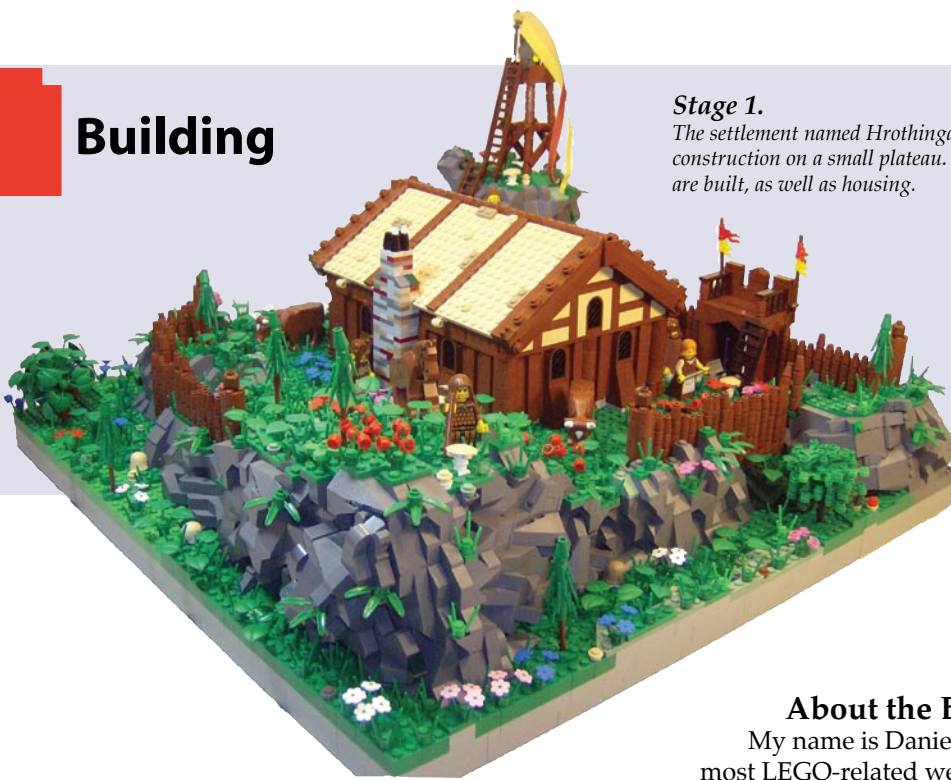
Recently Leo and Iris have found an old Dutch farm and stable in the North of Holland, they have bought it, and will be moving in soon, so they will have a lot more space to build in with LEGO bricks! 

In contrast to Sokenniwell castle ,this old town gateway has been built after an example of an existing edifice This is the gateway from Amsterdam to Haarlem. In Amsterdam stood (and still stands) the "Haarlemmer Poort", and indeed, between these two gateways, lies the way Amsterdam-Haarlem. In those days, you did not need a 'Tom-tom' to travel from city to city. This view is the back side, of town side of the tower.

Below: Construction plans of the Amsterdam Gate, an old gateway to the town of Haarlem. Leo used the original drawings of the city of Haarlem to work out a LEGO building plan.

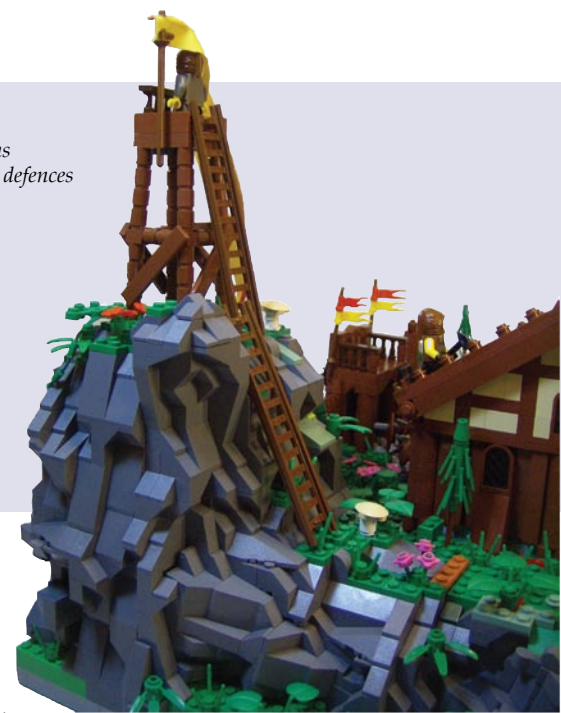


Building



Stage 1.

The settlement named Hrothingas begins construction on a small plateau. Simple defences are built, as well as housing.



About the Builder

My name is Daniel Z and my nickname which I use on most LEGO-related websites is DNL. My flickr name is Daniel Z "DNL".

A Castle's Life Cycle

Daniel Z chronicles a castle's growth, decline and restoration in a series of LEGO® models.

Article and photography by Daniel Z

I'm a student and have been building with LEGO since I was old enough to play with DUPLO. I didn't really have a Dark Age, but there have been a few years in which I hardly bought any LEGO, partly because the sets were really bad (Knights Kingdom II). When I saw some pictures of the new 2007 castle line, though, I got excited and found Classic-Castle.com while searching for more pictures, and later the rest of the online LEGO community. I started buying and building with LEGO much more frequently as a result.

I have always had an interest in medieval times. In my childhood, castle was the only theme I built and played with. I still love building castles and other medieval buildings because of the great architecture and endless possibilities.

About the Castle

I was inspired to build the evolution mainly by a castle James Stacey built a few years back [This castle can be found online at <http://www.minifig.co.uk/default.asp?id=3&mID=33>]. He started with a keep and then added several layers of walls and fortifications around it. He didn't

change any of the original buildings for each stage though, and I got the idea to make a castle that grows and changes through the ages.



Stage 2.

As the Hrothingas grows, so does the housing and other structures. Stone walls and towers are built for strength.



Stage 3.

Hrothingas is built up as a castle, with stone walls and towers overtaking the older wood structures.



It took me about five months to build all the stages, but I also built some other MOCs in that time. I think each new stage took about 15 to 20 hours to complete. There isn't a real storyline behind the project, but the castle changes as it probably would have in real life. Between stage four and five the castle lost its defensive function because of the invention of gunpowder and was deserted, like many real castles.

I was also inspired by some video games, like *Age of Empires*, in which the buildings change while you play the game. I'm inspired by many other builders, especially the ones that come up with new building techniques and styles. Some of the builders that inspire me most are Aliencat (Aliencat! on Flickr), DARKspawn (darkspawn on Flickr), Slyowl (slyowl on Flickr), Mark Kelso (<http://mocpages.com/home.php/5708>), Sir Nadroj (found on Flickr) and Rebelrock (<http://www.brickshelf.com/cgi-bin/gallery.cgi?m=RebelRock>).

I'm quite proud of the technique I used in the gatehouse of stage four, I made it by using panels on their side (see below), which eliminate the gaps that usually are between two angled walls. With this technique the corners look smooth and the towers look more like a whole building instead of four walls that are connected to each other. I'm also proud of the technique I discovered to make a 1/5th offset of a wall underneath an arch, this is very useful because a normal arch in a wall often looks too 'deep' (also seen below in the gatehouse walls).

Stage 4.

Hrothingas Castle is completed. The craft of the builder can be seen in the gatehouse below.





Stage 5.

Hrothingas Castle is no more. Deserted, the castle is in ruins, with nature reclaiming the landscape.



I guess the easiest part of the castle to build were the curtain walls. The hardest part was definitely the big gatehouse. It wasn't easy to make it all fit and attach it firmly to the ground.

For new builders, I would advise them to practice a lot by building castles, and look at other builders' castles for inspiration. It is also very helpful to join a forum and post your MOCs there to get advice and help. Entering contests like the Colossal-Castle-Contest on classic-Castle is also a good way to get motivated and fun to do. 🏰



Stage 6.

Hrothingas Castle is restored, but as a tourist attraction. As a result, some structures are added that are more embellishments than restorations.



At first glance, the castle genre seems dominated by large, grey structures made by people with way too many 2x4 bricks. I have been building castles for many years, and the theme has endless possibilities and variations. A castle MOC may be a traditional castle structure, but it can just as easily be a tudor-style house, a hay cart, a dragon or even a waterfall. Castles may be themed after real-world castles, or may contain fantasy elements such as dragons or elves. Castles need not be European, grey, and square – They can be Oriental with pagoda-style features, tan with Middle-Eastern theming, or even a makeshift bandit hideout. This article will focus on a traditional castle structure and associated features, but this is only one part of what castle can be!

To build a castle, it is helpful to understand some of the key parts of a castle and what their function is. At the heart of a large castle resides the tallest structure, a building called a keep. The keep is where the lord of the castle could keep watch over any battle going on within the castle, while remaining safely inside the castle walls. Moving outwards, the courtyard of the castle surrounds the keep. This large empty area housed peasants and day-to-day activities in times of peace, and could be used for staging troops or preparing defenses during an attack.

Moving further outwards, one reaches the most striking feature of a castle – The great walls surrounding the courtyard. These walls are generally thick to resist attack, and have a walkway around the top. Along the outside edge of the walkway are crenellations, made up of crenels and merlons. A merlon is the solid part of the parapet, which a soldier could hide behind, while popping out into the crenels to attack the enemy. These crenellations can define a LEGO castle's look through part selection.

These walls connect via towers, which may be round or square, and have other features in them such as gates and drawbridges. This is where the real theme and style of the castle comes out, and the building can get very complex. While LEGO is generally suited to square objects, with the right techniques this squareness can be transcended and lead to unique shapes.



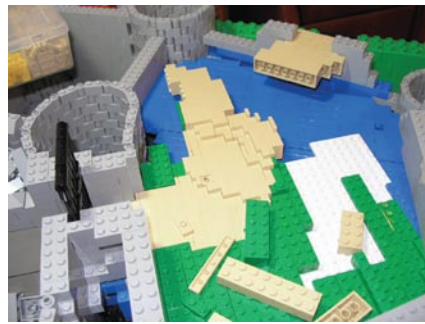
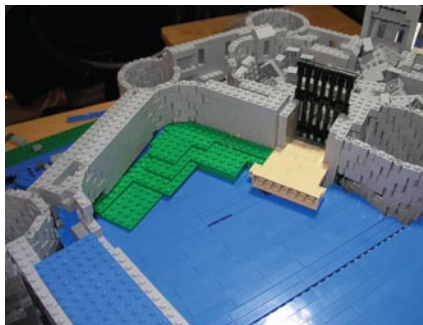
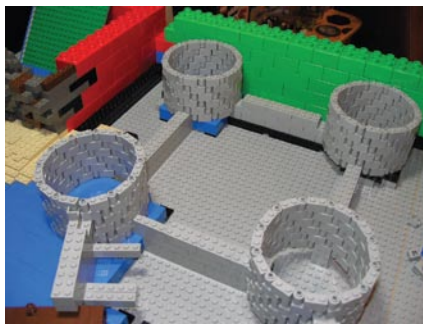
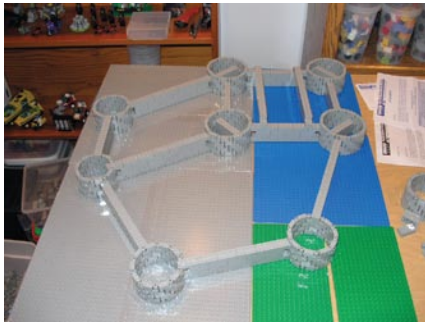
Above: John Langrish's Nottingbley Castle

Castle Building: More than Walls and Towers

*Article by John Langrish, Aaron Andrews
and Chris Malloy*

*Photography by John Langrish, Joe Meno,
Aaron Andrews and Chris Malloy*

Below: A sequence of Nottinghamley Castle's landscape and walls being built. Once can see the progress as more terrain and structure is added.



The landscape around the castle is one of the most commonly neglected features – In real life, the landscape could dictate the fate of a castle! Landscaping of a castle can include mountains, rivers, waterfalls, valleys, oceans, forests and anything else. It is important to keep in mind that the landscape dictated the castle, therefore the castle often made use of the unique features in the landscape. For example, a pre-existing cliff might eliminate the need for serious defenses on one side, or a river might double as a moat.

To start building a castle layout, I will start by laying out baseplates in the size and shape I want to achieve. On the baseplates I will lay a single layer of bricks down to outline the key features I have in mind: A separation line between where land and bodies of water will be, where forests or pathways might go, and any other major details.

At the same time, I will make a general outline or template of the shape I would like my castle to be. This is usually made of just bulk bricks with no details added, to give an idea of how the castle will sit on the landscape. This is overlaid onto the landscape layout lets you see how to blend the terrain and structure together to create a cohesive, natural looking structure. With a clear idea of what the integration of the castle and landscape will look like, it's easier to construct the landscape to suit the look of the castle you have in mind.

My next step is usually to fill in any ocean or low-level bodies of water. I like to use a SNOT technique which involves a layer of bricks on their sides to give a very smooth surface, but there are many different styles to be used. The next step is to build up the land in the desired method. This land can work to set the tone of the land. Sandy beaches or bright green land can have a bright, happy look or dark cliffs add a menacing feel.

After this outside shell of land is built up the desired level, I add the template of the castle back in place and permanently build it into the landscape. This gives a guide to mesh the landscape and castle together. While it uses excess bricks, it can be useful to simply put the template on the baseplate and build it up to the level of the landscape. This might not be necessary for simpler shaped castles, but if you are using angled walls and more complex styles, it can help in keeping track of how each component of the walls connects.

Before building up the walls very high, it's time to add in any major features your castle might want, usually a main entrance or gate, and any smaller entranceways or stairways that might appear on the outside. Placement of these is key to a cohesive

landscape, as you can lay out any pathways that may be within the courtyard or outside the castle walls. Depending upon the theme of your castle, you may want to brighten it up with a fountain, flowers, and trees, or make it spooky with a gallows and some forgotten skeletons.

Finally, the walls can be fully built up, and the details can be worked in. Often simple patterns of repeated pieces provide neat details. For example, using a row of clips along all the battlements gives a great stonework texture and by using the repeated pattern, they cease to look like clips. Details like this transform simple grey walls into something special.

With the castle essentially done, there are many other aspects that can contribute to a castle layout. A common building to be found outside the castle walls (or even inside, should the courtyard be large enough) is a Tudor style house. These houses require relatively few pieces, most of which are not castle-specific at all. The basic idea is to have a dark “frame” around lighter colored wall panels, which is an historically accurate style. Aaron Andrews (aka DARKspawn) best describes such buildings:

“Perhaps the most attractive aspect of the castle theme for me is the level of detail that can be included in a LEGO model. Wood frame buildings, including those of the Tudor style, provide some excellent opportunities to add layers of detail and explore various building techniques. Be inspired; search for photos on the interweb or at your local library.

The first step is to find the structure’s “footprint.” This is the shape of the floor plan. Try to avoid regular shapes like a basic rectangles and squares. This will add character to your model and provide opportunities to add details. Even something as simple as a diagonal “board” crossing a framed section where a window ought to be will add a point of interest. Try to have a purpose for the structure. Even something as simple as a peasant’s home still requires many points of detail – the peasant’s garden, a well or water pump, a place to keep his horse. Take the time to consider the functionality of the structure and details you should include will become obvious, especially with a little research.

Be inventive with your building. Rather than using roof elements find something interesting to use for the building’s roof instead, even something as simple as a roof made out of 1xn brick (as in the example provided) can make your model stand out against the rest of the crowd. The castle theme provides as many opportunities to employ SNOT techniques as any other theme. Diagonal boards can be attached to the exterior of the creation for extra realism. Heaps of other SNOT details can be employed too, use your imagination and use elements inventively rather than in the usual ways.”

Castle can be much more than just castles, knights and peasants: What about the dragons, wizards and dwarves? Sometimes these elements alone can make a castle MOC, or make a larger display that much cooler. Some larger fantasy creatures like dragons can be a MOC in themselves! Chris Malloy (aka porschecm2) has a great example of a small MOC using fantasy elements, that has no castle structure in it at all:

“One of the many things I love about the castle theme is the freedom to let your imagination run wild, while still conforming to certain stylistic norms. Fantasy castle, in particular, is a tremendously fertile sub-theme for trying out new ideas. Fantasy building is quite friendly to builders with smaller collections, as they need not make their creations resemble any historical reality. For this model, I chose



Above and below: Models by Aaron Andrews.



Below: Diorama by Chris Malloy.





More of Chris' diorama.



to create a barren wasteland, and populate it with a necromancer and his skeletons opposing a band of dragon-knights. I am able to use pieces such as the purple flames since this is a fantasy setting, and the majority of the diorama simply consists of grey, dark grey, and black slopes. The setting allowed me to avoid using large amounts of the more rare green or brown slopes and foliage pieces, while reinforcing the mood of the model."

As seen in Chris's MOC, the figure placement makes the scene come alive. If it weren't for these lively characters, it would indeed be a barren wasteland. Like any minifigure-scale model, minifigures can make the display come alive. Sometimes the minifigures and their accessories can create scenes that pure bricks cannot, such as a bustling marketplace or fierce battle. Aaron Andrews describes minifigures in castle well:

"Building dioramas of medieval life is a great deal of fun. At first glance, someone unfamiliar with the theme might consider the subject to be comparatively boring compared to themes like SPACE! Nothing could be further from the truth. When creating a medieval diorama it is important to keep the focus on the real stars of the LEGO world – the minifig! Take the time to think about the scene you want to depict, the best dioramas have clearly defined subject matter, like a medieval parade (as in the example provided), a festival or feast, or even a street side market scene. This will provide the basis for your creation.

Although the minifigs are the stars of the diorama, no good scene is complete without a suitable setting. Make the scene interesting, multiple levels is the best way to make something as mundane as a medieval street really come to life. In the example provided I have made multiple levels within the creation on which to stage the action – the water level, the harborside, and the stone wall. Be inventive with your building, but keep in mind that the scene must be able to accommodate the minifig action, that's what will really make the diorama come to life.

Take the time to include as many elements as possible to help convey the theme. Most importantly, have your minifigs act out the scene. Imagine that the diorama is like an exaggerated snapshot in time. Once you have established the theme to your satisfaction, try filling out the extra space with small, unrelated scenes, maybe a marriage proposal or a medieval mugging, adding comic relief, acted out by the minifigs, is also a great idea. Have fun with your creation and your audience will too."

The ideas and concepts we have explored here are just a few of what can go into a castle MOC. The genre is very broad, and extremely creative and intricate MOC's can be built from relatively few parts, while beautiful and epic landscapes and structures can be created with a larger number of basic pieces, or as a collaborative effort. **b**

John Langrish is an engineering technologist in Victoria, Canada and has been a LEGO Fan all his life. He is a VicLUG member and regularly takes part in public displays of LEGO locally, and in LEGO conventions abroad. John has been a member of the LEGO Ambassador Program since cycle 5 in 2007, and works to enrich the LEGO community every way he can. John primarily builds castles, but regularly dabbles in other themes.

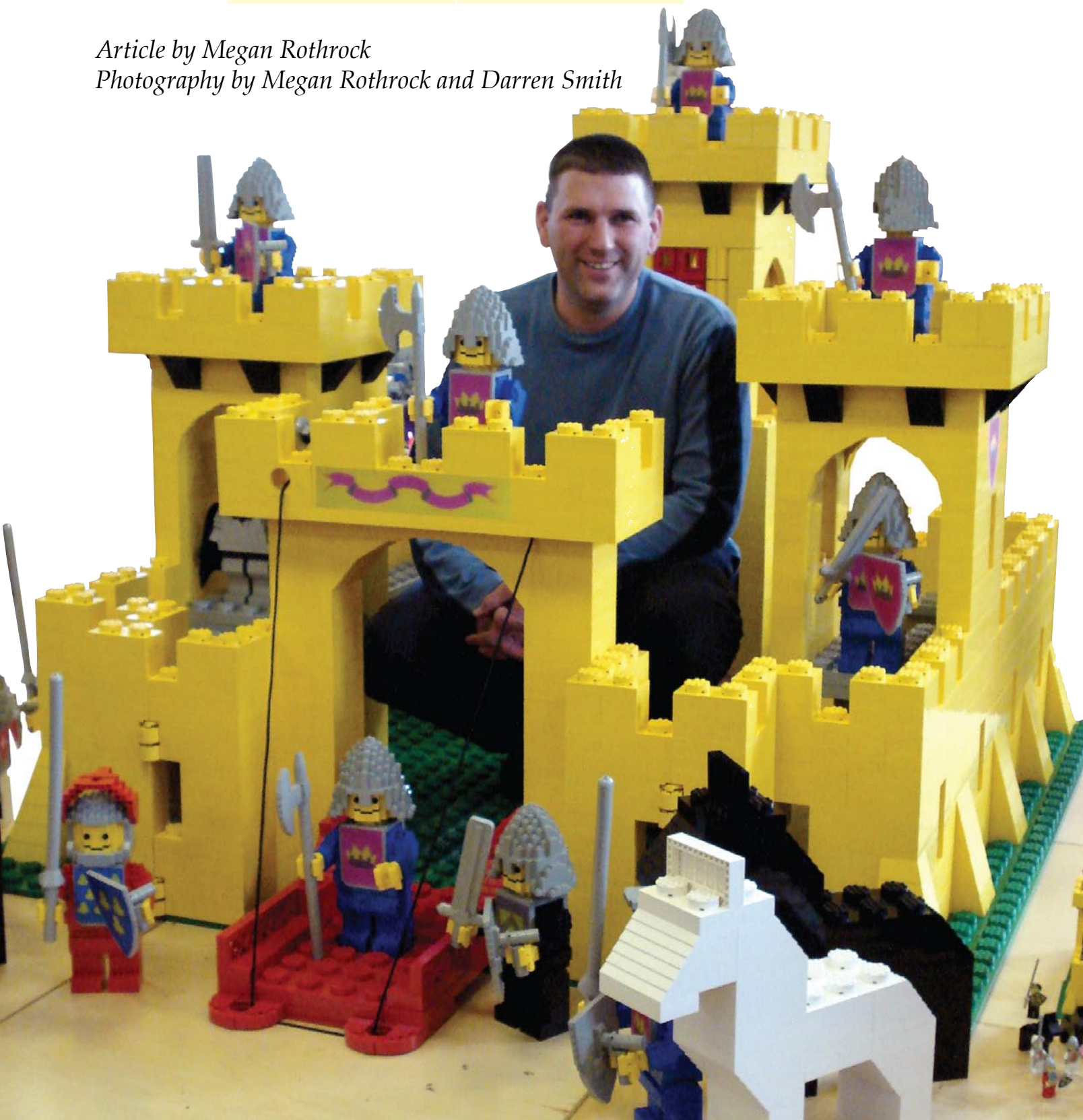
Aaron Andrews is from Brisbane, Australia and is a builder of many themes but enjoys LEGO Castle most of all. Aaron goes by the nickname DARKspawn on many LEGO fansites. Chris Malloy is a Spacer by day and Castlehead by night, and is a die-hard parts monkey.

Building a BIG Classic LEGO® Set!

Building:
Large-Scale Models

Article by Megan Rothrock

Photography by Megan Rothrock and Darren Smith





As we grow up, a lot of our cherished LEGO® sets we had a child can seem smaller. But for one British AFOL his set has become giant! A member of the Brickish Association (a British LEGO fan group), Duncan Tirmarsh has managed to recreate the classic Yellow Castle LEGO set six times larger than the original one, complete with a working drawbridge. It also has the 1x2 hinges so it will open just like the original set! *BrickJournal* interviewed him about building the massive model.

