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Brick Journal

Issue 1, Volume 2 • Spring 2008

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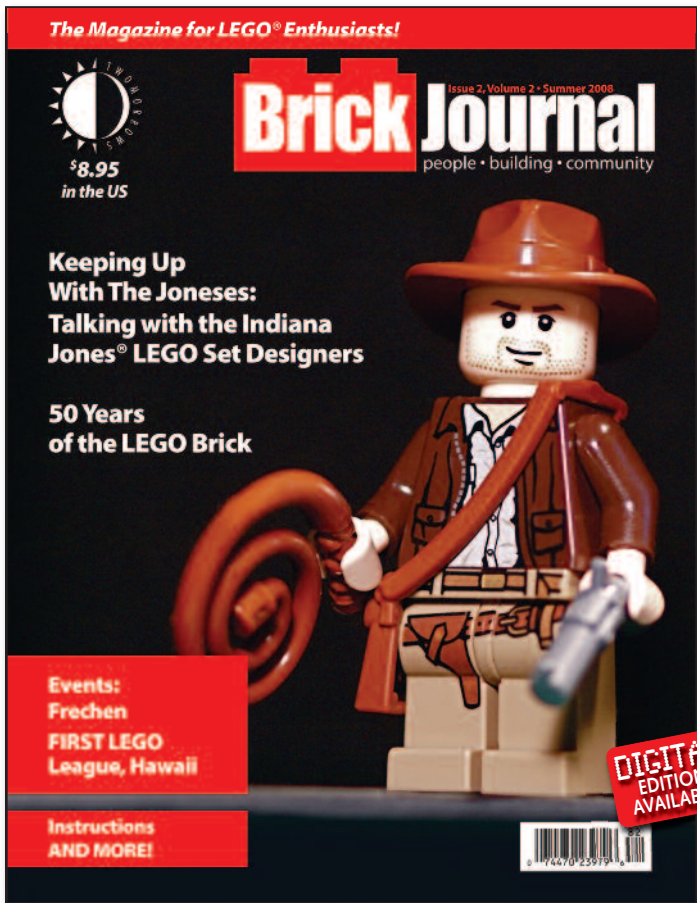


Brick Journal

people • building • community



NEXT ISSUE IN JUNE:



BRICKJOURNAL #2 (VOL. 2)

Our second FULL-COLOR print issue celebrates the summer by spotlighting blockbuster summer movies, LEGO style! The LEGO Group will be releasing new sets for **BATMAN** and **INDIANA JONES**, and BrickJournal looks behind the scenes at their creation! There's also articles on events in the US and Europe, and spotlights on new models, including an **SR-71 SPYPLANE** and a **LEGO CONSTRUCTED CITY**. For builders, there are **INSTRUCTIONS & MINIFIGURE CUSTOMIZATIONS**. Plus, there's a feature on the **ONLINE LEGO FACTORY**, showing how an online model becomes a custom set, and a look at how the LEGO Group monitors its quality!

(80-page magazine) \$11 US POSTPAID (\$14 Canada, \$20 Elsewhere)
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COMING IN MAY:



BRICKJOURNAL COMPENDIUM 1

VOLUME 1 features interviews with LEGO car builder **ZACHARY SWEIGART** (showing his version of the time-traveling Delorean from the movie *Back to the Future*), **JØRGEN VIG KNUDSTORP** (CEO of LEGO Systems, Inc.), Mecha builders **BRYCE McLONE** and **JEFF RANJO**, paraplegic LEGO builder **SCOTT WARFIELD**, **BOB CARNEY** (LEGO castle builder extraordinaire) and **RALPH SAVELSBURG** (LEGO plane builder), **REVEREND BRENDAN POWELL SMITH** (author of the LEGO version of the Bible), NASA Astronaut Trainer **KIETH JOHNSON**, **JAKE McKEE** (Global Community Director for The LEGO Group), builder **JASON ALLEMANN** on recreating the spacecraft from 2001: A Space Odyssey and 2010: The Year We Make Contact, features on the **BIONICLE** universe, how to make your own custom bricks, plus instructions and techniques, and more! Reprints Digital Editions #1-3 (below).

(256-page FULL-COLOR trade paperback) \$44 US POSTPAID (\$51 Canada, \$61 Elsewhere)
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The first nine issues shown below comprise Volume One, and were released from 2005-2007 as Digital Editions only, averaging more than 100,000 downloads each. They're available for downloading now for **\$3.95 EACH**, and issue #9 is **FREE!**

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About the Cover:

A closeup of the Omicron Weekend!

Photo provided by Michael Rutherford.



From the Editor:

Hi!


Welcome to the first printed issue of *BrickJournal*! For those who are reading the magazine for the first time, let me give you the quick tour of the mag.

BrickJournal is a magazine about the many aspects of the LEGO building hobby. While it may appear that there are only models to be shown (and there are), there're other things to be spotlighted, such as:

- **People** — The LEGO hobby is, first and foremost, made up of men and women. From the LEGO Certified Professionals who make large commissions to the people who make small microscale models, we interview and present the best builders worldwide.
- **Building** — We also look at how people build their models. There are techniques and styles for different themes and scales, and we examine and demonstrate these. We also have models and instructions in each issue so you can build and see firsthand how model construction is done. We also look into minifig customization, where parts and decals are created for truly unique figures.
- **Community** — *BrickJournal* regularly covers LEGO fan events. Builders meet in Europe and the US and we report many of those meetings, from the initial meeting of a European LEGO Users Group to a convention that has hundreds of attendees and the LEGO Group!

For the past two years, *BrickJournal* has been online as a download. Through nine issues, we have covered much of the community and the LEGO Group, including looking behind the creation of new sets. But this is only scratching the surface, as there are always more things to discover.

So what is *BrickJournal*?

It's a record of the LEGO hobby and fan community and a presentation to you, the reader, of the hobby and community. Most importantly, though, this is an invitation for you to meet and discover LEGO building — it's a big community, come on in! 

Joe Meno
Editor

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.

PPS. 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!

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**LEGO Sets:
Coming Soon**

Join the Battle!

The countdown has begun to launch the next LEGO Factory Exclusives — the Star Justice and Space Skull sets! Launching April 16, 2008, these sets take the battle between good and evil to the high frontier! Both sets will be available at www.LEGOfactory.com for 99.99 USD/EUR. These sets are for ages 10 and up, and have different features:

Space Skulls (#10192)

(designed by Mark Sandlin, a LEGO Fan from Georgia, US)

Features

- The models have transparent red eyes and terrifying teeth.
- Skullmecha has 12 mobile arms.
- Skullbot features freem blaster and grasping claw.
- Skullmecha features heavy freem cannons and missiles.
- Skullmecha is the chosen vehicle of the Space Skull Commander.
- This set contains 4 models and 4 minifigures
- Printed Instructions are included for all 4 models

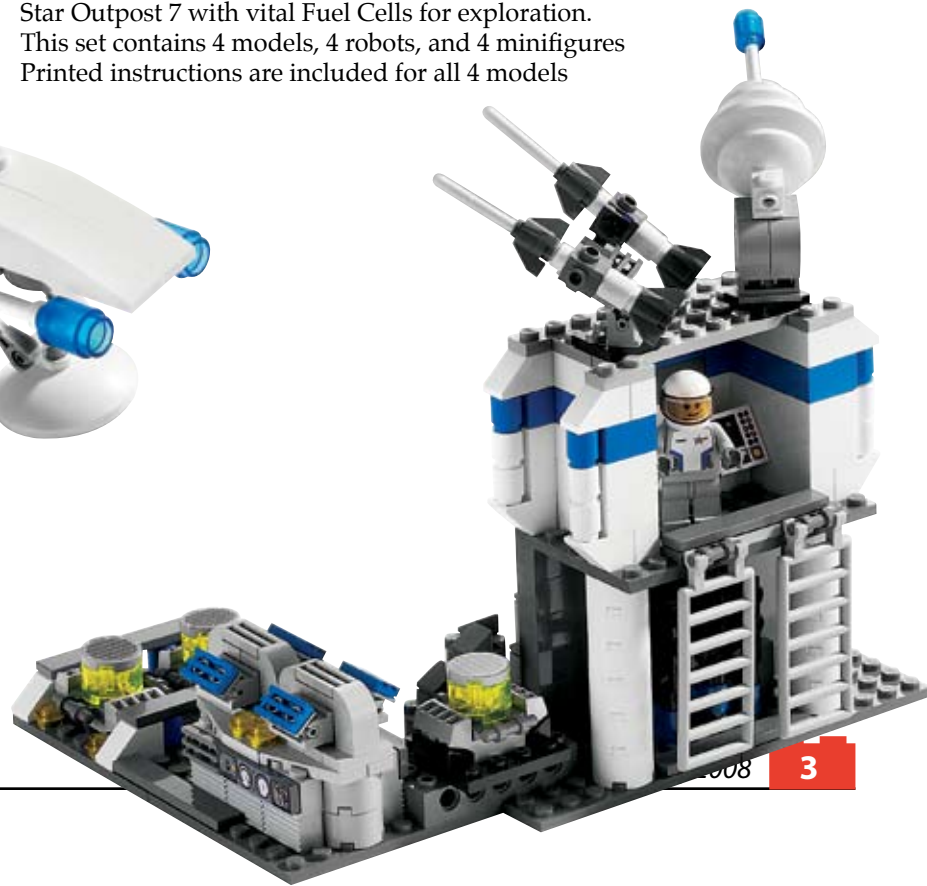
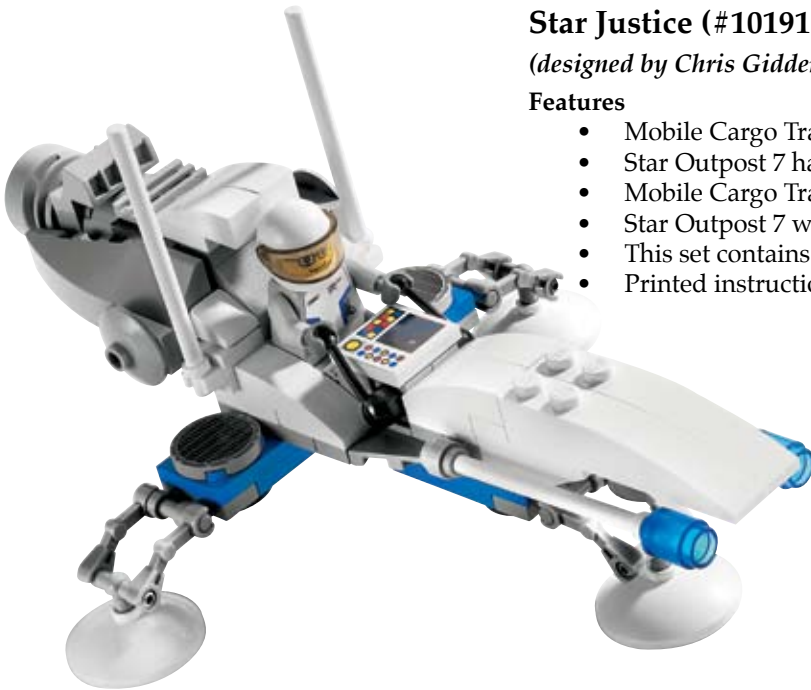


Star Justice (#10191)

(designed by Chris Giddens, a LEGO Fan from Georgia, US)

Features

- Mobile Cargo Transport has eight wheels with suspension.
- Star Outpost 7 has storage and reloading place for the energy units.
- Mobile Cargo Transport carries equipment over any terrain.
- Star Outpost 7 with vital Fuel Cells for exploration.
- This set contains 4 models, 4 robots, and 4 minifigures
- Printed instructions are included for all 4 models



**The Battle Begins
April 16, 2008 at
[www.LEGOfactory.com!](http://www.LEGOfactory.com)**

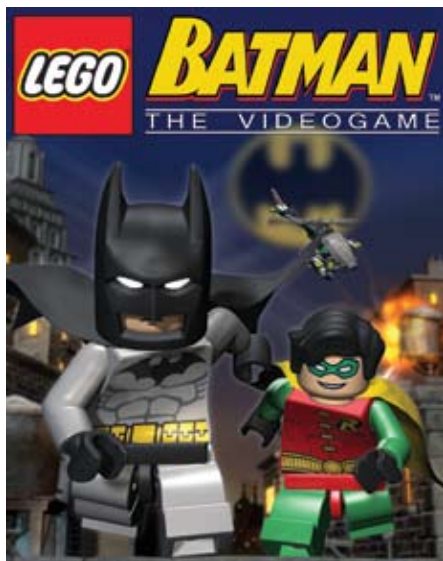


To the Bat-Game!

BrickJournal spoke with Richard Earl from TT Games. Richard has been kind enough to give us a little information about some upcoming games based on their already famous LEGO gaming engine used for the creation of *LEGO Star Wars, The Complete Saga*.

Article by Geoff Gray

Screen Pics provided courtesy of TT Games



Hello, Richard. Please tell us about yourself and the part you play in the creation of these stellar LEGO games.

Richard Earl: Hi *BrickJournal*! I look after the marketing side of things here at TT Games, which means quite a varied role at the company. I'd love to take credit for the success of the games, but that has been down to the stellar development team that has worked on all three *LEGO Star Wars* games.

LEGO Star Wars was an instant hit, and that was followed by *LEGO Star Wars II, the Original Trilogy*, which added some really cool features to the game engine, and allowed people to now experience the rest of the *Star Wars* universe in LEGO fashion. This was followed by *LEGO Star Wars, The Complete Saga*, which added Xbox Live Network Play as well as a few other features. Now TT Games has announced that two more titles are coming out; One based on the *Indiana Jones* series (due out Summer of 2008), and the other based on Batman (due out Fall of 2008). Can you tell us a little about the gameplay and features of these two games? Can we expect all of the mayhem, funny cut scenes, puzzles, extras and interaction?

RE: We're really excited about both these new titles which offer us a very exciting opportunity to try something away from the *Star Wars* universe. Unfortunately, as it's still early days I can't reveal too much about the games, but suffice to say you will see a lot more information for both coming out in the coming months. What I can say is that *LEGO Indy* will be available in Summer '08 and *LEGO Batman* will be out in the Fall '08. Both titles are being worked on by the *LEGO Star Wars* team so you can guarantee they will retain the same fun and charm from the *LEGO Star Wars* series. What will be interesting are the differences you will see in both titles, as they are very different characters. Batman is a crime fighting detective and Indy a great explorer. How this comes out in the gameplay will be what keeps fans of *LEGO Star Wars* interested as well as attracting some gamers who maybe haven't tried *LEGO Star Wars*.

Will the new games be available on all of the same platforms as *LEGO Star Wars: The Complete Saga*?

RE: Both games will be available on pretty much every single platform there is: PS2, PS3, PSP, PC, XB360, Wii and the DS!


Given the Indiana Jones tie-in to Lucas Arts (and the work that Traveller's Tale has done with Lucas Arts), it is easy to see how the Indiana Jones game would be a logical release for you, but who inspired you to produce the Batman series, and what groups are you working with to produce the game?

RE: Originally it seemed a natural progression as Batman is a very cool character and LEGO were also making the play materials. Now that TT has been bought by Warner Entertainment it means that the whole weight of the brand owners and the game publisher and developer are combined behind *LEGO Batman*. Which makes for a very exciting prospect!

Can you tell us which movies are covered in the two different games?

RE: I can't reveal too much yet, but I will say that there is some great, family friendly material there for us to work with for both titles.

What last tidbits can you leave us with?

RE: Thanks for the opportunity to tell you a bit more about *LEGO Batman* and *LEGO Indy*. I think TT Games have a very interesting 2008 ahead as we move away from the *LEGO Star Wars* universe that has been so successful for all involved. I look forward to telling you even more about the games in the coming months 



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The LEGO Group: Town Plan 10184



Revisiting the Town Plan

2008 will be an anniversary year for many LEGO products, and to begin the celebration, a set from fifty years ago was updated. BrickJournal talks to the designers and staff behind the new/old set!

Interview by Joe Meno, with answers from Eva Hendriksen and help from Martin Lassen, Steen Sig Andersen and Jamie Berard

The Town Plan set is a commemorative set — why was it selected?

We wanted to celebrate the 50th anniversary of the original LEGO® brick patent.

For inspiration, the project team went to the LEGO Idea House to look at the old LEGO sets from 1958, the year of the patent. Back then we had a lot of sets with town plans so we knew we were going to make a set based on that.

Kjeld Kirk Kristiansen, the grandson of the creator of the LEGO Group and current owner, is on the box art of this set and its predecessor — what part was he involved with in the production of this set?

We told Kjeld about the idea and he got very excited about it. Kjeld met with the project team. He shared his very clear memories of the old Town Plan with the team. He gave input to the model design and compared it to the original sets. He remembered very well when the picture for the old box design was taken in the living room of his home and we were happy that he also liked the idea of being on the new box design.

Kjeld also contributed significantly by writing an intro letter telling about the development of the LEGO brick. The letter is included in the set.

Who designed the set — there are cars and buildings, so were the building divided among the designers — and how so?

Unlike most LEGO Direct models, Town Plan was actually worked on by a team of designers. Five designers got to work on specific parts of the Town Plan. Steen Sig Andersen acted as design lead and therefore was responsible for the buildability of all the models. He exclusively designed the town hall and wedding scene as well as the fountain with gold bricks. Jamie Berard designed the cinema and gas station. Jørn Thomsen designed the interior and exterior details of the gas station as well as the vehicles and gas pumps. The posters in the cinema and all the stickers were created by our graphics designer Kjeld Sørensen. And Simon Kent also contributed to the project by creating the initial cinema graphics for the sketch model.

The set looks like the old version, but with updated parts — how was the design approached — the old set was an inspiration, but was there a consensus to stay close to the old set's style?

Our Marketing Manager, Martin Lassen, was the one with the idea for the Town Plan. He envisioned a minifigure version of the original Town Plan but with much more detailing and retro charm. The design team visited the LEGO vault to gain inspiration for the new version. After speaking with Kjeld Kirk Kristiansen, it was decided that the gas station would be an essential focal point of the set. It was not only Kjeld's favorite building, but was also an important part of most earlier versions of the Town Plan.

What were some of the building challenges?

One of the biggest challenges was to create a new Town Plan that Kjeld would be proud of. Since he was willing to put himself on the box for the first time since he was a child, it was critically important that every aspect of the Town Plan exceeded his expectations.

Another challenge was trying to create a set with three buildings, two vehicles and 8 minifigures for the same price as one modular building. This helps explain why the buildings are open—back and why there are no road plates.

Also, having so many designers contributing to one set created an additional challenge for Steen. He had to make sure that each model maintained one design style and scale so that all the individual components worked together.

Are there any models that you are especially happy with? (I love the theatre interior, as I used to work in one of those.)

Like a proud parent, each of the designers, of course, is rather partial to his own design. But there are a few mentionables. Steen had to create a town hall that had universal appeal, yet still fit into the clean 1950s styling of the other two buildings. He's particularly proud of the wedding scenario as well because it is the first time minifigs got to marry in an official LEGO release.

Jamie had fun creating a very different style cinema. He also enjoyed making the gas station open in a similar fashion to the old 6391 Cargo Center from the mid '80s. Jørn was very happy to work in the minifig world again after being focused on MINDSTORMS for so long. He is very happy with the 4-wide car, but especially likes the red fuel truck. And finally Kjeld, the graphics designer, really enjoyed working on the cinema posters. It allowed him a rare opportunity to do more sketching rather than more traditional LEGO stickers.

Who came up with the movies in the theater?

The movie posters were the joint effort of Martin, our marketing manager, and Kjeld, the graphics designer. Kjeld drew each of them by hand. Only the spider was loosely based on the original designs created by Simon Kent.

How was the design managed: What was the process of how this set was produced?

We first started with a tour of the Idea House and LEGO vault. Martin then gave the team a brief on what the set should look

continued on page 9





To Build a Town Hall

The Blue building at the left is the very first version of the Town Hall that Jamie created. It has an open back and limited detailing. The design is more in line with the expression of the other buildings, yet doesn't quite hit the mark on colors and details and uses some building techniques in the columns and door frame that may be too tricky for the targeted age group.

The Tan building below is the very first version of the Town Hall that Steen created. It has a solid back and lots of detailing. We decided to open up the back and lower the level of detailing in order to bring the building more in line with the expression of the other two buildings.



The final Dark Green version (below) of the building offers lots of interesting details in valuable colors while still maintaining a style that works well with the other buildings.

—Jamie Berard, LEGO Set Designer



continued from page 7


like and how much it should cost. Jamie then built the first sketch models of the three buildings and presented them back to the team. From there, Steen Sig took over and worked with Jørn on the changes and additions to the physical models, while Martin and Kjeld, from the graphics lab, worked on the movie posters and other stickers. We then invited Kjeld Kirk Kristiansen in to see the near-finished model and get his approval for the project.

Unlike some other large scale building sets, such as the Café Corner and the Market Street, this is more of a play set, with interiors and vehicles — did this make the set harder to design or easier?

In some ways the Town Plan was easier to create than a modular building, while in other respects it proved to be quite difficult. On the easy side, the expression of the anniversary set is more simple than the modular buildings. The building techniques used are a bit less advanced in order to lower the age marking to 12+. Also, the models were made easier by removing back walls and avoiding brick-heavy modularity.

