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Brick Journal

Issue 18 • March 2012

people • building • community

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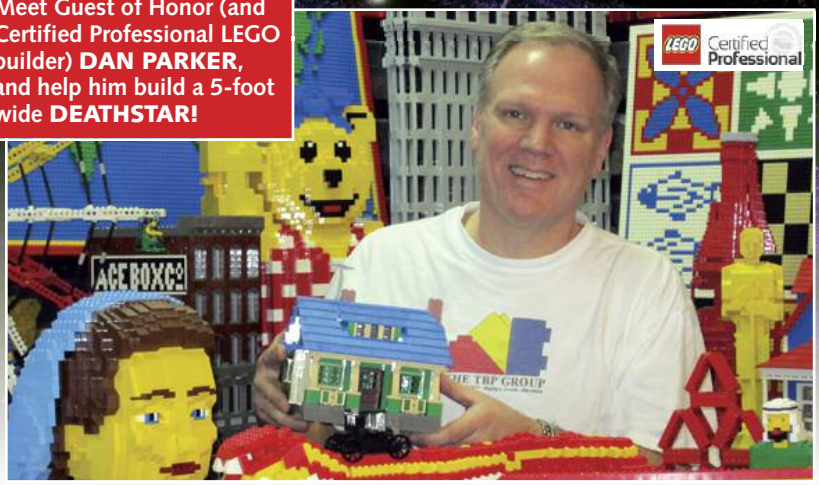

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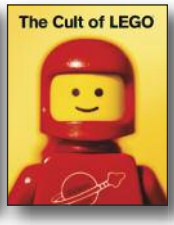

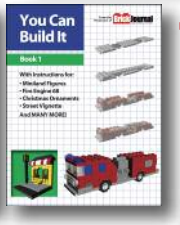

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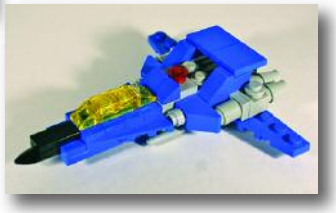

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Issue 18 • March 2012

BrickJournal

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March 2012
Issue 18

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Many thanks to the websites who have served as mirrors for *BrickJournal*:
www.LUGNET.com, www.Brickshelf.com, www.peeron.com, www.brickmodder.net www.rustyclank.com

About the Cover:
Japanese Mountain Temple. Built by Takuya Taxon. Photo by Takuya Harajo.

About the Contents:
Closeup of Brick Fan Town. Photo provided by Yoshikazu Saito.

From the Editor(s):

Well....This issue came from the idea of showcasing builders that haven't been seen very often. Japan is a place with incredible builders, but compared to Europe and the US, they have a low profile. Part of why this happens is the language barrier, but another part is that what is seen is only online, where a good build or layout is quickly glanced at, only to be put aside for the next hot MOC.

I have wanted to go beyond the borders of the builders I have met and seen, and this issue is a major step to the horizon. Thanks to Nathan Bryan, who wrote, met AFOLs and photographed for this issue. He also has some thoughts too...

> *It has been a pleasure traveling around Japan, meeting other people involved with and enthusiastic about building with LEGO bricks. Everyone was so helpful, from doing research, providing information and contacts, to helping with or actually writing articles. I hope that through these articles, the many wonderful things being done with LEGO here in Japan shines through. I would like to say a big Domo Arigato Gozaimashita to everyone for their support in putting this issue together!*
>
> *2012 is the 50th year since LEGO products became available in Japan, and their popularity, with both kids and adults, continues to expand tremendously. This year a LEGO Discovery Center opens in Tokyo, and in 2015 a LEGOLAND in Nagoya. The popularity will just build and build and build!*
>
> *Nathan Bryan - Japanese Bureau Editor*

Comments on this issue are welcome! Are there other places to spotlight? I'm sure there are!

Joe Meno, Editor

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

P.P.S. Yes, *Brickjournal* has a website — www.brickjournal.com! Twitter? Yep, there too — http://twitter.com/brickjournal. Facebook? Yup — http://www.facebook.com/group.php?gid=58728699914&ref=mf.

P.P.P.S. If you want info on a subscription, you can go to www.twomorrows.com or scan the code at right!