Q: Hi Duncan! How old are you and how long have you been a LEGO fan? (Any dark age, etc.?)

I am 38 years old and I live in Farnham, England. I have been a fan since early childhood. I had a dark age between the ages of 16 and 21.

What gave you the inspiration to scale-up the classic LEGO Yellow Castle six times larger? Why did you choose to go with six, and why that particular castle?

Someone started the 6-scale trend at one of our AGM's (annual group meetings in the UK) and a few bricks were built. I didn't participate as I was still building my London underground map (which was spotlighted in a previous issue of *BrickJournal*). When I saw the 6-scale bricks I thought they were great. That gave me the idea of building a whole set at this scale. I picked the yellow castle because it is a great set and is mostly made up of basic bricks and plates. Even the horses are bricks.

Do you know how many bricks you have used?

No, not really, but lots and lots.



Top and Above: Closeups of the model.

Right: The Yellow Castle on display at LEGO World Copenhagen.




How did you manage to get all of the bricks to build it?
I had quite a lot, and some came from fellow AFOLs. The rest came from LEGO UK (United Kingdom).

How long did it take to acquire them?
It took about six months to acquire all the bricks. I didn't make a list of what I needed, I just knew that I needed lots of some (like green and yellow macaroni pieces) and not so many of others.

Did this dictate how long it took to create the castle?
No, most of the building took place three months before our AGM (The Brickish Association's annual gathering and meeting) where it was first on display.

What is the process that you take to scale up a LEGO brick six times larger?
I made prototypes of most of the bricks to see if they looked right and had the same function, such as the hinge bricks which I actually made work.

How long does it take you to set it up for an event?
It takes about two hours or so with three people.

How much do you disassemble it?
The castle breaks down to the same number of bricks as the original set because each brick was individually made. None of the pieces are glued, so sometimes a few pieces have to be repaired. 




Building in progress.



A closer look at the castle wall.

Giant Yellow LEGO® Castle Visits Denmark

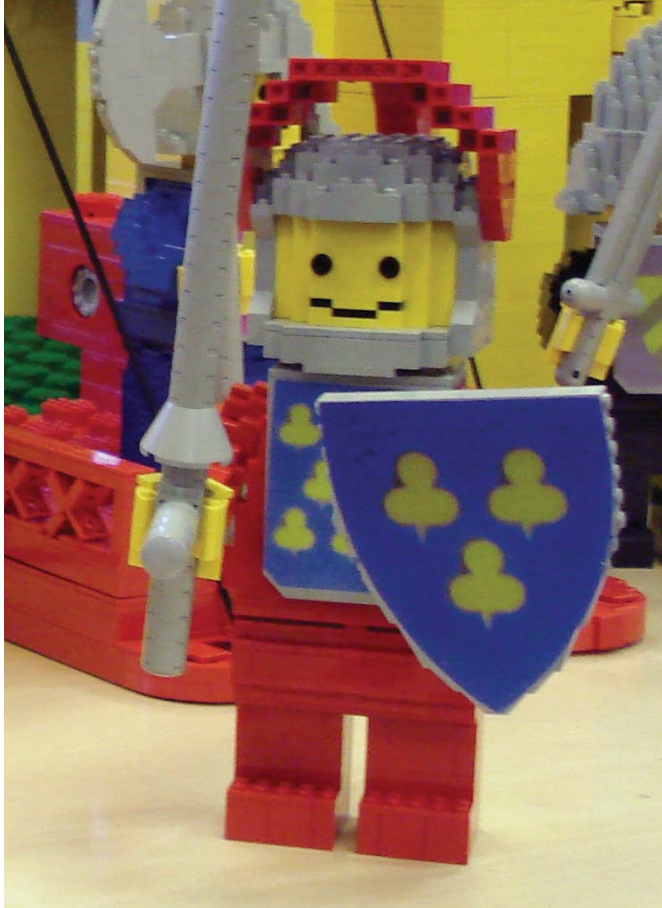
This past November as part of the 30th anniversary of LEGO Castle celebration this model was transported from the UK for display in the LEGO Idea House in Billund Denmark. None of the pieces are glued so there was some repair that needed to be done to some of the model before it could be built. There was a copy of the original sets' building instructions to follow, and it was just like building the set, except that one 1x2 brick fit in your *entire* hand! 



Vibeke Kaiser-Hansen and Edel Schwarz Andersen plan where to place the next brick.



Its fun to build with giant LEGO bricks!




The design of the minifigures were done by James Sutton. Here, he describes how he built the many figures needed for the set.

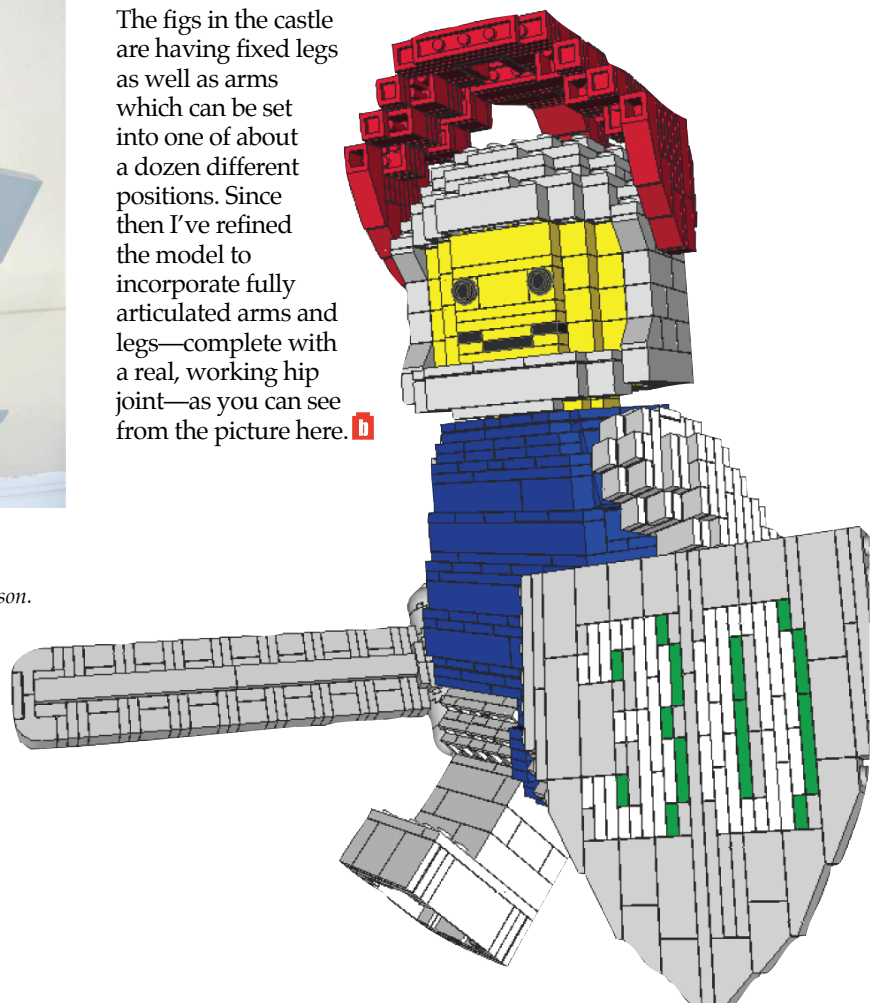
I started with the legs. After a couple of weeks I'd decided that the only way to get a fig that looked close to the original would be to build legs that are 5-wide with a 1-wide hip between them. There were two breakthroughs that nailed this: The first was realizing that a pair of 1x2x3 panels at the bottom of a 5-wide leg would allow a 6x scale stud (a 4x4x1 cylinder) to sit directly beneath a leg, and thus allow the fig to stand just like a normal mini-figure.

The second was the use of a "4315: hinge plate 1x4 with car roof holder" to close the 1/2 stud gap caused by the use of jumper plates in the thighs. This is a technique that's often used by LEGOLAND model makers, and I noticed it during a visit to Windsor. After the legs were completed I moved onto the torso and arms. The hands followed next, and thanks to the lack of any pins in the base of a 2x2 macaroni this allowed it to be mounted at 45 degrees to form the 3/4 circle of the hands.

The heads and visors were the most challenging parts of the build, especially since the visor needed to rotate around the head, which was built out of bricks and has have lots of straight edges! Getting the size just right to give the necessary clearance took a week's worth of evenings.

The tabards and weapons were the fun part of the build and my 4-year-old daughter enjoyed battling against me with them! Once the basic design was completed all that was left was to build 14 of them—a process which itself took over 3 weeks!

The figs in the castle are having fixed legs as well as arms which can be set into one of about a dozen different positions. Since then I've refined the model to incorporate fully articulated arms and legs—complete with a real, working hip joint—as you can see from the picture here. 




Top: One of the completed minifigures.

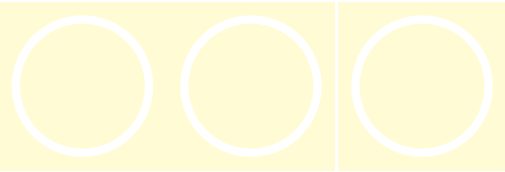
Above: Completed minifigure model with minifigure for size comparison.

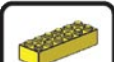
Right: Snapshot from LDView of the 30th anniversary minifig James built to display at the Brickish "STEAM" event in October.

Image above and right provided by James Sutton.




Feeling inspired?

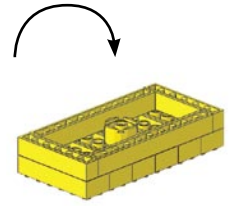
Want to build your own 6 times scale LEGO models? Here are instructions for a 1x2 LEGO brick to get you started! Even if this is all that you build it also makes a nice paper weight, conversation piece or desk ornament. 





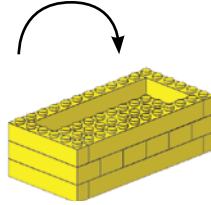
1  6x


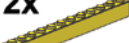


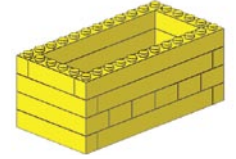
2  1x
 2x
 2x





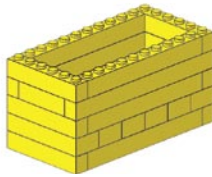
3  2x
 2x



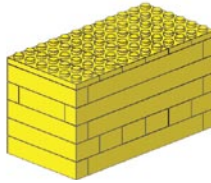
4  2x
 2x

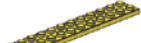


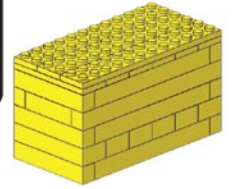
5  2x
 2x



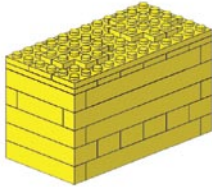
6  6x



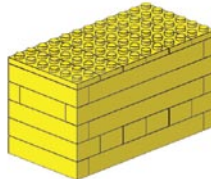
7  3x



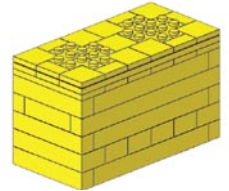
8  8x





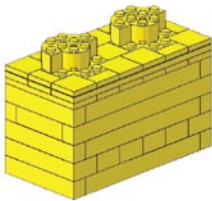
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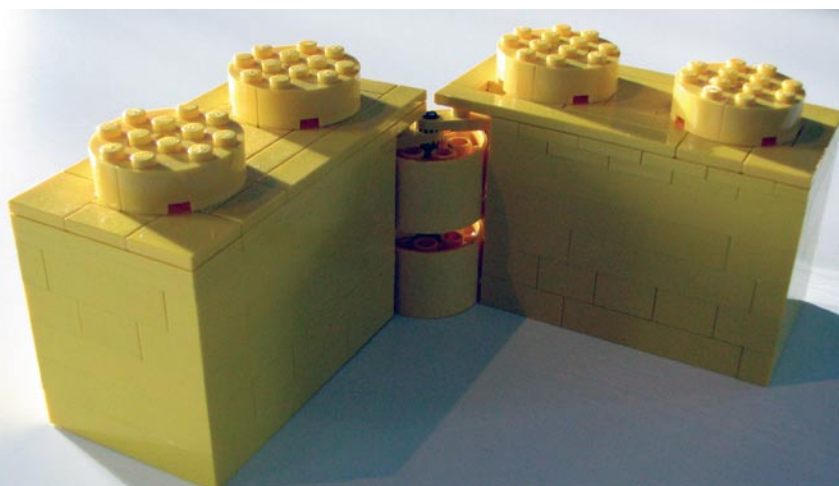
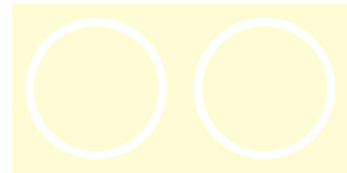
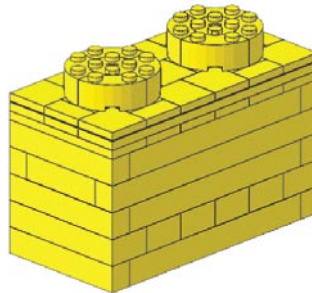
10  6x



11  2x
 4x



12  4x

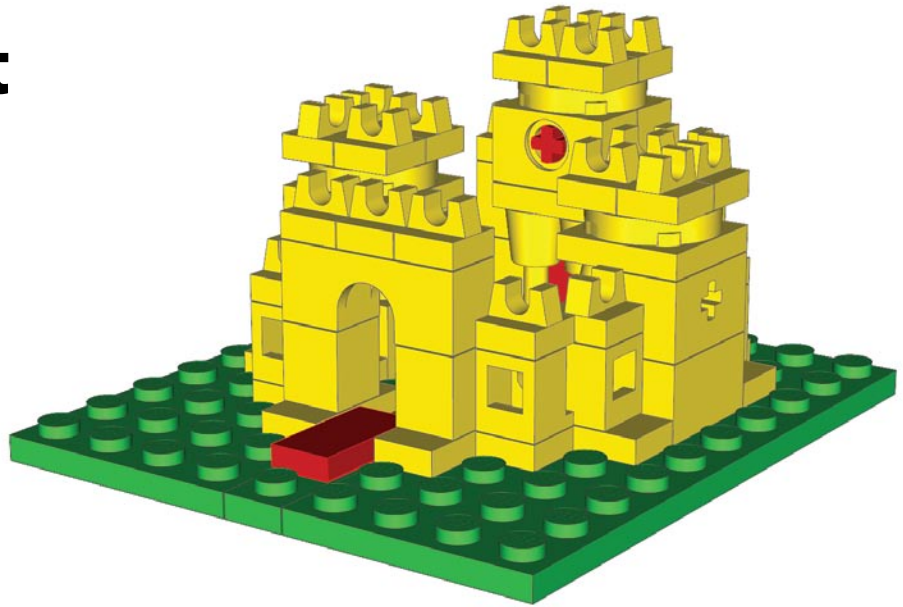


You Can Build It

MINI Model

Mini Yellow Castle

Design and Instructions
by Christopher Deck



Hello dear fellows, I'm certainly glad I could join again for this special castle issue of *BrickJournal*. Today we want to take a closer look at one of the most famous castle sets of all times! It was released more than 30 years ago in the year 1978 and marks the beginning of the LEGO® castle line. Today set 375 it is often just referred to as "Yellow Castle" and still is one of the most wanted castle sets.

My tribute to this legendary set is the micro version which I want to present to you now. The basis of this tiny model is 7x7 studs and thus requires a lot of jumper plates as well as a 3-piece-base plate to be centered. This is necessary to build up the many corners and edges of the castle. The piece used most for this model is the 1x1 tile with clip which is the obvious choice for the pinnacles of a micro castle.

However, the things that really make this castle unique and always recognizable are the red spots in the yellow colour scheme: The two gates and mainly the red window of the tower in the centre of the castle. The micro version features both red gates, and also the nice red window in the tower. For this we need two Technic® bricks next to each other. The rear one has an axle hole and holds a 2-wide red axle while the front one has a standard hole which leaves some empty space around the axle. This creates the illusion of a red window frame.

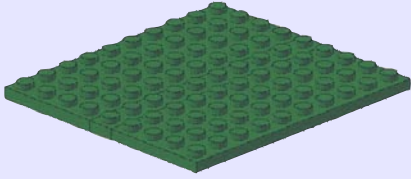
With that I think we're done and have a finished micro building. I wish you happy building and see you next time!

Yours, Christopher. 

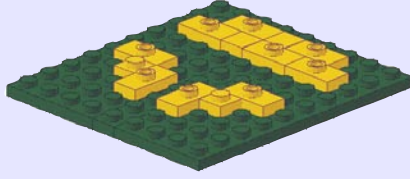
Parts List

Numb.	Color	Part	Description	Numb.	Color	Part	Description
1	Yellow	4490.dat	Arch 1 x 3	2	Yellow	3022.dat	Plate 2 x 2
1	Yellow	3659.dat	Arch 1 x 4	3	Yellow	4032.dat	Plate 2 x 2 Round
4	Yellow	3005.dat	Brick 1 x 1	2	Bright Green	3030.dat	Plate 4 x 10
6	Yellow	4070.dat	Brick 1 x 1 with Headlight	1	Red	32062.dat	Technic Axle 2 Notched
2	Yellow	3003.dat	Brick 2 x 2	3	Yellow	32064.dat	Technic Brick 1 x 2 with Axlehole
4	Yellow	6188.dat	Cone 1 x 1	1	Yellow	3700.dat	Technic Brick 1 x 2 with Hole
1	Yellow	30002.dat	Minifig Goblet	23	Yellow	2555.dat	Tile 1 x 1 with Clip
1	Yellow	2343.dat	Minifig Goblet	2	Yellow	3070b.dat	Tile 1 x 1 with Groove
2	Yellow	3024.dat	Plate 1 x 1	1	Red	3069b.dat	Tile 1 x 2 with Groove
1	Yellow	3023.dat	Plate 1 x 2	1	Red	3068b.dat	Tile 2 x 2 with Groove
9	Yellow	3794.dat	Plate 1 x 2 with 1 Stud				
1	Bright Green	4477.dat	Plate 1 x 10				

1



2



3



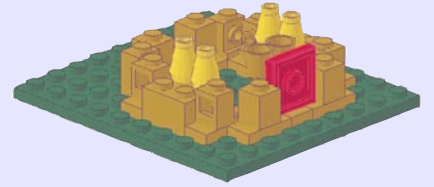
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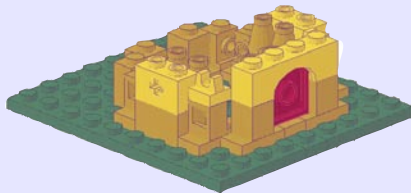
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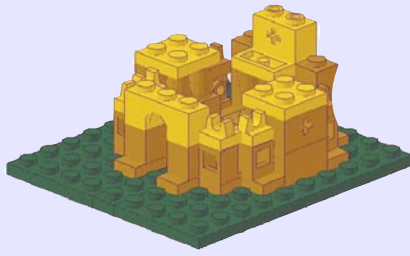
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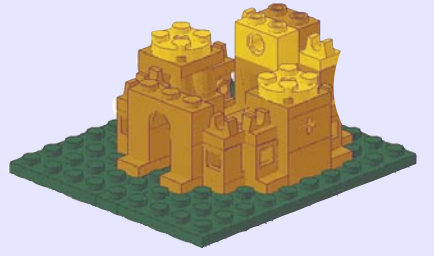
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8



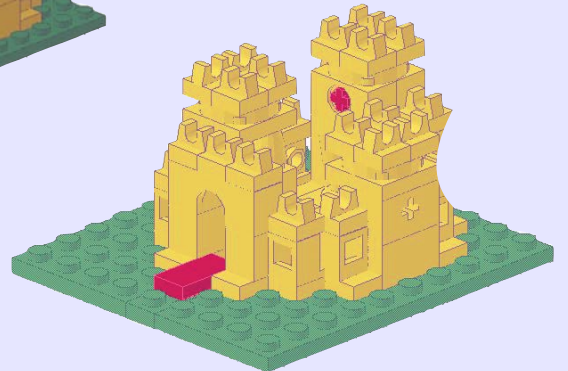
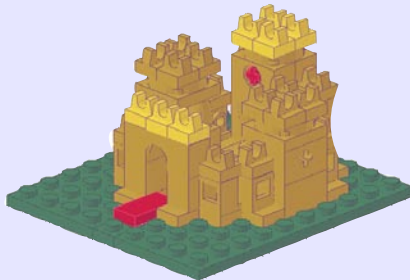
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11





Daniel August Krentz

The Legends of LEGO® Set Design

Article by Megan Rothrock and Mark Stafford

Photos by Megan Rothrock and the LEGO Group



Niels Milan Pedersen

Almost every AFOL has a treasured favorite set from their childhood. For me, (Megan Rothrock) it is the LEGO® Yellow Castle set from 1978. My family was living in Exeter, England that year, and there was a fantastic toy shop at the end of our street, filled with LEGO sets. Back then LEGO in America, where I was from, was scarce and every winter my friends and I used to drool over the LEGO sets in the huge Sears Christmas catalog that was shoved into the mailbox. This British toy shop had it all; I had never seen so much LEGO in one place and in its window was an incredible Yellow Castle on a rotating base! I was lucky enough to get that LEGO set from my parents as a birthday/Christmas/Special-Living-In-England gift and it warped my five-year-old mind! Before this I was always digging into my older brother's LEGO, and getting his hand-me-down chewed pieces. This was the first set that was all mine, and it had LEGO people that could move their arms and legs! I'm very happy to say that I still have the set with its box and instructions—it is my treasure.

Fast-forward to 2007. While attending the 75th Anniversary of LEGO celebrations in Billund, Denmark, I met a very nice retired LEGO employee. He was interested in the LEGO models I'd brought to show. It only took a few minutes to discover that he, Daniel August Krentz, had been the LEGO Designer on the Yellow Castle! We only met briefly though and talked only a little about his work on the LEGO Yellow Castle. More time passed and I heard tales of Daniel and his home here in Billund, full of amazing LEGO creations, and hoped I'd get another chance to meet with him.

Then one Friday this past September, Mark Stafford and I were lucky enough to join LEGO Designer Niels Milan Pedersen for lunch with his former colleague Daniel to talk about the old days. Daniel is one of the giants of LEGO Set Design history, he designed the classic Yellow Castle (375), the Fireboat (316), the Town Square (1592) and innumerable

other classic sets. Niels, of course, is also a legend; responsible for a huge number of sets over the last 27 years including the Kings Castle (6080) and sets in almost every castle line since, not to mention sculpting the LEGO horse, octopus, crocodile, monkey, skeleton, Space Police 3 Aliens and the new Atlantis fish-figures to name just a few! We sat down over some Danish food, our heads swimming with question after question, not just about the Yellow Castle, but also about the rest of their work.

Daniel grew up in southeast Denver, Colorado; he was fascinated with wooden blocks and later model cars and loved building scale models. However, in 1955 he entered "what you adult fans these days call your dark ages." This was during his time at Kalparaiso College in Indiana, where he studied Psychology and Philosophy, and his need to build was unfulfilled. After college he moved to Chicago Illinois, where one day in 1961 he came across LEGO sets in a Marshal Fields department store. It was love at first sight. Over the next few years he bought many dozens of 'supplementary' brick packs to increase his brick count and build bigger and better constructions!