However, the set became much more difficult with respect to the need of creating a large value perception for a reasonable price. Coordinating so many designers who wanted to contribute to this important set also created challenges. Additionally, just the inclusion of stickers added another level of complexity. Close dialogue with Kjeld in the graphics lab had to be maintained the whole time while the models were being developed.

Any more commemoratives coming out?

Since it is an anniversary year, you should definitely keep your eyes open for updates and announcements on www.LEGO.com! 

You can see the Town Plan at:

<http://shop.lego.com/ByCategory/Product.aspx?p=10184&cn=233&d=263>



People:
Nathan Sawaya

Talking to the Brick Artist

Nathan Sawaya is not only an AFOL but also a LEGO Certified Professional (LCP). In his interview he talks about his past as a former lawyer, his first LEGO set, the New Orleans project and his current touring exhibit. So, what does an LCP actually do? Read on to find out...



Why LEGO?

Playing with LEGO growing up let me build anything I wanted to build. It let my imagination control the playtime. If I wanted to be a rock star that day, I could build myself a guitar. If I wanted to be an astronaut, I could build myself a rocket. It was the perfect tool to lead me into my current life as an artist, where I get to create whatever I want.

With some other toys, if you lost a piece, then the whole toy couldn't be played with, but not with LEGO bricks. If you lost one LEGO brick, you just had to be creative and find some other way to build it.

Now as an artist, I see no limits to my creativity using LEGO.

How would you describe yourself?

Um, 6'2", 170 pounds. Nice guy.

When did you get your first LEGO set?

It was Christmas 1978 when I received my first box of LEGO bricks from my grandparents. I remember ripping into the package and building a LEGO house right then, oblivious to the rest of Christmas morning. It seems like I have been creating with LEGO ever since that day. Of course, these days my LEGO creations are a little bigger than a toy house.

When did you first start building with LEGO and what do you recall from this age/era?

I started building when I was five years old. Fortunately, my parents were very accommodating and let me have a 36-square foot LEGO city in our living room. I would spend a lot of time building and rebuilding this city. LEGO allowed me to go on my own adventures within this city.

Previously working as a lawyer, do you get more enjoyment and satisfaction out of your job now than back then?

The worst day as an artist is still better than the best day as a lawyer.

Would you ever return to being a lawyer?

I worked with some great people when I was a lawyer, and I really miss working with some of them, but I don't know if returning to the law is in my future. I kinda like playing with LEGO all day.

A few years ago you worked at LEGOLAND California. How long did you work there, what was your position and what did you gain from it?

I worked as a Master Model Builder for about seven months. I learned a lot about the process of building large scale projects and the engineering behind them. It was a fantastic experience, but in the end I really missed New York City. I realized that I also wanted to have the freedom to pick and choose my art projects.

*By Melody Krützfeldt
Photography provided
by Nathan Sawaya*

How and when did you become a LEGO Certified Professional (LCP)?

LEGO invited me to be an LCP a few years ago. The program had been in existence for several months, but we were still trying to define our place in the LEGO community when I joined. For the first year, we spent a lot of time developing our purpose. I think we are still finding our place in the community.

Do you also work with other LCPs? Or have you met any of the other LCPs?

We have all worked together in defining the mission statement and guidelines of the LCP program. I have met in person all but one of the LCPs, and will hopefully meet him at our annual meeting next year. As for actual LEGO building, I have had the opportunity to work with two of the LCPs in an amazing project we did at FAO Schwarz in New York.

Is there any competitiveness between you and the other LCPs?

I think there is a mutual respect for everyone's separate work within the LCP program. By focusing on different areas in the LEGO marketplace, we try to avoid the competitive conflict that would have the potential to unravel the program.

Where in the world has being an LCP taken you?

As an LCP I have gotten to work on some amazing projects. Recently I was on the LEGO team that put together a map of the U.S. in Washington D.C. with the help of 10,000 other people. The map was over 60 feet long, and as far as I know is the largest LEGO mosaic ever put together.

What media related things have you been involved with?

I have had the opportunity to be on a variety of television programs, such as *Late Night with David Letterman* and *The Colbert Report*. It is always fun to do something different like television, but also quite challenging.

What was the best event you went to that you enjoyed the most?

One of the best events I was a part of was the opportunity to work on ABC's *Extreme Makeover: Home Edition*. It was a unique chance to help design a room for a special little boy who was a big LEGO fan. He was also a big sports fan, so I had fun building a lot of sports equipment out of LEGO, including a life-size sculpture of the boy playing basketball. I also built an entire bed to look like a football field, all out of LEGO!

Tell us more about:

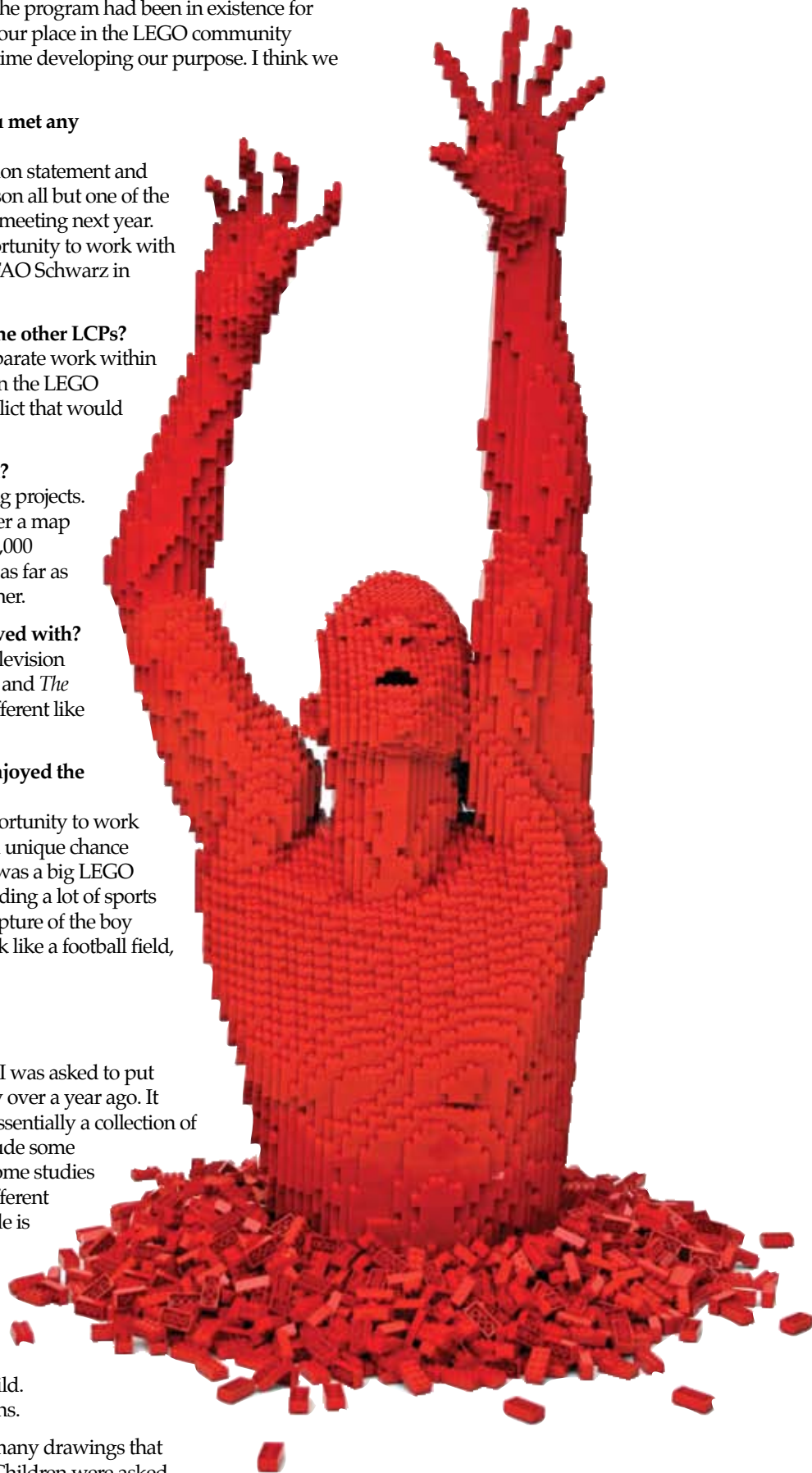
Your recent "touring" exhibition...

My touring exhibit has been a surreal experience. I was asked to put together a collection of works for a museum show over a year ago. It debuted at the Lancaster Museum of Art, and is essentially a collection of my work over the past few years. The works include some whimsical pieces, some avant guard pieces and some studies of the human form. The exhibit is now touring different museums for the next few years. The tour schedule is posted on my website at www.brickartist.com.

The New Orleans Project...

After the Katrina devastation, I was commissioned to build a permanent installation for the New Orleans Public Library. It contained over 120,000 bricks and took over six weeks to build. The sculpture celebrates the rebirth of New Orleans.

I drew my inspiration for the sculpture from the many drawings that children from across the country had submitted. Children were asked





to draw and write about what they felt was important for the rebuilding of New Orleans. Through the thousands of pictures, I definitely noticed that no matter where they were from, all kids had very similar ideas about what was important for a city. It would need a fire station, a hospital, schools and a park. They were drawn in different styles and a plethora of colors, but I saw these themes repeated again and again. Other common themes included hotels, houses and libraries. In the end, I used these drawings as inspiration to create the sculpture.

I really wanted to capture the look of the drawings by making the buildings brightly colored, slightly crooked or slanted in places, and the windows not always lining up.

The final sculpture is permanently on display in the Main Branch of the New Orleans Public Library.

When you build “live” at an event how do you plan for this or do you just build as you go along? Do you use anything to help you build the project or does it just come naturally?

When building at a live event, the toughest part is estimating how much brick you should bring. I would hate to run out of brick at an event, but I also want to avoid bringing unnecessary materials. The key is envisioning what the final project will look like. From there I work backwards trying to figure out the amount of bricks, what sizes, colors, etc.

How do you go about designing your models? Is there a special technique or something that you use to design to get a feel and understanding of how your models will look?

Last week I built a large replica of the Resurgens Plaza in Atlanta. The design process involved a lot of trial and error, and graph paper. Using just the few photos of the building I could find online, I guesstimated the proportions of the building. I then tried a bunch of different designs for the windows. Once the window design is defined, I pretty much knew what size the building would have to be. I tried building a few different designs to get the right proportions, but once I felt confident, I then just started building upwards.

Do you ever have sore hands after constant building or are they accustomed to it now?

My hands get sore once in awhile, but for the most part they have been through it all and are doing just fine.

What is your favorite LEGO element?

The 1 x 2 jumper (1 x 2 plate with one stud). Best thing for creating “curves” out of rectangular elements.

Most common bricks you use and why?

I use a lot of traditional rectangular bricks in my works. I think there is a nostalgia factor there. Plus, the traditional rectangular bricks get the best reactions from adults who remember building with the same type of pieces as a child.

When did you get your own studio and how would you describe it?

My studio is probably like a lot of other LEGO rooms in houses all over the world. I have

hundreds of bins on shelves holding lots and lots of bricks. There is a table in the middle where I build things. I estimate that I have about 1.5 million bricks on hand at any one time.

What inspires you the most?

I think there is a nostalgia factor in building with this medium that harkens back to playing with the toy as a child. I especially love seeing people's reactions to my sculptures made from the very same toy they have played with at home. It is inspiring in itself just for me to see the awe on people's faces when they realize that something I have created is entirely out of LEGO bricks.

But inspiration comes from many places and people. I can never point to just one thing and say that has been my inspiration. I have been inspired by people I have met, locations to where I have traveled, and something as simple as a tree. It all depends on my current state of mind. Sometimes I have been inspired by something but it will take years for the idea to develop and come to fruition before I actually start building it. Also, I live in New York City, and when I get stuck on a specific, I will often just take a walk in the city and usually that leads to some sort of inspiration.

Do you ever find yourself building something and taking it apart to rebuild it better or something totally different altogether?

All the time. It is just part of the process. It is pretty rare that I get it right the first time.

Do you ever build something just out-of-the-blue, without using any pre-designs and such?

Yes. In fact my sculpture, "Infinity," is an example of just that. I just started a red line that turned at right angles and I just kept working at it. I spent two weeks building on it until the end of the line met up with the beginning.

Do you build anything for yourself?

I like to take on projects that interest me, so in a sense, I build everything for myself. The sculptures in my museum exhibit are really all a reflection of me. They are all from my body of work over the past few years.

What was the last LEGO set that you have built?

I built a Batman set last week, but I'm looking forward to building the Motorized AT-AT.

What do you do in your spare time?

When I'm not building, I am usually spending time with my friends.


What does your family think about what you do for a living, are they supportive of you?

My family has always been very supportive of my career choices. Since I used to be a lawyer, and now I'm a LEGO artist, at least now they can be proud.

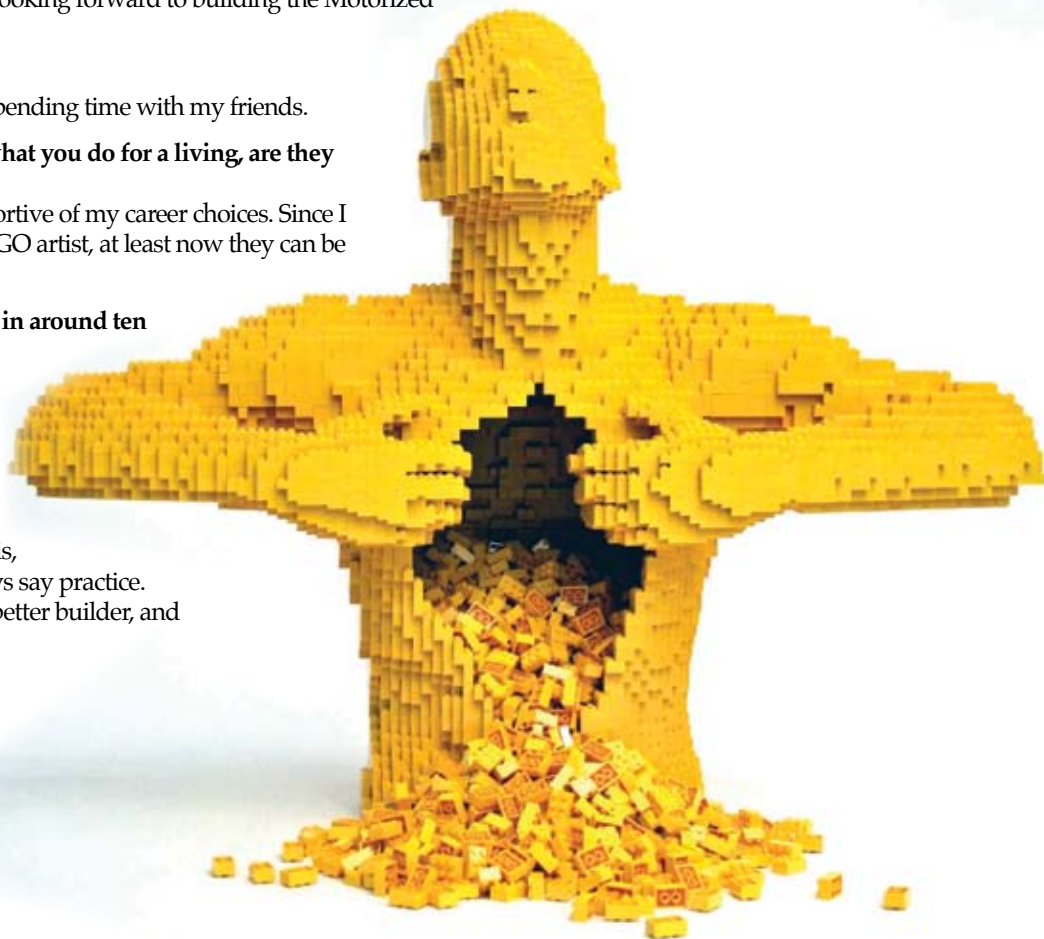
What do you think you will be doing in around ten years from now?

I have some ideas, but they're a surprise. ;)

What advice do you have for anyone who wants to also become an LCP?

The question I am most asked by kids is, "How can I get your job?" And I always say practice. Just keep building. It will make you a better builder, and hey, it's fun. 

You can see more of Nathan's work at www.brickartist.com.



In His Words:
Stephan Sander

Miniland Scale: The Perfect Scale for Building Cars!



Miniland scale, a larger scale than the usual minifig scale, is an uncommon scale to build, but a good scale to build detailed cars. Here, a builder talks about building in this size.

*Article and Photography
by Stephan "x_Speed"
Sander*

During a visit of LEGOLAND Billund, Denmark some time ago, I discussed with a couple of friends about a red sports car which could be seen in the Miniland. The question was which type of car resembles the model. They swore that it was a Ferrari Testarossa, but I was quite certain that they were wrong. Afterwards I found out that the LEGOLAND model which my friends thought was a Ferrari Testarossa was in actual fact a Ferrari 348. Because these two types of Ferrari have several differences, I decided to build a Ferrari Testarossa in Miniland scale and prove my friends wrong. This was the day I found a new passion: building Miniland scaled cars!

For me, the scale of 1:20 is perfect to build cars in. It's possible to include the most iconic details but also doesn't need ages to finish building or need a lot of parts. "Not a lot of parts" means that a model could consist of more than 500 elements. The question is not if a car is buildable, but if it will be recognizable. As an example, the design of some '80s sports cars like the BMW M1, Lotus Esprit, or DeLorean DMC12, came or were basically inspired from the same designer. You can build models of all these cars and it will be possible to recognize each of them. This would be a much harder job using Minifig scale. The other advantage of this scale is the Miniland citizens. Go through the LEGOLAND with open eyes and you'll discover so many nice details. Compared to the standard Minifig it's possible to build various people in many shapes and sizes.

Of course there are some issues building in Miniland scale. The size tends to quickly push up the costs to create any kind of building. In the case of building cars, one possible problem is the wheels. The difference between the available sizes of the wheels are that they are almost too big or too small. But this statement is valid for every other scale, too. Another issue is the windows. Building them in LEGOLAND style, with transparent elements is very expensive. An alternative might be to build just the pillars as is almost always done in bigger models, but I'm not a fan of that technique.

Too many tiles? If the look of the car should be built with studs or studless is a

question of one's own preference and the availability of tiles in the preferred color. Studless cars often look more realistic, and many AFOLs prefer that way to build. But one characteristic of building with LEGO bricks is hidden. This is a question of one's own preferences, too. Sometimes it's very useful to use plates and tiles on the same level to indicate small details of the car body.

For making the design process easier, just print out a photo or diagram of the desired model in the final scale. Place the model on the printout and verify the correct dimensions, position of wheels, etc. This makes the final model fit better to the original and gives you the chance to detect mistakes earlier.

Back in the '60s, Kjeld Kirk Kristiansen also built lots of different cars when he got hold of the first LEGO wheels. His first creations were between 6 and 8 studs wide. With the release of bigger wheels, his creations got bigger, too.

One of his creations is actually shown in the LEGO Idea house in Billund. It's a red racing car which was basically inspired by the British manufacturer Lola. I liked the design when I saw the creation for the first time. And so it dawned on me to make a redesign of this car. My version should look more modern, but the shape and idea had to be kept. So the result is nearly studless and the surface looks smoother. The outer dimensions are slightly shrunk so that it fits to my other creations.

The LEGOLAND cars are not as easy to build as they look, but rather more complex. One of my all-time favorites is the rusty and odd looking Chevrolet Impala driven by the Olsen-Banden (Danish movie). Even with lots of photos from different views it was complicated to reproduce this very tricky model. But finally I was able to make my own 98% copy of this awesome car and the figures of Egon, Benny and Kjeld (the Olsen-Banden). There is a rule for the LEGOLAND model Designers: "When they build a model, then they have to be able to build it without glue. Afterwards they have to be able to turn it all round without any parts falling off. The glue is only to prevent it from falling apart over time in the park. And so they can handle it for production." Fortunately, this rule doesn't exist for fan-built models.






The model I've spent the longest time building is the DeLorean (DMC12) from the movie *Back to the Future*. Since the day I saw the movie, I've been a fan of the DMC12 and I still remember how difficult it was to get any information about this car back in the '80s. To reflect the original's stainless steel surface, the model is built in pearl light grey. Fortunately the most important element is available in this color: jumper plates, or how we Germans call them: AZMEPs (short cut for "Aus Zwei Mach Eins Platte" which means something like "plate which turns two studs into one"). The wing doors are very iconic for this car and so they must be openable on my LEGO version. And of course the most important part of the machine which makes time travelling possible is included too: the Flux-Capacitor!



Next to the *Back to the Future* time machine I've built a normal street version of the DeLorean. Fortunately I've gotten the chance to visit the annual meeting of the German DeLorean owners. It was very nice to compare my model with the real life car. Sadly because of the lack of available elements in pearl light grey there is no mechanism for the wing doors. They are openable but they will fall apart, so this car would definitely not stand the LEGOLAND test.

Same for my latest creation, a Toyota MR2. The openable doors are fixed with hinges, but the motor cover and the trunk are not. This car is the one that includes the most features. Additional to the opening doors and hoods, it has working flip-eyes! Just push on the steering wheel and they'll open. The MR2 was not as popular as the other cars I've built. But at one stage I owned this car in real life for a short time. Too short. That was the reason for me to build another one without the need to bring it to the dealer's garage once a month.