Glossary

AFOL (Adult Fan of LEGO)
NLSO (Non-LEGO Significant Other)
MOC (My Own Creation)
TLG (The LEGO Group)
BURP (Big Ugly Rock Piece)
LURP (Little Ugly Rock Piece)
POOP (Pieces—that can be or should be made—Of Other Pieces)
SNOT (Studs Not on Top)
LUG (LEGO Users Group)
LTC (LEGO Train Club)

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

Powered by LEGO® Fans!

Article by Megan Rothrock
Images provided by the LEGO Group

You know ReBrick.com is a new website from the LEGO Group, but did you know that this innovative social media hub which highlights what AFOLs create with the LEGO Brick was created with help from members of the AFOL Community?

BrickJournal *met recently with Tormod Askildsen, Senior Director of Community Engagement & Events; Peter Espersen, Online Community Lead; and Signe Lønholdt, Community Editor Online Community from the LEGO Community Engagement and Events team at their headquarters in Billund, Denmark.*


Peter Espersen


Tormod Askildsen


Signe Lønholdt


Mads Mommsen

***BrickJournal:* How long has LEGO ReBrick been in development?**
Tormod Askildsen (TA): We started the ReBrick project about three-and-a-half years ago. An external agency, Naked Communications, pitched an idea to us. The idea was pretty close to the LEGO Fan concept (a web portal for both new and experienced LEGO fans and the community) which was born back in 2004 and established by a group of fans. In September 2008, there was a meeting near London with three LEGO Ambassadors and a group of LEGO employees. From the feedback during this meeting, the initial concept of ReBrick was formed. One of the "ground rules" established early on was that ReBrick should highlight content already available on community sites, thus drive traffic to fan sites rather than be an alternative destination. Also, ReBrick should have a global scope and be developed with members of the LEGO community while seeking to add features different from those of the major fan sites.

Peter Espersen: When I joined the LEGO Community team a little over two years ago the project was still in the concept phase. Over the last two years we moved from the many early sketches, business model discussions and power point slides to a closed beta in late 2010 and open beta a year later. We had many challenges getting it off the ground, as internally we needed to prove it was a solid business case in order to get funding for the project, and involving the LEGO Fan Community from the beginning was an important part of this.

We invited quite a number of people from Community sites, LEGO Ambassadors, and others who we felt could contribute to the project—gathering their opinions and creating surveys around it, for example what colors to use, blue or yellow, themes to have and so forth, and everyone involved could vote on this.

***BrickJournal:* What is the basic idea behind ReBrick?**
PE: In the area of LEGO user-developed content, the LEGO Community is a juggernaut; they create some of the most amazing social objects in the world!

We wanted to celebrate and facilitate even more action around this, but it was essential with ReBrick to communicate that The LEGO Group should not

The first internal LEGO training session for Rebrick.

be the focus of the attention; it is the LEGO Fan Community and what they can do with LEGO Bricks that is important. The basic idea is to display all of this interesting stuff that is out there and show off how powerful LEGO is as a storytelling medium while bringing this excitement to a broader mass of people who then might get more excited, be inspired, and maybe even buy some LEGO sets and start building their own things.

***BrickJournal:* Oh definitely, just by going to LEGO events you can see how the visitors get very inspired by what is possible to create with LEGO bricks!**

PE: With thousands of websites out there dedicated to the LEGO hobby, hundreds of blogs and millions of articles, videos and images of inspiring creations, which in one way or another focus on the LEGO brick, it can be a challenge for AFOLs to share their models with the masses. For example an early member of the Community who has been building models for many years and sharing them on sites like LUGNET, BrickShelf, and MOC pages can reach most of the community, but if they wanted to gain a broader reach for their creations, then we can help by sharing it on ReBrick and other social media tools like Facebook, Twitter and other LEGO sites, of course crediting the original owner.

For a 'newcomer' to the LEGO hobby it is a challenge figuring out where to go. If you are interested in, say, Trains or Space, where should you go? So that is something we have tried to do with LEGO ReBrick: create a hub. We don't host any content; we just highlight and direct users to those places where the content is. It is not interesting for us to have a lot of traffic only to our site; we want the **whole** of the LEGO Fan Community to have the traffic.