In 1966 Daniel moved back to Denver to work at the Post Office, where he found himself "bored to tears." He continued to buy LEGO bricks from Samsonite. (Daniel informed us that Samsonite had the LEGO license in North America until 1973 when The LEGO Company bought it back and opened the Enfield offices.). While working at the post office, he spent all of his spare time building LEGO creations, one day his father convinced him to get in touch with Samsonite and see if they could give him a job he would enjoy doing! In 1969 LEGO contacted him and offered him a job in Denmark. "I said 'yes' immediately!" Daniel beams.

Daniel was the first international LEGO designer ever hired, and in November 1970 he arrived in Billund ready to build. "It was even smaller then and the town had two 'big' companies, The LEGO Company and a big dairy, comparable in size to the LEGO factory at the time." He began work immediately though his first set, the Blue Windmill (362) did not come out until 1972. Daniel took time away from LEGO from 1971 until 1973 and then remained until 1999. "27 years in total!" he proclaims.

We asked him what other sets he worked on and he and Niels were momentarily stumped. It was hard to remember all of the models these two worked on in over 25 years with the company. "I'll go get that yellow collectors book from Chris [Bonven Johansen, graphic designer]

Niels said. A few minutes later, he was back with the Star Wars graphic designers' copy of the LEGO Collectors Guide. Poring through the pages of the guide, it all started coming back. Their eyes lit up and the room was filled with a lot of: 'I did that', 'no, you did that and I did this', 'but who did that one?' accompanied by laughter.

"Back then we had 2-3 years to develop a set, not like today." said Daniel. In 1976 he worked on the Advanced Basic sets of (910), (911) and (912) with Jens Nygaard



Sets designed by Daniel August Krentz. Above: the Yellow Castle. Below: the Texas Rangers.



Below: Dragon Knight minifigure prototypes.





Sets designed by Niels Milan Pederson. Above: Black Monarch's Castle. Below: King's Castle



Prototype for a medieval village.



Nielsen, who was also working on the prototypes of what would become the minifigure at the time. He made the Firefighting Launch (316) and he also remembered making a train, but cannot recall which one! "I also did a Cowboy set, 'The Texas Rangers' (372) but these were all with the amputee figures that looked like they had all been in accidents!" The later minifigure design was much more to their liking and they were soon developing sets with them.

His first minifigure sets were the Fire Station (374) and of course, the Yellow Castle (375) and related set the Knight's Joust (383). "The problem with these was the brick-built horses, when children played with them then broke in half, or their legs fell off. This upset some children, which is the worst thing a LEGO designer can hear."

So was Daniel happy when Niels designed the LEGO horse? "Yes. It was much better, we were much happier with Niels' fine LEGO Horse. I think Neils started in 1980?" asked Daniel. "Yes, around then." answered Niels. "Plus there is the matter of the illegal build to the ears, a 1x2 tile wedged between four studs? What were you guys thinking?!" -They both broke out into laughter!

"And from then there were the three of us, me, Niels and Jens, we developed almost all the sets until around 1985." explained Daniel.

Daniel then points out the Two-Seater Space Scooter (891), I made that too, but under Jens' close direction, "Space was his favorite, and he wanted to do them all!"

We asked Daniel the obvious question about the castle: just why was that castle yellow?

"It was really yellow so it was a Mediterranean castle. At the time there was not much gray around, a lot of plates but only 1x1, 1x2 and 1x8 bricks." explained Daniel with remarkable memory. He continued, "We also had trouble being allowed to turn sloping bricks gray because we kept building tanks and Godfried [-Kjeld Kristiansen, the owner of the LEGO Company] did not like this—'End of Discussion!' In fact on one occasion, Jens and Niels were given one hour to clean out the tank models from the shelf they had put them on."

"There was one time Jens and Daniel were building a tank as a gift for the head of LEGOLAND who loved militaria," recalled Niels, "But Godfried came into the studio, and I was too far away to warn them. But just as he got to the desk Jens grabbed the gun off the top and threw it over his shoulder, then put his hand over the iron-cross on the side and tried to convince him it was some kind of new space vehicle! Godfried just laughed at him, as he knew what it was, and luckily knew why we were building it and ignored that one!"

Niels remembers the yellow castle being built in other colors than yellow, but Daniel is confident it was always yellow. "I wanted to make it in tan or dark gray, but at the time those colors were only made for LEGOLAND, I had to wait for more realistic colors, but brick for brick it was still the most number of bricks for the price when it came out." he said obviously still proud of this.

It was the idea of N.C. Jensen, the then Marketing chief, to have the castle open up on hinges allowing the kids to play on the inside easily.

The two continued to pick through the book, Niels claimed the classic space Rocket Transport (6950), as Daniel claimed Supply Wagon (6010), Siege Tower (6061), Knights Castle (6073) with the Black Falcons and Blacksmith Shop (6040) "I was glad to be building in more realistic colors" said Daniel. Niels designed the Kings Castle (6080) and they both think Jens made the Catapult (6030) "It even looks a bit spacey!"

In 1986 Daniel made some of his most important contributions to the world of LEGO castle with the Guarded Inn (6067) and the Black Falcon's Fortress (6074) and also found time for the Modular Space Transport (6892).

Niels claims the 1987 castle sets. "It was around then I received my first 'fan' letter, it was handwritten and was asking about the heraldic symbols we were using." he tells us, "I just scribbled a few notes, not very considered answers and sent it back to the customer service people. I thought they would re-write it but they just sent off my 'rude' answers. It turned out my 'fan' was a professor of Medieval Heraldic History! He wrote back thanking me for my response. I felt quite bad about it!"

Niels also built the 1988 Black Monarch's Castle (6085) and the Forestmen's Hideout (6054), Daniel contributed the Twin-Arm Launcher (6039), a model still echoing in today's castle sets, and the classic Blacktron base Message Intercept Base (6987).

In 1989 the Pirates line began and Niels was responsible for every one of them! "Finally a LEGO skeleton." We asked Niels what he meant by 'finally'? "I made the first skeleton about 10 years earlier, kind of as a joke for a Dungeon on our model shelves." Explained Niels, "Jens thought it was a good idea and I began to develop one properly, but then Gotfreid saw

it! First he scolded Jens, then he came and scolded me, and told me never to make it again, Mini-figures do not die. It was only ten years later I dared show one again, this one did not have any flesh left on it though, and I had figured out how to make a smiling skull for his head and on the flags! If you see the early development pictures from the pirate line you can see I did not even dare put a skull on the flags, it was Jens who convinced me it was time to try again."

As the 1990's arrived Daniel designed the Forestmen's Crossing (6071) and the King's Mountain (6081) Fortress, "This was the first set with a raised baseplate I think. I really liked them, they added a lot to the sets they were included in. I think it was Jens idea?" Daniel asks Niels, then continues "Well, who else would it be!" they both laugh, "They were really hard to figure out how to decorate, we had to make them with LEGO bricks and Plaster of Paris, then these were made in wood, the wooden versions were used to make the plain vacuum plates. Then I hand drew a grid onto them and we reheated and flattened them to see where and how we had to print on them to make them come out nice. But it failed so many times! So many versions, there seemed no way to predict it. But after plenty of trial and error we got it right!"

Castle prototype using a custom baseplate.



A 1980s prototype for a dwarf mine, an idea that was dropped at the time and never seen by the designer of the current Dwarf Mine.





Another village prototype.




A castle prototype based on the Loch Ness Monster.

The three of them continued on through the early 90s; joined by Steen Sig Anderson on some of the sets, they produced more Pirate and Castle sets, including the Wolfpack and other classic factions, Niels' favorite is the castle he did with the pop up ghost, though he can't remember which one that was!

"We were in friendly competition with 'town' and Jens told us not to let them know what we were working on, he never wanted us to give them our good ideas!" In 1993 Daniel designed the Dragon Knights sets and the Fire Breathing Fortress (6082) he thinks this was probably his last Castle. It was almost the end of Jens' Leadership too. The Designers were divided into Concept Designers and Set Builders and the philosophy of the group changed somewhat.

From then on Daniel was working on new concepts with Jens, he made lots of Castle and Space ideas, and lots of building models for 'fan club' magazines for LEGO until he retired in 1999.

Daniel still builds with LEGO everyday, and his house is almost legendary in the local area. Inside his house are his massive collections of vintage toy cars and his many bridges constructed of LEGO bricks suspended between dozens of shelves of LEGO creations, some decades old, some brand new. We were invited over and took a lot of photographs, many more of which we plan to put in a future *BrickJournal* article about Daniel's fan creations, after all, he may also qualify as the first AFOL!

We want to thank both Daniel and Niels for sharing time and their stories with us. LEGO was in its Golden Age back then, where a Designer could take the time to discover, experiment, and play with their creations. In today's hustle and bustle world it's important to be able to look back and reflect on the history of such a unique toy company, its products, and its dreams of the future. It's not everyday you get to meet your childhood heroes, so I apologize to the hardcore Castle fans out there if we didn't cover all of the bases. 

One of Daniel's home layouts.





A custom set and its box.

In the years since LEGO® Factory started in 2004, the service has expanded considerably. From the three sets released at the launch of Factory, there have been other sets released by the LEGO Group designed by fans, including the Hobby Train set, Market Street set, Space Justice and Space Skull sets, and Custom Car Garage set. While these sets were designed with the LEGO Group by LEGO fans, LEGO Factory is also a place for budding builders and designers to build their own models and with a few mouse clicks, buy a set they designed. LEGO Factory's webpage now has galleries to hundreds of models created by builders young and old, each available for purchase.

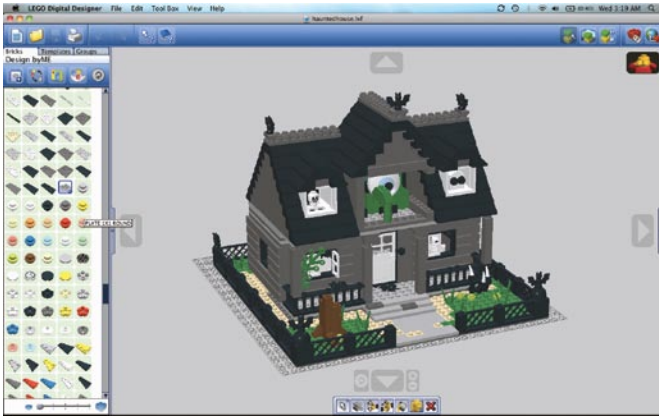
To do this, LEGO Factory uses proprietary computer software called LEGO Digital Designer. This created a new way to build, by using a palette of parts that could be used to virtually build LEGO models. The initial LDD was limited in scope, with a small selection of parts that could be used to build. This selection now has expanded, with hundreds of LEGO elements available for use.

LEGO Digital Designer's interface has also grown and improved, making it easier to find and use the ever-growing palette of parts. With each new Factory set, new starter models were introduced to get everyone into building as quickly as possible. With more recent versions of LDD, builders could build with palettes based on Creator sets and MINDSTORMS sets, allowing for new directions for users to build.

LEGO® Design byME: LEGO Factory's Next Generation

Article by Joe Meno

*Photos courtesy
of the LEGO Group*



The front wall upstairs is hidden, as noted by the 'hide' symbol on the top right corner. Also, the part graphics on the left have been reduced, so more parts can be seen and used.

However, there was one last issue that made LEGO Factory less than satisfactory. Ever since the beginning of Factory, instructions for a creation were left for the designer and/or builder to print from LDD or review onscreen. While this meant that a step could be clearly seen and rotated on the computer screen, it didn't match the building experience of a real LEGO set.

The next generation of LEGO Factory, LEGO Design byME, pushes the LEGO Factory experience to the next level, and *BrickJournal* was able to review LEGO Digital Designer 3.0. There's some new things that were placed in the program that make it easier to use.

Opening the program is just like previous versions, but the workspace has a grid that is different. Instead of a simple grid, the grid now appears to be made of 2 x 2 stud plates. Also, at the edge of the workspace, there are grey arrows at the sides and top and bottom. These are the new camera controls, so turning a model is easier — just go to the edge that the model needs to be turned. The bottom controls also have the zoom and center view buttons. What makes this good is that the camera controls are constant and easy to find.

The palettes are now on a panel on the side, which can be closed. The other side also has a panel that ties into LEGO Design by Me, which was offline at presstime. When the panels are closed, the model automatically resizes to fit the space. What's important is the parts palette and the tabs under it — the template tab and group tab are there.

Those familiar to LDD would know about the template — a user can create his own starter model by building a model and saving it as a template. Now, though, a user can select parts and create them as a group in the model, which comes in handy when a repeated set of items need to be in a model. Instead of building, say, a set of lights for a landscape, one can build one and make it a group. By doing this, the builder can click on the group, paste it in and place it wherever it is wanted.

For those who have opened older LDD models and got the warning that some parts did not get placed because they were not available, there is a new function. The buyability tool can be used on these models to see the unavailable parts (the user can dim the available parts so only the unavailable can be seen) and also to replace them if possible. This is a nice refinement, as parts that were left off often were not easy to find.

Another function that has been added to LDD is part hiding. Using this, a builder can hide parts and place

things past them. This is great if the builder has build something closed, such as a house. By using the hide function, a wall can be hidden and the builder can proceed to work on the interior without tearing anything down. Until now, a builder had to plan to build in a very linear way - hiding allows them to build as needed and then embellish afterward. LDD even remembers the placement of the hidden bricks, so no other elements will take their place.

The LEGO Group saved the best for last, though. The enhancements are pretty nice, but the real magic is after the model is completed and ordered. For a \$10 (USD) fee, the model elements are placed in a custom printed box with printed instructions! The instructions (called Building Guides by the company) come as a book, just like the official LEGO sets. The building guides were only printable previously from the model files in web browser format (HTML) which took many pages to print. For those who preferred to use their computer, there were some advantages, as they could look at an assembly from all angles, but still needed a computer to guide the builder. With the printed instructions and boxes, the finished LEGO Design byME set is one step closer to the official LEGO sets. The LEGO Group continues to work on improving on this service, as stated by a LEGO representative:

"LEGO Digital Designer's Auto-Generator was created to make it possible to include unique Building Guides with your custom LEGO Design byME set. As it is still in its BETA phase, it still sometimes encounters difficulties analyzing certain models. However, as we continue testing and continuously keep teaching it new tricks using advanced algorithms, we aim to eventually be able to provide quality Guides with every custom set."

He continues, "Currently we still know it has some problems generating very wide, tall or in general large models, but we are currently working to find solutions to this. We are proud of the high level we have already pushed it to, and hope, if you choose to include, that your Building guide will be more than satisfying."

So if anyone wants to design their own LEGO set, complete with box and instructions, all they have to do is create it on LEGO Digital Designer. LEGO Design byME pushes the design and the building experience to another level of customization — one where a builder can really say the entire set was a "design byME!" 

You can go online to www.designbyme.LEGO.com/ to download LEGO Digital Designer



Instructions from another model.

Go West!

Stagecoach Building

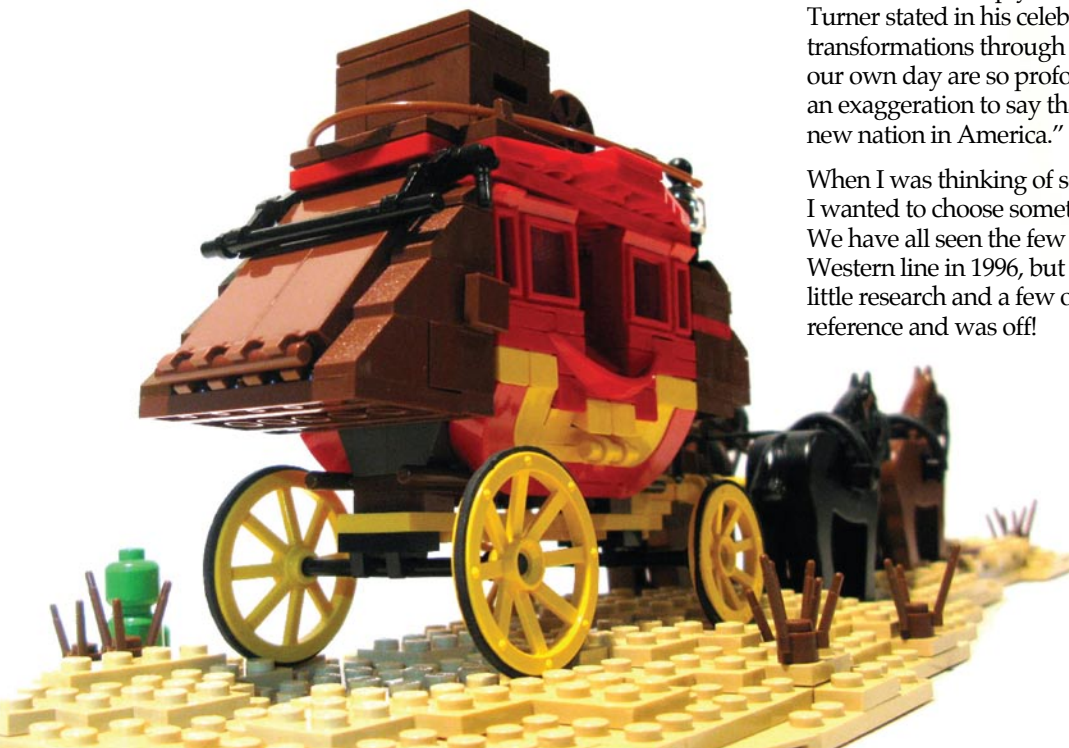
Building



*Article and Photography
by Jordan Schwartz*

Although I usually do not play favorites with anything in my life, I can say with certainty that I am partial to the western line of LEGO® sets over every other theme. There is something about the west that tugs at my brain in just the right spot that inspires me incalculably. The seemingly endless desert, a blanket of sand sprawled over a dehydrated pastoral palette of cacti, coyotes, mountains and mines, is so very mysterious to me. What was it like to live in the American west in the mid to late nineteenth century? So many other questions pop into my mind when thinking, studying or reading about it. Looking at it from yesteryears, it is no wonder why the genre exploded in many outlets long ago, and continues to explode to the present day - from novels, to films, and even LEGO sets, the wild west has simply remained timeless. As Frederick Jackson Turner stated in his celebrated *Frontier Thesis* in 1893: "The transformations through which the United States is passing in our own day are so profound, so far-reaching, that it is hardly an exaggeration to say that we are witnessing the birth of a new nation in America."

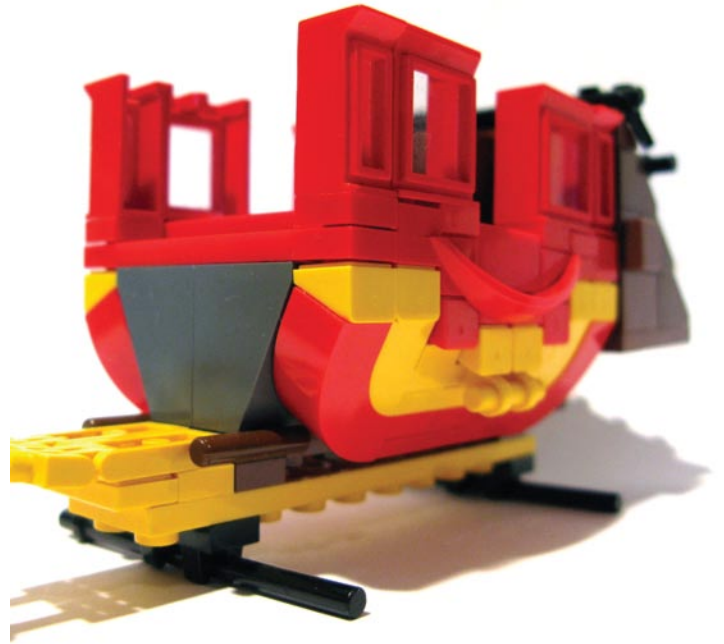
When I was thinking of something to build out of the old west, I wanted to choose something iconic and easily recognizable. We have all seen the few wagons from the original LEGO Western line in 1996, but never a proper stagecoach. With a little research and a few online image searches, I found my reference and was off!



Above: Jordan's stagecoach diorama.

Right: Looking back at the diorama.

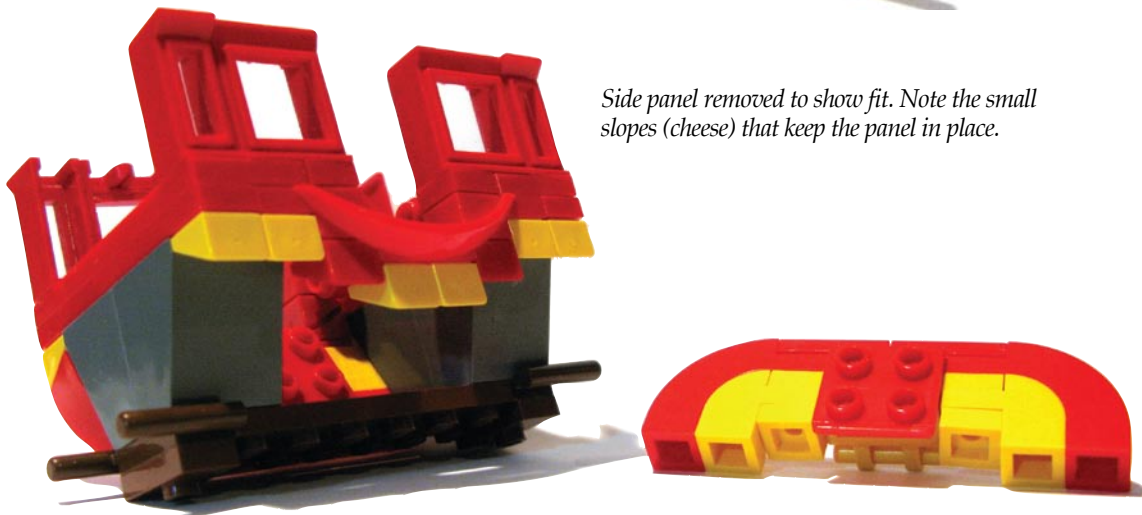
To start, a color scheme needed to be established. Of course, the classic red and yellow combination was an obvious choice for a couple of reasons. One – it is distinctly western (so as not to confuse the stagecoach with any other wagon from any other era) and two – it gave me a massive parts selection, because red and yellow are such commonly colored elements. Next, when building any type of small minifigure-scale creation, especially a vehicle, it is critical to build the shape correctly. The curvaceous features of stagecoaches are very subtle, which posed a challenge – how do you achieve the correct rounded shape of the main body of this archaic vehicle without making it too bulky? I would have to build it in a studs-down fashion. Using $1 \times 3 \times 2$ arches and modified rounded bricks I formed the contour of the bottom ends on the sides of the stagecoach. However, that section also needed to curve inward. Using two 1×2 modified plates with handles hiding near the axles, the section was cradled, giving a surprisingly tight and stable connection. Cheese slopes ($1 \times 1 \times 2/3$ slope bricks) helped seal up the seam where this panel began to curve. With that difficulty subtly taken care of, it was then time to move on to the door and window area. The new style mudguards worked perfectly as detail near the doors, and the old style windows provided some more fine features for the body. The back storage section was built and attached simply by using hinges and the roof and seating area was one piece and fit nicely on top, like a puzzle. On the top of the



A look at the studs-down construction of the stagecoach body.