To make some decent photos of the car it's always a good idea to place it in a nice environment. Build some figures and place them around the car, or just put a racing car on the street. It's much better than capturing the car and one's own socks on the home carpet. Recently I've built many different cars, but there is still one big problem: whenever I finished one car, two new cars were added on my virtual to-do list. 

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People: Female Fans of LEGO

The AFFOL (Adult Female Fan of LEGO)

Over the past few issues I have searched the world for female fans of LEGO. Many of them have shared with me their views on products for girls as well as what they would like to see in the future. Of course, they've also shown me the amazing models they build and in turn I've shared those with *BrickJournal* readers. It is interesting to read through their answers to my questions and to find many of them fall in certain age ranges, and the fact that few of them want to build with the stereotypically female colors like pink.

While this is a mostly male dominated hobby (boys and men), it is also exciting to see the girls and women being able to build so well and as time goes on, maybe there is hope for more of us girls, yet! Girls throughout the world are encouraged to build and use the LEGO product, and as you can see, age is no barrier. You do not need to be an artist, designer, sculptor or anything else, just be yourself, have fun, and build with your imagination! There is plenty of inspiration out there and loads of fantastic parts and colors with which to build and create some of your wildest dreams!

So, let's hope for more female minifigs, more females in advertisements (personally I think these things are also lacking) and many other exciting things for both boys and girls in the future!

If you are a female AFOL, have a website, Brickshelf folder or pictures of your MOCs and would like to see your MOCs in *BrickJournal*, please e-mail me at: mel@brickjournal.com 

People:
Female Fans of LEGO

Jennegien



Jennegien Nieuwstraten

Name: Jennegien Nieuwstraten

Age: 50

Country: Netherlands

Your hobbies: Everything to do with ancient history, nature, earth technology, animal habitats, space, universe, etc. Mythology / religion, architecture (ancient and modern), non-western cultures, developments and falls of societies (religious or not) and languages, children and their developments and their new insights into life, technology and computers, reading (science fiction, fantasy fiction, and King Arthur stories), classical music

Website: <http://www.Brickshelf.com/cgi-bin/gallery.cgi?m=jenna>

I was born in 1957 as the third of five children with three sisters and one brother. I went to study Hebrew language and culture but switched to English after several years. I started working during my studies at the university at Leiden for the publishing department (we didn't have PCs back then, but some kind of bulky computer system with floppy disks that could hold 128 kb, lol). When the PC was introduced I switched to the technical support department and took on studying IT. When I was in my thirties I found my true profession—technical writing—and followed some courses on documentation technology.

I love to start from scratch in my work and combine disciplines such as language, techniques and didactics. I designed, wrote and illustrated technical manuals for new technology such as image analysis, object modeling technology, wind mills, public transport computer systems, etc. In my forties I was too ill to work, so I had to stay at home but I was not used to doing nothing. Fortunately I had two young nephews by then with whom I started playing with LEGO. I played with LEGO when I was a young girl, but we had one box to share amongst five children... so there was never enough. I started collecting LEGO in 1996 when my nephew was born. Both he and I loved animals, and fish especially. At first I collected Playmobil animals and fish for him, but it wasn't enough of a challenge. So I bought a few boxes of LEGO and started building for him. Three years later my other nephew was born and LEGO became even more important. My sister, her children and I went to LEGO WORLD in 2002 where we met Megan Rothrock. We were impressed so much by her that I felt challenged to do the same or better (lol), so I started building and exposing my work at LEGO WORLD.

As a child I loved to play outside, in trees, on swings, as long as it was outside. fifty years ago we didn't have as many toys as children have nowadays. But I loved to play with LEGO whenever there were no other siblings around. I also loved to read books, especially about different cultures and such, and I loved to play with my brother's cars. With LEGO I loved to create houses/structures that were somewhat outlandish. I did have one doll though, which I still cherish. As we didn't have that many toys in those days, and I was a girl, nobody gave me any LEGO. In retrospect that is the one toy that I would have wanted to be given on my birthdays :). But what appealed to me then and now is ancient history, mythology, and science of the earth/space, technical science and especially communication and its tools. Foremost nature is what interests me and how people and societies work and achieve ways (read buildings/structures) to live in. Nowadays LEGO is a way of combining most of my hobbies and thoughts into my buildings. We had a box full of non-theme bricks. I wouldn't know of any themes back then.

I think that as a girl in my early days I missed out on the technical education. Then and now LEGO is foremost a boy's play/tool. I really feel I missed out on that part of education. I am an AFOL just because I could :). I had a second chance at LEGO when my nephews were born.

How many hours do you spend building with LEGO?

That depends... whenever LEGO WORLD is coming up, I spend many waking

hours at building LEGO, and from January on I spend many hours demolishing my buildings :).

What are your favorite building themes (both what LEGO produce and what you like to build yourself?)

My favorite LEGO themes are... the Creator and Designer series, *Star Wars* and Mission Mars theme, *Harry Potter*, the Hans Christian Andersen series, Paradisa, Castle themes (but not the large knights), Aquanauts theme, Oriental expedition (conclusion: anything but the City and Racer theme although they contain some very nice bricks).

The first theme I would like is fantasy (dragons, more things like *Lord of the Rings*, sweet elves, so many books from which I could derive ideas). My other major theme is cultures. There are so many beautiful cultures with their building skills and styles on this earth... it is a pity they are not reflected in LEGO themes.

The way I build is from scratch... I like to start out with an idea, put the base of the building down and just work from there based on the bricks I have. This probably explains my eccentric style because often I don't have the bricks of my choice and have to find a "workaround" :).

What do you like most about LEGO and their products?

The versatility of it all, the reusability and the interconnectability between all their products (the fact that every part from any theme can connect to something else). This gives me lots of freedom to experiment. I still have an amount of Znap... I still like it. :). Also I love the educational aspects... the mathematics and spatial orientation skills that children can develop playing with LEGO. And I love the combination of a technical tool with arts and creativity.

Five parts you would love LEGO to produce:

Five only? Oh boy. I do have a lot more ideas on this, but I would have to write them down while building. The things I can think of right now are here (but ask me later when I have talked to my eldest nephew... then we will have a list :)):

- 1) open bricks/ plates and baseplates, i.e. : plates with holes in them, for instance a plate of 6x6 where only the rims with studs remain and the same for other sizes, or a baseplate of 8x16 with a hole for a staircase on one side.
- 2) A combination of two 1x2 slopes into a cornered stone either without or with one stud on the corner.
- 3) bricks/ plates of five studs long (these should be complementary to the three studs long bricks and plates)
- 4) Window frames that can hold the two inner windows but without the holders for the shades.
- 5) Arches that would properly fit over fences.
- 6) More cornerstones like the ones we had when I was a child of a combination of the 2x4 and 2x2 brick in different variants of brick and plate height.
- 7) Many more nicely colored stones and baseplates! (More dark red, golden, pink, purple, aqua, medium and light blue and green colors).





What is it like to be as a female in the AFOL world, which is dominated mostly by men?

Sometimes it sucks because men perceive especially colors differently than women. Probably this is also the reason that the production of girl LEGO is so minimal. The other thing is that men often think that women cannot be technical/logical, which is a shame! But oh well... men still need women to do their work :).

On the other hand, I do know quite a number of men who stimulated me to go on with my quite eccentric style of building and I am grateful to them (and I also do realize that you have to be an open-minded person to validate my work, hehe).

I worked as a technician amongst men

most of my working life, so I got used to the differences in perception :).



What would you suggest to LEGO to make their products more popular for girls?

Many more themes that girls would like. The girls that I know want to build things like a beauty parlor, a restaurant, etc, things of daily life that are non-violent. They all want to build with LEGO but complain that either the boxes are daft because there is nothing to build (for instance the Belville series, although the colors are very nice, there is hardly anything to assemble, no challenge), or the boxes are too expensive, or the theme is too violent or of the wrong color. Especially I would suggest to LEGO that education in how to combine basic colors with special colors is very important to girls, and that the girls do *not* lack any building skills but they lack proper building instructions in themes of their choice.

One thing I want to show girls especially with my work is how to combine large quantities of a basic color with a small quantity of a special color to get a pleasing color scheme and model.


Is LEGO doing enough to promote their products towards girls?

Simple answer: No, not at all. Next year I want to put all my efforts into building modular doll's houses for girls and things in which they can create their own setting as a living room, beauty parlor, whatever, to show that girl LEGO can be made attractive to girls. Maybe my exposition at LEGO WORLD will not be as eccentric as now, but I think it is worth the effort.

What would you like to see from LEGO in the future in relation to girls?

Better themes, building instructions (level of boys' LEGO), more maturity in the designs and better colors.

Any other comments you would like to share?

I think it is a real pity that LEGO does not invest in girl LEGO. They miss out on half of the world's population as a potential market. The claim is that LEGO is a boys' toy, which is just not true. I truly feel that this is a loss for both LEGO and all the girls of the world. 

Verena Schaden

Name: Verena Schaden

Age: 32

Country: Vienna, Austria

Your hobbies: LEGO, our pets, our website, writing

Website: www.brick.at

I started as a little girl playing with my brother's LEGO. He had a pirate ship and an island and we loved to fight each other. I restarted to build with my kids and my husband who was an AFOL earlier than I was. I loved to build together with the whole family and so one thing led to another. First I just helped Tom with his MOCs then we built them together and now I also build my own. Nevertheless I still prefer building together as it's simply more fun.

How many hours do you spend building with LEGO?

That depends. Sometimes a whole weekend with just a few breaks to eat and sleep but there are also times where I don't touch a brick for weeks.

What are your favorite building themes (both what LEGO produce and what you like to build yourself?)

I absolutely love all kinds of castle, medieval and fantasy themes.

What do you like most about LEGO and their products?

Well the possibilities. There's nearly nothing that's impossible and you're just limited by your own fantasy (and of course your brick supplies) [grr].

Five parts you would love LEGO to produce:

- 1, Fantasy figures like elves, witches, goblins or dwarfs (they heard my wish and I will get my dwarfs soon [grr]).
- 2, More female minifigs.
- 3, More animals and food parts.
- 4, 1x1 round tile.
- 5, Double sided stud plate.

What is it like to be as a female in the AFOL world, which is dominated mostly by men?

I'm mostly interested in activities dominated by men and it doesn't bother me. I usually enjoy this situation and avoid it the other way round as I don't like "typical female" chitchat. Perhaps I'm not a typical girl ;-).

What would you suggest to LEGO to make their products more popular for girls?

When I look at my two girls LEGO should provide more sets displaying everyday life and fantasy themes. They love to build objects like playgrounds, an ice-cream cart, rooms, pyramids with interior, treasures, hideouts, a witch cave, farms, riding stables and so on. Some license themes like *Harry Potter* or *Spongebob* are also very popular with them.

Is LEGO doing enough to promote their products towards girls?

They try with Belville but it's not that easy. There are a lot of girls who prefer

People: Female Fans of LEGO



Verena




more complex and common themes. They tend to put Belville down as LEGO for “babies” or “birds.”

What would you like to see from LEGO in the future in relation to girls?

I think to widen LEGO City with sets like different shops, a school, a bus, a playground, a cafe or restaurant, a zoo, etc. And of course, more female minifigs would be a good idea. Fantasy and medieval themes like a witch cave, a Halloween set, an elf tree, a market or a tavern, too.

Any other comments you would like to share?

People don't stop playing because they are getting old; they get old because they stop playing. ;-) 



Thekla Borchert

Name: Thekla Borchert

Age: 47

Country: Germany

Your hobbies: My family, our motor home

I can't exactly remember when I got my first LEGO; it must have been around 1965. I used to build and rebuild the sets; I can't remember building my own creations. A highlight was when I got the 4.5 V train system. It always seemed to me that I will never have enough bricks to reproduce the beautiful houses from the idea books. I would have loved to build them, but I never had enough windows. Still, as an AFOL, I keep every old window I can get! ;-)

My dark ages finished when my son was about 6. I still had my LEGO in a small, old bag, which I then gave to my child. A few months later my husband and I discovered 1000steine on the Internet and that was the beginning of a wonderful friendship....

Why are you an AFOL?

It's great to share a passion with others!

How many hours do you spend building with LEGO?

Sometimes not one hour, sometimes three hours a day without a rest.

What are your favorite building themes (both what LEGO produce and what you like to build yourself?)

Houses, churches, famous buildings from my hometown Berlin, Adventurers and *Harry Potter*.

What do you like most about LEGO and their products?

I like it because I can build things, keep them as long as I like them and then destroy them to build new houses or whatever.

Some parts you would love LEGO to produce:

- 1) Slope 2x3 Double Concave one side 45° the other side 33° (similar to part #3046 but one of the two sides for 33° slopes).
- 2) A part that allows connecting two bricks bottom-to-bottom without a gap between the parts (using a TECHNIC pin means you get a small gap.)
- 3) Tiles that fit on Brick, Round Corner 2x2 Macaroni (part #3063)

What is it like to be as a female in the AFOL world, which is dominated mostly by men?

I don't care about this, I never thought about this. But at the last two meetings each, a reporter wanted to talk to me not because of my MOCs, but because I'm a woman amid "so many male AFOLs" this is annoying!

What would you suggest to LEGO to make their products more popular for girls?

Nothing, as I don't think girls should have specific "Girl" toys.

**People:
Female Fans of LEGO**




Thekla





Is LEGO doing enough to promote their products towards girls?
I would say yes.

What would you like to see from LEGO in the future in relation to girls?
Not so much pink and glitter. Girls like pink, because they're always told that girls have to like pink!

Any other comments you would like to share?
The new colors, but I am afraid that you don't want to hear this... ;-) 



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Congratulations!

Adam Reed Tucker and Brickstructures, Inc.™ would like to Congratulate Joe Meno and Brickjournal on making it to print! We have always been a proud supporter of Brickjournal and as a way to celebrate this achievement Brickstructures, Inc. will be introducing a new column for Brickjournal.

This column will be sharing in depth the creative processes that Adam Reed Tucker employs in the creation of his 1:200 scale skyscrapers. He will identify, document and uncover the challenges and various building and problem solving techniques he uses which differ from one building to another.

The Brickstructures idea was born as an initiative to raise awareness of the fascinating worlds of Architecture, Engineering and Construction. Our mission is to celebrate the past, present and future of Architecture and to inspire future architects together with architects from around the world. Our hope is that this will inspire minds of all ages whether you're young and eager to learn or young at heart and simply intrigued by these marvels.

"As an Architectural Artist my desire is to capture the essence of a particular skyscraper into its pure sculptural form, I first and foremost do not view my models as literal replicas, but rather my own artistic interpretations that harness it's overall appeal. Beyond its identity as a toy, the LEGO® brick is not initially thought of as a material typically used in creating art or used as an artist's medium. It is the pure sculptural form that I have translated from reality through the LEGO brick. I quickly discovered the LEGO brick was lending itself so naturally to my applications as say paint to a painter or metal to a blacksmith, that I found it to be almost magical". — Adam Reed Tucker

A glimpse of what's
to come...



Designing the Hybrid Rescue Tank

A LEGO set designer gives BrickJournal a first person — account of the processes and challenges behind creating a set

*Article and photography by
Mark Stafford*



When I was about five years old we all had to stand up in class and say what we wanted to be when we grew up. I said: "I want to be an astronaut and a LEGO Designer." I still hope that someday NASA will be in touch, but in the meantime I managed to crack that other unlikely dream, and since October 2006 I've been a LEGO Designer!

It's still hard to believe and sometimes if I think about where I am and what they are paying me to do I get a grin on my face that last for hours! There were things to consider of course: How will it be to live in Denmark? Will I lose the fun of building? Are the rules we have to build with going to be too restrictive? What's the staff discount? (That last one I actually asked at the interview.)

So far it's been fantastic, better than I dreamed, and part of that was being assigned into the Play-Themes part of the design group, this is the group that develops all the lines with mini-figures except for City and I was assigned to the Exo-Force line to help develop the 2008 range!

This article is about the development of the Hybrid Rescue Tank, a model that I think of as mine because I made the first sketch model and took it all the way through to final model committee. But right from the start I should point out that nothing from LEGO is developed by one person, there are new pieces in the model that I had some input towards but I didn't design them, there are the cool stickers that I didn't make, the box art, the 3-D images, the graphics, etc., all not mine, and that's not even mentioning the team of designers around me in Exo-Force and from other lines and groups, all of whom have input, ideas and suggestions as the model evolves. But that aside, in my mind this is my model and I think it turned out pretty cool!

This yellow and red model with the bionicle Gatling-style shooter was the first version of a "new Exo-Force tank" that I built. The design brief for this model was very loose; it was to be a new tank that could sit alongside the new Battle Machines and the existing orange tank without looking out of place. As you can see I used a very crude TECHNIC frame here, I'm not a TECHNIC builder at all and this part of the model presented a big challenge for me.

Why a TECHNIC frame? Well, the original Exo-Force tank (the incredibly cool orange one) is built in such a way that it's a very large model for its price. Although we didn't necessarily want the new model to be too much like that tank, we knew it had to be a similar size or it would not fit into the Exo-Force universe. The strongest way to build a large model is with an internal TECHNIC frame. (most fans learn this as they build bigger models). However, although I knew this as a designer, as a LEGO consumer I'm not a big fan of TECHNIC frame models. They always seem a bit bare to me, and I don't enjoy building them either; I feel I'm not getting the system parts I prefer (sorry TECHNIC fans)! So here was my challenge, build a big, stable model, and if this meant it had to have a TECHNIC frame then make it fun to build, keep it to a minimum and then include as many classic style LEGO bricks in the set as possible!





The next version was this one where the tracks were moved to the front of the vehicle and the wheels to the rear. Also the firing Gatling shooter was removed as the separating flying vehicle was agreed to be a strong enough play feature that no shooting function was needed in this model. (Yeah, the designers know most AFOLs think that shooters are a waste of space, but kids really do love them and to date most LEGO is still bought for kids!)

The main problems at this stage was deemed to be the colors; red and yellow is pretty funky, but too bright and a little "young" in tone for this model, and still the TECHNIC frame I had made simply sucked.

So I went to a TECHNIC Designer and asked "How can I build the simplest possible TECHNIC frame that will give me the height and volume I need, but be a stable building platform for a brick built model?" (Actually I boiled that down a bit and said "help me!"). Nathaniel Kuipers was the guy I went to (also recruited with a fan background - Brickshelf name: IndustrialDesigner). He took my nonsense frame and showed me how to build a nice, strong and above all easy to build TECHNIC box frame (in about 10 minutes). Cool!



So I took his frame and began to build a slightly modified version of the last model in white and red. As I was constructing the rear end there was one of those moments of inspiration that make LEGO building so much fun. The huge single rear drive wheel was born! I was so excited that I didn't wait to build my own top and took a half-built model from another designer (Adam Grabowski, whose gallery is: <http://www.Brickshelf.com/cgi-bin/gallery.cgi?m=MisterZumbi>) and stuck it on top to show to my Design Lead how cool the concept was looking with this massive rear wheel. He loved it! This is the really the first version of the final model; everything from this point on was about refining the model, bringing it in on budget and most importantly making it cool to build.



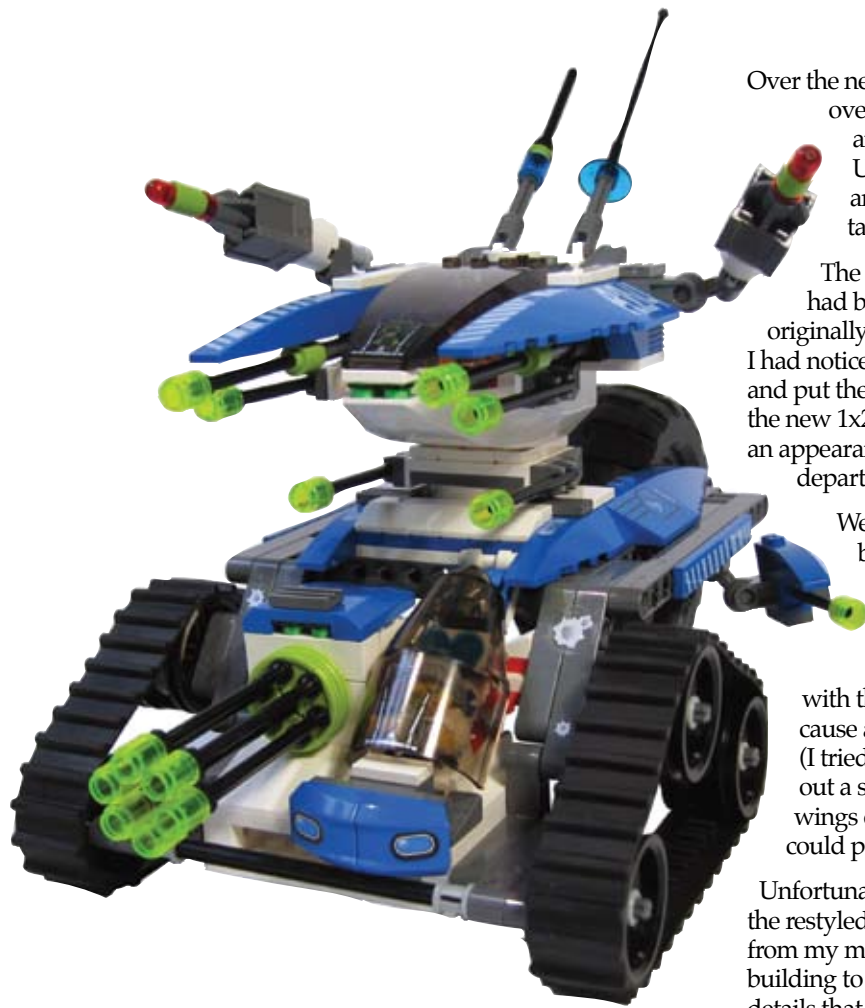
As you might have noticed, the stickers on these prototype models are from various other LEGO sets: Aqua-Raiders, Racers and of course old Exo-Force. Again, yeah, I know, I'm not a fan of stickers myself. However a printed brick is logistically a new brick to manufacture, store and pack, therefore it replaces what could be a new type of brick or a new color of an existing brick in the model. Also they cost a lot; if I'd used printed bricks in the Hybrid Tank I'd probably have to take quite a lot of normal bricks out of it and it wouldn't be as cool. So right from the start we opted to go for stickers on the Hybrid Rescue Tank.

Over the next three weeks the Hybrid Tank was probably rebuilt over 20 times and extra copies built up to be taken apart and calculated for price on at least five occasions. Unfortunately here there's a gap in the photographs and there's no record of these stages until this image taken shortly before the model committee.

The colors have changed to blue and white. The top I had borrowed had been discarded to be replaced by the originally planned detachable flyer with flip out wings and I had noticed the relationship of the wheels to the front gun and put the mechanism in place to spin it. You can also see the new 1x2 sloping grill piece had been invented and made an appearance, as did the new cargo box created by the City department (and also used in the new *Indiana Jones* line).

We had designed many of the other *Exo-Force* sets by this time and the separating mini-robots had appeared. The mini-robot I had made for this model at this stage was a cute medic droid, but it did not really fit in with the rest of the mini-bots from the 2008 *Exo-Force* line. This, in conjunction with the top cockpit opening with a hinge that turned out to cause a major structural weakness led to another redesign. (I tried to save the opening cockpit, but I just couldn't figure out a strong enough way to keep this and secure the swing wings on the flyer strongly enough that a seven-year-old could push the tank around by it).

Unfortunately some savings had to be made to accommodate the restyled mini-bot so I chose to remove the new cargo boxes from my missile launchers. Part of the job of a LEGO designer is building to a budget, and this can be really difficult; it's the little details that make all the difference and when you have to lose one of them it can be a little tough, even though I know the final product is still a good one. At the same time it's these limitations that have kept me building models as a fan — no budget, no building or color restrictions and I don't have to consider how a child would play with them or reproduce building them!




Then another change; a new 4x4 turntable was available. It's now only two plates thick and allowed me to lower the top slightly. This was cool because I could include yet another new part! I want to get as many new parts into a model as possible for the AFOLs out there, but to be honest I'll only do it as long as it doesn't compromise the design too much.

Then I had "model committee". I can't say too much about that, but basically there is a room full of the LEGO Group's finest experts and they each build the model following the designer's lead (as there are no instructions yet). Each offers suggestions or points out failings and the model comes out of the process the best it can be, or is rejected for a rebuild. (I had a model rejected later in the year and that was really hard to take, but now I look back and realize this led to a much stronger product in the shops.)

The comments from model committee were very valuable and there were a few changes to be made, all of which were improvements in buildability, playability or stability. Although I think the look of the Hybrid Tank was slightly compromised by these changes, this is unimportant compared to the disaster of giving a kid a toy to play with that can't be built easily, breaks all the time or doesn't work properly.

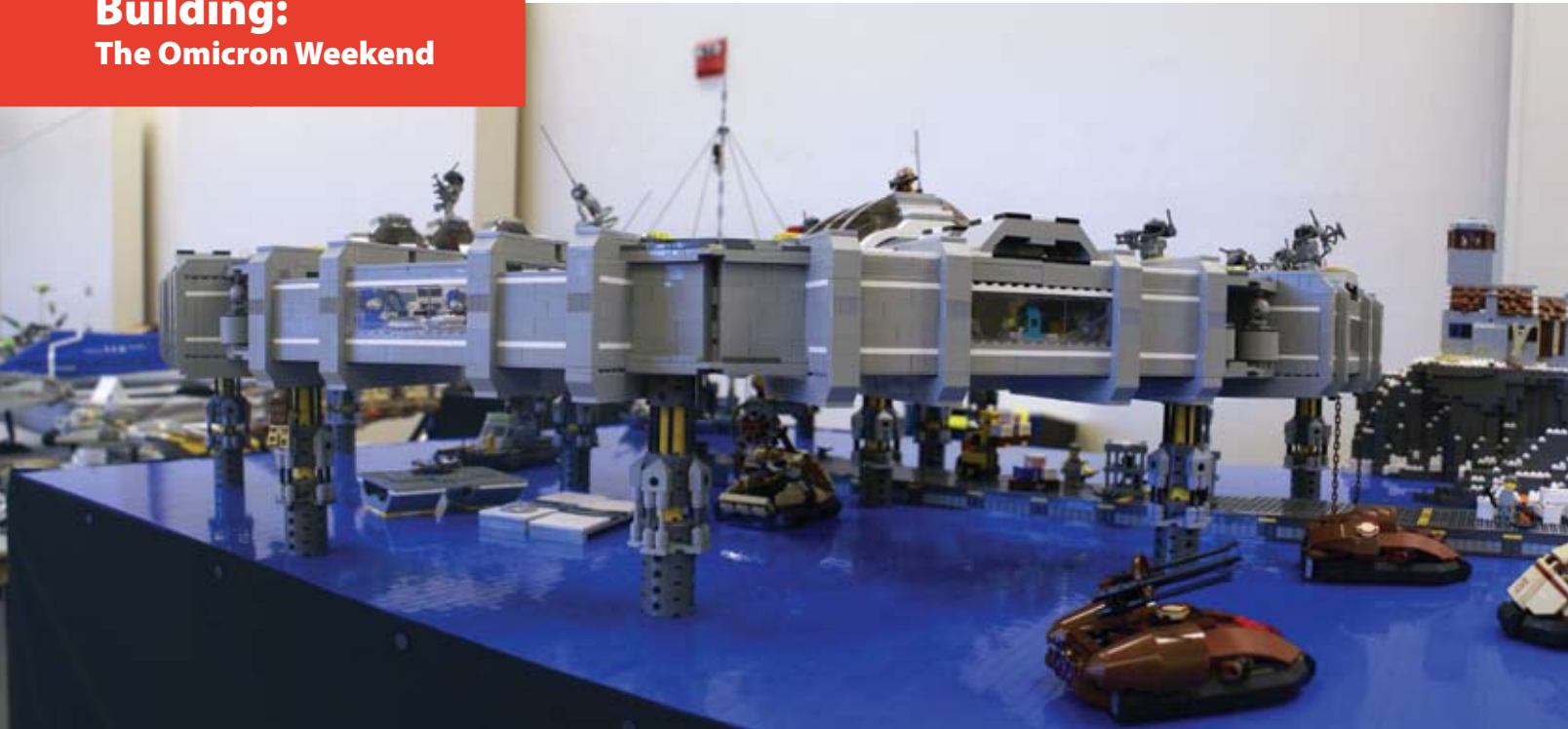
So this is the final model. It took about two months to develop, it comes with two mini-figures, it's blue and white on a dark grey TECHNIC frame, has a laser cannon that revolves when it drives, a top section that lifts off to become a flying scout vehicle (useful in the jungle where visibility is low) and a separating mini-robot (Spy Drone) to help keep an eye on what the evil drone robots are up to!

The model was then out of my hands and I moved on to develop other LEGO sets. Other departments picked up the baton and took care of the stickers, the 3-D virtual model, the building instructions, the packaging design, the packing line details and the ad campaign. All the time checking back with me to verify that the stickers were cool, the model was correct, all the parts were present and the presentation showed the Hybrid Rescue Tank in the best way possible.

Anyway, I hope you like look of the set and you're going to immediately rush out and buy it to build, but if not I think I crammed enough interesting new parts and color changes into the set that you might want it anyway! 

Mark's Brickshelf gallery can be found at:
<http://www.Brickshelf.com/cgi-bin/gallery.cgi?m=Nabii>





Chatting with the Omicron Weekenders

The winner of Best of Show at North-West Brickcon was a fully detailed layout built by three LEGO fans. BrickJournal got to talk to them about building this incredible creation, and got some... interesting answers.

*Article and Photography
by Joe Meno*

Introduce yourselves — what do you do?

KG: I'm Keith Goldman, and I do whatever I feel like I wanna do... gosh!

RR: I'm Ryan Rubino, pet store owner and purveyor of fine canine apparel in "America's Finest City," San Diego, CA.

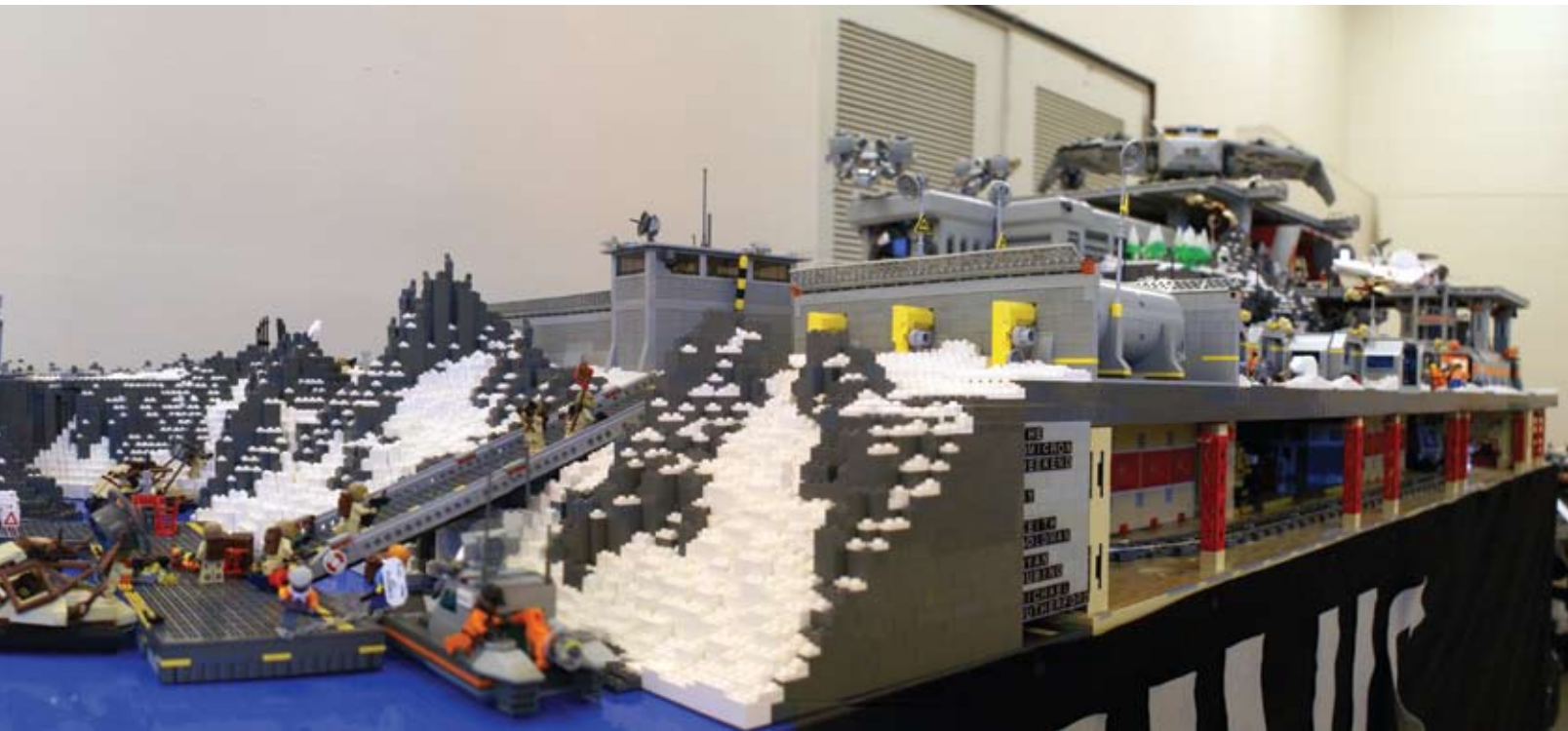
MR: My name is Michael Rutherford. I currently reside in Virginia. I am a soldier in the United States Army.

How did you get into the LEGO hobby? Did you have a Dark Age?

KG: I got into the hobby through my buddy Mike Rutherford. Whenever I hung out at his house, he always had LEGO on the family room table. Initially, my interest was purely minifig driven. I delighted in placing them in violent, erotic, and other adult situations. I would say I really got the itch to build when Mike showed me a minifig-scale aqueduct he'd been working on for a few weeks. I remember it being about four feet long and maybe two feet high, made entirely of one color (white), complete with stepped-water. Regardless of the actual measurements, I started buying kits soon thereafter. It took several years to accumulate enough raw ore to build the kind of things I was interested in, things like the aqueduct.

I have not had a Dark Age but with a kid on the way, I can foresee a Dim Age. I still have plenty of ideas, and plenty of LEGO, but time is always the biggest problem.

RR: Mike introduced me to the idea of creative building with LEGO in the late '80s. Mike, Keith, and I developed an interest in it as a hobby long before we discovered the emerging online community. I did experience a Dark Age during the expansive building period for Tor Omicron.



Omicron was originally designed as a space station and the project lay dormant for at least a year. I had lost almost all interest in finishing it, but couldn't bring myself to tear it down. The ring was given new legs with the advent of the collaborative KEITHLug sci-fi diorama. All in all Tor Omicron existed in some form for over three years before completion.

MR: I grew up with two older brothers, and we had a LEGO collection we shared (or fought over) for as long as I can remember. At about 12 or 13 I put them away in the back of the closet (the LEGO, not my brothers) and forgot about them until about the age of 23.

How did you all meet?

KG: I met Mike in the summer of 1236, when we both participated quite enthusiastically in the capture of Cordoba by Fernando III. I didn't speak with him for another quarter of a century after we squabbled about whether the one we reverently called Fernando El Santo should subjugate the independent Almogavars of Sierra Madre, or if he should finally make good on his plan to found Franciscan and Mercedarian houses in Andalusia.

As for Ryan (I think it was the year of the Ram), I met him in line to meet Chuck Darwin, who was signing his new book the "Origin of the Species" on November 24, 1859. Some low-guy with no hat tried to cut in line, and we had to cut him back out again.

RR: My friend Philip introduced me to Mike when I was about eleven. The three of us grew up on the same street in San Diego and attended the same junior high and high school. Both of us were on the cross country and track teams. Mike met Keith in high school and the two of them worked together at Montgomery Wards one year. Coincidentally,





Keith and I worked in adjacent buildings in a different shopping center in our early 20s. Keith worked in the corporate bookstore and I in the corporate pet store. Lunch was often a welcome reprieve from the lock step mentality of the corporations.

MR: Ryan's family moved in just up the street when we were in 4th grade. I met Keith in high school. Ryan, Keith and I all came out of our respective Dark Ages at about the same time.

How did you come up with The Omicron Weekend?

RR: From looking at the cover art of so many sci-fi novels.

KG: Practically speaking, we wanted to exploit Ryan's wheel shaped building that was initially conceived as a space station, and years in the making. I remember at least five boilerplate ideas that didn't involve themes not suitable for a fest environment: 1) Space station/dock with large ship(s). 2) Undersea-lab with giant squid and a neighboring metropolis, 3) Arctic Base, 4) A Lunar mining facility, 5) Large, futuristic skyscrapers that were joined by the wheel about ¾ of the way up. Since we also wanted to exploit Mike's plethora of vertical lift aircraft, and between us we had a good deal of white brick and plate, we went with option 3.

The specific elements of the project were inspired by any good, bad or indifferent sci-fi and action movie made since the '50s and countless novels by hacks and highbrows. We were definitely going for the kind of look you see on paperback cover art from the '70s and '80s.

MR: We discussed our goals and agreed on the following: We wanted to contribute to the quality of the NWBC. We wanted to demonstrate the potential of a genuine team effort. We wanted to garner praise. We wanted to delight AFOLs and the greater public alike. Once we had established these goals, a theme based on a secret polar hook-handed chimp production facility seemed only natural.

Who did what? And describe your respective parts in the layout.

KG: Ryan built what is in my mind, the cornerstone of the project, the wheel called Omicron. Mike built all the aircraft, the spooky shack (also called a lighthouse), the shutter boxes (in front of the Cyclops building), and the tower-like building on the right hand side of the layout we referred to as the chimney. Mike also did rough drafts on the Cyclops building and the hangar. It was my job, to connect it all together with the advice of the other two stooges.

RR: I designed the wheel-like Omicron platform, which stands above the water. Keith and I developed the table and various support structures to support the LEGO terrain.

MR: First and foremost, Keith hosted the mother of all WIPs (Works In Progress) at his house and kept Ryan and myself focused on the task for more than a year. Ryan and Keith built the custom table in Keith's LEGO workshop where it "gestated" for a year prior to its one and only public display. Keith also invented and built the terrain and the underlying support structure for the diorama. All that rock and snow? Those train tunnels? That's all Keith. Keith invented most of the vehicles, boats and many of the buildings featured on the diorama.

Keith kept doing this trick that astounded me: I would construct a building and send him a picture to get his

opinion. The next day, he would send me a picture of the same building, but in the diorama! He kept replicating everything I sent him a picture of (and improving it along the way!). This is how most of “my” buildings wound up on the diorama. This replication technique saved us a lot of time and money in transporting projects from my home in Virginia to Keith’s home in Nevada prior to NWBC. It was like being able to beam finished components across the country.

The ring shaped building was Ryan’s biggest contribution to the Omicron potpourri. I’m sure Keith tried to replicate the ring as well, but was thwarted when he ran out of gray plate. Ryan also invented the majority of small “accessories” that provided the “working industrial” look of the diorama: boxes, crates, monkey cages, cargo of all types. Ryan brought an offbeat flavor to the mix that you just can’t bottle. Polar bears? Monkey surgery? A building bigger than a hula-hoop? That’s all Ryan.

I invented most of the aircraft, and the military vehicles, and some of the buildings. Beyond that, I talked a lot. Opinions about the theme, color, layout, and endless commentary about what the other two guys were doing. I keep a large inventory of hot air on hand, and I exploited this fully during the construction of this project.

How long did it take?

RR: From our initial planning meeting in Las Vegas to display at the NWBC in Seattle, just over 12 months.

MR: About a year. Lots of breaks. Lots of distractions. But all said, it was about a year of building, transporting, consolidating, copying, Bricklink buying, and planning.

KG: 384 days 22 hours 17 minutes and 43 seconds.

How many bricks?

KG: Joe, I can’t believe you’re asking me this. If you look at the pre-interview contract you signed you’ll see it under number 32 of “What not to ask Keith.” Why are you asking Keith number 32?

RR: Are you serious? Who writes these questions anyways? I think there were 6000+ blue 1x bricks in the sheet of water. Beyond that I have no clue.

MR: That’s the amazing part! Only 36 bricks total! Would you believe it?

How did you get it to Seattle?

KG: Ryan and I drove that mother, just like Burt Reynolds and Jerry Reed in *Smokey and the Bandit...* or George Peppard and Jan Michael Vincent in *Damnation Alley*, or like *Thelma & Louise*. We packed that thing into six large boxes and crammed it into a minivan along with enough plywood to build yourself a nice bonfire, until you couldn’t see out of the back window. You could do an entire series of articles on road-trips to LEGO fests, and ours was nowhere near as impressive as the tales you hear around the campfire. That said, ours was an odyssey of epic proportions. Because of pending litigation in the township of Medford, Oregon, I can say no more at this time. Oh, and Mike brought a handful of parts, a half a tube of Mentos (The Fresh Maker), and some pocket-lint on the plane.





Keith Goldman, Ryan Rubino, and Mike Rutherford

Layout in Progress

Below are some photos of the Omicron Weekend being built. The train track for the lower level was built, and terrain was added as well as platforms for supporting the buildings.

Photos courtesy of Ryan Rubino



RR: Magic minivan ride!

MR: We wanted to transport the diorama in a giant radio controlled dirigible but none were available at the time. In the end, Ryan and Keith formed the two-man element that transported the whole mess from Vegas to Seattle via van. It was a three-day odyssey that took them through several distinct biotopes, and several of our 50 states. If they hadn't cowboied up and spent the money, burned the gas, driven the van, and made the trek, there would have been no Omicron Weekend. I flew in to Seattle the same day they arrived and gave them a high five.

What were the challenges you had to deal with?

KG: The road trip was a hassle, and the whole project cost more than any of us expected. Sustaining interest for three years, in three people, in three states was also problematic. MOCs have a finite shelf-life with me, and it was irritating to have to live with a single MOC for an entire year. Fortunately, we were able to meet for a couple of weekends over that period to float in my Vegas pool with a few beers and hash out a plan to literally punch people in the stomach with our combined greatness! And for those who couldn't attend, we wanted to make them feel as low as a stray dog.

As far as the actual building, the biggest challenge was achieving the right scale. We wanted to avoid that compressed look that seems to occur naturally when you try to build something large. Although some of the buildings are still a little too close together, and the wheel is much closer to the shore than we'd like, we were able to get pretty close to the scale we wanted.