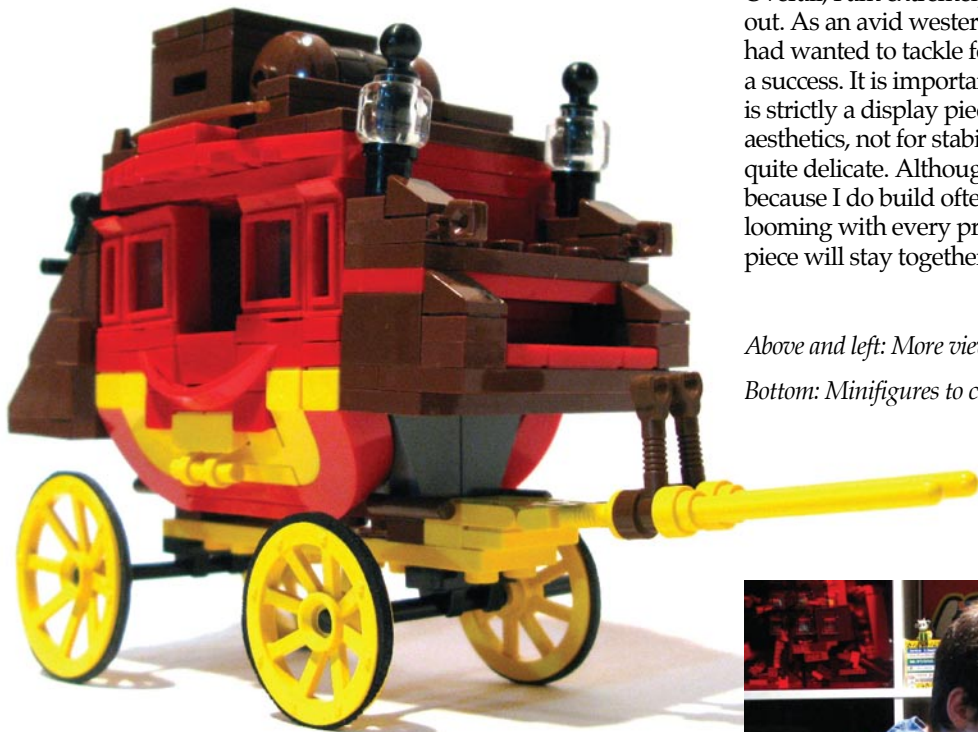
The top and bottom of the stagecoach.




Side panel removed to show fit. Note the small slopes (cheese) that keep the panel in place.



stagecoach, a long brown TECHNIC flex cable made a nice thin rail, and a combination of trans-clear minifigure heads and other elements made quality lanterns. With the main body of the stagecoach complete, all that was left were the wheels, horses and minifigures. The classic wagon wheels were perfect, but through Bricklink I was able to find some rare non-production yellow ones. These “non-production” wheels are official parts that did not appear in any sets [either produced for LEGOLAND models or for prototypes]; they came in a variety of colors, including red, green and blue. Small black elastic bands, wrapped around the rims of the wheels, made appropriately sized tires. All in all, I feel the wheels are truly the pièce de résistance of this MOC. The horses were next; using LEGO string and Belville bridles, I was able to create a more realistic looking team. Minifigures were the last element; I know many builders resent the new Clone Wars heads, but in some rare cases I feel they work. For example, in this instance the heads truly allow the figures to ooze personality. Finally, my little plastic caravan was ready to be pulled all across the frontier!



Overall, I am extremely pleased with how this creation turned out. As an avid western fan, the stagecoach was a vehicle I had wanted to tackle for quite some time, and I consider it a success. It is important, however, to note that this MOC is strictly a display piece – I say it all the time: I build for aesthetics, not for stability or playability; consequently, it is quite delicate. Although my creations are generally short-lived because I do build often and a need for specific parts is always looming with every project I undertake, I have a feeling this piece will stay together on display for a long time to come! 

Above and left: More views of the model.

Bottom: Minifigures to complete the model.



Jordan Schwartz is also known as Sir Nadroj and can be found on Flickr at:

<http://www.flickr.com/photos/sirnadroj/>

and on Brickshelf at:

<http://www.brickshelf.com/cgi-bin/gallery.cgi?m=sirnadroj>

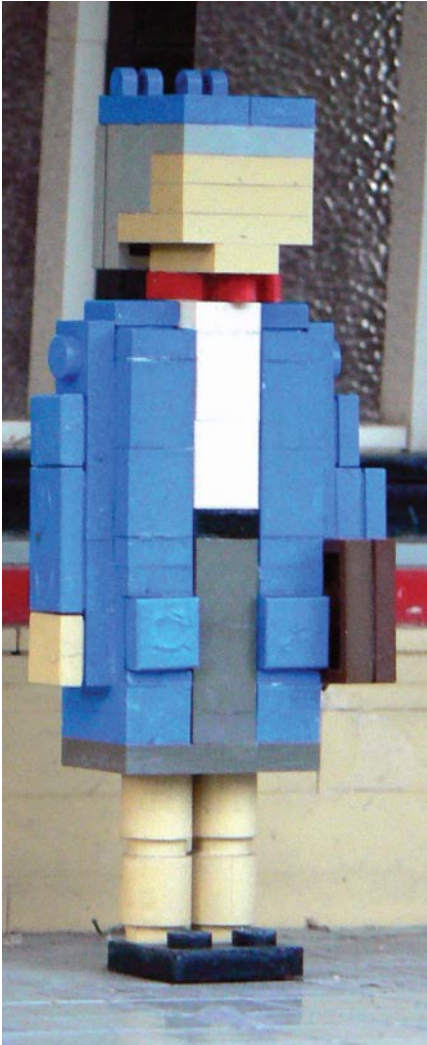
His website is:

<http://www.brickstud.com/home.html>

This is his first article for BrickJournal.

Miniland Building

The School Teacher

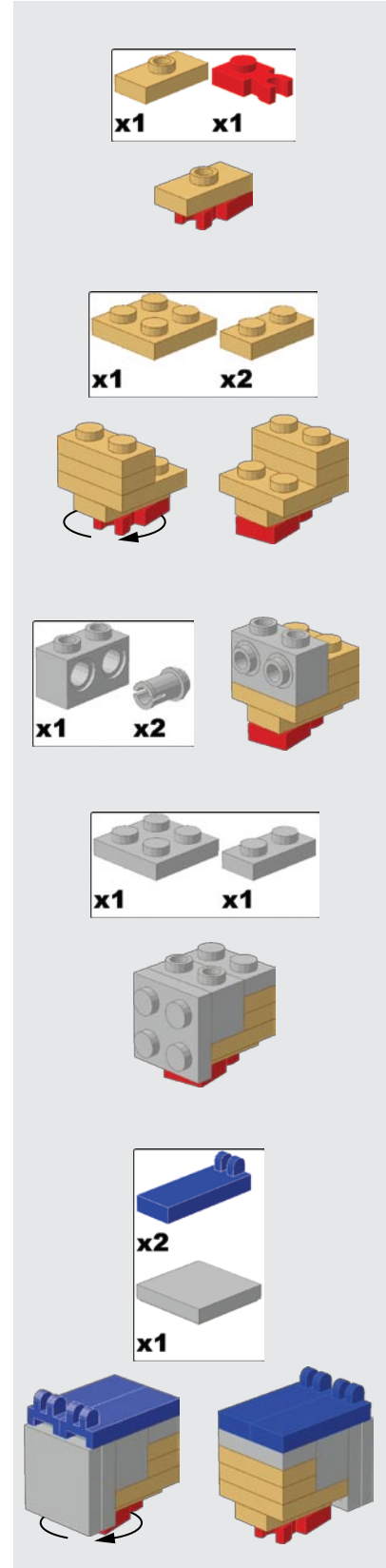
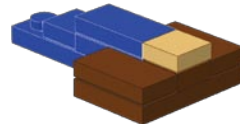
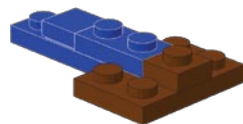
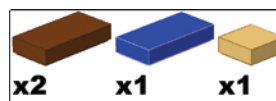
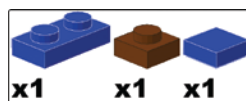
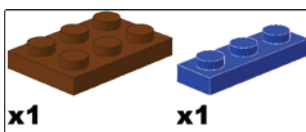
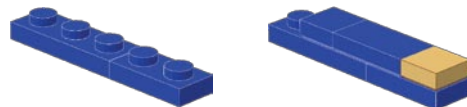
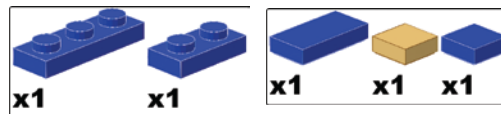


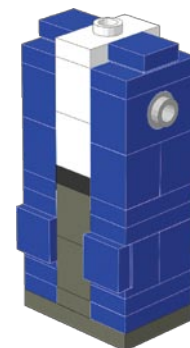
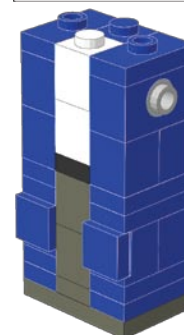
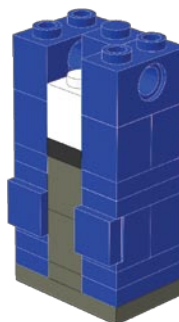
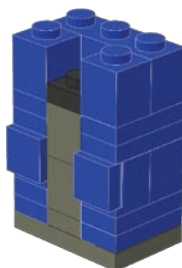
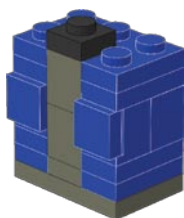
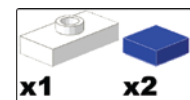
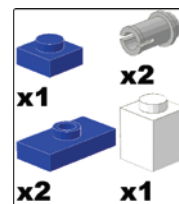
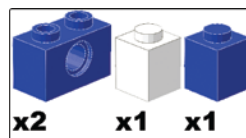
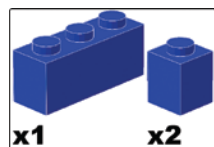
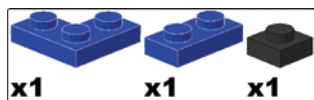
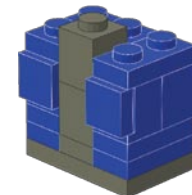
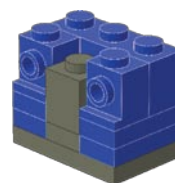
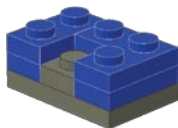
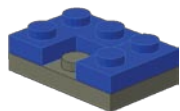
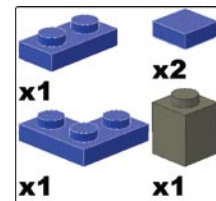
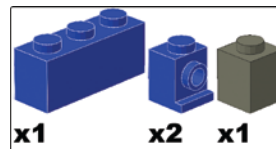
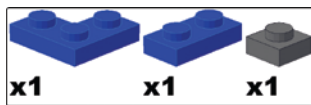
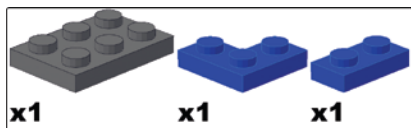
At MINILAND in LEGOLAND Billund, this character stands at the railway station, waiting for the train to come - not in front of a blackboard at school. However, she looks like a school teacher to me because of the severe dark grey skirt, the brown suitcase in the left hand, the formal white shirt, the blue coat with pockets, the grey hair and overall upright posture. She could also be a librarian or a business woman - finally that's up to you and your imagination.

*Article, photo and art
by Didier Enjary*

Let's build it. The head features a red scarf (1x1 plate with clip) and a blue hat made of 1x2 hinge-tiles. These latter are actually a bit longer than 2 studs and make possible a smooth transition with the SNOT-mounted 2x2 grey plate and tile (as a hairdressing).

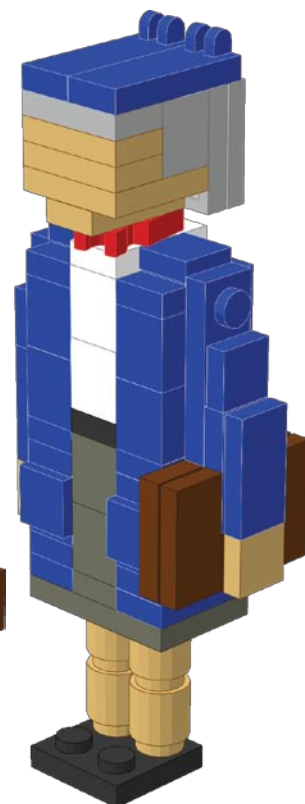
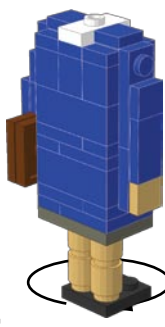
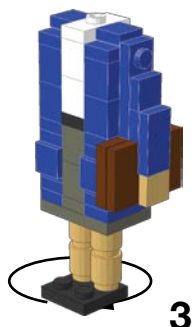
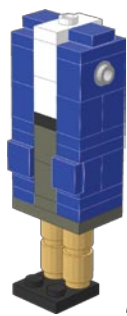
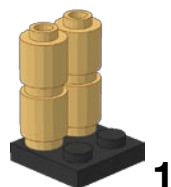
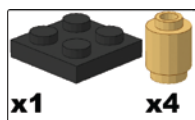
The arms are not bent, articulated or hinged in any way : the right one is as simple as tiles stacked on plates. The left one is holding a small case. Don't be fooled, the case is not built as a separated item and, just like for the right arm, you build the left one by stacking plates and tiles.





If you look at it carefully, you can see that the body (skirt, shirt and coat) does not involve any kind of complex build or tricky part. You can easily find out how the pockets are built from tiles on headlight bricks. What is important here are the choices for colors : blue on the sides and back (coat), dark grey for the bottom (skirt), white on the top (shirt), black in the middle (waistband).

The character is almost done. You just have to build the legs (only 5 parts needed), to assemble the various elements and *voilà!* 




You Can Build It



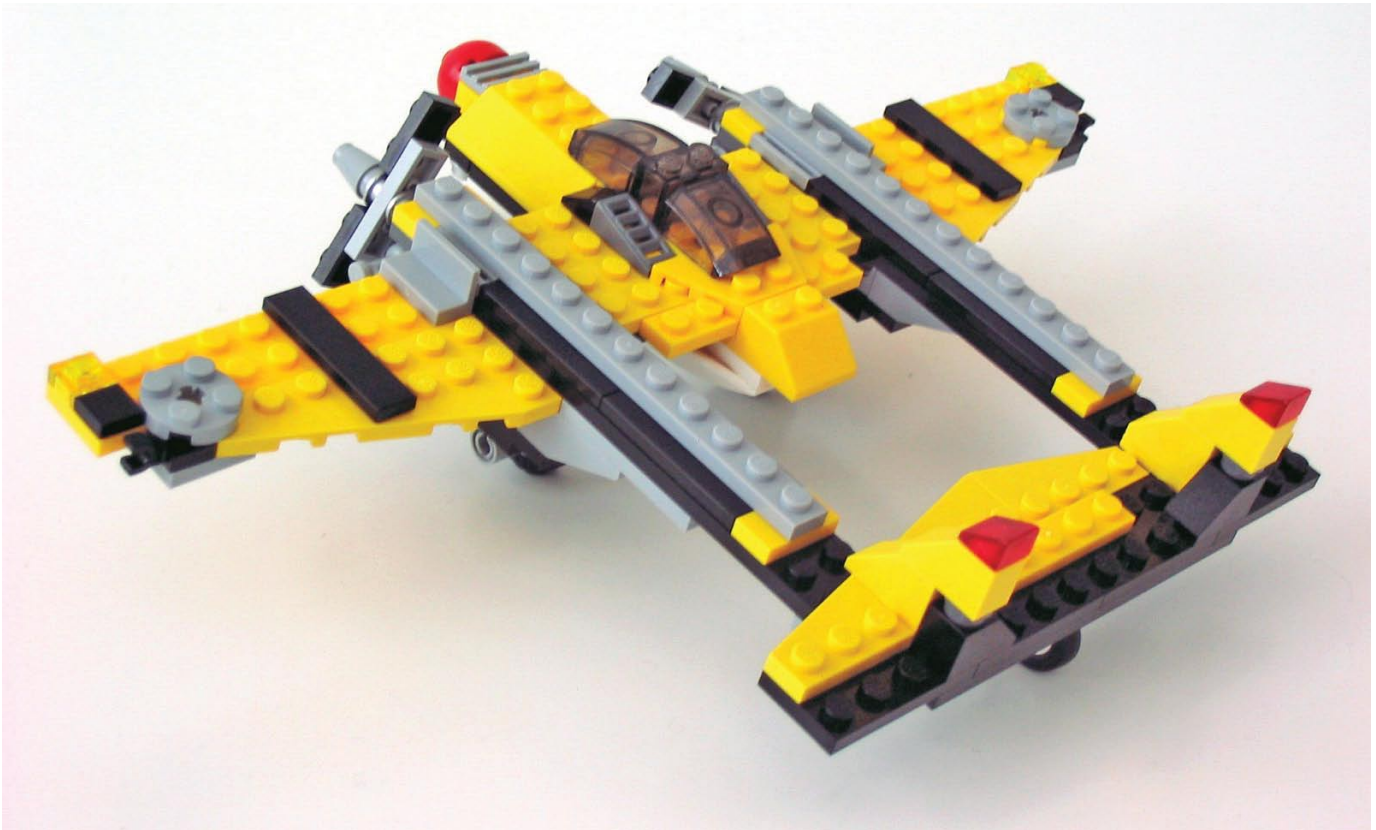
Alternate Build: Creator Set 6745

The first online issue of *BrickJournal* had an alternate build of a Creator set by LEGO fan Nathanael Kuipers. After a long absence, he has returned to show another alternate build with another set. Using only the elements from the Propeller Power set, he was able to create another plane, a P-38 Lightning! Details include retracting landing gear.

*Article and Photography
by Nathanael Kuipers*

If you want to build this model, you can download directions from *BrickJournal's* website. 





Hey Kids! Comics!

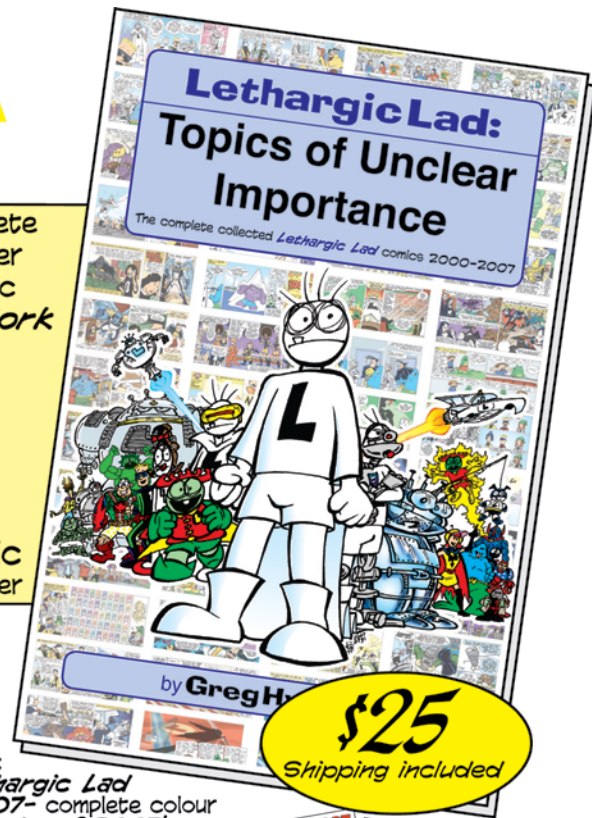
by *Greg (AFOLs) Hyland*

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



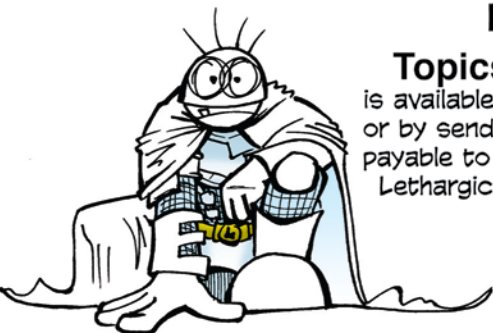
Lethargic Lad:

Topics of Unclear Importance

is available exclusively at www.lethargiclad.com or by sending check or money order made payable to "Greg Hyland" to:

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2008's strips! \$20



The Minifig Customization Toolbox

*Article and Photography
by Jared Burks*

This article series has covered quite a few topics on minifig customization. Since then, the hobby has really grown. Several new tools are available that were not readily available when certain articles were written. In order to address these changes in the hobby, this article is going to look at the Minifig Customization Toolbox: the typical tools used for different customization techniques and where to get them economically or for free. You will still need minifigure parts, which will not be covered here. This article also will not cover how these tools are used, merely what is available, where to find them, and what skill set they apply too. Hopefully this article will help you find those hard-to-locate tools, which could help improve your customizing.

Decaling:

The foundation of minifigure customization lies in custom decals. This part of the hobby requires a few items: vector art software, waterslide decal film, printers, decaling solutions, and application tools.

There are several vector art programs out there including CorelDRAW (my favorite), Adobe Illustrator, Draw Plus, and Inkscape. The last two are mentioned as they are free, and are great alternatives to the high-priced commercial options.

DrawPlus Vector Program:

<http://www.freerisefsoftware.com/software/drawplus/>

Inkscape Vector Program:

<http://www.inkscape.org/>

Cost: FREE

Waterslide decal film can be found almost everywhere these days (hobby and art shops) including Walmart. Typically, decal film is about \$1 per sheet. You can pick it up locally to avoid shipping fees. While these brands aren't the best, they are not a bad start to be able to test with and get started in the hobby.

The most commonly found film is from Testors. If you can't locate this option, Micro-Mark offers an excellent film. Testors' film is strictly for inkjet printers, whereas laser and inkjet options are available from Micro-Mark. Remember to review the article on decal printing, especially if you choose an inkjet option as the decals MUST be sealed prior to dipping them in water.

Testors Custom Decal System:

http://www.testors.com/product/0/9198/_/Custom_Decal_System

Micro-Mark Decals:

<http://www.micromark.com/decailing.html>

Cost: ~\$10 USD

The decal film type brings us to the next piece of equipment required, a printer. If you hunt around you can find a real bargain on a printer, that is if you don't already have one. If you don't mind internet purchases, check www.spoofee.com or other bargain finding sites for a few days and I am sure a deal will pop up.

Cost: ~\$50



Testor's Decal Kit

Decal application tools are the next items required. Decal setting and softening solutions are critical to more advanced application techniques and highly

recommended, which can be purchased at most hobby / model stores. The typical brands are Badger, Model Masters, and Microscale. Badger brands can be found at Micro-Mark (link on previous page), the others you will have to search for online or locally (Model Masters is fairly common and can likely be found locally). The free option is diluted white vinegar (2 drops of water to 1 drop of vinegar). To apply these items you will need some small brushes that you can buy cheap at the Dollar Store. I prefer nylon because they seem to last a bit longer. Wood stick cotton swabs and tweezers are also very helpful and can be purchased economically at a pharmacy. Sealants are merely clear paint; a spray form is the easiest to apply. You don't need an airbrush, merely buy spray paint. Model Masters has a great clear lacquer option; however the \$3-5 clear Krylon at Walmart works well. Before spraying, ALWAYS make sure the nozzle is clean so it won't splatter when you spray your decals or figures. Also make sure the decals are completely dry first.

Cost: ~\$10-15

Parts Modification/Creation & Color Alteration

General tools (Knives, Mod tools, sand papers, paints, etc.)