There were a ton of annoying details, like Bricklink vendors not coming through on time, bruised egos, modules that wouldn't fit on-site, a lost package of parts, feline-related blunt force trauma to a building, and above all, time. We were building right up to the day before we left for Seattle.

MR: Team: Subordinating our individual styles in order to attain a true stylistic synthesis was very hard. Team is a popular word... it sounds nice. But really giving up control and going with what "those other two guys want" was a real challenge for me. Think about it: Three arrogant adult guys, with no real boss. Every decision was participatory. Every bone of contention had to be discussed until we attained consensus. Keith was really in charge, but that was a sort of "Open Secret" which Ryan and I agreed to ignore. I'm surprised Keith still talks to either of us.

Money: I took two plane trips to Vegas to pre-position components and to help work on the dio. Ryan drove out from San Diego about four times to do the same. The cost of the logistics culminated with a three-day road trip for two guys: Gas, hotel, food. All of that is after numerous Bricklink purchases... Our sponsorship deal with the United Nations fell through, so all of these expenses were "out of pocket."

RR: Are you kidding me, Joe? Didn't you meet the two egomaniacs I had to work with?

What are the best parts of the layout?

KG: It's hard to be objective about it, but I think it all begins and ends with the wheel. You can use the MVP metaphor from any team sport. If you take it out of the lineup, the whole thing falls apart. That said, the vehicles are all pretty

good (credit to Soren Roberts for the tan hovercraft design). Mike's design for the shutters that appear in several of the buildings was also a highlight for me. Beyond that, I don't think anything is really stand-out, but they all combine to make it work.

As far as the fest itself went... the hands-down highlight was Brian Cooper's Mecha-Godzilla stomping the hell out of the layout.

RR: The coastline and rising topography, because it puts all the small and large MOCs into context and makes them believable in one scene.

MR: The polar bear was the best part. The polar bear is an often misunderstood member of the arctic community. His interaction with humans is often problematic. I feel Ryan was able to capture the surprising frailty of this majestic predator of the north. In so doing, Ryan has made all AFOLs a little more aware of why we need to lock our trash cans. I've never encountered a higher level of environmental relevance in any LEGO diorama.

What was the most fun part of building?

KG: When the last brick went into place. To be honest, the project became a grind by the end and I'm grateful that Mike and Ryan took the lead in presenting the MOC to the public at NWBC. This freed me to walk away from it and hang out with other AFOLs and gawk at all the great MOCs.

Along the way, I had the most fun building the snow-drifts, the landing pads, the tank-farm and my first attempt at a train. Building some of Mike's contributions based on photos wasn't exactly fun, but I learned a lot doing it.


RR: Building the table and wood plateaus and assembling 1000s of blue bricks on a vacation dedicated entirely to LEGO in the city of Sin.

MR: Sharing a picture of a proposal with Keith and Ryan and listening to the inevitable litany of questions: What is that thing supposed to be? How many of these things do you want to make? Does it have to be that color? Are you serious? Do you actually think it would look like that in real life? Have you shown this to Keith? Have you shown this to Ryan? What did he say?

What are you thinking of next?

RR: I have some ideas, but first I need to organize my LEGO area and sort a lot of parts.

MR: We all feel the Omicron Weekend was a total success and we are gratified by the results. But it was a lot of hard work. Right now we are all taking some time to chill out and build fun stuff with no real plan. Ryan and I are both currently reorganizing our LEGO workshops. Keith has been anxious to start some projects he has been contemplating for a long time. I think we will launch another project in the future, but for now, you control the action.

KG: Your mom. You had to ask. 



Creating Completely New Accessories from Clay!



In past online issues of BrickJournal, minifigure customization has been explored in an ongoing column. We continue this with a look at modeling new parts by sculpting in clay.

*Article and Photography
by Jared K. Burks*

To welcome *BrickJournal* to print, the Queen decided to make an appearance. To find out how to make her headdress, as well as any other special part to complete your custom figure, keep reading. The easiest way to get that part is to sculpt it using clay. This article will present all the tricks and tips I have learned while making clay parts, but the best piece of advice I can offer is to sculpt. Practice improves any skill: if you aren't happy with your first attempt, try again. I sculpted the piece for this article twice, and honestly, would like a third attempt but time didn't permit. For the record, I am still new to clay sculpting but I have learned much from many, including Isaac "Red Bean" Yue, Robert "Tothiro" Martin, and Bluce "Arealight" Shu. I have compiled what I have learned from these gentlemen, as well as others, and what I have taught myself, here.

The Basics

First, you must use the proper clay for the job; the clay must be strong, yet easy to work with, and cure solid. However, please note that any part created in clay will be for display and light play only. There are ways to mold the sculpted clay part in silicon rubber, and cast in resin plastics, resulting in a durable piece, however this is a bit complicated and a topic for a later article. To begin, you must create something to mold, if you are going down that road, so let's start with creating a new part.

You must choose a type of clay to use; there are several types ranging from the earthen clay dug from the ground to completely synthetic. The major types of clay are Earthen, Nylon-reinforced, Plasticine, Polymer, Wax-based, and Paper-based, each having a primary use based on its composition. This hobby most often utilizes polymer clay, however, it ultimately boils down to what you are comfortable using. I do recommend clay that cures by some mechanism other than firing; non-drying and firing clays are inadequate for this hobby as they remain soft or require kilns. Clays can cure by alternate means than firing, including air and low temperature (oven temp). Some sculptors prefer using another type of media, epoxy putty (MagicSculp), which cures at room temperature by chemical means, yet retains many of the characteristics of clay. The major limitation of epoxy putty is its quick cure time, so you will need to sculpt quickly.

Polymer clay is the most commonly used clay in this hobby because it cures at a relatively low temperature and remains pliable until cured. Polymer clay hardens by curing at temperatures created in a typical home oven generally at 265 to 275° F (129 to 135° C) for 15 minutes per 1/4" (6 mm) of thickness and does not shrink or change texture during the process. The curing temperature can be lowered if the clay is baked for a longer duration. You can also cure polymer clay by placing it in boiling water or surface cure it using a hair drier. Surface curing will allow you to sand your part; however without a complete curing the clay will be fragile. When properly cured, polymer clays are quite strong and won't normally break when stressed or dropped. Polymer clay is sold in hobby and craft stores, and even found in Wal-Mart. Leading brands of polymer clay include Premo, Fimo, Kato Polyclay, and Sculpey. These clays are available in a wide array of colors so you might not even need to paint the parts you create. On top of these great options,

this type of clay is quite inexpensive. A small package of clay, more than enough to create many parts, can be purchased for less than \$2.

Once you get your hands on some clay, play with it, work it, and get a general feel for it. Your hands will be some of your best tools used to create your custom parts. However, you will need some additional tools to create the fine details on your creations. I find any fine tipped item works well including X-acto knives, paper clips, and most any other small item (figure 1). Find items that work for you. Your tools don't have to be store bought clay tools; most of these are actually too large for this work. If you want to buy a tool set, look for dental tools. Remember this is very small scale work; your tools need to be able to create fine detail. Your greatest tool is going to be sandpaper, but we will cover this a bit later.

Sculpting 101

Clay sculpture is generally created by one of two methods, addition or subtraction of material. These techniques are as they sound; either the addition or removal of material to create detail. I started in wood carving, a subtractive technique, and commonly find myself reverting to this method. Find the technique that works best for you. One tip I can offer is that subtraction works better with surface-cured clay. This can be achieved by using a hair drier or boiling water as previously mentioned.

Note: the amount of time required to surface cure varies, based on your location, humidity, etc., so be sure to experiment. Unfortunately, I cannot tell you exactly how to sculpt a part, it will take time and practice to master this art. I can offer a few tips and tricks that I have learned and been taught by others to help speed your learning curve into this new avenue of minifig customization.

While I am a subtractive sculptor, generally speaking, I still try and create my parts in layers. This allows me to sculpt and sand as I go so when I am finished sculpting I have little sanding left. The layered sculpting method is demonstrated in figure 2. If you try and sand the part at the end, you may find that the detail work on the piece is difficult to work around. Sanding is a slow process, but it is *critical* to making your custom element look more like LEGO elements. One tip to save time on your sanding is, right before you cure (surface or complete) any part, give the part a quick wipe down with a Q-tip that has been dipped in rubbing alcohol (70% Isopropanol). This will remove any fingerprints or other slight imperfections on the sculpted part, leaving a smoother surface. To sand your custom parts you will need very fine grit sand paper, which can be purchased at most hobby stores (woodworking grades are just too coarse). Because you are using an ultra fine grit paper, sanding will be slow, but you will be rewarded in the end with a better looking piece. As with the tools you are using to sculpt the part you will need small tools to sand it. To make these sanding tools, cut the sandpaper and attach it to small sticks or rods (Figure 1). Make sure to step up in grit values to really get the best finish.



Figure 1: Tools. Several commercial clay tools as well a few makeshift items with commercial and homemade sanding sticks on the right.



Figure 2: Queen's Headdress Layered Sculpture. The process used to incrementally create the queen's headdress. Notice the small additions at each step.

Tips and Tricks

Depending on what you are creating, especially if the item is long and thin (swords, etc.); your creation will need an internal support skeleton. The support can be made of most anything. I have used everything from wire to wood, but I prefer styrene. Styrene is a type of plastic which can be purchased in sheets and a variety of shapes from most hobby stores. By using an internal support skeleton your item will be stronger. The reason I prefer styrene is it has a slightly higher melting temperature than the curing temperature of polymer clay. This doesn't mean you can merely pop items containing styrene in the oven. However, the styrene is reasonably stable when the polymer clay is cured by boiling, hair drier, or extended time low temperature methods. Styrene/plastic can be incorporated into your sculpture as well. Certain shapes are very difficult to sculpt perfectly. Take the orb at the top of the head piece shown in figure 2. This would have been very difficult to sculpt perfectly, however by cutting the tip off a LEGO antenna a perfect orb can be added to the sculpture and when painted, no one is the wiser to how you did it. Another tip is if you are creating pieces with a grip (sword hilt, for example); make the grip portion out of plastic. This will help make your part more durable as the plastic will take the abuse of the part removal from the figure's hand, protecting the clay.

If you are creating a hairpiece or some other accessory item that must attach to a LEGO element, you will likely want to remove it after you have finished sculpting it. This can be tricky and if your clay isn't completely cured, it could result in damage to your creation when trying to remove it. To help with part removal, you can wrap the LEGO element it attaches to with very thin aluminum foil or Parafilm. Parafilm is a stretchable wax-like product that is used by hobbyists when painting models. It can be found at hobby shops or online. Another great trick is to sculpt over the top of another element. You can sand down a LEGO hair piece to a "skullcap" and add clay to the top of it allowing you to sculpt a new hair style, helmet or whatever. Most importantly this allows you to keep the internal stud acceptor and more easily remove the cured part. Just remember when curing this clay to be careful, you will need to cure using the slower/lower temperature technique previously discussed, Figure 2.

The final tip/trick I have for you is the use of clay sealants and air drying glazes. I have recently found both of these items. The sealant is sold with most resin casting kits and the glaze is found with most clays. Both the sealant and glaze strengthen the cured clay and give it a finished sheen. This finish allows the paint a better surface and results in a finish closer to plastic. If you want to jump in and paint it I suggest acrylic paints. They are easy to find and clean up.

The Wrap

I will end this article as I began it; sculpt, sculpt, and sculpt. Only through practice will you get better. Sculpting and re-sculpting a piece will teach you something each time you make the design. Everyone needs a hair drier, even if you are bald. Sandpaper is your friend, sand early and often, always increasing in grit. Seal your final part to give it that LEGO sheen. Check out some of the great items created in clay below for inspiration. Come back next time to learn how to paint it.



Figure 3: Other's work! These techniques have been used by others. Here are creations from Robert "Tothiro" Martin (*Star Wars Aliens & Hellboy*) and Bluce "Arealight" Shu (Scooter and Pig and Monkey King).

Next Time:

Minifig Customization 101 – Altering the color of LEGO Elements – Paint, Dyes, and More!

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You Can Build It: Star Wars MINIs

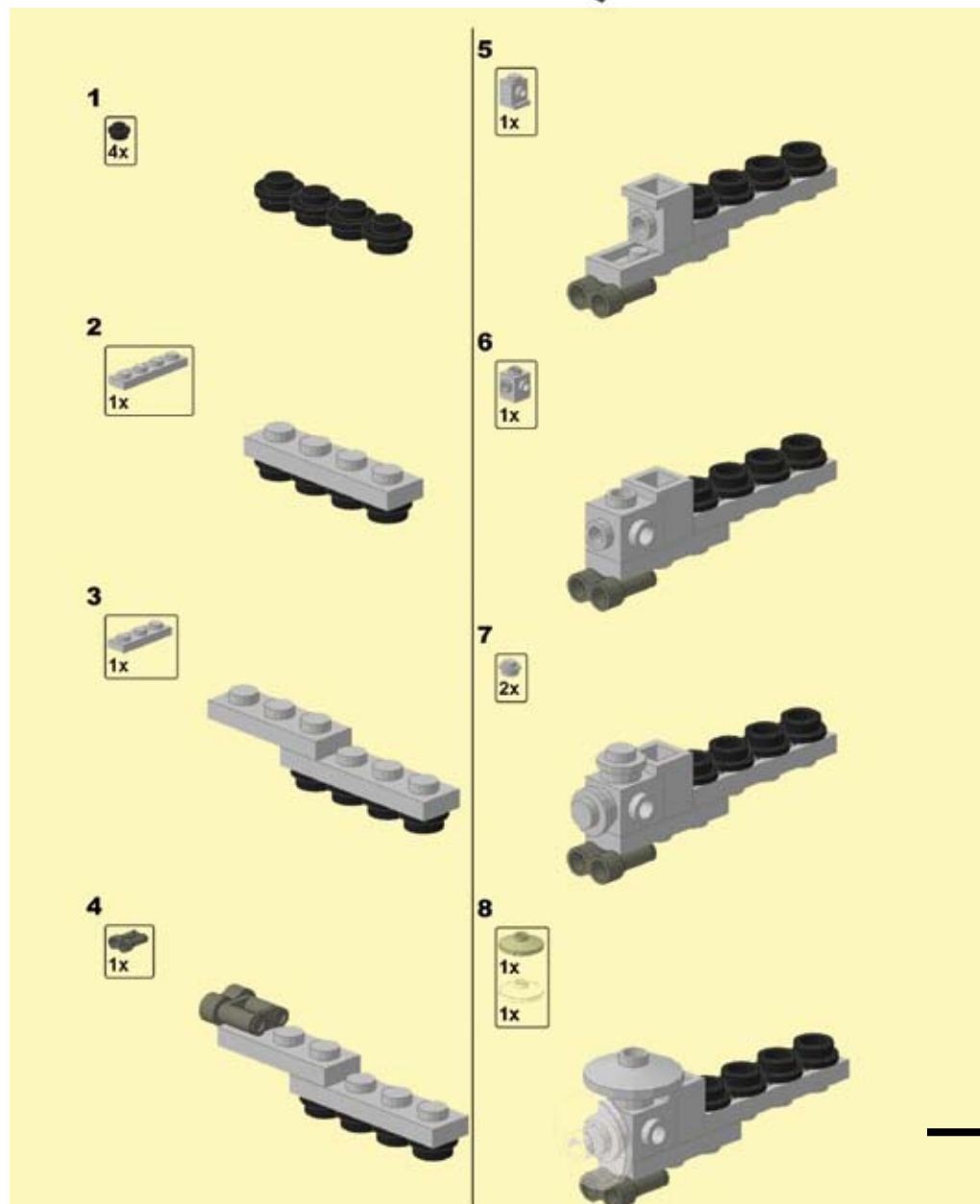
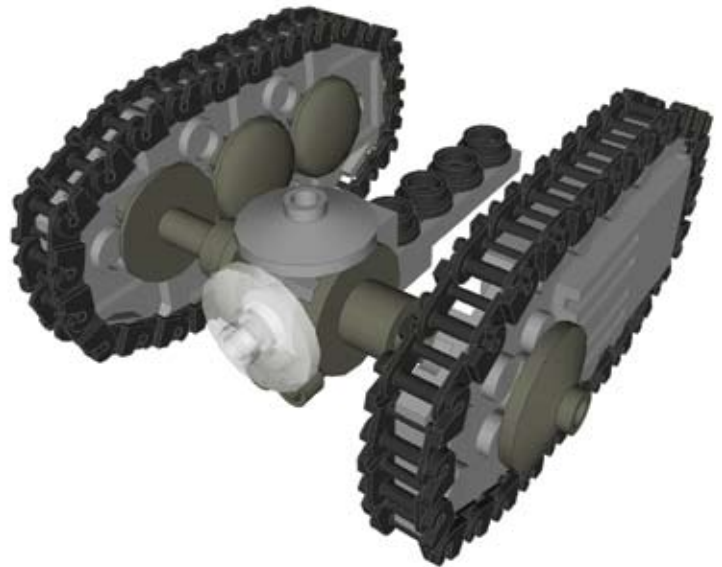
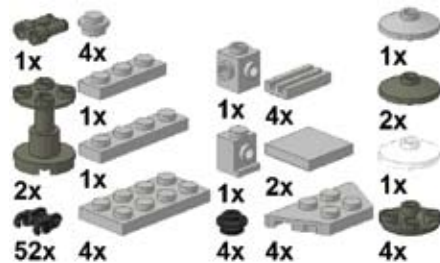
The TIE Crawler

Model by Christopher Deck
Instructions Rendered
by Geoff Gray

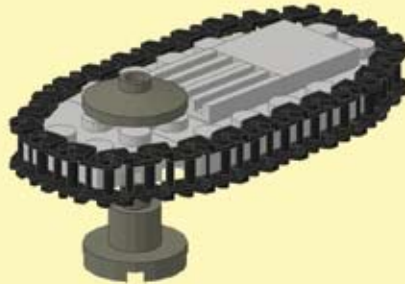
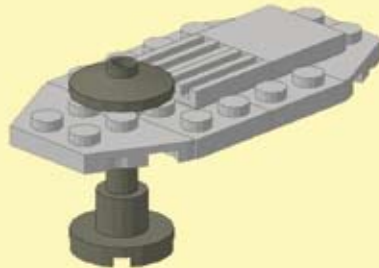
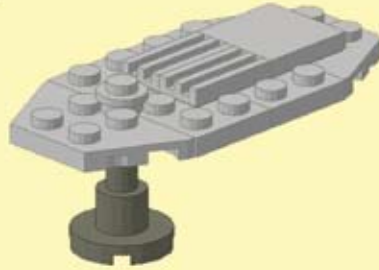
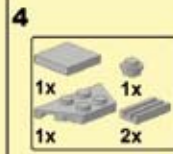
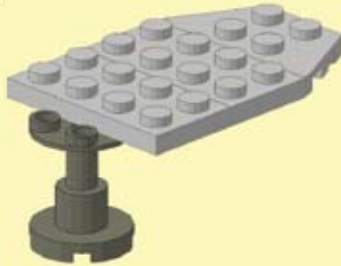
It's great to be able to contribute to the first printed issue of *BrickJournal*. To help get things rolling, I thought it would be fun to feature a tracked ground vehicle that is one of the most popular vessels in the *Star Wars* Expanded Universe. It's a vehicle that has recently been released by The LEGO Group as an official set: the infamous TIE Crawler! (#7664) The mini version featured here uses more than 50 tread pieces, but don't let that sway you from giving this build a try. I wish you happy building and see you next time! **b**

~ Christopher

Parts Needed

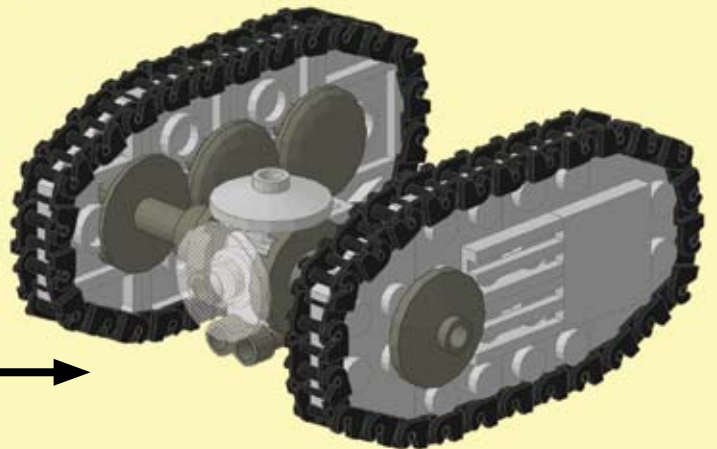


You can see more of Christopher's models at: <http://www.deckdesigns.de/>



2x

9





Building Modern Armor

Creating military vehicles with LEGO elements is a challenging effort. How challenging? BrickJournal takes a look.

Article and Photography by Magnus Lauglo

I had been meaning to venture out from my comfy, quaint little realm of castle—building and try out some modern military style MOCs for a long time. Finally, a few years ago I put away my treasure hoard of old gray brick and Black Falcon knights, and started playing around with tank treads, turrets and the beautiful new dark green bricks. Before I knew it, I was racking my brain trying to figure out how to fit a gun turret with space for two crewmen inside a 6 stud-wide tank chassis. Learning to build cool-looking and functional tracks, turrets, and hatches and then fitting them all together with space for minifigs inside, but without making the whole thing far too big, was a new and refreshing challenge.

Going from 12th century war to 21st century war may not seem like such a giant step for someone working with a creative medium such as LEGO. And I'm honestly not sure why my LEGO building (and that of many other AFOLs) so often takes on an action-oriented, and violent subject matter. Perhaps it is no more of a paradox than the sobering fact that ever since a caveman tied a pointy stone to the end of a stick, warfare is the one human activity that has most consistently engaged technological innovation and creativity. And for better or worse, creativity is what building a LEGO model is all about.

I build tanks because I think they are cool. But I haven't been building in a socio-political vacuum; and it is inevitable that I've come to draw some associations

between my military MOCs and the way real military weapons are used in the real world. For my own reasons, I've tried to steer away from building vehicles that might evoke the most direct parallels to current Western involvement in the Middle East. As a result, I've built very few tan-colored armored vehicles over the past few years. This little "policy" of mine ironically runs somewhat parallel to the official TLC line on avoiding violent sets with contemporary themes. Mega Bloks, on the other hand, have no such qualms; their desert-camouflaged M1A1 Abrams and M2A3 Bradley have been rolling off the shelves of toy stores for years now. While there are obvious similarities between my creations and the military hardware we see on TV patrolling the streets of Baghdad, much of the inspiration for my MOCs actually stems from my memories of serving in the Norwegian Army, about ten years ago.



I'm going to talk about some common challenges facing the military builder and some the building techniques I use to get around them. I'll concentrate on heavy-duty tracked ground vehicles like tanks and armored personnel carriers, as these are what I have been building the most of. While many of my creations have been inspired by real life armored vehicles, I've never really tried modeling an actual vehicle, and this article probably reflects that to some extent.

Each kind of LEGO building has its own style and building challenges. If you're building an armored vehicle, you'll find yourself balancing and compromising between aesthetics, functionality and scale. As there hasn't to this day been an official military LEGO theme, you won't find specialized prefabricated pieces that might suit your needs. That means you'll have to build your own hatches, armored periscopes, and machine guns from scratch. This is all part of the fun of course, but for them to be functional they may end up being a lot bigger than you would optimally like. You'll probably use more plates than bricks; and you'll want to gather lots of panels, tiles, jumper plates, and slopes. And be prepared to use some SNOT techniques to get the effects you want just right.

What I've found most difficult is building as compactly as possible. If you are building a skyscraper, or a castle in minifig scale, your MOC will likely be much smaller than it would be in real life. A 4x4 baseplate castle is a quite respectably large MOC, but if you convert one stud to one foot, you'll find yourself with a 120 square foot castle, which in real life would be rather cramped — even for a Spartan border outpost. So with a MOC like this, the challenge is to figure out how to make it look as big as possible by playing with scale. Now if you are building a vehicle such as a car, train or in our case perhaps a tank, you have the exact opposite problem. A modern real life tank might be about 11 feet wide, 26 feet long (including the cannon which protrudes beyond the hull of the tank), and 8 feet high. Convert those feet to studs for an approximate minifig scale MOC, and you'll find it is difficult to build a minifig-scale tank with any kind of interior of those dimensions (specifically, vehicle height is the biggest problem). An armored personnel carrier or infantry fighting vehicle is even harder to pull off to scale if you want to fit a squad of combat-ready troopers in the back. This has to do with the inherently *inhuman* scale of minifigs of course, but also because of the overall dimensions of the bricks you are working with. You'll likely have to make some sort of compromise in the end between space for internal detailing and functionality, with realistic size/aesthetics. You may want to decide early in if you are building for exterior scale or interior detail/realism, and whether you want to prioritize functionality or aesthetics. The more functionality





you want out of your MOC, the bigger it is going to be. If you're like me, you'll want there to be space for your crew inside the vehicle itself, but as close as possible to a realistic scale.

On the other hand, if you are happy with a vehicle with no interior, and you don't care much about fitting the minifigs inside, you could probably build to minifig scale quite accurately – and you will also save brick this way. This may be a good way to go if you are modeling a real life vehicle and it is important to capture specific exterior details and get the scale as close as possible to the real thing. If I were trying to model an actual T-72 tank, I'm guessing I would worry far less about making space to fit stuff inside the interior – I'd just want it to look as accurate as possible.

Whenever I built military vehicles as a kid in the '80s, I remember wishing there were better military colors. The really big news for military builders these days is the new dark green. It isn't strictly speaking a traditional military shade of green, but using it in combination with other colors makes a lot of sense: it can look very nice, and you can stretch your budding supply of dark green brick. Also there isn't a very expansive selection of parts available in dark green yet, so you're bound to need to add another color anyway. The BNSF GP-38 Locomotive (10133) and Mythical Creatures (4894) sets have both been useful sources for dark green brick, and we can only hope that TLC continues to release sets that use a lot of this color.

Tan of course, is a great military color, as it is now available in a wide selection of basic and specialized bricks, and also looks great either on its own, or in combination with other darker colors. Other options include a multi-tone grey urban combat color scheme, white with dark highlights arctic camouflage, or even going "peacekeeper" style in all white. Of course, this is LEGO, and you can try out whatever colors you have available. A brighter color scheme can work well (remember all those awesome G.I. Joe/Cobra vehicles?), and may suggest a more futuristic, space-like look.

LEGO tracks come in several types, though none is perfect. The classic segmented TECHNIC tracks are expensive to acquire in sufficient quantities, but they allow for the most flexibility, as they can be made as long or short as you like. Unfortunately, they are commonly available in widths of about one brick, just under three bricks, and five bricks — whereas I feel the ideal width for a tank track would be more like two bricks wide. The rubber one-piece tracks can be useful, but the length can't be adjusted, and they may be a little short for the needs of a tank builder. Non-purists may be tempted to resort to non-LEGO brand track, as Mega Bloks does produce track in pretty much the right size (one piece, rubber, two brick wide) along with fitted wheels. The more discriminating builder will of course want to go LEGO all the way, and find some way to use the pieces available as best as possible. Play around with various wheel configurations — you can pull off basic but functional suspension system if you like, or alternatively go for a more "greebled" and realistic look.

If you don't like (or can't acquire) the LEGO track, you can always build a wheeled armored vehicle, and maybe even incorporate steering.

Hatches for the crew may seem like a minor detail, but they can be surprisingly hard to pull off. Try not to let them get more than two or three plates high, and make sure they close properly when the crew are inside. I find that sitting the minifig in a diagonal position (so he is half sitting, half lying back) helps — this is especially useful for fitting the driver in, and is not at all unrealistic.

If you want to fit the minifigs inside the turret with the hatches closed, your turret will have to over 4 bricks high, and may look unnaturally big for the tank if you simply attach a turntable to the bottom and stick it on top of the chassis. If you aren't that bothered with interiors, or fitting the guys inside, then you can build a much lower turret, maybe have the guys sitting there with the hatches open, and simply remove them when the hatches close. This may be the best solution if you want to go for a tank with exterior scale as close as possible to the real thing.

In my opinion, the most satisfying turret design is one that has space for the crew inside and also doesn't look far too big. To pull this off, you'll have to bury part of the turret inside the body of the tank itself. Modern tanks have two or three men in

the turret and it is just about possible to squeeze two minifigs side by side into a 6-wide turret. To spin freely, this turret will need more than a 6x6 area in the chassis. You could build a chassis with an 8-wide interior or try a 6-wide interior, and play around with panels until you find something that gives the turret space to rotate.

Fitting the minifigs in can be a pain, so make sure to keep this in mind as you build. I like to keep a few figs around to test the interior before I finish the MOC. Designers of real military vehicles have similar problems, and armored vehicles generally have pretty cramped quarters.

While LEGO has never put out an official military line, there are a wide range of torsos that can be used for soldiers. If you want to go for a small army of similarly attired troopers, hunt around on Bricklink for some torso designs that you like that are affordable in large quantities. Start with a squad, and build your way up – there's no reason why castleheads should have all the fun when it comes to army building. If you're like me, you'll enjoy coming up with nice compact weapon designs using various small LEGO elements. For a more realistic look, there are some very nicely made custom weapons and helmets out there, for WWII era, contemporary, and futuristic soldiers.

After years as a castlehead, building tanks has been a fun change, and has impressed upon me the different types of challenges of building in various themes. I'd encourage builders of all ages to venture out from your comfort zones and try a new theme or two for a little while. If you only build in one theme you can get very good at that; but trying out a new building style is what really stretches you as a builder. At some point I'll probably build another castle, perhaps with a few new tricks under my belt.

Links:

LUGNET Military MOC page with links - <http://news.lugnet.com/build/military/>

Flickr Military MOC group - <http://www.flickr.com/groups/LEGOmilitary/>

Magnus Lauglo's Military Brickshelf page - <http://www.Brickshelf.com/cgi-bin/gallery.cgi?f=188751>



A Portrait of Billund Miniland's Inhabitants



Article and Photography by Didier Enjary

LEGOLAND parks are similar in many ways to any other theme park with their rides for the kids. But there is something extra that both the younger and adults enjoy: the Minilands. The Minilands replicate at scale various well known cities, landscapes and monuments from around the world.

To make them alive, Minilands are inhabited by some small people. These people are not like the famous minifigs as they are built from bricks and plates and around twice to three times taller. Even though built from quite basic parts, there is a great variety of designs for these Miniland people and that is the topic we will explore together over the next few issues of *BrickJournal*.

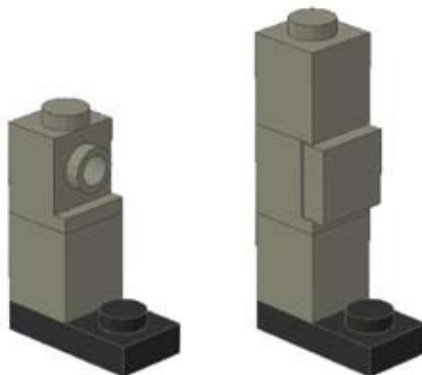
For each Miniland article, you will see a picture of a new brick-built person shot at the Billund version of Miniland at the LEGOLAND themepark in Denmark. Computer-generated images will allow you to build people by yourself from your own parts collection and some comments will help you to understand LEGOLAND designers' building tips and tricks.

For this first presentation, let us study this man standing up, wearing a striped waistcoat, which is a quite simple design. He is in many points the prototype of most Miniland people and we have chosen him as a starting point that helps to more complex designs.

The first lesson is that Miniland people are divided into submodels: legs, torso, arms and head. By combining various submodels designs, you can create an infinite number of miniland people.

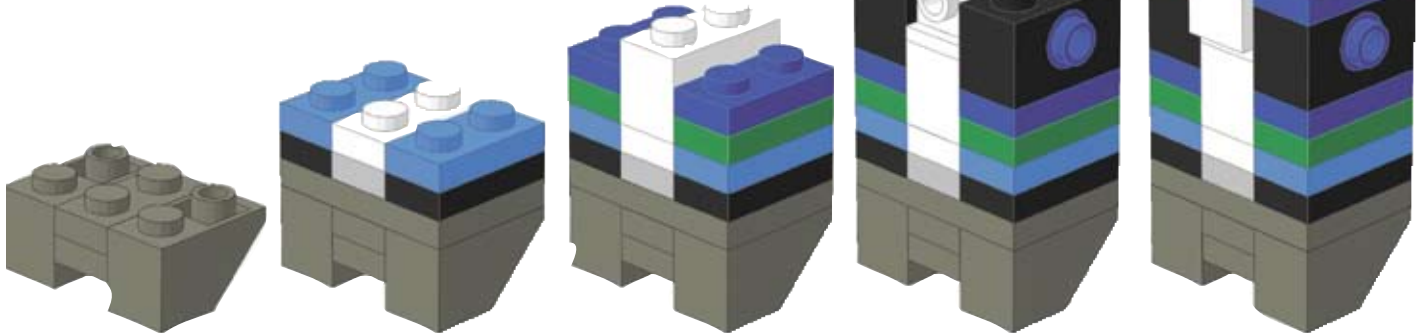
The leg is built by stacking three bricks on a 1x2 plate. Different colors create the contrast between the shoes and trousers - in this case black and dark grey. The knees are suggested using 1x1 bricks with one stud on the side covered by 1x1 tiles.

This design is the standard in Miniland, But we will also see several additional leg designs using, for instance, various slope and round bricks.



The torso is a much harder submodel to design. It has to evoke the body of the character and at the same time create the points where the arms and head will be attached. The body (hip and torso) is built onto two dark gray slopes that make the transition to the legs. Rather than using 2x3 bricks, it uses variously colored 1x2 plates to add some details such a grey belt buckle and a striped waistcoat on a white T-shirt.

The shoulders are black TECHNIC 1x2 bricks receiving half pins (here in blue) - the arms will be attached to the half pins the same way they can be stacked onto a stud. The bricks are covered by black tiles centered on blue jumper plates, which gives the model a less studded look. The white jumper plate allows you to center the head.



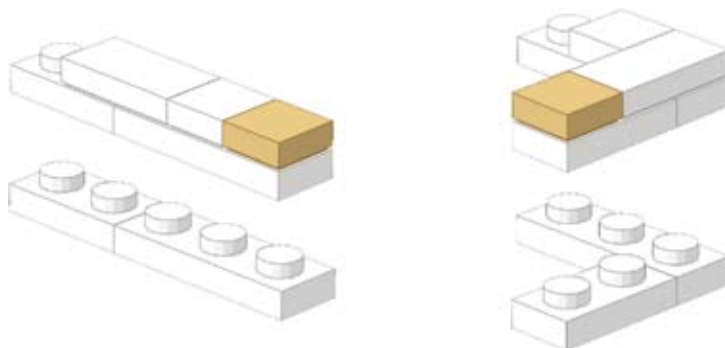
The TECHNIC half pin is common in blue nowadays but it used to be produced only in gray before 2000. Anyway, in the final assembly, they are hidden, so do not mind the color for this particular part.


Tan color is used for parts that represent flesh. However, tan is not so widely available. So, if you are out of tan parts, use yellow instead.



The head is built on a 1x1 plate (the neck) and a jumper plate (the chin). The jumper plate allows you to center the tan 2x2 and 1x2 tan plates that make the face. The brown ones on the back represent the hair. The top of the head makes use of a closed 1x4 hinge that creates a fringe effect on the forehead.

The arms are simply made of tiles stacked on plates. The hands are represented by tan 1x1 tiles at the end of the arm. The right arm is straight, but the left one features an elbow thanks to a 90° turn.



The lesson ended, we hope you will let your creativity run wild to create your own models. We will see you soon when our next study will be the design of an old bended woman. While waiting, have a look at the *BrickJournal* website for bonuses. 

Building: The Capitol Building

A Capitol Idea!

A Quick Chat with
Dominik Gerlach

by Christian
and Melody Krützfeldt

Photography
by Dominik Gerlach



Back in 1997, Dominik Gerlach wanted to build something challenging. Impressed by the dome of the Capitol, he decided to give it a try. However, only in 2003 he did he start with some tangible planning. The first steps were organizing some building plans and starting to collect bricks. On some of the days he built from early morning until late in the evening, but it took until 2007 to get it to its present state. Currently the MOC is built from over 500,000 LEGO bricks. The numbers will increase up until 2008 when Dominik hopes to have the model completed.

With its massive central dome, the United States Capitol cannot be overlooked. The dome was not only the part Dominik built first, it is also his favorite part of the building.

Here are some more statistics about the model. The building has 4,500 white windows (part #7026), 10,000 white 1x2 bricks (part # 3004) and 8,000 dark grey 1 x 1 tiles (part #3070b). The model is 4.18 meters x 2 meters, and the scale is 1:40. By the time it will be finished it will be an additional two meters in depth. Still on the to-do list: building the staircase on the back of the building and the large garden area behind the Capitol.

Building a model this size isn't that easy. One of the first obstacles for Dominik was to get information about the building. He built the Capitol from a floor plan and some pictures, as he has not been to Washington to see the real one – yet. Another problem was to obtain some of the bricks. White 2x2 windows (part #7026) and medium blue plates are difficult to get when they are needed in large quantities, for example.

Since Dominik has not quite completed his version of the United States Capitol Building, as he has a few final touches to complete, we decided to ask him a few quick questions about his model and the future of it:

How did you feel when you placed the very last brick in which to complete the model?

I don't know since I haven't placed the last brick yet.

Did you ever get to the stage where you wanted to give up due to the size and workload of the model?

Yes, I reached that point for a short while when I couldn't get any medium blue plates.

Will you ever dismantle the model?

No, I have no plans to dismantle it in the near future.

Where has your model been on display so far?

It has been on display at the 75 years of LEGO Anniversary event in Billund (Denmark) and at the LEGO Fan Weekend in Skærbæk (Denmark).

How do you get your models around when attending shows and events?

I've specially built wooden boxes for the model.

Does it take a lot to prepare the setting up of the model and to pack it away again after a show or event?

With the help of another person I need roughly six hours to set up the model and four hours to pack it up again.

Is it true that you are off to the US next year to display your model at the real Capitol?

It's not finalized yet, but I hope it will be possible. Unfortunately it will be a somewhat costly trip.


How will the model make its way to the US? — I hope it will be well packed! ;-)

Well that will still be a problem. I guess it will be sent by ship.

How long are you planing to be in the US?

That will depend on funding and who wants me to display the model.

Will you build something of this scale again?

Not in the near future, but who knows....So if you have ever dreamt of building a beautiful, large model that you have always wanted to, just remember it takes a lot of time, patience, planning and of course LEGO bricks! 



Congratulations Joe!

The Brickworld Team wishes you and Brickjournal much success as it debuts into its new print form.



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Seattle, Washington is a great convention town. My last trip there was in 1983; it was for an international convention for Barbershop Harmony... my *other* hobby. A lot can change in 24 years, but it was another convention that brought my wife and I back. This trip, it was all about the bricks, as we attended BrickCon 2007 in February, and if you weren't there, you missed a great weekend!

Great? Even that doesn't really describe it.

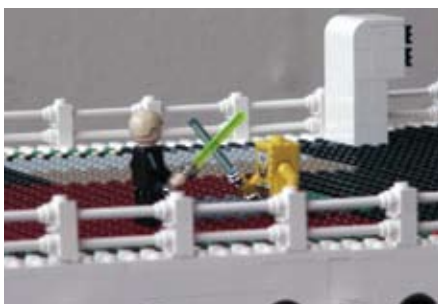
Getting to Seattle from Springfield, Oregon isn't hard. It's a straight shot up I-5. Getting to the Seattle Center—no problems. *Finding* the Pavilion where BrickCon was, in the dark, on a Friday night, with a football game and a grand piano sale, with a box of LEGO sets and MOC's... well, okay. My bad—should've gotten a map and looked at it. Once there though, it was a great time. Good to see some folks from BrickFest there, and made some new friends as well. The interaction with other builders is part of what makes these weekends so special. You really get to meet someone when you come to these conventions. This weekend was no exception. And the models and MOC's... wow. Rather than trying to describe them, let me show you a few....

Emerald City LEGO Fun

*Article by Matthew Crandall
Photography by Matthew Crandall
and Joe Meno*

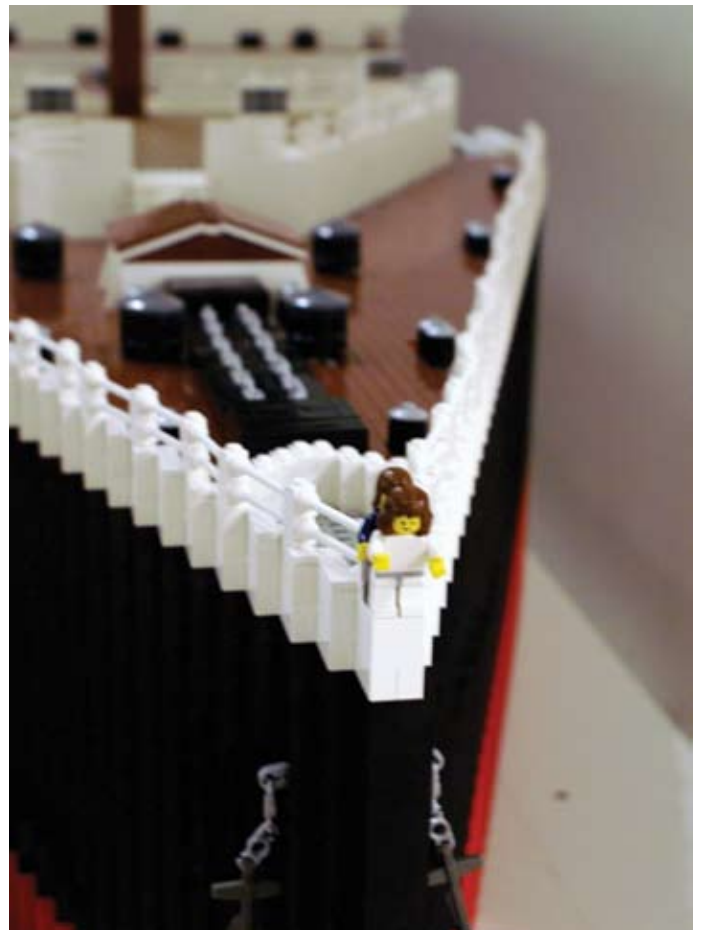


The *Surak*...



...And Luke and
SpongeBob on the
Titanic.