Modification tools can vary widely from one project to another, but the basics are hobby knives (X-acto) and rotary (Dremel) tools. If you buy name-brand versions of these tools prepare to spend quite a bit of money. However very nice alternatives can be found at Harbor Freight for very little money. Harbor Freight is a US brick and mortar with an online store, so if one isn't near you buy online. If you choose to go into the store make sure to print the item details from the online store as the brick and mortar prices are slightly higher, however if you have a printout they will price match their internet store.

Harbor Freight Hobby Knives:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=96551>

Cost: \$13

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=32099>

Cost: \$6

Harbor Freight Rotary Tool:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=92880>

Cost: \$30

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=94076>

Cost: \$10

Remember that these knives are sharp and can cut [you] I'd italicize or capitalize *you* for emphasis as easily as your project[.]. Therefore, I recommend a Kevlar glove, and these are found online at wood carving stores or Harbor Freight.

Harbor Freight Protective Glove:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=66062>

Cost: \$8

Recall that many alterations can be achieved with sand paper, which is safer for your fingers than a knife. You could run down to the local home improvement store, but I doubt you will find any paper of grit 800 or higher. To polish plastic back to a high shine you really need a very high grit paper (~12,000). Micro-mesh makes professional grade cloth backed sand papers that will last for quite some time. They are expensive compared to the home improvement store option, but in this case I completely believe it is worth the investment. Micro-mesh makes a kit for wood turners to make writing pens, there are resellers on eBay that have these cheaper than anywhere else I have found. The turners kit contains 9 sheets of 3" x 6" sand paper of grits from 1500 – 12,000. Using these in series will leave sub-micron scratches that are only visible to a microscope, thus leaving your project with a high shine. These papers can also be used in sculpting.



Wooded Stick Cotton Swabs.

Nylon Bristled Paint Brushes.



Cordless Rotary Tool



Razorblade Knife Set with Pin Drill



Kevlar Carving Glove.



Micro-Mesh Sanding Cloth.

Micro-mesh Sanding system:

http://micro-surface.com/index.php?main_page=product_info&cPath=273_188_189&products_id=53

Cost: ~\$15 (eBay)

Paints and Dyes:

Of all the tools needed paints are the easiest to find. You can pick up Testors hobby paints cheaply at most stores, including Walmart. Look for the primary color bulk paint packs, these typically run \$5-10 and have 8-15 paint colors in them. These paint packs are a very good value for your money. With a primary color pack you can mix and make most any color. The hobby uses small items that don't require much paint, so mixing your own paint with a few drops from a bottle works great. Sometimes these packages come with brushes, sometimes they don't. You can typically buy a massive brush pack at dollar stores. Even if most brushes in the package are not usable the few that are will be worth the price, just check an art store's pricing. Personally, I like nylon brushes that have orange or white colored bristles. Recall that there are alternatives to painting such as vinyl or fabric dyes. The vinyl dye can be found at automotive stores, the drawback is it is typically only available in limited colors. Just be sure you are purchasing a vinyl dye and not a vinyl colorant. Refer to the color alteration article for the difference. Fabric dyes are available most anywhere including Walmart. The liquid versions seem to work better, so search these out instead of the powders.

Cost: ~\$15

An airbrush is a nice tool to have, but not always cheap. The low cost option is about \$30, but these are really only good for broad coverage and don't always meet every need. Investigate this tool heavily and only purchase when you are sure you have a need. A much cheaper alternative to an airbrush is a Preval paint-sprayer. This system has a container you can add any paint to and turn it into a spray paint.

Preval Paint Sprayer:

<http://www.prevalspraygun.com/>

Cost: ~\$5-10

Sculpting (Clays and Tools)

Packages of Sculpey III are very economical and can be found most anywhere including Walmart. You can work with the clay with homemade tools; [P] paperclips, tongue depressors or popsicle sticks, and anything else small. However some economical tools are available from Harbor Freight. There are some more expensive options at art stores that have rubber tips that are quite nice, so ask yourself how much sculpting you are going to do.

SculpeyIII:

<http://www.sculpey.com/>

Cost: ~\$2

Harbor Freight Dental Tools:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=1816>

Cost: \$3

Harbor Freight Carving Tools:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=34152>

Cost: \$5

While these help, they are not required. The expensive option costs about \$6 per tool. These are rubber-tipped modeling tools. Luckily I find them locally, but depending on where you are you might have to look online. These tools are really quite nice and work great as they allow for very subtle detail work.

Texas Art Supply:

<http://www.texasart.com/g11/Colour-Shaper-Modeling-Tools.htm>

Cost: ~\$6 each

Baking Sculpey uses your home oven (no expense) or you can cure it in near boiling water. Practice clay sculpting BEFORE getting into molding and casting as they can get quite expensive.



Model Masters Spray Lacquer.



Preval Sprayer.



Rubber Tipped Sculpting Tool.

Metal Sculpting Tools.



Molding and Casting (Kits)

Molding and casting can get expensive quickly. If you choose to go this route check what is available locally. I recommend starting with a kit that contains both rubber and resin. Both Smooth-On and Micro-Mark offer a starter's kit. I don't recommend Alumilite as you get half the volume of rubber when compared to Smooth-On or the Micro-Mark kits. This is the most expensive and complex part[s delete] of the hobby, so just as with the airbrush[,] weigh your need before purchasing.

Smooth-On Kit:

http://www.smooth-on.com/Getting-Started-Po/c4_1217/index.html

Cost: \$50

Micro-Mark:

<http://www.micromark.com/COMPLETE-RESIN-CASTING-STARTER-SET,8174.html>

Cost: \$90



Dental Tools for Molding and Casting.

Cloth Accessories

General tools (Wad punch and Cloth)

For cloth, outside of the material and a pair of scissors, there is really only one tool, a multi-punch leather tool. A leather multi-punch works well, but is not as nice as what Mark "MMCB" Parker uses. However, it is significantly cheaper and you can pick one up from Harbor Freight. Finding a metric version of a punch is quite difficult[,] an English version can be used, however it isn't as accurate to the LEGO figure's neck and arm hole sizes. You will also need a nice pair of fabric scissors to cut the fabric to shape.

Harbor Freight Punch:

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=91076>

Cost: \$5



Multi-punch Leather Tool.

Cloth is cheap and can be found at any fabric store. Remember you don't need much for minifigures; so check the scrap and discount areas. Another alternative are pre-cut quilting squares available at many stores. Just make sure you are buying broad cloth, if you want to stay with a similar fabric to what LEGO uses. You will also need an anti-fraying solution.

Photography/Digital Effects


General tools (light tent, backgrounds, digital editing)

Revisit the photography article to find out how to make your own light tent. These are available online for a wide range of prices. Many packages are available that include lights and backgrounds, so make sure to look for a deal. As for digital editing[,] Adobe Photoshop is the standard. It is really hard to beat. Irfanview is a great free program that can be used to do many editing options.

Irfanview:

<http://www.irfanview.com/>

Cost: Free

So if you want to dive completely into the hobby with the best options as I see them you will have about \$220 worth of items to purchase including a printer. I don't recommend starting the hobby by purchasing every item; figure out what you really want to try first. Work on the skill set required for that part of the hobby and once you have perfected it, then move on to another area. I would buy the cheap stuff first and then move on to nicer items as you improve your skills. You don't need expensive equipment to get great results. 



Smooth-On Molding and Casting Kit.

Minifig Customization 101 – Decal Design: It's All about Style!

TITANIC TOMES FROM TWOMORROWS!



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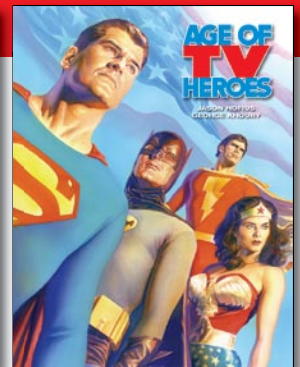
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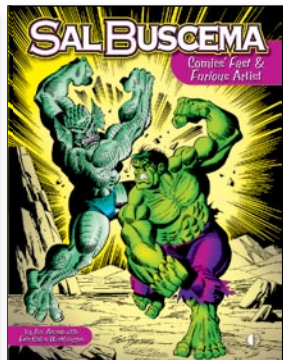
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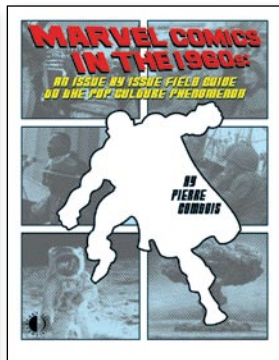
SAL BUSCEMA: COMICS' FAST & FURIOUS ARTIST

In 1968, SAL BUSCEMA joined Marvel Comics and quickly became one of their top artists, penciling such storylines as the original AVENGERS/DEFENDERS WAR and CAPTAIN AMERICA, as well as a ten-year run on THE HULK and 100 consecutive issues of SPECTACULAR SPIDER-MAN. This new book by *Alter Ego's* JIM AMASH with *Modern Masters'* ERIC NOLEN-WEATHINGTON explores Sal's life and career through an exhaustive interview with the artist, complete with extensive examples of his art, including a deluxe color section, and a gallery of work from Sal's personal files! Ships Nov. 2009!

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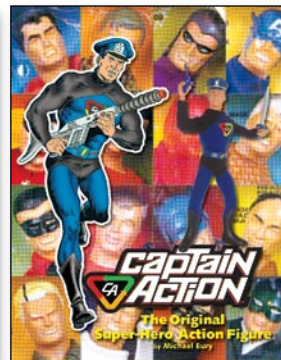
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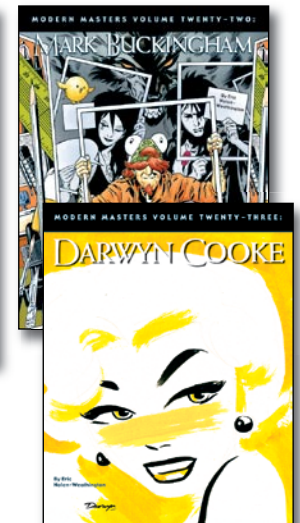
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Since its founding six years ago, Classic-Castle.com has sought to live up to our slogan “The source for all your LEGO® Castle needs.” We try to stay on top of all of the news relevant to the LEGO Castle theme, host resources like set guides and how-tos, foster discussion and encourage MOCs in this theme. One way of doing this is through contests. Throughout the year we hold at least four or five contests, some driven by the site administrators and some by forum members, including the annual “Battles” and “Mini Castle” contests. Our signature event, though, is the Colossal Castle Contest held at the end of each year.

The Colossal Castle Contest, or CCC, is the longest continually running LEGO fan contest online. It is open to all members of the larger LEGO community, and its goal is primarily to promote building LEGO models in the Castle theme and secondarily to promote our site. Above all, though, we want to have fun. As a participant in CCC1 and a judge in each of the subsequent contests (since I joined the admin team at Classic-Castle), I can personally say that this is one of the highlights of my LEGO year!

Each year around the first of November, categories are announced for the contest, with entries due by December 31. We generally have around 9 or 10 different categories, ranging from the size of a single customized mini-figure up to full castles covering multiple baseplates. Prizes in past years have included classic sets obtained by admin and contest organizer Ben Ellermann (architect) or donated by forum members, custom accessories donated by dealers such as the Little Armory, BrickForge and BrickArms, new sets donated by the LEGO community team and even MOCs (my own creation) that were donated for use as trophies.

The range of categories allows builders with smaller collections to compete fairly in a category such as vignettes, but also gives those with much larger collections the room to stretch in the larger categories. Each year the categories vary, to keep the contest fresh and to encourage creativity. Speaking as a judge, I know that if our categories were always the same the contest would become stale - there are only so many different ways to build a trebuchet, for instance. We try to design the categories to fit the prizes available. For instance, in CCCII (2004), when we had set 6066 Camouflaged Outpost as a prize, we had an “outlaw fortress” category, when BrickForge donated several of their animals as a prize for CCCV (2007), we had a “medieval farm” category, and so forth.

We’ve also tried to make the categories timely. In the very first CCC (2003), the Classic-Castle City standard had just been designed for group displays, so three of the categories challenged builders to use this standard. In CCCII (2004), the “castle vignette” category capitalized on the then-new fan meme, and as a result helped promote vignette building among the larger community. In CCCIII (2005) we celebrated the recently released Viking sets by having a Viking category.

The History of the Colossal Castle Building Contest

*Article by: Bruce Heitbrink
Art and Photography provided
by Classic-Castle.com*



The logo for our Colossal Castle Contest by Mike Rayhawk.

Some of my own favorite categories in past contests have been those that got away from the more straightforward shop/fortification/catapult/cart etc. In CCCIV (2006) there was a “medieval bridge” category, and I truly didn’t know what to expect.

Medieval Bridge (2006)



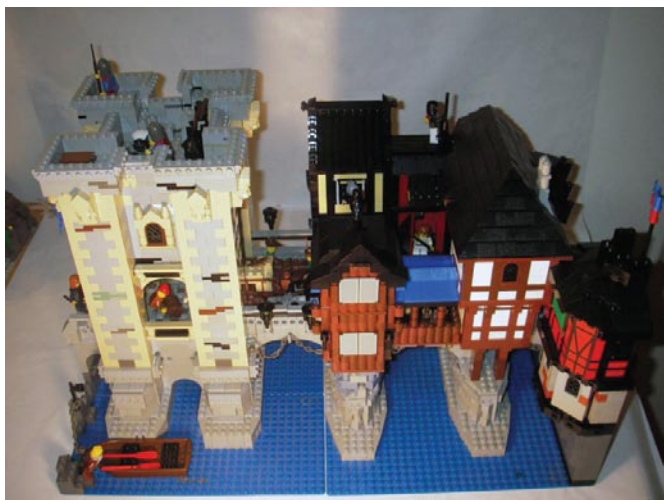
Patrick Bosman (oppienokki) won the category with a hanging bridge suspended over a beautifully landscaped deep ravine, with forestmen ambushing some soldiers - you could really feel the bridge swaying back and forth as the fight progressed.



In addition to that, Aaron Andrews (DARKspawn) had a beautiful Japanese style bridge leading to a shrine, with some ninja action included.

Medieval Legend (2007)

In CCCV (2007) we had a “medieval legend” category, challenging builders to use a real legend from the middle ages as their inspiration. I was expecting lots of MOCs based on King Arthur and Beowulf, and we did have great examples of each of these, but people also came up with much more obscure tales.



Kenn Oldham (KenndoubleN) had a stone bridge from some major city, with a guard tower and shops bustling with life on the bridge.



Tom Snellen (MrTS) won the category with the Bakery of Eeklo. In this Dutch legend, there was a baker who could bake new heads for people if they were unsatisfied with their own. While they waited for their new heads, the baker replaced the old ones with a head of cabbage. Tom’s MOC is quite humorous, with figs wandering around the bakery with cabbages (the green Exo-Force hair) for heads.

Festivals and Celebrations (2007)

That same year we had a “Festivals and Celebrations” category, which was won by a great wedding scene by Robert Arnst (Stone Goblin) set in a Mid-Eastern town square full of people.



That same category had Micah Berger (The Green Knight) building a traveling group of actors staging a Christmas pageant in a snow-covered village full of details.



Jonas Lindbarg’s (Maedhros) Nos Galan Gaef, a Celtic festival when people would jump over bonfires in a ritual to clean themselves and ward off evil spirits. In Jonas’ MOC one of the figs is getting a little singed while leaping, and there is an ominous ghost lurking in the shadows.

Crime and Punishment (2008)

This past year, CCCVI, we had a “crime and punishment” category, where builders had to construct two separate scenes - first of a crime, then of the resulting punishment.

In addition to some of the more expected scenes including stocks and beheadings, these ranged from a child getting spanked after stealing a pie (by Peter Anderson/Shadowviking).



to a murderer getting the ultimate punishment in the afterlife (by Luis Baixinho/LBaixinho).



Tapestry (2008)

Also this last year we had a rare non-mini-figure category - "tapestry" - which had builders making mosaics in the style of wall hangings. There were several great entries, but BlueSecrets took the cake with a great tapestry of a knight that really looked like it was woven rather than built of LEGO.



In addition to the individual categories, each year (starting with CCCII) we have a Master Builder prize. This goes to the person that entered multiple categories and did well across all of them. We have had some truly spectacular prizes for this category in past years - a rare book and the then-brand-new set 10193 Medieval Market Village, both donated by LEGO, and some of the most coveted classic sets from the Castle theme, including the legendary 375 Yellow Castle that started it all. They've also been awarded the title Master Builder in our forum, which they bear until the next person is crowned in the subsequent year. Our past Master Builders have been Patrick Morgan (LEGOFREAK), Nelson Yrizarry (Sir Nelson, or Big Daddy Nelson), Jens Heyer (jens, or schlimps), Aaron Andrews and Tom Snellen. Each of these created a series of stellar MOCs. In a tradition, these builders have sat out the following year's contest to allow others to shine. This is not a rule imposed by the site admins, and personally I always want to see what these people would come up with for the new categories, but I do appreciate the spirit in which they have done this.

Some little sub-stories and competitions have arisen within the context of the CCC. In CCCIII (2005), we had a special category where the admins built MOCs and the rest of the forum judged us. Nathan Wells (Lord_Of_The_LEGO) won with an awesome fig-scale working catapult. In last year's CCCVI we had admin teams in which people were grouped together so that they could encourage each

other. Humorously, if one member of a team failed to get an entry in by the deadline, the whole team got labeled with the rank of "junior gong farmers" in the forums. Talk about peer pressure to perform! I'm happy to report that "Team Bruce" won the day, pretty much due to Daniel (DNL), who did well in multiple categories. Perhaps the most notable sub-competition in the CCC comes from CCCV (2007). The Polish group LUGPol challenged the Portuguese Forum 0937 to a build-off. The group that had the most finalists in the CCC would win, with either a case of fine Polish vodka being sent to the Portuguese group, or a case of Portuguese wine being sent to the Poles. These groups spent six months preparing for the CCC, analyzing past contests to figure out what the judges liked and giving feedback to each other to improve their MOCs. The result was that we had an influx of many top quality MOCs from these two nations, and some fine wine was enjoyed in Warsaw. I really appreciate the ties of good will that were fostered by this challenge and also the great building that resulted.

As I noted earlier, I always look forward to the CCC each year. Every year we find new surprises. Some builder who has never tried their hand at the Castle theme before will be inspired to enter and will come up with something new and amazing. Or maybe there will be a great builder who posts primarily on a forum like the Czech site Kotsky and they host their images on their own server, so we've never seen them before on Classic-Castle.

Each year people come up with new building techniques, and it's not always the same builders you know and watch on Brickshelf and Flickr. For instance, since I'm a judge of the contest, I have to look fairly closely at all of the entries. A couple of years ago there was a young and inexperienced builder, whose photographs were kind of blurry, so they were the sort of thing you might just skim past on Brickshelf. But in looking at the details of the blacksmith shop he had built, I saw

he had a great design for a mini-figure-scaled bellows. Or in another instance, I may be wrong, but I think the first time I saw people build up plates to make a ship's sails billowing in the wind was in the vehicles category of CCCIII (2005), where both Robert Arnst and Piotr Rybak (Lomero) had great ship entries.


Vehicles (2005)



Another thing I really enjoy about this contest is learning new things about history. In CCCII (2004), Greg Nation (greg3) made Jan Zizka, a Hussite leader for the custom fig category and a Hussite war wagon (basically a medieval armored personnel carrier) for the wagons and carts category, which taught me some things about Bohemia in the 15th century. That raises one last thing. While many people come up with multiple entries, occasionally someone thinks them through so their entries comprise a complete whole. For instance, in CCCII (2004), Eddotcom had a whole series of MOCs built for the Black Falcon faction, or in CCCIV (2006), Jens Heyer built a series of

different scenes for different categories, all of which fit together to make one huge MOC that stretched across his living room floor.

Anyway, the whole LEGO community is invited each year to participate in the CCC. Even if you don't build something this year, check out the amazing entries, and you'll soon see why this is my favorite LEGO theme. All information about this contest can be found at www.classic-castle.com. Check the "events" link for information about this and other contests, watch the front page for breaking news, or register for our forum and join in the conversation. 



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One of several train layouts at Brickworld.

Event Report: Brickworld 2009

*Article and Photography
by Joe Meno*

I recently had the opportunity to sit down with Bryan Bonahoom and Adam Reed Tucker to discuss Brickworld. Brickworld 2009 was held at the Westin North Shore Hotel in Wheeling, IL. This annual event was held the third weekend in June (as usual) and continued to grow in attendance this year. I was lucky enough to attend the event and be a part of some memorable moments throughout the weekend. For most attendees, the highlight of the event was the visit from Jorgen Vig Knudstorp, CEO of the LEGO® Group and Kjeld Kirk Kristiansen, the LEGO Group's owner.

I asked Bryan what the highlight of Brickworld 2009 was in his eyes. He had a tough time answering because, as he said, "the attendees create memorable moments constantly. They create the memories with their actions at Brickworld and through the MOCs they provide. I got to quietly walk around with my wife, Kathie, late Saturday evening during the World of Lights display. Each of the lighting effects invoked visions of the individual laboring to build the creation." Bryan added later that probably the most memorable moment during the event for him was the Esther Walner Memorial Charity Auction. "Esther added so much to the event [last year she passed away of cancer early in 2009] and the community. Her focus on making everyone feel welcome at Brickworld 2008 and part of our family was missed this year and will continue to be missed. Some other wonderful people are stepping up to fill the void, but it will never be the same as Esther coming around with 6 inch buttons that said 'ASK ME' for all of the coordinators to wear." Why was the auction so memorable?



Attendees pose in the main display room.

"Well Joe, I think you know that" Bryan replied. "You and Kjeld were having a lot of fun in the row in front of me. And Will Chapman gave that kid \$100 to beat out Mark Peterson in a bidding war. Then there was Judith and her emotional donation to the auction. All of it ended with Adam winning the bid to build the town layout with Kjeld in the hotel lobby."

Adam added, "the displays this year just blew me away. We packed 25,000 square feet with just displays. And the workshops and presentations were great. All the rooms were larger this year and we were still filling each one to capacity and beyond. But, for me, other than building the set with Kjeld, the highlight was definitely listening to Olivia Donahue's presentation about girls and bricks. She was a phenomenal speaker. And, did I mention she is only 13 years old?"

The World of Lights was also introduced at Brickworld this year. It is a community-wide collaboration to light all of the MOCs. And, it made for a fun and relaxing Saturday night as we got to wander the display area in lighting provided solely by the displays themselves. Adam definitely had a great idea here!!

Kathie Bonahoom stepped in during our discussion and I got to ask her how Brickworld went this year. Since Kathie took over this year as the event coordinator so Bryan could have time to enjoy himself a little, she had some interesting insights. Kathie noted "we made some definite logistical improvements in the registration booth. The new magnetic badge board was pretty cool to see with 570 badges on it!! The PVC pipe tree to hold the goody bags was a lot of fun in the booth. And, moving the sales of t-shirts and event kits to a separate area made public ticket sales a lot smoother." Kathie was then jokingly wondering out loud how many people noticed these little details.

But, it is Brickworld's attention to detail and dedication to making sure the event is fun for the attendees that makes it such a great event. Bryan says "a plan is a tool, not a straight jacket". So, being flexible is a big part of the effort at the event. That is why Bryan and Adam really appreciate the Westin and



Kjeld Kirk Kristiansen and Adam Reed Tucker build after the auction.

the staff there. "They make it as easy as possible on us", Bryan and Adam said almost in unison.

Being a reporter at heart, I just had to ask about Brickworld 2010.