There was a pretty big model of the Titanic up front. You couldn't miss it. All weekend, small tableaus were taking place. Luke Skywalker fighting with SpongeBob Squarepants. A large lizard eating SpongeBob. The two lovers on the bow. Every time I walked by, it seemed like there was something new going on. There were two Mecha-Godzillas... *that worked*. There was the "Original Café Corner," a MOC from New Orleans that was really cool.



There are some really creative people out there, let me tell you. You should see what Breann Sledge does with her Bionicles. She has really raised these to an art form. Steampunk, ExoForce... the list goes on.



The theme this year was Pirates. Ahhhh, yes. Pirates. Those of us who were around or remember the original release of the Pirate sets were not disappointed... the Great Pirate Sail-In got all but maybe eight sets in for the convention, I think. It was quite the display, too—I had two of my three sets there on display, including one of my favorites: King Kahuka's Throne, from the Islanders run. Seeing them all made me a little wistful that I haven't finished doing the detective work on some Pirate minifigs I acquired at a garage sale. (I need to figure that out and start the rebuilding of whatever those are.) The Con set was a little pirate ship, packaged in a treasure chest for a box. That just added to the fun. There was a large pirate flag and sword, all in brick.



King Kahuka's Throne. There were numbered bricks for those that made it.

Being the Space fan I am, I had started a small shuttlecraft MOC but turned it into the HPMS (His Pirate Majesty's Ship) *Hangar Queen*, pictured at left. I chose the name *Hangar Queen* because the entire thing was built from spare parts. Ugly as a mud hut, but fun! Deena (my wife) submitted a tableau with a ferry and dock; she had fun doing that up and got some positive comments on it as well.



What else was there? Well, let's see... there were raffles all weekend. All kinds of building going on, into the small hours... and what would a LEGO convention be without a midnight trip to the LEGO store? We all went to the Midnight Madness event; in the coolness of a fall night there was the buying of LEGO, and there was much rejoicing. Much buying, and much more rejoicing.

Saturday came, and we opened up for public viewing. Trains were running on schedule, the moonbase was open for business, the cuckoo clock was ticking, there was the assemblage of what would ultimately turn out to be the record height Café Corner going on, people were oohing and aahing over all the creativity, and my wife... was out front, selling tickets. (Bless her heart—I want to publicly thank her for the hours she spent both days dealing with tickets, so I could take pictures, buy LEGO, answer fan questions about the Pirate display, check out some of the talks, and generally having a good time.) The dealer's room was going full tilt, there was a kid's building area, and organized chaos was the order of the day.



One of the sessions I watched was "Build in a Bag." This is where you complete a small set without opening the bag to do it. (I suspect it is harder than it looks.) Then there was the Wacky Race, and my personal favorite was a rather large wheel.

After public hours (and dinner), the fun continues. Awards were passed out for the "Best of," there was the auction (which raised quite a bit of cash, most of which came from one bidder) at the same time as the draft (the draft sent was Chum Bucket — #4981), more building of the huge Café Corner, and the Dirty Brickster session.



Now, about the Dirty Brickster session that evening...
(maniacal laughter goes in here)

...suffice it to say that if you have never participated in one, you've been missing out, folks. I think it's more fun to watch (as a participant) than it is to actually get something. (At least I ended up with something I liked—the Designer Sea Machines (set #4505). I felt for the guy who ended up with a large pick-a-brick cup full of pine trees.)

[Editor's Note: Dirty Brickster is a gift game where participants bring small wrapped packages that have LEGO items of one type or another, from small rare sets to odd parts. These packages are then placed in a lot where people can pick. Using a lottery, participants are given turns to pick a gift from the lot or steal a previously selected gift from

(continued on page 59)

ME Models Railway Series

Engine wheel-sets by: **BIG BEN** BRICKS LLC
New 2007


New for 2007 from ME Models! We have designed exciting rolling freight for your train layout. Each set comes in a sealed collector box, high quality laser instruction booklet and NEW for 2007 - high resolution vinyl "die-cut" decals! The decals are easy to apply and do not leave any residue upon removal! Be on the lookout for both U.S. and European designs. Boxcars, refrigerator wagons, flatcars with a variety of loads, hoppers, tank cars, cabooses and later this year passenger wagons and ENGINES featuring BIG BEN BRICKS Wheel Sets! Go to www.me-models.com for additional information and to place your order.



another person. Such a person is called a Dirty Brickster.]

Sunday came, and so did more public viewing. Lots of people again, the same stuff as Saturday, and by the time all was said and done, there had been some 3,700 plus people through the gates. (At least, that's the number I *think* I heard.) Even more building of the Café Corner (which ended up at well over twenty stories) and yes—more buying of LEGO. I ended up purchasing three Classic Space sets, which are a welcome addition. Sadly, I was unable to buy some of the individual elements I was looking for; I didn't have time to print my list up.

Sometime over the weekend I took in a session on LEGO Certified Professionals, and Dan Parker offered tours of his studio on Monday for those who were still in town. (By the way—Dan, thanks for the invitation. Your studio *rocks!*) A big thanks to all the LEGO professionals who answered questions in that session—there are a whole bunch of us who envy you guys.

All good things must come to an end, and BrickCon was no exception. Sunday afternoon came, the doors were finally closed, and after the final session, it was time to pack everything up and head back to the hotel for the evening. (We had the luxury of staying in Seattle Sunday night.) Packing all the new LEGO into the car Monday morning, along with all the stuff that we brought up... well, that's *another story*. 



Sailing In... To NWBrickCon

Article by Joseph Evangelista

Photography by Joe Meno



“Ahoy there! Set your sails to the far West... the North West in fact! Rumor tells of a land filled with enough treasure to give up this pirating life and settle down in our favorite port of call (not that we would though, we’re pirates after all!). But ye be warned... ye better have enough booty to share with the rest of the crew. For this be a pirate themed convention, and only those who are dressed to fit the part will be permitted to dock their boats here.”

Well I didn’t dress the part, nor was I about to proclaim having plenty of booty (pun intended), but I was allowed to pass the boat through the narrow channel and sail into the port of NWBrickCon 2007. The first thing anyone will tell you is that Seattle is a cold and dreary place, but after spending a few days with the SEALUG gang and some other new friends that wandered in from the cold, it turns out that Seattle is actually a very warm and inviting place to be. That’s the best way I can describe the atmosphere that surrounded the Seattle Convention Center Pavilion Friday-Sunday, October 5-7.

With just over 13,000 square feet packed tight with all kinds of LEGO creations, it was easy to become quickly overwhelmed at the level of detail and creativity that everyone put into their MOCs. From extremely detailed Model Team cars, to expansive castle battles, and a vast monkey research/experiment layout (the Omicron by KeithLUG) — this was the place to be. Countless minifigs littered the surrounding landscapes — armies of castle warriors battling dragons, figs in spacesuits getting lost around the moonbase, and people relaxing at the local restaurants in the town/train layout. With so many figs on display it’s a good thing the Café Corner Hotel broke ground early and made it to 22 stories tall! Though it was questionable whether or not it would break the previous records. Protests and worker strikes slowly decreased as management improved morale by threatening to make workers “walk the plank.” The building was completed on schedule thanks to a scruffy looking pirate who went by the name “Steve.”

The general public visiting the event was instantly greeted with a look at a wondrous and amazing sight... once I moved my ship’s sails to the side they were able to actually see the layouts! With a 22-foot Titanic lining the left wall and robots running circles around little kids stealing their candy, one look from the entryway told everyone that they had just sailed into murky waters — clearly they would be in for something unexpected! And yet the reaction from almost every person that walked through during public hours was the same: absolute amazement!

There was an impressive MINDSTORMS display in which numerous NXTs and RCX vehicles, assembly lines and even a crane had to work together to get the precious cargo (LEGO soccer balls) to their destination. Utilizing precise timing, LED lighting, some path learning, and a little bit of luck, Gus Janssen was able to show visitors some truly spectacular robotics with his Great Crate Contraption. Right next to this was a table set aside for the Gothic Lawn Gnomes, a FIRST LEGO League team from the Seattle area. Among the creations was an etch-a-sketch hooked up via infrared to a PlayStation-looking controller and an NXT challenge

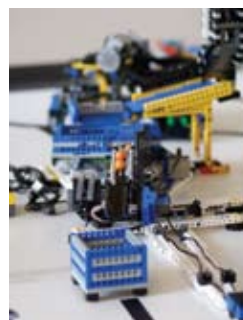
course! If you were particularly lucky you might have found some hidden treasure buried in your creation in the form of a micro gnome. If your creation had been “gnomed” it was your mission to repay the deed... literally by giving a donation — pirates be warned, those little gnomes are craftier than they’re given credit for!

One thing that you have to get used to when you visit Seattle is that instead of there being a Starbucks on every corner, there are actually three! The birthplace of this successful company definitely left its impression on the event. In fact there were quite a few Starbucks-inspired creations scattered through the event — I didn’t know Starbucks had a pirate island franchise! And we all know that there’s nothing worse than an over-excited sailor!

Buried treasure seemed to be the popular item this year; at every turn there was another stash of gold LEGO guarded by a fierce dragon (or in some cases unsuspecting pirates pumped up on caffeine from Starbucks). The gold was so plentiful in fact that some of it even appeared as a mini-figure in the form of the C-3PO. “Yes, this is the last Chrome Gold C-3PO”... (10 minutes later)... “Our next giveaway is yet another Chrome Gold C-3PO!” Don’t think that the abundance of figures made them any less rare though; at the auction they brought in between \$110 and \$150! While buying LEGO at events such as these can definitely break the bank for many, I was pleasantly surprised to find some nice finds at the Brick Bazaar. From the various minifig creation areas there were countless gems to be found, causing many to abandon their setup work and acquire some more patrons to fill their coffee-shop seats.

Surprisingly, while there were enough seats for the minifigs (with the exception of those that stood monkey guard duty at the Omicron Weekend station) there were not too many seats for the weary soul looking to escape the crowds on public day. The small “classroom” partitions acted as a sanctuary and also provided some space for roundtables. Attempting to escape the crowds I tried to rest in a chair behind the partition, however I was quickly pushed into another seat with a small Racers set in front of me and told to build. There was one catch however — I wasn’t allowed open the bag! Never had I attempted such a feat, and never again will I underestimate the strength of a plastic bag. No matter what angle I twisted it, it never once ripped. All the effort and struggle and genius I exhibited during this 15-minute build proved ultimately useless — I even lifted the bag above my head upside down to get some tiny pieces put on the model! Upon finishing I slammed my creation down on the table to signify that I was done... the rear axle fell off (as did a few other pieces)! I was penalized 20 seconds, which didn’t really matter since I was in last place out of the nine builders; but it didn’t matter, the real joy was looking around seeing everyone with a big smile on their face from sharing a few jokes and having a good time.

Even during the teardown for the event people were still having fun — inside reports say that Godzilla was even attacking the Omicron Weekend base six tables away! While I’m sure that Omicron security is top notch, I don’t think they can hold up to a 3-foot-tall robotic Godzilla who can level buildings at the drop of a hat with its spinning





hands and glowing eyes. No, seriously... watch. [drops hat] "Reports are just coming in that the north section of the Omicron base has just been breached and a nuclear implosion is imminent." See, told you!

So there you have it, NWBrickCon 2007 in a somewhat lopsided, discolored nutshell. While many will tell you that it was a lot of fun, few will also tell you how many Mai Tais and margaritas they drank, how little sleep they got during the trip, or how tired they were of answering the same questions to the public ("yes, it has a lot of bricks," "yes, it took a long time to build," "no, you can't touch it," "no, this isn't a convention for brick layers," "no, I'm not trying to play hard to get!"). Now that everyone is gathering their strength and rebuilding their creations from the long ride home there is only one question that remains — where will you be in October next year? **b**



LEGO WORLD: Continuing the Success of the Past Six Years!

**Event Report:
LEGO WORLD**

On Thursday, October 18th, LEGO WORLD 2007 opened to a total of 55,000 visitors over six days. All tickets were sold out two days before opening. The tickets were sold through the Internet and the toy shop Intertoys — only to control the number of visitors each day and to create a pleasant entry for the visitors because there were no queues.

The IJsselhallen at Zwolle welcomed around 10,000-11,000 fans each day. LEGO WORLD is organized by the LEGO Company and Libéma who manages and operates the IJsselhallen. The Dutch LEGO fan club De Bouwsteen (the building brick) organized the displays of AFOLs in the first hall. In this report I want to take you on a tour through the halls following the “loop route” (walking route). I was accompanied by Jeroen Pieters, a freelance photographer, who helped me find a few of the “jewels” of this LEGO WORLD.

Entering the IJsselhallen in Zwolle the first hall you encountered was the Bouwsteen AFOL hall. A huge hall full of LEGO creations from fans all over Europe. The diversity of the MOCs and displays was great — ranging from clocks, a working bowling alley, trains (lots of trains), and castles, to the smallest MOCs made by children.

The exhibitors came from all over Europe: Italy, Portugal, France, Denmark, Belgium (working together with the Dutch Bouwsteen members from the south of the Netherlands in a group called Benelug), and of course many of the members of the Bouwsteen. Accommodation was arranged for AFOLs who lived too far away from Zwolle to stay the night in cottages of a relatively new local holiday park.

On Sunday, Hans Beuze, chairman of the Bouwsteen, said that the atmosphere was nice and relaxed and that the adaptation of the hall layout had gone smoothly. The Bouwsteen hall moved from previously being on the far end of the building to the first hall where visitors entered. This new layout was very successful, visitors encountered LEGO fans and their work coming in and going out. The new layout also caused new security issues which were solved without any problems.

This was the year for two jubilees: LEGO introduced its products to Holland 50 years ago, and the Bouwsteen celebrated its 12.5 year existence.



This was also the year that Eric Brok passed away. Eric Brok was a LEGO fan, designer and ambassador 'pur sang' (of pure blood). His presence is greatly missed by many, not only by Bouwsteen members, but worldwide. His legacy is the set he designed that was released earlier this year, the Market Street (set #10190).

*IJsselhallen, Zwolle,
the Netherlands*

*BrickJournal tours
the largest LEGO
event in the world!*

Article

*by Jennegien Nieuwstraten
Photography by Jeroen Pieters*



I will highlight a few of the things that struck me as being special. There was so much to see that it is impossible to mention it all, so do visit web sites that show more photographs of this enormous and astonishing event (i.e. Brickshef).



Megan Rothrock is a female LEGO builder with an artistic building style. Her creations are always very innovative. She does not really build, but “sculpts” with LEGO the most fantastic objects such as dragon trains, a nautilus and lots of fantasy creatures. Amongst her latest creations a number of “jewelry” boxes can be found. Each box contains a very cleverly built movable tableau vivant (living picture).



Martijn Boogaarts and Gerrit Bronsveld built this working bowling alley with actual ball return and pin replacement systems. It was made of LEGO products only (except for the bowling ball and pins) it contains approximately 100,000 bricks, 40 motors, 14 RCX units, nearly 40 sensors and 13 automated functions. They worked for over 300 hours to build it. They are known as builders of impressive MINDSTORMS models such as a car factory, pinball machine and slot machine.



Bartjan Meier and his wife Inge started collecting DUPLO two years ago when their twin sons were two years old. Their collection extended to a display of 25 meters wide and 2.5 meters deep within these years, a true DUPLO World! Even as an adult your hands itch to play with it. Those twins are very lucky children!



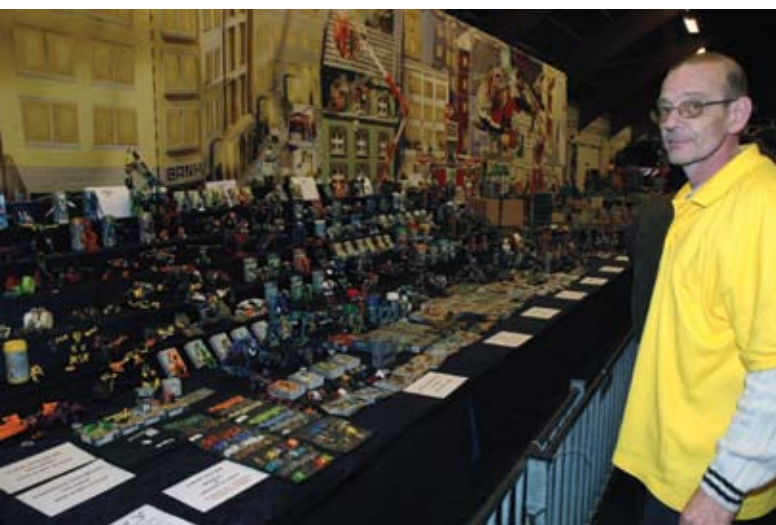
The Benelug group had a fantastic display of houses, towers, and trains. Rob Beurskens from the Netherlands built this coastal display and lighthouse tower in two months. Serge Belsack from Belgium built a fantasy tower. Ludo Soete from the Belgian delegation of five men told that their display of 23 meters long was a great opportunity for them because LEGO WORLD is the only major occasion nearby.



Although “girl” LEGO is often not considered to be “genuine,” I do want to mention the collection of Lillian here. She has been collecting Scala LEGO for many years now and has an awesome collection. Many girls are searching for “girl’s” LEGO and I am always very happy to be able to direct them to Lillian.



Tania and Luis Baixinho from Portugal brought their Lisbon tower and typical Portuguese farmhouse with them. They were invited by LEGO ambassador Paul Wolters.



The LEGO Bionicle collection of Johan van Keulen is great! Many children spent a long time looking at it, and the most frequent question Johan had to answer was “is this one for sale?”



A boy of nine years old, Jouke Gerrits, built this White Chapel for the LEGO WORLD building contest, being inspired by my own White Flower Cathedral! I feel deeply honored by that.

The Sinterklaas (the midwinter tradition from Holland that later developed into Santa Claus all over the world) was being copied at LEGO WORLD. The original LEGO Sinterklaas is over 30 years old and had no building instructions. Roy Cordes from LEGO Benelux asked Bouwsteen members to make three copies for display in stores around December 5th (the traditional day for giving presents in The Netherlands). Jaco van der Molen spent the last seven months creating new building instructions in LDraw. Together with Dirk Plug, Leo Bezemer, Henk Schoonderbeek and Ronald Heemskerk they nearly managed to copy the first one at LEGO WORLD.





Two records were being tried this LEGO WORLD. The first record was building the Eiffel tower (10181) by six skilled LEGO builders from the Bouwsteen. Nearly two minutes were taken off the former record, which is set to one hour and 14 minutes now. The Millennium Falcon of the *Star Wars* series (#10179) record remained unbeaten.

On one side of the hall were a number of second-hand shops. It was hard to find room to move or have a peek in the boxes full of bricks when so many adults and children were all trying to find just that brick that they needed, too. And who would think that girls are looking for pink only?

The NS (Dutch Railways) had a stand in this hall, too; they offered special train tickets to LEGO WORLD visitors. Connexion (a bus company) transported Bouwsteen members to and from LEGO WORLD.

Also present in the Bouwsteen hall were LEGO designers from Denmark with stands for LEGO City, Creator, Star Wars, Duplo, ExoForce, MINDSTORMS, Castle and TECHNIC. Their stands were visited by the public continuously. And on Monday, a LEGO leadership team of 40 visited LEGO WORLD. Four members of the Bouwsteen each took a group of ten to show around.

The Intertoys shop was also in the Bouwsteen hall. The shop was very well stocked with almost every LEGO set currently on the market. As a result, the store was busy and sales were good.

After spending hours in the LEGO fan hall, we travelled to the second hall which featured several activities such as a LEGO shop with loose LEGO polybags for sale and candy stands/stores. The Aviodrome, a sponsor of LEGO WORLD organized a LEGO City airport layout in this hall. The children's farm from Paula (dairy company) was present with live stock, custard puddings and more fun for children.

Travelling through a tunnel of tents (enabling a walking route without "traffic jams") we entered into the great hall.

The central and major activity in the great hall was, of course, the building contest with exquisite results in both



building skills and artistic ideas and inspirations. In this hall we also found the Koninklijke Landmacht (Royal Troops) who are traditionally present with a practice course, conducting children through it. Furthermore, displays of Bionicle world, LEGO Universe and LEGO Jungle could be visited. A treasure hunt in the sand, a Racer track, and many

more great activities attracted many children. Also more official LEGO shops were present here with loose LEGO bricks, Klikits and additional LEGO products such as shirts. Axitraxi provided the inflatable bouncers. The Dutch Red Cross was present in the great hall with a very nice display of traditional ambulance workers and nurses, and several vehicles and tools to draw attention to the fact that too few people have first aid skills.



At the far end of the great LEGO hall was the Jetix hall. Locally famous child performers presented their acts here. The show presented many local artists and the hall was filled with people for each performance. It was great to watch how parents and children equally enjoyed and were literally moved to dancing by the performers.




Back through to the great hall to the walking corridor onward to the museum. The museum was terrific, a must for every LEGO fan. It was filled by LEGO and many members of the Bouwsteen to give a complete overview of 50 and more years of the LEGO products. And looking at the pictures... who would say, according to the fascinated children of both sexes in the photos, which LEGO is for whom?

Returning back to the LEGO fan hall we came through the DUPLO and Belville hall. DUPLO has become a product of its own merit, just like Belville, which was clear from the number of children present trying to get hold of the bricks. The throne made of pink bricks with mermaids and princesses on which children could have their picture taken by their parents was continuously occupied.