Bryan said "registration opens January 1st and 2010 will bring a lot of cool things to the Westin in June." Adam added that the Brickworld 2010 theme has already been selected and that it is a "space-based" theme. Artwork is in process and Bryan & Adam are busy designing the event kit. Brickworld will occupy the whole Westin hotel in 2010. 35,000 square feet of fun.

I pressed one more time for any secrets and they decided to reveal something new and exciting for me to announce here in *BrickJournal*.

Brickworld is partnering with IndyLUG on March 12-14, 2010 to put on a public exhibition at the Indianapolis Convention Center. "This is a new endeavor for all of us", Bryan added, "But, in keeping with Brickworld's core values of Share – Learn – Explore – Discover we felt it was time to share creations with a new community. IndyLUG is a wonderfully talented club with enough members




Only a few of the many models on display at Brickworld.



and enough bricks to utilize a 10,000 square foot display area. As far as we know, this is the first event where a convention has partnered with a local club to showcase the club's displays. We are all excited about it."

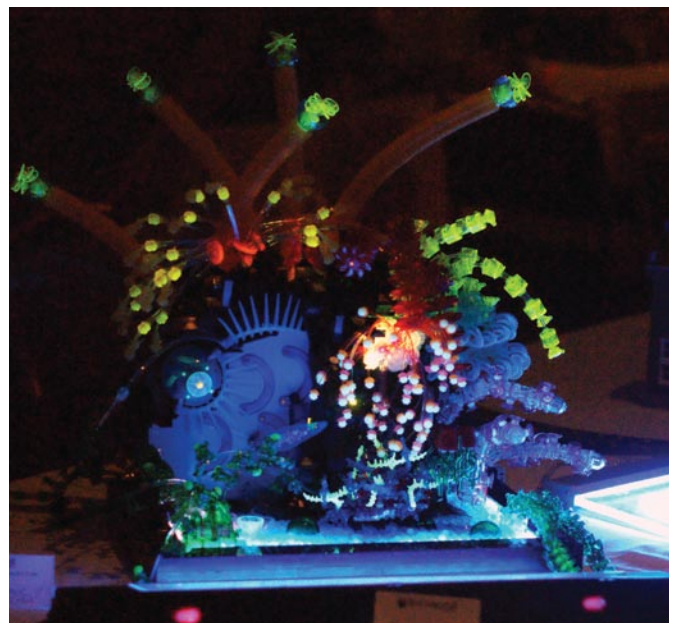
I followed up with IndyLUG President, David Gregory, to get his thoughts on the partnership. David said "Several IndyLUG members, including me, have been coordinators for Brickworld since the beginning. Bryan and Adam are great to work with. We wanted to put on a show, but we couldn't afford the risk as a club. Plus, we didn't have any experience with running an event of this nature using a convention center facility. Partnering with Brickworld has removed all the stress of organizing the event. And, for Brickworld, this should be pretty easy and fun compared with putting on the full convention in Chicago. The entire club is excited and we have been working to define and construct displays since August."

All-in-all Brickworld was quite a success in 2009 with a record 570+ attendees and almost 6,000 public day visitors. The attendees all seemed to have a good time as the event hall opened each day at about 7 AM and didn't close again until 1 AM or later. And, as Bryan and Adam reminded me again at the end of the discussion, it is all because of the attendees. Brickworld provides the canvas on which you place your art and have your fun. The event is what you make it. And, the final parting words from Adam, "play well, we will see you all next June at the Westin!!!" 



Above: Arthur Gugick's models.

Below: Jenn Wagner's coral reef glows during the World of Lights.



From the big screen to the little brick, DK looks back at ten years of LEGO® *Star Wars* in their new *LEGO Star Wars: The Visual Dictionary*.

How do you review a book you helped to write? Can it be objective, unbiased and fair? Perhaps starting with its genesis and, in the true spirit of LEGO construction sets, building from there is the way to go. So from one cliché to another:

Not so long ago, in a publishing house in nearby London...

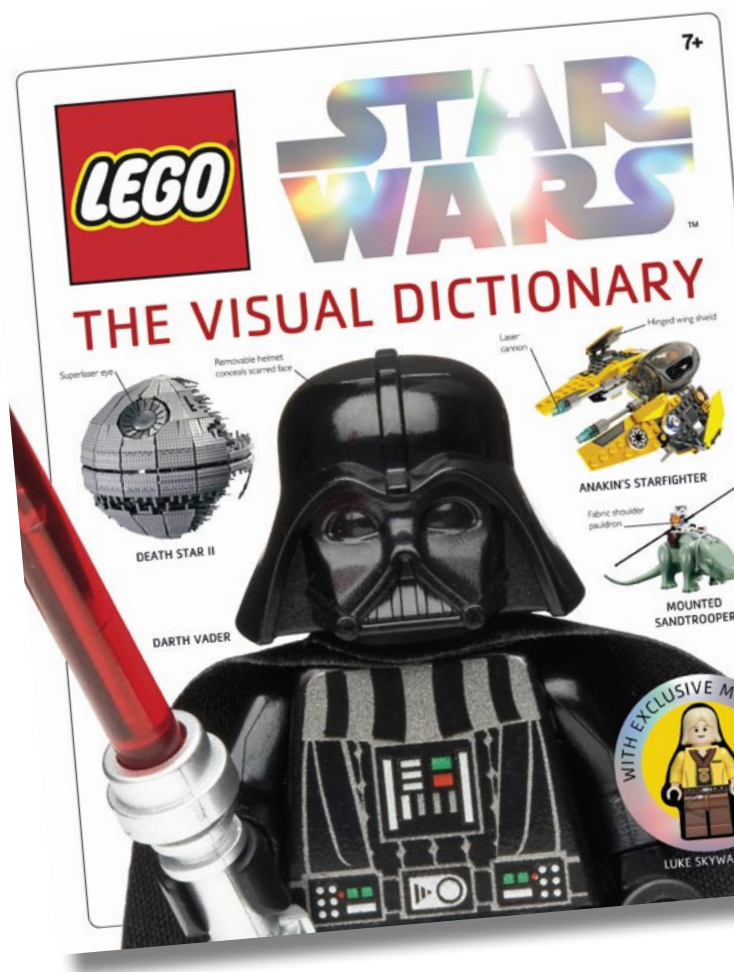
The book began by accident. Back in 2008 Simon Beecroft (author of *Inside the Worlds of Star Wars: Attack of the Clones*, DK Readers *Anakin in Action!*, *I Want to Be a Jedi*, *Ready, Set, Podrace!*, *Watch Out for Jabba the Hutt*, *Epic Battles*, *Beware the Dark Side*, *A Queen's Diary*, *Fantastic Four: Evil Adversaries* and co-author of *Doctor Who: The Visual Dictionary*, which are all published by Dorling Kindersley where he is a managing editor) and his team at DK were working with the LEGO Group on a couple of other books that were being released in 2009. In the course of discussing these new titles (which includes *The LEGO Book*, due out this October) someone pointed out that it was the tenth anniversary of the LEGO *Star Wars* line, and even though DK was heavily committed to half a dozen LEGO books already, Simon jumped at the chance to immortalise one of the most iconic of LEGO themes in print.

Despite an overloaded work schedule, the Visual Dictionary team shoehorned LEGO *Star Wars: The Visual Dictionary* into the timetable and work began in January 2009. Asked if he was 'the Force behind the book' Simon modestly insisted that all of the books at DK are team efforts. "We're a small team of editors and designers, and everyone is very talented. When a lot of extra books come on the programme at a late stage, we have no choice but to pull together. It's second nature to us. This particular book was perhaps a special case for me because I was really excited about it — I loved the idea of going 'old school' and doing it in the style of our Visual Dictionaries, with a bit of Incredible Cross-Sections thrown in."

With the initial specifications in place the next stage was for DK and Lucasfilm to agree on the business terms of the book. In the case of LEGO *Star Wars: The Visual Dictionary*, the deal was unusual in that DK was negotiating with two separate licensors (Lucasfilm and LEGO Group) on a single product. But it was all very amicable, and soon enough Carol Roeder (LFL) and Alex Allan (DK) had the deal locked in place.

At this point Simon put a brief together and took the concept to Lucas Books' managing editor, Jonathan Rinzler (Jonathan Rinzler is an Executive Editor at LucasBooks, which is a division of Lucas Licensing. His work includes *The Making of Star Wars* and *The Complete Making of Indiana Jones*. He is presently working on *The Making of The Empire Strikes Back* and *Star Wars: Visions*, both of which will come out in 2010.), who loved the idea of commemorating ten years of LEGO *Star Wars* in the Visual Dictionary format. His one concern was that time was

Behind the Scenes of



Article by Jeremy Beckett

Art courtesy
of Dorling Kindersley Publishing

short and finding a suitable author would be difficult, so he suggested that Simon write it himself. With ten years of experience of working with Lucasfilm on the previous *Star Wars* Visual Dictionaries under his belt, he jumped at the chance.

In most cases an author must become an instant expert on whatever projects they are working on, but Simon had two aces up his sleeve. Firstly the list of *Star Wars* books he has worked on is longer than a Wookiee's arm: "I started working at DK as the editor on *The Phantom Menace* Visual Dictionary. I was sent to Skywalker Ranch in California with a designer and told to come back with a finished book — it took 5 weeks working at Lucasfilm, but we did it. I worked on all the following *Star Wars* books that DK has done, some as editor, others as Publishing Manager, and visited Lucasfilm in California on many occasions." But more importantly he has a four year old son who loves LEGO toys, especially the *Star Wars* theme, so the book just came at the right time for Simon because he wanted to become an expert to impress his lad!

One of the first orders of business was a visit to the LEGO headquarters in Billund, Denmark where "all the various LEGO teams presented their upcoming projects. They broke up the presentations with fun building activities

Some of the spreads from the book.

that we all had to do, and at dinner in the evening they set everyone a task to be the first to build a small LEGO police car without taking the bricks out of the sealed bags!" explains Simon. Armed with the knowledge of what the LEGO Group had planned for the remainder of 2009, Simon and the rest of the team (editor Elly Dowsett and designer/ AFOL Jon Hall) were ready to go.

The next stage was to develop the layout of the book, and rather than list the sets by their numbers, which movie they came from or the year they were released, DK chose to arrange them thematically (though if you look closely at each set you will see that the sets are placed in movie order within the page). "I put all the models into the thematic groupings – all the Imperial ships together, all the bounty hunters, etc – then put this into a synopsis. Jon Hall then did an awesome spread styling, which was inspired by the Visual Dictionaries, but pitched a bit younger." Simon explained. He then pulled together some sample text such as descriptive blurbs and small annotations to highlight each set. These threw up a number of issues, including whether the team should handle the sets as if they were *in universe* or treat them as LEGO models. In the end the team agreed that a bit of both worked best, and included a data box for the more mundane details such as set number, year of release, number of parts, etc. (These data boxes also work as points

Cloud City

After the C-3PO located the Rebel base, Han Solo and Leia charge their ship through into a overkill reactor is sud small their place gants

When his frier carbon their li through into a overkill reactor is sud small their place gants

CO Dir thrt for



Echo Base

On the ice planet Hoth, the Rebel Alliance establishes its secret Echo Base, protected by an immense energy shield. When the Empire discovers the location of the base, it deploys AT-ATs and AT-STs to destroy the shield generator. The combined strength of Rebel artillery emplacements and snowspeeder squadrons cannot prevent one of the worst battlefield defeats for the Alliance.

Hoth Base

Huge blast doors and DF9 anti-infantry battery protect the north entrance of the Rebel base. Inside the doors, the Rebels have constructed a large hangar for X-wings and snowspeeders, which are serviced by a variety of repair and maintenance racks.



Turret Defense

In trenches and behind snow-packed ridges, supported by tall, cylindrical anti-infantry batteries, Rebel soldiers are the first line of defence against Imperial walkers.



Rebel Soldier

Rebel soldiers on Hoth wear insulated uniforms and backpacks. They have yellow faces, red fringes and helmet visors in the 1999 Snowspeeder (set 7130); they have the same faces but with snow goggles in the 2004 Snowspeeder (set 4500). Their faces are flesh-coloured in the 2007 Hoth Rebel Base (set 7666). Troops wear new-style goggles in the 2009 Echo Base (set 7749).



Snowspeeder

Rebel snowspeeders are civilian T-47 airspeeders adapted for military use with laser cannons bolted to the wings, as well as souped-up engines and armour plating (but no shields).



Tauntaun

Rebel troops on Hoth make patrols on domesticated snow lizards called tauntauns, which can withstand freezing winds but are not the sweetest smelling of animals.



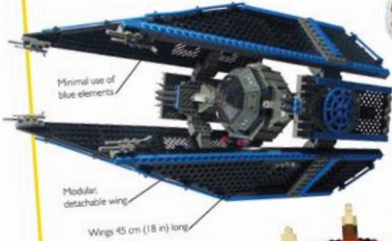
BRICK FACTS

- The 1999 and 2004 Snowspeeder sets include a dish-shaped anti-vehicle artillery P-Tower, used against AT-ATs, flying vehicles and snowtroopers.

Ultimate Collector Sets

TIE Interceptor

The TIE Interceptor is captured accurately, with its long dagger-like wings (which can be folded to lie flat) and a hinged cockpit with a detailed interior featuring a pilot seat, controls, a HUD (heads-up display or transparent data screen), and several monitor screens. The model sits on an adjustable stand, which allows it to be displayed in a variety of positions.



Minimal use of blue elements

Modular, detachable wing

Wing: 45 cm (18 in) long

Set name	TIE Interceptor
Year	2000
Number	7181
Pieces	703
Film	EP IV

Darth Maul

The 45-cm (18-inch) tall bust of Sith apprentice Darth Maul has to be constructed from the bottom up and utilizes building techniques employed on expert models at LEGOLAND® Parks. This remarkably detailed model weighs almost 4 kg (9 lb).



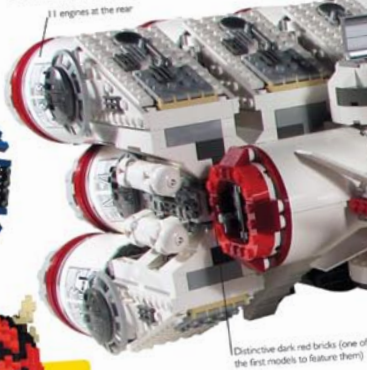
Meningeal eyes

Bust can be supported on a special stand

Set name	Darth Maul
Year	2002
Number	10018
Pieces	1368
Film	EP I

84

The LEGO Group issues a small number of highly detailed *Star Wars* models called Ultimate Collector Sets (or UCS). Intended for older builders and primarily for display, each set includes a collector's card and, in many cases, a display stand. Most are not scaled for minifigures, though some, such as Millennium Falcon, are minifigure-scaled.



3 engines at the rear

Distinctive dark red bricks (one of the first models to feature them)

Set name	Millennium Falcon
Year	2002
Number	10019
Pieces	1348
Film	EP IV

Tantive IV

Princess Leia Organa's consular starship, *Tantive IV* (otherwise known as the *Blockade Runner*), is one of the largest LEGO Ultimate Collector sets, at over 60 cm (2 feet) long and almost 30 cm (1 foot) wide. The highly detailed model is made up of separate sections—front, mid, and rear engine block—built individually and then pegged together. The top and lower turbo lasers rotate and the ship is supported on "landing gear" stands.



BRICK FACTS

- 2000 also saw the release of an UCS X-wing (set 7191), with 1,304 pieces, a gearbox to operate the s-foils, moving controls in the cockpit, and an R2-D2 minifigure. The model is nearly 60 cm (2 feet) long, with a wingspan of 45.5 cm (18 inches).

Yoda

This sculptural bust of Jedi Grand Master Yoda is an impressive 35.5 cm (14 inches) tall. Like the Darth Maul bust, Yoda is built in layers from the bottom upward: The instructions show a bird's eye view from above rather than a three-dimensional view. When complete, the head can be rotated to different positions.



Plute necklace

Set name	Jedi Master Yoda
Year	2002
Number	7184
Pieces	1,075
Film	EP I, II, III, IV & V

Stickers add details

Naboo Starfighter

Set name	Naboo Starfighter
Year	2002
Number	10026
Pieces	187
Film	EP I



R2-D2 (some only)

Sticker elements

Chrome elements

Sleek trail

The Naboo starfighter has fewer bricks than other UCSs, but among them are unique chrome and curved elements, which give the finished model a sleek look. The 29-cm (11.5-inch) long model features twin laser cannons, a proton torpedo launch tube, and R2-D2, as well as a display stand and plaque.

Cockpit module slightly larger than movie ship

85

This spread highlights the UCS sets.

of reference for the sets that had to be split up across the different page themes.) Lucasfilm and LEGO then looked at the spread styling, approved it, and Simon, Elly and Jon started on the book in earnest.

Undeniably one of the more modern hurdles of working on *LEGO Star Wars: The Visual Dictionary* was the number of people in so many different time zones (DK is in London, UK, LEGO Billund is in Denmark which is one hour ahead, LEGO Enfield in Connecticut, USA is five hours behind and LFL is in California, USA and a further nine hours early than London). For the most part this worked in DK's favour, with the team having an entire day to get a page before they had to send it to LFL for approval. At the end of a DK day the LFL day was just beginning so Jonathan Rinzler had a full business day to review the work. And if anyone from DK ever had to pop over to Denmark to meet with someone at the LEGO Group it only meant a plane trip of a little over one hour. Even when a new team member, working from a string of internet cafés in Australia, was brought in, the pace of work never faltered.

The ball kept rolling unimpeded until it was realised that the LEGO media archives didn't have photos of all the sets, in particular the pre-*Attack of the Clones* ones. An expert consultant was brought in to photograph his collection, and filled in further by acting as a fact checker on the spreads and guided DK on the merchandise and fan community pages.

Perhaps the most eye-catching aspect of the book – even more than the incredible high quality of the print and the glorious photographs – is the exclusive minifigure that peeps out of the hardback cover. This, says Simon, was all the LEGO Groups doing, and when they first suggested including a minifigure DK was more than happy to agree. For several months all went quiet and the DK team began to prepare themselves for the worst, but then the LEGO team came back with an exclusive Celebration Luke to mark the celebration of ten years of the most successful LEGO theme ever.

That was in May, and now six months later the book has been through final approvals with LFL and the LEGO Group, translated into other languages, gone to the printers and been distributed all around the world to bookstore shelves.

What will it take for *LEGO Star Wars: The Visual Dictionary* to make it from the store's bookshelf to yours? Would I buy this book? Yes, yes, emphatically yes! Is this because I am a LEGO collector and a *Star Wars* fan? Perhaps, but if I saw it on the shelves of my local bookshop I know my eye would be drawn to it. The book literally pops off the shelf and without a doubt the style of the *Visual Dictionary* series successfully lends itself to the *LEGO Star Wars* line. A multitude of huge photographs leap out of the page and the bold text grabs your eye, yet does not detract from the layout. The vehicles, minifigures, creatures, play sets and ships all look great against the crisp white

background, and there are plenty of interesting pieces of text to read, so in this sense it's a perfect fit. I like the way the thematic arrangement - mirroring the movie *Star Wars* Visual Dictionaries - shows how comprehensively the vehicles have been covered by LEGO Group (and in some cases re-designed later on) and how the characters have changed throughout the movies, the behind the scenes of set development, the glimpse into the LEGO community (which has never been touched on before) and the expanded merchandise that most LEGO collectors overlook.

Despite all the praise I'm heaping on the book, it is not without its mistakes, and hopefully the LEGO *Star Wars* license will continue and give DK a chance to correct them in an updated edition. Until then you could just consider them Easter eggs, and treat yourself to a treasure hunt.

The book is suitable for ages 7 and upwards, and it is definitely aimed at the younger end of the LEGO market. It's not as serious as the movie-based Visual Dictionaries, and in order for it to be more accessible for the younger fan it contains more than a touch of parody and fun. For example at the bottom corner of each page a graphic has been added that acts as an animation when the pages are flicked through at speed. To an adult reader this is no more than a novelty, but a child would see it as a reason

Readers can see the LEGO plans for the Death Star!

to read and re-read the book countless times, and a child without any knowledge of the LEGO *Star Wars* line would go into the book as a Padawan and come away a Jedi Master (that's *Star Wars* geek-speak for beginner to expert).


At first glance the adult LEGO fan might not see the value of the book – it isn't a collector's guide, nor is it an in-depth resource. For the casual adult LEGO enthusiast there's plenty to learn and even the most avid of LEGO fans will discover numerous factoids that they were unaware of. Even I, a LEGO *Star Wars* expert consultant, can attest to that. Most AFOLs would see LEGO *Star Wars: The Visual Dictionary* as no more than a collectible, but viewed from another angle it can also act as an archive of collectibles. How many of us have a place to display all our sets? With this book the LEGO collector who can't devote a garage or a spare room to showing off a LEGO collection can easily open the cover and enjoy the LEGO *Star Wars* sets they do have but can't put on show for lack of space. And did I mention that you get an exclusive minifigure with it?! **b**

You can purchase the LEGO Star Wars Visual Dictionary at local bookstores and Amazon.com.


Jeremy Beckett is a contributor to Starwars.com and the Star Wars Magazine. This is his first article for BrickJournal.

Death Star

DETENTION CELL
In her detention cell, Princess Leia refuses to give Vader the location of the Rebel base. She even stands firm against the interrogator droid's ultrasonic and electrohook devices. Now she needs Luke and Han to rescue her – and they all dive into a filthy trash compactor!



TIE ADVANCED
The mini-sized TIE Advanced is unique to the set. It can be flown into the hangar and docked on a slide-out TIE fighter rack. The cockpit view screen opens to allow Vader to take the controls.



Labels: Turbolaser, Conference table (weapons cache underneath), Security cameras, Cog operates interrogation devices inside cell, Interrogator droid, Removable door to Leia's detention cell, Kenobi working in secret, Control lever, Tractor beam reactor coupling, C-3PO and R2-D2 keep a low profile, Trash compactor wall, DIANOOGAS (Dianogas, or garbage squids, live in trash compactors, refuse pits and sewers across the galaxy, feeding on scraps of decaying organic matter. Chute into trash compactor from detention block AA-23 above).


Minifigures
The set features several unique minifigures, including Luke and Han in stormtrooper disguise, a white assassin droid and Emperor Palpatine with a supremely grotesque face. Darth Vader features a new torso design.

Labels: Rotating turbolaser turret, Turbolaser turning mechanism, Emperor Palpatine's throne, Guard post, Collapsing catwalk, Vader duels with Luke, Railing, Air duct, Stormtroopers on extendable bridge, Air shaft, Mechanism controls central turbolift, Rogue assassin droid, Protocol droid on work bench, Tool rack, TIE docking rack, TIE Advanced, Grand Moff Tarkin, Elevator well, Winch handle raises and lowers pilot lift, Loading bay, Cargo crane, Cargo crate, R2-Q5, Luke and Leia prepare to swing across chasm, Storage bay, Central turbolift shaft.

DATA FILE

Set name: Death Star
Year: 2008
Set Number: 10188
Pieces: 3,803
Films: EP IV & VI
Dimensions: length 42 cm (16.5 in); width 42 cm (16.6 in); height 41 cm (16 in)
Minifigures: 24 – Luke Skywalker (in regular outfit, stormtrooper outfit and Jedi Knight outfit), Han Solo (regular outfit and stormtrooper outfit), Obi-Wan Kenobi, C-3PO, R2-D2, Princess Leia, Chewbacca, Darth Vader, Grand Moff Tarkin, Emperor Palpatine, 2 stormtroopers, 2 Imperial guards, assassin droid, interrogation droid, Death Star droid, 2 Death Star troopers, R2-Q5 and mouse droid.

VIEWSCREEN DISPLAYS
A view screen in the superlaser control room displays tracking monitor readouts of Alderaan and the Fourth Moon of Yavin as it emerges from behind the planet itself into firing range.



The number of FIRST® LEGO® League (FLL) teams worldwide continues to grow. Ask any FLL team members and you'll probably hear how the experience was life-defining. However, there would be more teams if it were easier to find out how to get started. The barriers to entry are actually fairly high. Don't let that discourage you, though. The rewards of a successful team are far greater than the challenges of starting one up.

This article describes the strategies for starting a new team. If you already have an FLL team, this article can serve as a review.

The FIRST LEGO League Season

How early can you start a team? The theme for each season is announced in January. While the theme is always really general when it is initially announced, your team can start to develop a broad understanding of the subject area for their research project. In some years, there is an "early bird" team registration in March. Your team can register and obtain a team number at that time. The obstacles are shipped in August and should be built by the season start date.

The FLL season officially starts when the scoring for the challenge is posted on the web (early September). At this time, all FLL teams can put together a strategy and start to program their robots. However, just because the season officially starts in September doesn't mean that you need to start then. In fact, by the time the season starts, you may want to have your team formed and working together, parents on board, and obstacles built. This will give you a jump start on the season and allow you to accomplish more.

If you plan far enough in advance, it never hurts to take your new team to watch an FLL tournament. Tournaments start as early as late November and as late as early March. From these events, a beginning team can learn a lot by watching other teams using the robot to solve different problems. For parents, watching other kids compete may not be very exciting. For coaches and kids, however, the time will be well-spent looking at the various techniques used by the teams. Watch the teams carefully and look for the little things. Good teams make it look easy, but FLL is incredibly hard.

During the summer, you might want to see if you can find last year's obstacles on eBay or work through the *Mayan Adventure*, a book of MINDSTORMS challenges written by James Kelly. Many institutions worldwide offer classes or camps that your team members can join to learn to program the NXT. Some are as close as your local community center or private schools. In other words, there is no time like the present to get your team organized and ready. Every second counts!

Forming a Team

FIRST LEGO League teams are formed in many different ways. Like any other competitive activity, recruiting strategies vary from the simple call for participation to interviewing and selection. Teams are often associated with an organization such as a school, community center, religious institution, or neighborhood, but they need not be. All that is required to form a team is six to ten interested young people.

Your association and recruitment strategy will depend on your own opportunities and preferences. To allow you to gauge those options, we present several methods that are commonly used in the FIRST LEGO league community. Most likely, teams formed using any or all of these methods will appear at your regional or state tournament. By understanding the different recruiting methods, you can better understand what you are up against in a FLL tournament.

Schools are probably the most frequent association for a FIRST LEGO League team. Teachers usually serve as coaches for



Starting a FIRST® LEGO® League Team

*Article by Randy Miller and
Tatiana Znayenko-Miller*

Photography by Joe Meno

This is the second in a series of articles about both basic and advanced techniques that can help your FIRST LEGO League team achieve mastery of the robot and the game. This article discusses the dynamics of starting a team. In Part III of this on-going series, we will discuss how to calibrate the robot.

Of Festivals and Nationals

FIRST LEGO League regionals happen worldwide, and from there, winners go on to higher tournaments. In the US, because of the number of teams, states are selected by lottery to go to the World Festival, which has been held in Atlanta, Georgia. World Festival is the international tournament, and teams from as far as Asia and the Middle East come to compete. Those US teams that do not go to World Festival go to the US FLL Nationals, which took place in Dayton, Ohio this year.

Here are some photos from both events - these are only a glimpse of what happens at these events!



World Festival - Above and Below: Teams at their runs at the Georgia Dome. Teams from other countries often wear their native costumes, giving the event a very festive atmosphere. World Festival may be a tournament, but for many its also a chance to meet people from other countries.



these teams. In some schools, having a FIRST LEGO League team is mandated by a local or state law. Other schools take their standing in the regional and state tournaments as a matter of school pride. These schools tend to stand up at least one highly competitive team every year.

The recruiting strategies for school vary from simple sign-up to recruiting bright students. Some schools offer robotics classes as electives during the “off season”. They may take the best students in the class as the basis for their team. These kids start the season capable of programming the NXT. The schools then run FIRST LEGO League as a “team sport” or elective.

Some teams are “grown”. Players start young and learn through competitive experience year after year. A team that starts with all nine-year-olds can be amazing in their third and fourth years, especially if they continue to work during the “off-season” on past challenges or the *Mayan Adventure*. The most important factor is a grown team is continuity. Ideally, the same team members will stay together year after year. It is easy to spot a grown team at tournaments as you will begin to recognize their experience.

Some coaches form multiple teams and have the team members share ideas. The goal of these teams is to combine strategies, mechanical elements, and programming ideas to optimize their robot runs. The idea is that your team contributes innovation to all of the other teams and they contribute their innovation to you. While each team will go compete against the others in tournament, the chances that many of the teams will win are greater since their shared pool of knowledge will likely outclass the other teams.

Some teams are simply formed with a group of young people wanting to do more with their LEGO sets. This may not seem like much of a strategy but there is nothing that says that a team has to be anything more than a group of nine- to fourteen-year-olds wishing to have fun. Soft skills such as those learned in acting, debating, and public presentation may be as prevalent on these teams as the technical skills. Teams have been known to accept team members who have never played with LEGO before.

The strategy that works best for you is only limited by your imagination. There are many hybrid and variant strategies of the above. Some of these methods of forming a team may appear to be “the way to win”. This is not the case. Since a FIRST LEGO League tournament is much more than programming a robot, many rogue teams have swooped in to take a state championship from the reigning powerhouse. They had to work hard to do it, but it is very possible.

Believe it or not, a smaller team may actually be better than a larger one. Smaller teams tend to be more cohesive and there is always contention for the single robot (building vs. programming vs. running), the challenges (can I run my program now?), and the computer. When choosing members for a team, often less is more.

Finding a Coach

Perhaps the hardest thing in creating a new team is to find a coach. There are many “would-be” teams that were unable to find an adult willing to commit to the weekly hours necessary to allow a team to get through the season. A typical weekly practice lasts two to three hours or more. The season can be as short as three months or as long as five depending on the month of your regional or state tournament.

Time spent with a new team requires active participation by the coach. The role of the first-year coach is most likely to be that of a teacher. Team members will learn the FIRST LEGO League values, the programming language for the robot, and

how to solve problems as a team. New coaches should be developing young adult mentors (YAMs) who can shoulder the load and work with the kids. The goal of the first year should be to learn enough to feel confident at a tournament. Expectations should be set fairly low, especially for young teams and first-year coaches.

A second-year coach can start to step back and behave more like a mentor than a teacher. The coach should help the team build schedules, organize, and work to help the team become more of a team. For younger teams, the coach may organize the team around the strengths and weaknesses of the individual team members. Older teams may start the process of self-organizing, deciding for themselves which team members are best suited for a given task.

The third-year coach can relax and allow the team to do all of the organization and work. By the third year, YAMs are capable of running the team. The coach or coaches play an active role in the start of the practice, but then can step back. The time commitment is no less than it was the first year, but the intensity of the meetings for coaches diminishes as it increases with the team. This means that coaching gets easier with time and experience.

As a coach, you may not have built structures with today's high-tech LEGO pieces in your youth, and you most certainly won't have programmed a LEGO MINDSTORMS NXT robot. Even to the professional software engineer, NXT/G and ROBOLAB, the programming languages used for FLL, are not something that you are likely to have seen before. Fortunately, there are free videos available to help the coaches teach and learn these programming languages.

Just remember that while you are new to all of this, so are many of your tournament's coaches. It is very normal to feel insecure about your experience. The reality is that you are most likely in the same boat as many other coaches at tournament.

The Coaching Contract

The most important element in creating a successful FIRST LEGO League team is dedication. Bring your own style to the team and teach them the things that have made you successful. As you realize just how intense FIRST LEGO League is, there is a tendency for new coaches to want to "help out". A suggestion to the kids here or there is probably just fine. However, it is the kids' job to build and program a robot as well as to do a research project. *You do them a disservice when you interject your ideas and labor into the solution.*

To ensure that every team understands the role of the coach, FIRST LEGO League created the coaching contract. This ensures that all coaches are given the same guidelines for coaching their team. Judges seek out and reward teams that show the autonomy that comes when their coaches follow the promise in the contract. The tournament interviews will require participation by the team members. Coaches may watch, but the judges are interested in the information that the kids provide.

My Promise as Coach [from the 2009 FIRST LEGO League Coaches' Handbook.]:

- 1) FLL is about the children having fun and getting excited about science and technology. Everything that my team does starts and ends with this principle.
- 2) The children do the work. This is their opportunity to learn and grow. The children on my team do all of the programming, research, problem solving, and building. Adults can help them find the answers, but cannot give them answers or make decisions.



World Festival: Above and below: One of the parts of World Festival that makes it special is the ice cream social at the beginning of the event. For everyone, this is a time to meet and socialize with other teams. For some, it's a time to do a performance on stage, such as singing or doing skits. For all, it's a chance to make friends and have fun!



- 3) My team is comprised of ten or fewer members (all team members participate on only one team), registered as an official FLL team, and all team members are 14 on January 1st of the Challenge year.
- 4) I am responsible for reading and relaying all aspects of FLL guidelines and rules to my team, other coaches, volunteers, and parents. FLL communicates with my team via my primary e-mail address.
- 5) I encourage my team members, other coaches, volunteers, parents, and team supporters to develop and practice a set of FLL Core Values (Gracious Professionalism) that reflects FIRST's goal to change culture in a positive way by inspiring others through our team's actions and words.

I added the following provisions to our coaching contract. These contract items are optional since they are not official but I think that they are also very important.

- 6) There can be no favoritism. You may be a player's mom or dad but when the team is together, you are a coach. That isn't to say that you can't help your son or daughter when they need a parent. However, FIRST LEGO League is a team sport, and as a coach, you represent all of the players. Treat all of the players equally and match the task to the strength of the team during the season. Work with and challenge each of the players in an area outside of their strength in the off-season.
- 7) Coaches never win trophies – I know it is nice to win a LEGO trophy. However, the intrinsic value to coaches should not be their own achievements but in their team's achievement. I tell my players not to put any energy into nominating me or any of the other coaches for any coaching awards. I win "Coach of the Year" when my team performs better this year than they did last year. It is not about the coaches. It is all about the kids!
- 8) The team wins when they achieve their goals. The coaches should set expectations at the beginning of the season in line with the maturity of the team, such as:

"We are in a learning season so we win when we successfully do our best at the Regional Tournament. Don't worry about winning a trophy. Let's learn as much as we can at our first Regional so we can set our sights on winning something next year."

"If you want to win the Regional, you are going to have to work very hard. Remember that many of the teams last year broke 300 points on the table. You will have to score at least that many points to be in the running for Robot Performance."

"We are in a rebuilding mode. We won last year but we have a lot of new players so let's concentrate on bringing them up to speed and then seeing where our veteran players can take us."

The team should set their season's goal in line with the coach's expectations. The best coaches don't have anything to prove to the team or the parents. The kids win when they do their best.

Multiple Coaches

Really advanced teams will have multiple coaches. Each of the coaches may have specialties such as research, robot runs, and team building. By dividing the work, these teams allow the coaches to concentrate on their respective areas. The coordination between the coaches may be loose as well. Each coach is given a certain

amount of the practice time to work with the team.

In these cases, a team model which allows each coach to operate "their way" works best. Each coach should have the ability to develop their own plans subject to the time constraints of the practices and season. Plans should consider that nothing really ever goes according to plan. Take heart in the fact that you will most likely work an extra practice or two into the schedule right before tournament.

Finally, it is important for all the coaches on a team to have a common vision. If one coach wants to win at all costs and the others are interested in strictly providing an educational experience, there may be some disharmony. Ultimately, the goals of the team should be set by the kids. However, the coaches and parents, as well as the team's level of experience, have some impact on those goals. Making sure that all of the coaches are on the same page is extremely important.

Mentors

YAMs (Young Adult Mentors) are very important to a coach's sanity. The team members will most likely outnumber the coaches. Even if there are multiple coaches, it is likely that there are only one or two coaches per area (research, team building, and robot challenges). Mentors are an extension of the coaches. They can work with the team members in one area while you work with team members in another.

Mentors are often older siblings, former team members who have aged out, or even friends of the coach such as a friend's high school student or church youth group members. Some mentors come with FLL experience, others wish that there had been an FLL team when they were younger, and some have no interest in LEGO at all. Being a YAM for an FLL team is a leadership experience that they can add to their resume for college.

There are two flavors of YAMs, the technical mentor and the team mentor. The technical YAM likes to analyze the team's strategy, mechanical elements, and programming and provide training and guidance in areas in which the team is weak. The tendency of this YAM is to favor technical excellence over any other value.

The team YAM works to instill FLL values such as gracious professionalism and teamwork. This YAM promotes harmony and team spirit over any other value. The truth is that both flavors of YAM are needed for a complete team. As we lay out the roadmap for building a winning team, it will be easy to see how each flavor contributes.

Choosing a Place to Meet

The second most difficult thing in creating a new team, after finding a coach, is finding a place to meet. Many FIRST LEGO League teams are affiliated with schools so the natural place to meet is the school. Community centers and churches also make great meeting places. However, setting up and tearing down the challenges detracts from the team's productivity. In a public place, this presents a problem. Many a challenge piece has gone missing because the general public had access to an unattended table.

Often a private residence makes the ideal place. If you can find a peaceful place to set up a 4 foot by 8 foot table, it has the added advantage that one of your team members (or coaches) does not have to travel. Play dates can become impromptu practices, making that team member's house "the place to be."

The Role of Parents

As a parent of a FIRST LEGO Leaguer, your role in all of this is extremely important. Your involvement must not be too much or too little. Perhaps the worst trait in an FLL parent is ambivalence. FIRST LEGO League

is very intense and challenging. Younger children will need all of the support that you can give him or her as they will be moving into very new areas.

Parents can move beyond their work with their own children to become a real asset to the team. Bringing meals to practice is just one way for parents to help out. This keeps the team well-fed and productive as practices run through meal times. Parents will often break out the construction equipment to build a special 4'x 8' table for the robot challenge. Some parents even transition into coaching roles to help out with areas such as team building or research.

However, when parents get involved with trying to do the work for the kids, they "cross the line". FIRST LEGO League is about the kids doing the work. There will be times when the kids fail and this is part of the learning experience. A good coach works with the kids to set objectives that are within the capability of the team. Parents will need to be supportive of both the coach and the kids as they attempt to meet the objectives.

Signing Up

Now that you have all of the elements, it is time to sign up the team. Registration begins in May (there is often an earlier registration period in March) and the team will need to raise the funds necessary for the registration fee (\$200), the challenges (\$65), and an educational robot kit (\$395). Organizations such as schools may cover this cost but usually, it falls upon the parents. If you divide the cost among a team of 6 to 10 team members, it is about \$60 to \$100 per kid.

The FIRST LEGO League site allows teams to register as late as mid-October. However, it is highly recommended that you register early. Each team is assigned a unique team number and the earlier you register, the lower your team number. Team numbers are used to order the teams in the opening ceremony. If you have the lowest team number in your tournament, your team is announced and walks into the tournament first.

Additionally, you want to receive the obstacles as quickly as you can get them. Since the obstacles are made of LEGO, they must be built. This can take an entire practice in itself. The LEGO parts and instructions are shipped before the scoring instructions for the challenges are announced. The scoring instructions tell you what you can do with each of the challenges, such as moving one element from point "a" to point "b". The scoring instructions also tell you how many points out of a possible 400 for accomplishing the task.

Once you have registered, you will receive a coaching manual and several CDs with instructional and promotional videos. It may be valuable to show the promotional videos to the first year team as they will give them some idea of what they have signed up for. Some of the videos are clearly FIRST LEGO League marketing, but these videos can really get the team "fired up" for the tough season ahead.

Summary

There are many strategies to forming an FLL team. Determination of the best strategy for you and your team is a matter of personal preference and philosophy. Dedication is the most important ingredient. If you have the dedication to working with the kids and to helping them through the learning, competing, and reflection process, they will thrive.

Understanding how other teams are formed can give you insight into your tournament. Each team will have strengths and weaknesses but there is no substitute for hard work. That said, FLL should also be fun. When everyone is having fun while learning, you are on the road to building a winning FIRST LEGO League team. **b**



US FLL Nationals: Above: The Microbots do their robot run. Below: The Alliance round is where three teams work together on a robot run. Coordination is important, as each team has to participate. Here, the teams meet beforehand to plan which team does which task. Bottom: Another team does a run.



Let the Games Begin!

Brick Gaming Comes of Age



*Article and Photography
by Sebastian Blanco*

The idea of using LEGO® bricks and elements to play games is wholly natural. Kids of all ages have come up with ways to do more with the bricks than building another car or spaceship. The LEGO Group has released its own board games - including Creator, Time Cruisers and the Racers Super Speedway Game - that added game rules to the bricks. There were also the X-Pod series of sets that could be used to play a strategy game. This year, TLG released a series of board games - with at least one designed by renowned game creator, Reiner Knizia - in Europe, with the games reaching the US in 2010. There is no need to rely on official sets in order to “Build - Play - Change,” though. Do-it-yourself LEGO games have existed for years, and some of them have serious fan bases, attracting dozens of players - and plenty of spectators cheering on the action - when they are played at public events.

Two homebrew LEGO games with big followings were played at the largest game conventions in the United States – GenCon in Indianapolis, Indiana and Origins Game Fair in Columbus, Ohio – this year. GenCon saw pirates, the Imperial Navy and orcs (yes, orcs) battle in the seas of LEGOnesia in LEGO Pirate Wars. Then, during Origins, the ancient sport of chariot racing came to plastic life on a huge oval track in Circus Giganticus. Rich enough to enjoy for their gameplay, both of these games use the brick as a way to appeal to passersby and attract players. In a conference center as packed full of proud gaming nerds as GenCon and Origins are, pretty much everyone has to stop and watch the action, at least for a few minutes.

LEGO Pirate Wars

Stephen Gabriel, the man behind *LEGO Pirate Wars*, said that the GenCon organizers understand the visual appeal of his game and try to put him in a prominent location each year (he's been running his game at the convention for about 15 years). Gabriel, who organizes a variety of gaming events with the Rogue Judges group (<http://roguejudges.org/dir/>) and is a member of the Northern Illinois LEGO Train Club (NILTC) (<http://www.niltc.org/dir/>), said that adults and kids (sometimes supervised by parents) can all play together *Pirate Wars* together. Oh, and young girls shouldn't be counted out.

"It helps to have someone a little older," he said, "but I've seen 12-13 year-old-girls turn around and wipe out pirates like crazy with just two little ships. Girls tend to be a little better at it, at that age range."

Gabriel came up with the original rules for *LEGO Pirate Wars* in 1991 or 1992 because of a youngster in his family. "My nephew got his first pirate ship for Christmas and we thought it would be fun to have a game you could play with the ships. I started writing the rules, found a couple ships in the local area and ran the game with him once. He wasn't interested, but I had a hell of a time. I did three slots of it at GenCon that year and everyone had a great time. They're like, 'Next year it's going to be back, right?'" It was, and the game has been going strong ever since. (Another pirate-themed game that uses LEGO parts, Evil Stevie's Pirate Game, was developed in 1998 by the famous game designer Steve Jackson (<http://www.io.com/~sj/PirateGame.html>). These rules are more complex than *Pirate Wars*, which has contributed to its decline in popularity in recent years, Gabriel said).

The basic idea in *LEGO Pirate Wars* is that the two sides are engaged in battle in dangerous waters while trying to complete a scenario objective. Gabriel changes the scenario every year – this year, an orc boat complete with a dozen orc minifigs appeared out of nowhere to fluster the pirate fleet – but it's all very familiar to fans of Hollywood pirate movies. Sometimes the players must rescue the governor's daughter, other times, there is a very tempting – but dangerous – island full of gold. The game's rules emphasize the story: all female pirates are all in love with the Imperial Lieutenants, so if they're ever on the same ship, they immediately surrender. As a bonus, though, female pirates have unlimited pistols. Pirate captains can fall into the ocean like anyone else, but are always last to get eaten by sharks. Imperial captains are always last to go down with the ship.

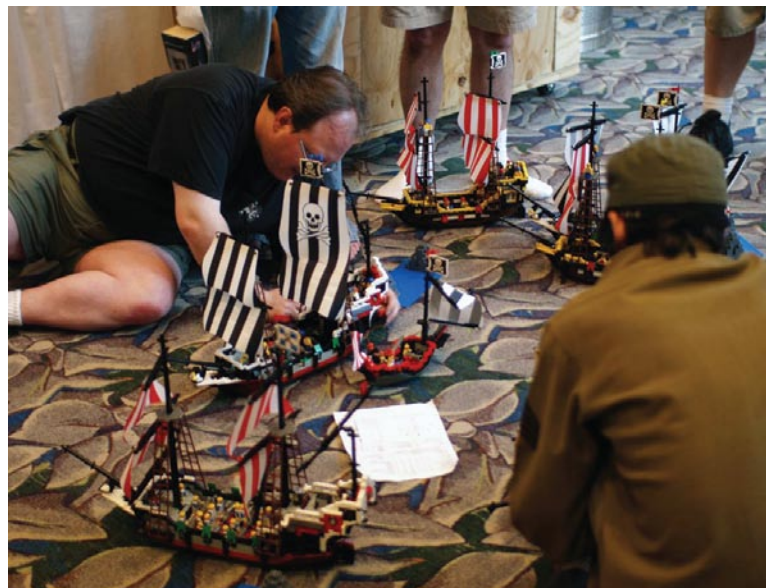
"It's all stereotypical," Gabriel said. "If the governor's daughter falls in the water with everyone else, everyone gets eaten by sharks except her."



Pirate ships ready for battle.



The Governor's daughter is in trouble!



The pirates move into range.



Orc pirates sail into the game.



More pirate ships join the fray.



Chariots race away at the Circus Giganticus.

Complete rules to *Pirate Wars* were originally published in the mid-1990s in *Shadis* magazine in two issues (#19 had the standard ruleset and #24 included optional rules) and can now be found online (http://www.thiel-a-vision.com/LEGO/pirate_wars_rules.htm). The basics take about five minutes to explain, but the gameplay lasts for hours. Because of the standard design of LEGO pirate ships, the rules that Gabriel came up with over 15 years ago can still be used today. "One nice thing is that LEGO designs their ships so well and so consistently the design rules work for all the LEGO ships," he said. "They all follow the same path, they all work the same way and they all match the models very, very well for the scaling." While the standard models provide a great base to work from, Gabriel tweaks and changes the ships to look and act a little differently during the game. Gabriel's fleet contains some 10040 Black Sea Barracudas that he's cut down in size for variety, some 6268 Renegade Runners that have two cannons and an extra sail for increased speed and a bite, and a 6271 Imperial Flagship that doesn't have the best movement ability but makes up for it with eight marines that make it deadly up close (the more minifigs a ship has, the more actions it can take each turn).