Many more sponsors were crucial in order to guide the visitors around: students of the school of Landstede helped out with the building contests and more, and students from Deltion college took care of the security issues (when you have been to LEGO WORLD as an exhibitor, you know the day is over when the grey-dressed guys and gals “sweep” the halls clean of visitors).

Other sponsors presented visitors with services and goodies: Nestlé organized a baby’s corner where parents had a quiet spot to attend to their young ones. Loekie (an advertising company) was present with a coloring contest; prizes for the LEGO WORLD building contests were donated by the company of the film *De wonderwinkel van Mr. Magorium* (*Mr. Magorium’s Wonder Emporium*). The candy manufacturer Haribo handed out sweets to children while their bear logo was created in a LEGO mosaic; as did Liga Milkbreak hand out its product in the “goodbye bags” when leaving LEGO WORLD; McDonald’s showed pictures of LEGO WORLD every day on the screens in their restaurants and served special LEGO WORLD menus, while Friesland Foods delivered dancing mats that could be won; Heelys donated shoes with wheels in the heels to the director of the LEGO museum; and finally, Staat @ Co donated the polo shirts for the Bouwsteen members. Without all the mentioned sponsors, an event such as LEGO WORLD would not be possible.

Back to the LEGO fan hall... the entire setup was great, it was very nice to end our journey in the Bouwsteen hall to have a look at all the things you missed the first time coming in. And then back to home, to dream of... LEGO :)

Until next year... 

NIWeek

07

WORLDWIDE
VIRTUAL
INSTRUMENTATION
CONFERENCE

NXT at NI Week: Playing Games!

To demonstrate the NXT MIND-STORMS platform at a tech show, the LEGO Group invited some LEGO robotics builders. Here's a report by one of the participants about the robot that was built for the demonstrations.

*Article and Graphics by Jay Kinzie
Photography by Brian Davis*

Hello avid LEGO fans! Jay Kinzie here. I am here to talk about events that LEGO hosted at NI (National Instruments) WEEK, a technology show. Companies from all over the United States come to show off and boast about their technological triumphs. There is also a main lecture each morning, and workshops for various technical skills that run throughout the day.

LEGO hosted a competition at their booth to raise awareness of the new NXT platform, and I was invited to attend. The competition was held with a *Star Wars* theme. The goal was to program a prebuilt robot to sort a series of prebuilt structures based on color that were scattered in select locations on a playing field. After the structures were identified by a color sensor, they were to be pushed to certain locations on the playing field. Lines were placed on the field that led to the destinations of the structures. The robot was equipped with a light sensor to detect the lines. Also to be in line with the theme, the structures were called "TIE Fighters," and the robot's mission was to "neutralize the TIE Fighters."

The robot started atop of a closed off, elevated portion of the field. When the game commenced each round, a door would open which would permit the robot to move down a ramp which led to the main playing field.

On the main portion of the field lie the structures. Pictured to the left is a structure. It was my project to design these robots and structures.





A crowd forms before one of the competitions



Pictured to the left is final design robot itself. The robot had many design challenges. One major challenge was that the robot had to be built from a standard Tribot chassis. While Tribots are some of the best general purpose robots around, they lack space and mount points to be able to accept large hardware on the front of the robot. This was alleviated by reconfiguring the front structure and using the NXT brick as a structural element so that the claw mounting assembly had something to protrude from.

The robot also needed to be very durable. Errors during the programming phase of the competition were inevitable. Thus the robot had to be able to withstand its own power so that it would not tear itself apart or sustain damage in collisions. It also needed to be simple so that the robot could be copied eight times with a limited parts set. Only parts that were in the retail NXT set were permitted to be used for the robot.


The main feature of this robot is the “floating gearbox.” The floating gearbox allows two functions to come from one motor. The first function is the grabbing motion of the tines; the second function is the lifting motion of the tines after they have grabbed something. Let us examine how this behavior emerges.



For example, say the robot is about to grab a structure. Immediately to the left is the diagram which shows the power flow during the grabbing phase in detail. The green line follows the power flow through the system. First a torque is developed in the motor. It is then sent through a 1:9 gear reduction (pictured on the left of the robot) so that the floating gearbox (center) has enough torque to lift a structure during the lift phase. In this state, the torque arrives at the tines to make them open and close. The motions of the tines are denoted in the diagram by the blue arrows.



This diagram shows the power flow during the lifting phase. The green line follows the flow of power through the system, and the two red “X”s with a red line in between them denote that the tines cannot close further. First, a torque is developed in the motor. It is then sent to a 1:9 gear reduction, in the same manor as the grabbing phase. Since the tines can no longer close further, the gearbox is locked. When the gearbox is locked, the gears and shaft cannot move relative to the gearbox, thus making the gearbox effectively one piece. This allows the motor to apply a torque to the gearbox itself, and thus lift the tines.

I had a great time with this project. I hope that this article has helped to spread more ideas in the LEGO community. If you have any questions, comments, or feedback, please feel free to e-mail me anytime. 

You can contact Jay at:
jbotics@gmail.com

The LEGO Digital Designer file for the robot can be found at the BrickJournal website: <http://www.brickjournal.com>

Pictured are the participants from the LEGO Group and members of the MINDSTORMS Community Partners. Front row (left to right): Brian Davis, Steve Hassenplug, Jim Kelly. Back row: Bryan Bonahoom, Jay Kinzie, Christopher R. Smith (Littlehorn), Steven Canvin (LEGO MINDSTORMS Marketing) and Rick Siegrist (LEGO MINDSTORMS Creative Lead).



Bricks in Vienna:

LGOe Club Exhibition
September 29-30, 2007

Article by Verena Schaden
(<http://www.brick.at>)

Photography by Karin Stifter
and Verena Schaden




It was a warm and sunny fall weekend in Vienna when more than 650 visitors came to see what the Austrian Community (<http://www.lugnet.at>) had to show. The MOCs and sets showed covered many themes and offered interesting parts for all types of LEGO fans.

Dioramas on themes like *Lord of the Rings*, Middle Age, Pirates, *Harry Potter* and Seaside invited viewers to stay for hours to note all the small details, ideas and construction techniques.

We displayed all the available *Star Wars* UCS sets, a lot of additional *Star Wars* sets, a collection of minifigs and maxifigs and last but not least, a showcase with pretty old and rare LEGO sets right from the time LEGO started building bricks.

A fully digitally mastered railway construction as well as train and truck MOCs inspired model makers to talk shop.

Also, the kids — the older ones as well as the younger ones ;-) — enjoyed playing with a Carrera track with LEGO cars, a railway course and some ingenious LEGO MINDSTORMS machines.

It was a great weekend! See you next time from March 28th to 30th in St. Pölten, Austria where the LEGO exhibition will be part of a large modelmaking fair! 





Switzerland: A New Country on the LUGmap

A new LEGO fan club is founded and BrickJournal is there!

*Article by Beat Felber
Photography by Beat Felber
and Andreas Kunz*



A lot of action around the displays of SwissLUG at the celebration exhibition in the Glatt centre.

It all began with a radio show. Back in autumn 2006, DRS3, a Swiss radio station, mainly oriented towards young listeners, broadcasted a feature on clubs. People already involved in clubs looking for new members and those with the idea of founding a club and looking for like-minded people had been offered a platform. Thus, a Swiss guy from the most eastern part of the country took the chance and spoke on the radio about his idea to found a Swiss LEGO club.

A few weeks later, a first meeting at an easily accessible place at a motorway service area took place. People from all over the German speaking part of Switzerland who had heard the feature on the radio showed up, also those who read about it on the corresponding Internet forum on the radio station's homepage. Finally there were some people who had been invited by others who knew of the initiator's plan. Thus, twelve LEGO enthusiasts met on a Saturday afternoon to set what later would become SwissLUG, the Swiss LEGO User Group.

To make it easier to match the names to all the new faces, nameplates made of LEGO bricks had been brought along by the future SwissLUG members. Also some bigger and even motorized models had been brought along, much to the enjoyment of the other guests at the service area. We all agreed that we should



Harbour diorama at the big exhibition in the Glatt centre celebrating 50 years of LEGO in Switzerland



First meeting at a motorway service area in autumn 2006.

meet again to officially start a Swiss LEGO club. So a day in February 2007 was decided on as the date of the foundation.

Again on a Saturday afternoon, we met — this time already with a lot of concrete ideas as to what should be done to establish a common platform for Swiss LEGO enthusiasts. Of course, first of all there was the decision to found a club according to Swiss law. Then Andreas Kunz, the initiator of it all, was voted for president unanimously. Further members of the board are Urs Stebler as vice president and Thomas Merz as treasurer.

So off the planning could go. We have our own homepage <http://www.swisslug.ch> with a picture gallery, message board and the possibility for new members to register. Meetings will be announced on the homepage and pictures of our events can be found in the gallery. So please feel free to come by from time-to-time — there will be updates every now and then. And don't forget to look out for our logo on our homepage and on the T-shirts of our members at various events.

The first of these events was already a big step forward for SwissLUG. 2007 is not only the year The LEGO Group celebrated its 75th birthday, but 2007 stood also for 50 years of LEGO in Switzerland! Therefore, one of our members had been contacted



SwissLUG guys at the founding meeting in February 2007.

and asked to participate in a six-week exhibition in a shopping mall near Zurich. But instead of just displaying some of his models, he convinced the person in charge that it would be nice if the whole club could bring their creations and make the exposition more interesting for visitors.

Thus from July 13th to August 25th, creations and models of the private collections of SwissLUG members were on display at the Glatt centre, one of the biggest Swiss shopping malls, close to Zurich and frequented by an international audience. There was even a press conference in the run-up to the exposition so that the LEGO hobby in general and SwissLUG in particular had been boosted and made it into the media.

Was it more due to the exhibits and play tables brought and installed by The LEGO Company or was it because of our own creations? We don't know. But what we do know is that there was a huge interest in our models which led to a lot of interesting discussions and even new members. During the times none of our members were present, visitors could grab one of our business cards leading them to our website. Feedback through this channel was not bad either.

But what was it that attracted the public? Was it the huge harbour diorama in minifig scale; was it the pieces of construction equipment and cranes, one of which was even too high to fit in the display case so that the top glass panel had to be left off? Was it the collection of TECHNIC super cars or the various train models? Was it the collection of early day city and maxifig sets or was it the *Star Wars* models? Or perhaps the Model Team trucks or the collection of official TECHNIC and self-made Unimog models? We think it was a bit of everything. There were exhibits for any kind of LEGO interest.

While the exhibition was still running, an official party at the LEGO headquarters in Billund took place to celebrate the 75 years since the invention of the LEGO brand. On the 1000steine forum, Jan Beyer, Community Ambassador for Europe was searching for AFOLs willing to take part in the festivities and bring along their favorite LEGO creation. For SwissLUG, Beat Felber applied with a model of a Liebherr A 314 mobile excavator and was lucky enough to be chosen to spend two and a half great days in Denmark. [Read more about this event in a separate *BrickJournal* article by Mel Krützfeldt in issue 9.]

Also during the show at the Glatt centre, SwissLUG engaged in a social activity. A family with two boys that lost their home and all their belongings in a fire had been asking for support with the help of a classified ad. It was easy for SwissLUG to take action on this matter and collect LEGO material to share with this family. The handover of different sets and loose parts took place at the exposition. We



Construction equipment and cranes, one of them is a bit too high for the display case



Talking shop at one of the regular SwissLUG meetings.

hope that it will help the boys to get over the grief caused by their terrible loss.

In the meantime SwissLUG grew further. New members from other language regions have been gained, including the French and Italian speaking parts of Switzerland. Our meetings take place at more or less regular intervals of about one and a half months. Members bring along their LEGO sets or parts they would like to sell or trade and new creations — official and self-made ones get discussed. Usually a meeting is concluded with a dinner during which the discussions about any kind of LEGO-related subjects continue.

If you live in Switzerland and are interested in LEGO, we'd love if you would stop by at any of our forthcoming meetings. The dates and places can be found on our homepage <http://www.swisslug.ch>. 

Beat Felber is a SwissLUG founder member and host of <http://www.engineeringwithabs.ch>, a site dedicated to LEGO models of mining equipment, cranes and transportation.

The Barnyard just got bigger

MOC it better with the new barnyard animals from BrickForge!



What is the MCP?

So what exactly is the MCP? The acronym stands for MINDSTORMS Community Partners. The MCP is a group of people who have been selected by the LEGO MINDSTORMS product team to act as partners between The LEGO Company and the robotics community. The members of the group provide valuable feedback to the LEGO MINDSTORMS product team about future releases, beta test some hardware and software, and also help organize and staff various robotics events and festivals whenever possible. In addition to the role the group plays for The LEGO Company, the members also write books, publish and manage several blogs, contribute to technical articles and teach others about robotics and MINDSTORMS. In return for all of this, the members get sneak peeks into upcoming products, and an occasional gift from the company.


So what's the history? Well, a few years ago, some members of the LEGO MINDSTORMS product team contacted four members of the LEGO community and created the MUP (MINDSTORMS User Panel). These four members (all very active and well known in the robotics community for their work with RCX) helped The LEGO Company play out some initial design ideas for the newest version of MINDSTORMS, the NXT. Later, nine more community members were chosen to augment the group and the MUP2 was born. Then, as the final push was being reached for the release of the NXT, The LEGO Company decided to create the MDP (MINDSTORMS Developer Program). *BrickJournal* previously interviewed Steve Canvin of the MINDSTORMS product team in Issue #6: <http://www.brickjournal.com/wiki/show/The+LEGO+Group%3A+NXT+MDP>

The MDP was introduced to the community through some advertising channels, and applications were accepted. 100 lucky people would be chosen from the list of applicants. These would join the 13 people from the MUP2. The company received over 9000 applications. After one year of the MDP (and based on its success), the MINDSTORMS product team decided to keep a smaller group together on an ongoing basis. They created the MCP and took applications from the 100 members of the MDP. The first MCP contained 20 community members. At the end of a year, the program was continued with the MCP2, and new members were added, bringing the total membership to 30 people (there are also ten members from within the company and partner companies). The following countries have representatives in the group; Australia, Austria, Canada, Denmark, England, France, Germany, Holland, Israel, Italy, New Zealand, Switzerland, Uruguay, and the USA (the youngest member is age 18).

The MCP: An Introduction

A new feature for BrickJournal begins here!

Article by Geoff Gray

Hello all, and welcome to a new column in *BrickJournal* called "From The MCP." This column will be a regular in the magazine and will feature a topic from one or more of the MCP members. Additional resources and articles will also be available on the *BrickJournal* website (<http://www.brickjournal.com>). This first column will introduce you to the MCP (see the sidebar "What is the MCP?"), show you some good links for information (see "Helpful Links" below), and introduce you to a new spotlight in the magazine called "TECHNIC For Thought." "TECHNIC for Thought" is a spinoff of the regular spotlight "Bricks for Thought," but is intended to help teach some fundamental building techniques and tricks based on the LEGO TECHNIC line of building elements. Finally, in the next issue, look for some great information on one of the favorite MINDSTORMS competitions in the LEGO Community, the SUMO Robot challenge. 

Helpful Links

Excellent Blog Site:

<http://www.thenxtstep.blogspot.com/>

Official LEGO MINDSTORMS Portal for sharing projects and advice:

<http://MINDSTORMS.LEGO.com/nxtlog/default.aspx>

Site listing many different software options for programming LEGO robots:

<http://www.teamhassenplug.org/NXT/NXTSoftware.html>

Article outlining all of the technical attributes of the various LEGO motors past and present:

<http://philohome.com/motors/motorcomp.htm>

Article from the last issue of *BrickJournal* reviewing an add on sensor for the MINDSTORMS NXT System:

<http://www.brickjournal.com/wiki/show/A+Look+at+the+HiTechnic+%27Infrared+Link%27+Sensor>

TECHNIC for Thought

by Geoff Gray



LEGO Group News Release

LEGO 9V Train Communication II

Dear all,

As promised in the first communication from the 1st of October, we are informing you of decisions regarding the development of the new LEGO Power Functions train system. Using all the valuable feedback we received from the AFOL community, we have now reached some basic decisions about the scope of the future train system.

We are still working on the details of the new Power Functions train system; however, there are certain features that have been decided. Some of these features are a new designed remote control with speed regulator, a new size rechargeable battery box with a built-in speed regulator and finally we are exploring and seriously considering new track geometries thanks to the use of plastic rails. As you know, this has been one of the most requested features from the AFOL community over the years.

In late April 2007 we arranged a workshop for a group of five AFOLs involved in the LEGO train community, and they worked on some of the possible solutions and defined the basic needs for a new LEGO Power Functions train system along with the LEGO design and engineering team. In this workshop it became clear what sort of elements and features to include in the new train system. The result of this workshop was the design of prototype elements. Detailed decisions about the specifications of the elements are still in discussion and will be for the next couple of months.

We wish to continue the cooperation with the AFOL community in the development of the Power Functions train system and in late November we had another workshop where we built on the experiences from the first workshop. In the November workshop there were ten fans from around the world: Denmark, USA, France, Belgium, the Netherlands, Germany, and United Kingdom. The idea was that the AFOLs and the LEGO team would build with the prototypes in order to determine what additional features to include, what to add to the concept and, finally how to refine it. This ensures that the new Power Functions train system gets input from the AFOL community and also ensures the features are as close as possible to what is requested by the AFOL community.

However, please keep in mind that the new train system first and foremost should be suitable for the use of children, and therefore it is consequently being tested by children as well as AFOLs. There is an established budget for the initial development so while we would like to address all needs that are expressed; there is a high likelihood that we will be unable to address all needs.

You will be updated on the results of the workshop and the continued development of the train system early in 2008. We continue to value and appreciate your feedback and suggestions with regards to this project.

Richard Stollery, Head of LEGO Community Development

Hi again!

Every issue of *BrickJournal* is a major effort on the part of staff and contributors, from writing to providing photography. Over the period of two months, information is gathered and over the third month what becomes the final magazine layout is drawn up and done.

As Editor, I try my best to make sure that what shows up in print is a nicely done presentation, with professional production values. The articles are edited and proofread, and photos adjusted for printing. What you have is the end result.

But there is always more. The community is more than what's in this issue or any online issue. And while *BrickJournal* is something of a record for the community, there is one thing it doesn't really document: the fun of the community.


This section is like the credits of a movie — the fun ones that have bloopers and thanks put in. Where most of the articles are somewhat serious, this is the place where the goofy pictures are.

Why? Because it's important to show the fun that is in the community. All of us in the LEGO hobby build because we want to. And we want to build because it's fun! A LEGO Fan convention is not the same as a business convention. Conventions like NWBrickCon (now BrickCon) are displays and social meetings.

Speaking of BrickCon, congrats to Wayne Hussey and all the organizers and coordinators on a great convention! I was there to take photos and was really impressed with how relaxed everything seemed. Good job all around!

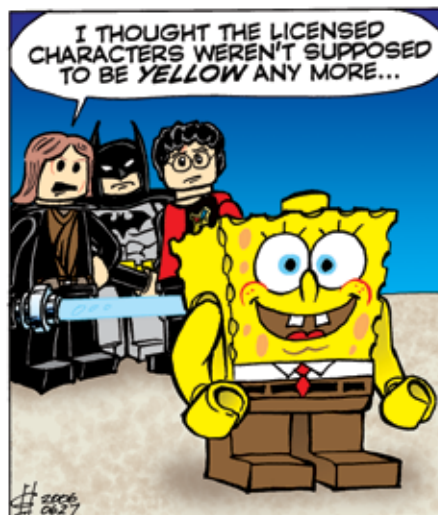
Many thanks to all the contributors past and present to *BrickJournal* — without any of them, I would not have gotten this far. The magazine has gotten writers from all over the world (as you have seen) and from the LEGO Group. It's really nice to be able to have this assortment of articles and access, as we have gotten some neat information which will be leading to more fun stuff in future issues.

Which leads me to what's coming next issue. The summer issue of *BrickJournal* will be focusing on... summer movies! We'll have looks behind the scenes of the new sets from the new *Batman* movie, *Speed Racer*, and of course, *Indiana Jones*! There will be more instructions and coverage of FIRST LEGO League's tournaments and much more!

Til then, later! 

Joe Meno

Editor
BrickJournal



AFOLS

And other comics
from Greg Hyland

If you have seen the comics in the *Batman* and *Spongebob Squarepants* LEGO sets, you have already seen Greg Hyland's work. What you may not know is that he has done other comics and has been the resident cartoonist to *BrickJournal*! More of his art can be found at his website: www.lethargiclad.com, which is also the home of his online comic! 

by Greg Hyland



MORE FUN STUFF FROM TWOMORROWS!



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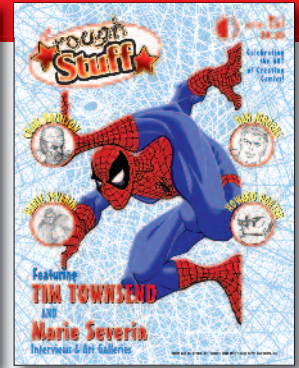
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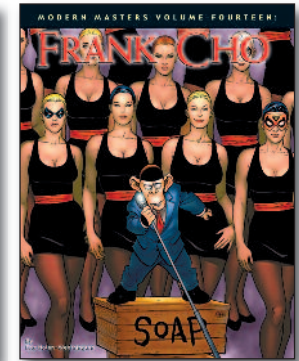
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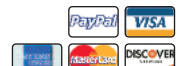


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