GenCon is the only place that Gabriel has run *Pirate Wars* for the last decade and a half, but this might change in 2010. He has been asked to run the game at Brickworld next year, and he's ready to do so. "The rules are simple enough that anyone can pick it up. It's just about having fun and everyone likes to play with the big pirate ships, so we can go out there and have some mayhem." People interested in playing should look up the rules about building their own ship, because anyone who comes prepared with their own ship gets to play for free. If all goes well, Gabriel said he will bring a new game that uses mechas (giant armored vehicles) that can be blown apart to GenCon next year. That might just garner more attention than a fleet of pirate ships.

Circus Giganticus

A dozen ships at full sail are not the only way to attract a crowd to a LEGO game. Earl Lindsay's *Circus Giganticus* pulls people in thanks to a huge race course, plenty of LEGO horses and chariots and non-stop action. *Circus Giganticus* is based on an old Avalon Hill game, with tweaks to make the LEGO chariots the stars.

"My friends and I played a game called *Circus Maximus* when we were younger and it was just a blast. It was a chariot race game right out of *Ben Hur*. We got older and other games came out that were similar but never really captured that same feel. It gives a NASCAR feel to a chariot game. So we decided to write something up. We all had these LEGO bits that were sitting around that we never did anything with, so we put this map together and used some counters to test play it. I had some luck at that time to have a large plotter available. I said, 'You know, we could make it this huge LEGO game.' I printed this thing out, we pooled our LEGO together and we made up a ton of stuff." He painted a few of the flags purple to denote another player color, refined the rules and off they went.

Lindsay and his friends created *Circus Giganticus* about six years ago, a time when horses were the hard to come across, he said. Once he managed to acquire enough horses and the wheels – "wagon wheels at that time were really hard to come by as well" – they could finally play the game as intended: making a big scene at conventions. Running the game at cons means it's not uncommon to have spectators cheer the

racers on, since the game makes it perfectly obvious what's happening at any given moment: the person in the lead is winning, and, because *Circus Giganticus* uses a balanced rule system, Lindsay said, there are plenty of opportunities for players to catch up if they get behind.

On top of the chariot races, Lindsay also irregularly runs a LEGO Star Wars version of *Silent Death*, a 1990 spaceship battles game produced by Iron Crown Enterprises. Lindsay's main gaming group is Amorphous Blog games, which dabbles in all sorts of game systems and is creating an entire world called Ki'larn (abgames.com). Using LEGO [elements] as game pieces creates an immediate "hey, that's cool" factor from people who see the game in action. Another benefit is that the bricks are tough. "LEGO [parts] can take a beating," Lindsay said, "and that's the beauty of it, that's what we wanted. We all have a lot of miniatures at home but the problem with miniatures is that somebody picks them up and drops them, they can break. You can't be angry because it's a game and it's meant to be played and sometimes things get broken. But with this, kids come over here, they pick it up, they bust something, whatever. We just put it back together."

Aside from the map and the LEGO pieces, *Circus Giganticus* requires some command cards that show what the pieces can do and dice. Because the race track is so huge, Lindsay only pulls it out twice a year: for Origins and for a smaller convention called AnCon (Another Gaming Convention) that takes place in Cleveland, Ohio. After many years of being schlepped back and forth, the map is wearing out a bit, so Lindsay is thinking of ways to remake the board. For now, the whole set – map, chariots, whips, minifigs, horses and central buildings – all fit into a case and a tube and travel from con to con, teaching new gamers the fun of actually playing with LEGO elements. 📖

Sebastian Blanco is a freelance writer that edits and writes for www.autobloggreen.com. He has also working on a book for www.koabooks.com.

Players running the chariots through their paces.



Chariot racers come in all colors.



Taking the race turn.



Community



Tim Courtney, Asli Bilgin, Renee Shull (CEO, Integrated Play, Kyle Hotte (CMO, Integrated Play, Lenka Zintel (The LEGO Group)

Looking at the LEGO® Community with Serious Play®

Article by Renee Shull

Photography by Kyle Hotte



Stacy Sterling begins the Serious Play exercise.

Brickworld, a fan-created event, took place for the third time and was a huge success. Thousands of LEGO® fans young and old headed to Wheeling, Illinois in June to network, buy, learn, and most of all, play with LEGO bricks. Children and AFOLs - adult fans of LEGO - alike took advantage of everything the event had to offer, including amazing displays and inspirational presentations and workshops.

One of the workshops was a creative strategy session held about the future challenges of the AFOL's online community. In collaboration with the fans, The LEGO Group used their own LEGO Serious Play method to brainstorm solutions for the next generation of social networking and web services.

LEGO Serious Play allows workshop participants to visualize their thoughts and ideas through the building of models. They also share stories with other workshop participants as they build. AFOL Tim Courtney and Lenka Zintel of the LEGO Group headed the workshop to reveal and review the problems of the current online community. Using LEGO Serious Play they planned to inspire the AFOL community to come up with creative solutions. Michigan-based management consultant and Integrated Play facilitator Renee Shull also participated in the workshop. Being a LEGO fan, Renee has long known the power of the brick as a barrier-breaking tool for empowering people of all backgrounds to make their thoughts, concerns and ideas seen and understood.

Coming into the workshop, many AFOLs were extremely skeptical about the method and some even came just for the bricks. However, the session surprised many of the skeptics, as the insight and inspiration the methods added to the discussion impressed many AFOLs. The session showed them how brilliant and powerful a tool LEGO Serious Play actually is in terms of sorting one's own thoughts, visualizing of difficult topics, and communicating.

The objective of the Brickworld workshop was to get a clear picture of the frustrations the current fragmented state of the online community has. It also allowed AFOLs to discuss and develop solutions that could be implemented by the AFOL community itself or perhaps in collaboration with the LEGO Group.

The Process

LEGO Serious Play is not just playing with LEGO bricks. It's a form of communication, training, and teambuilding rolled into a jam-packed session of surprises and fun.

In order for all workshop participants to familiarize themselves with this method, an initial training challenge was carried out where participants were asked to build a tower with a mini-fig on top, which portrayed one aspect of each AFOL's passion.

Participants took seats at tables with LEGO Serious Play sets. Each table would be headed by a lead from the community who would help facilitate and monitor progress.

The ground rules were simple. Don't have a meeting with yourself. Just start building. Trust your hands. Let them pick the bricks they want. DON'T get bogged down in the design.

Next, participants would share their stories one by one to the other participants at their table. This process would be repeated throughout the workshop while working with the key topics of the day.

The First Challenge

The first real challenge the AFOLs encountered was to build a model of their frustration about the online media. All frustrations were similar with the common barrier being fragmentation of the online community. Again, stories were shared as the concepts behind their model emerged.

The Second Challenge

The second challenge faced by the AFOLs during the workshop was to come up with an solution or idea for how new digital media could be used to connect AFOLs. And again, AFOLs, as well as the TFOLs (Teen Fans of LEGO) and children participating, would use the time given to build amazingly insightful and personal visualizations of how the obstacles could be bridged and new media could help the community grow and connect.

The Landscape


After solving the challenges, each table was now asked to consider actual implementation of their ideas. Keeping their solutions model built, collectively the participants at a table combined their individual solutions to create a landscape of how their ideas and solutions should be implemented.

One of the key findings of the first challenge was the AFOL's frustration with community accessibility on the Internet. While there are a lot of good Internet sites for AFOLs, the sites focus only on one specific part of the LEGO hobby. They also were not being able to connect to other fans with the same interest. For new LEGO enthusiasts or AFOLs trying to find tips and answers, there is no one central database or starting point.

The most popular solution to the fragmented community was a portal or central hub. This portal should focus on ease of accessibility, and prioritize and navigate existing content for AFOLs and new LEGO hobbyists. The need to connect with other LEGO fans in a community site to display, get tips, and help to excel in their hobby was also emphasized. The AFOLs are passionate about the online community and want to grow and share their love of the hobby. The AFOLs who participated are looking to the LEGO Group to the build and facilitate the online portal without losing control of the community.

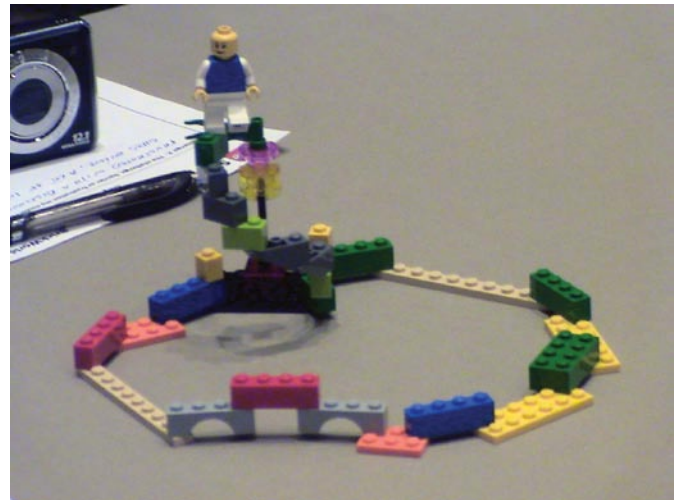
A participant sums this up quite nicely:

"LEGO Facebook – doesn't have to be run by LEGO or hosted on Facebook, but it needs to be a social networking site. I feel like the focus of a central community needs to be on the individual rather than the creations. When you focus on creations it breaks down by theme but when you focus on the person you emphasize what unites us all. We are people who love LEGO."

LEGO Serious Play training delves deeper into communicating in a open and honest way, allowing groups and individuals alike an opportunity to come together and express themselves. The method itself is a fun, innovative and powerful tool to improve an organization's or group's success because it's a fantastic and effective way of handling problems. If you have any questions, please call Renee Shull directly or visit www.integratedplay.org for more information. Renee Shull is the CEO of Integrated Play. For more information about Integrated Play contact Renee at renee@integratedplay.org or 269-760-3857 or renee@integratedplay.org. 



Renee Shull presents the second challenge.



A model of the community, with the description: "Community is a complex spider web online. It is fractured and difficult to navigate."



A landscape of community models, with the model above in the center.



Palle Agaard Christensen created this display for the Idea House.

The Fabulous World of LEGO® FABULAND®

Article by Jette Orduna

Photography by Megan Rothrock

FABULAND was a LEGO theme that was supported by licensed products such as records.

Recently the LEGO® Idea House set up a display to honor 10 years of the FABULAND product line. Some of you may not be aware that FABULAND was around for a decade, and was the companies' first line that was so much more than just LEGO sets.

At the LEGO marketing conference in 1978 Kjeld Kirk Kristiansen presented his new product development strategy for the LEGO employees. The presentation came after a period where product development almost came to a halt. The dynamic new model created a *system within the system* where the future product range was divided into independent product programs i.e. pre-school, LEGO construction toys and "experiments", each with its own age profile, concept and play idea (see *BrickJournal*, Issue 7, Vol. 2, page 72).

Under LEGO construction toys you would find new themes for 1979 such as LEGOLAND® Space, LEGOLAND® Castle, LEGOLAND® Town and LEGO FABULAND as well as doll's houses, trains and technical sets.

LEGO FABULAND was intended to close the gap between DUPLO® and LEGO® System and make the transition from DUPLO bricks to LEGO System elements easier for children.

LEGO FABULAND was easy-to-build models for children age 3 to 7, with a universe of friendly, funny animal-headed characters that appealed both to boys and girls. In addition FABULAND was the first LEGO theme to feature licensed products such as storybooks, playing cards, children's clothing and animated TV series.

A World of Role Play and Imagination

All FABULAND figures had moving arms, heads and legs, their own name, accessories and sometimes



uniforms related to their jobs in the FABULAND storyline.

A leaflet in each LEGO FABULAND set introduced parents to the FABULAND universe:

“FABULAND is the name of a delightful new play area for your preschool child. It is an opportunity for your child to use his imagination. You can read the story and let your child follow the pictures, which are like simple building instructions. Then your child can make up stories of his own and models to illustrate them. The possibilities are endless.

FABULAND pieces fit together with LEGO bricks so it is easy to extend the scope of play and give additional possibilities for bigger models – and longer stories – whenever you want”.

From 1979 till 1987 there were no lead characters in the FABULAND universe, however when the animated TV series based on the FABULAND series was released in 1987, Edward Elephant became the main character and every episode was released under the name *Edward and friends*, whereas the LEGO sets still were launched under the name FABULAND.

“Edward Elephant is kind and gentle but he daydreams from time to time and then things don’t go quite as he plans. Bonnie Bunny is so friendly that she likes to help *everyone*, whether they want her to or not. Max mouse is always looking for adventure. He is lively and full of exciting ideas. Joe Crow runs the airport in FABULAND. He is a fearless pilot, always ready to try out new daredevil flying stunts. Lionel Lion is the mayor of FABULAND. He feels very important as he drives around in his big shiny car”.

“FABULAND is a little to the right when you come from the south or a little to the left when you come from the north – wherever you live, it’s not far from your home. Edward and his friends live there”.


Stories You Can Build – Every Day is a New Story

LEGO FABULAND was the perfect theme for children who loved to role play. The colorful, charming buildings and vehicles were built from large pieces for fast building and the houses had rooms large enough to play with figures inside.

During the 10 years the FABULAND houses changed; the roof on the early models were made of 2 x 4 bricks but this changed in 1982 were the roofs changed into larger LEGO elements. Also the walls changed; from 1979 till 1982 the walls on the houses were large “boxes”. In the following year this changed to smaller elements. The changes are obvious in the sets 350 from 1979 and set no. 3678 from 1982, both sets being Mayor Lionel Lion’s house. The LEGO designers had a “rule” saying that children age 3 were not able to handle 1/3 elements very well and as a consequence the age marking changed from 3 to 4 in 1986.

In total, 99 LEGO FABULAND sets were released to retail from 1979 till 1989. In addition, key rings, booklets, clothes, other accessories and promotion sets with figures from the universe were produced.

LEGO FABULAND was discontinued in 1989 after 10 years on the market and many of the children (now adults) who grew up with Lionel Lion, Edward Elephant, Lucy Lamb and

Catherine Cat remember the models, books and films with joy as do the many fans and collectors of LEGO FABULAND. 



A few small viewers watch a scene from Edward and Friends.



A collection of the many FABULAND characters.



Some FABULAND sets on display at the LEGO Idea House.

10 Years of FABULAND

Here's a chronological listing of FABULAND sets by year of release. Photos are courtesy of the LEGO Group. Other information is culled from www.LUGNET.com and www.brickset.com

1979



324 Ricky Raccoon



325 Percy Pig's Wheelbarrow



121/328 Moe the Mouse and Roadster



329 Bernard Bear and Pickup Truck



128/338 Taxi Station



132/341 Cottage



134/344 Service Station



137/347 Hospital



140/350 Town Hall

1980



3602 Bianca Lamb and Stroller



3602 Bianca Lamb



3634 Charlie Crow's Carry-All



3665 Ice Cream Shoppe

1981



3601 Edward Elephant



3603 Boris Bulldog and Mailbox



3628 Perry Panda & Chester Chimp



3629 Barney Bear



3635 Bonnie Bunny's Camper

1982



3666 Service Station



3667 Bakery Shoppe



3669 Fire and Police Station



3672 Hotel-Restaurant



3678 Mayor's House



3695 Unknown



3701 Cornelius Cat



3703 Peter Pig



3704 Marjorie Mouse

1983



3709 Henry Horse



3710 Peter Panda



3787 Hannah Hippopotamus



3788 Paulette Poodle



3706 Elmer Elephant



3707 Clover Cow



3708 Rufus Rabbit



3781 Maximilian Mouse



3782 Patrick Parrot



3784 Hugo Hog



3786 Buzzy Bulldog



3654 Country Cottage



3626 Roger Raccoon

1984



3639 Inspector Dogge and Kalfe Crocodile



3664 Police Station



3670 Service Station



3711 Pierre Pig and His Tuba



3712 Robby Rabbit and his Accordion



3713 Gabriel the Monkey and His Drum Set



3789 Inspector Dog with Police Motorcycle



3791 William Walrus with 3-wheeled cart



3671 Airport

1985



3624 Flower Car



3625 Airplane



3631 Orchestra



3714 Brickyard with Oscar Orangutan



3715 Flower Stand



3716 Small Office



3717 Mouse Fishing at Dock



3673 Steamboat



3681 Amusement Park



3641 Camper



3642 Fire Engine



3643 Police Van



3660 Fisherman's Cottage



3792 Bedroom



3793 Buzzy Bulldog with Mailbox, Telephone



3694 Police Motorcycle



3695 Kitchen

1986



3718 Small Café



3796 Small Bakery



3633 Motor Boat



3644 Mayor's Car



3668 Merry-Go-Round



3679 Mill with Shop

1987



3675 General Store



3675 General Store



3719 Bus Stop



3797 Fire Chief



3636 Lucy Lamb's Bedroom



3645 Classroom



3659 Play Ground



3662 Double Decker Bus



3674 Bonnie Bunny's New House



1516 Theatre

1988



3798 Hannah Hippopotamus' Picnic



3622 Lionel Lion and Hannah Hippopotamus



3680 Camping Caravan



3683 Amusement Park



3721 Clive Crocodile



3623 Beauty Salon with Catharine Cat and Paulette Poodle



3646 Catherine Cat's Kitchen



3647 School Room



3663 Merry Go Round



3676 Fun Park

1989



3647 School Room



3663 Merry Go Round



3676 Fun Park



From the Designer's Desk

Here's an exclusive look at past ideas and present models on desks in Billund!

Article by Mark Stafford

Photos courtesy of the LEGO Group and Mark Stafford

Theme Name: Europa 1700

Archives file date: 1994

Description: Europe in the 18th Century, featuring cannon-forts, towns, bridges and transportation. Possibility of including Witches, Bridge Trolls and also it is the time of Dracula. Alternatively the theme could include historically correct soldiers of the Scotch, Russian, Dutch armies etc. with ships, hot-air balloons and the like. This is also the colonial era...

Cancellation reason: Unknown, presumed to be too close to the castle and pirate themes at the time?



From the desk of William Thorogood, Design Manager, a micro-mecha inspired by the BrickFA models in the Brickshelf.com folder of Count Blockula.



From the desk of Luis Castenada, Designer, a mini-fig scale family shrine of Samurai Armor. (Using a red colored test version of the helmet from around 1997.)


Wow, done!

One thing that I have missed here are the goofy pics that used to be on this page. There was a dry spell, most likely because I was busy taking pictures of models or something like that.

As a community, LEGO builders are a serious lot - they want to be taken seriously as artists and craftsmen (or women). So if you look at a train layout, you'll see a stunning attention to detail. The same thing goes for a spaceship model or moonbase layout. Things are built as if they are *real*.

But if you look closer, you'll find little things that are pretty funny. At the next event you go to, take a close look at the models and the minifigs - something incredibly goofy may be hiding. And that's the way the community is. Very serious to the outside, but deep inside...well, the pictures tell the story.

See ya next issue, where we focus on a favorite theme of mine and a returning one for the LEGO Group: Disney!

See ya soon! 

Joe



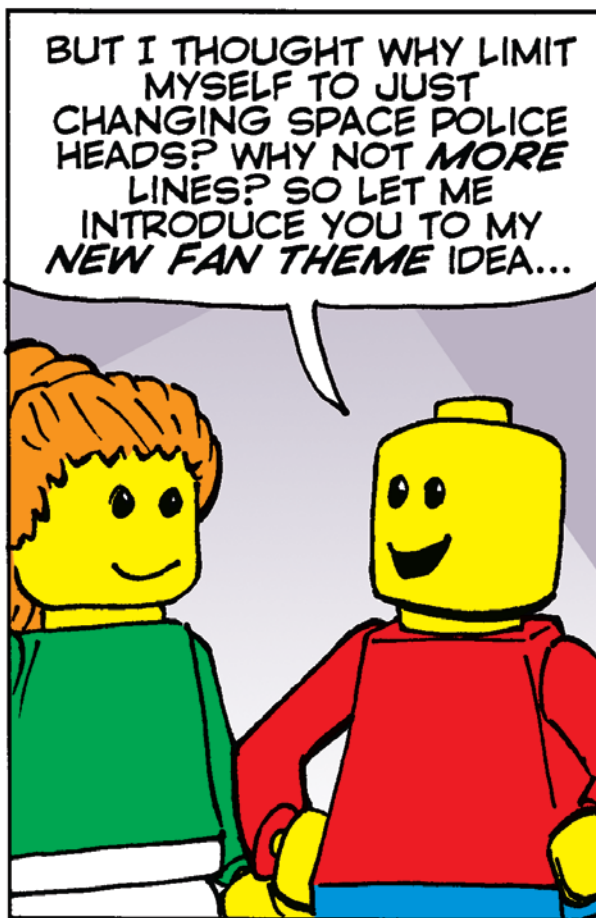
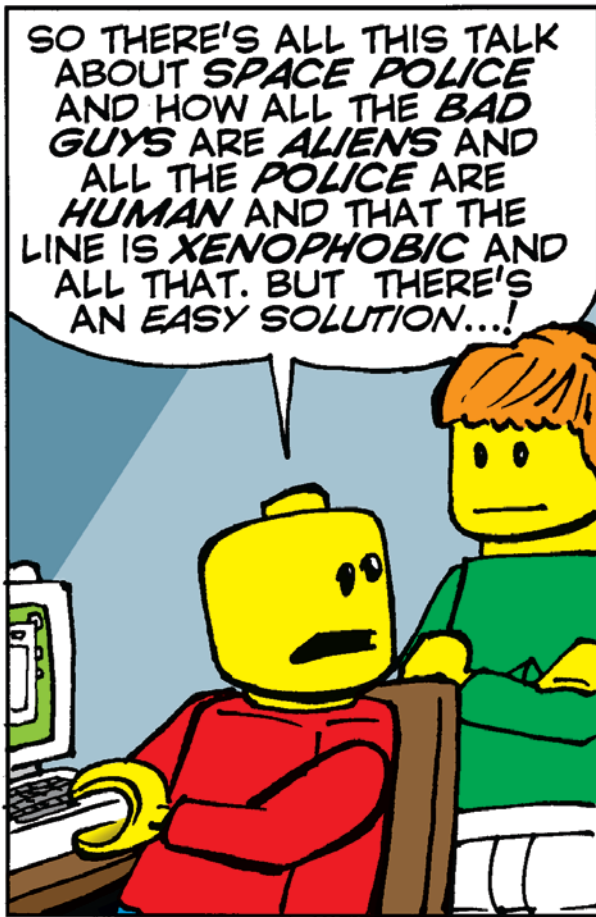
Last Word



KAMINOAN'S www.fineclonier.com
FINE CLONIER DECALS

Kaminoan's Fine Clonier. For all your minifig decal customization needs.

The advertisement features a dark blue background with a futuristic, industrial setting. Five LEGO minifigs are displayed in a row: a red and white character, a purple character, a tan character holding a glowing pink lightsaber, a red and white character on a motorcycle, and a grey character. The text 'KAMINOAN'S' is in a bold, blue font, and 'FINE CLONIER DECALS' is in a large, white, serif font. The website URL 'www.fineclonier.com' is in the top right corner. At the bottom, the tagline 'Kaminoan's Fine Clonier. For all your minifig decal customization needs.' is written in a white, italicized font.



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NOT YOUR TYPICAL BRICKS

If you have seen THE engraved Brick Badges at BrickFest™ and other LEGO conventions, you have seen the work of Tommy Armstrong, the Brick Engraver. He can engrave names and line art directly to a brick, making it a unique item for things like keychains, badges, awards, and models.



If you're interested in seeing the wide assortment of brick engravings and finishes and now PRINTING that Tommy offers, you can go to www.brickengraver.com and browse through his catalog. You can see his work at events worldwide.

You'll see that his work is not typical.

And neither are his bricks.



A plea from the publisher of this fine digital periodical:

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