I also feel that the LEGO Community deserves that we give some of the love back, it is something that we really wanted to do for them. People inside the company are very excited by what is going on with the Community. But it is very important that ReBrick is a benefit to the Community sites and that AFOLs don't feel that we are trying to 'take over'. We are not managing anything, we are trying to amplify what goes on out there. If the Community sites get more traffic then we are very, very happy.

***BrickJournal:* Are there any plans for the future of ReBrick?**
PE: Yes, LEGO ReBrick is ever evolving and changing. It isn't like we have launched our site and now it is done. That was just the first step, and now we will continue working with the LEGO Fan Community to help us further with new features. We don't want to do it if the Community is not with us. So yes, we will keep evolving!

Some of the AFOLs have been quite specific and challenging with feedback; we had one fan say, "Hey, isn't this code a bit messy?" Others have said, "It doesn't work in these browsers, and what about the iPhone, iPad, other tablets and devices?" They were so smart; it gave us excellent leverage to stress the development team even more!

***BrickJournal:* How many members does the LEGO ReBrick Team have?**
PE: The core team is myself (Peter Espersen), Signe Lønholdt, Mads Mommsen, and Tormod Askildsen. However we work with hundreds of people across the LEGO Company including LEGO Designers and also a wide range of external companies and partners—first of all Community Partners like *BrickJournal*, MOC pages, Brickshelf, Brothers Brick, and so on and then with technology partners like Microsoft, Google, Facebook and Flickr.

So Flickr is also on board with ReBrick?
PE: Yes, they are; we have been very fortunate that we have been able to meet the right people. When we have contacted these companies, it has been endless excitement for all involved. For our meeting with Google, we thought there would be one or two people there, and there were thirty who were all excited about the idea! I hope some of the interesting things that could develop over time would be that people in Google, Flickr or another similar company getting inspired from someone in the community or vise versa; I think that would be very cool.

***BrickJournal*:: Absolutely, there is a huge potential for cross involvement with those companies.**
PE: Yes, these companies have huge groups of LEGO fans among their employees!

***BrickJournal*:: That is brilliant! I think it is a great service to give to the LEGO Fan Community and has huge potential to expand, grow and bring people together.**

Signe takes notes on ReBrick functionality and design.

Presenting the site to the LEGO Certified Professionals.

Signe Lønholdt is the Community Editor-Online Community and is behind a lot of the moderation and is the 'watchdog' of ReBrick. She was asked what was the most fun she had with the AFOLs during the beta testing...

Signe Lønholdt: When I joined this team I was new to the LEGO Fan Community world, and I find them to be very inspiring and talented! Everyone I have worked with has been really great. There have been a lot of fun coincidences, some ask the critical questions that need to be asked, and others may suggest something that we had just been talking about in the team the same day before our meeting with the AFOLs. Another is our beta users, of course, who have been asked to not talk about the project. This has caused some funny situations with those involved and their families. They were very good to keep it secret. When I was at the AFOLCon LEGO fan event in the UK talking with one of our beta users, his girlfriend came over to us, and she didn't know anything about it. I thought since she was family (and therefore covered under NDA) and active in the Community he might have told her something, but he hadn't; everyone has been very good in keeping it all secret! That says a lot about our loyal fans and how they don't reveal things.

PE: Yes, when we did a soft launch and gave invitations to all of our beta users to invite their most trusted friends, they were very good to point out to their friends "You are not under NDA but please keep in quiet." *Shhhhhh….*

The main reason for all of this was that it was extremely important to us that the AFOLs get to the site first. It would be terrible for us if the first time some of the key people in the Community had heard of ReBrick was on TV or on a tech blog.

SL: Yes, they needed to learn about it first before anyone outside of the Community. But sometimes that is what happens with projects — we were lucky that didn't happen with ReBrick. It was great we were able to sort out problems while in a closed beta phase before it was live. I was glad to hear about things and make changes when AFOLs told us 'this is what we want and need'. It was important for the AFOLs to have a say in how things should and could be.

PE: The beta process was a bit long, but we wanted to make sure that we got it right, and also that those who joined the team later like Signe and Mads were able to give their input to it and collaborate.

***BrickJournal:* Yes, it has definitely been a collaborative project to be involved in.**

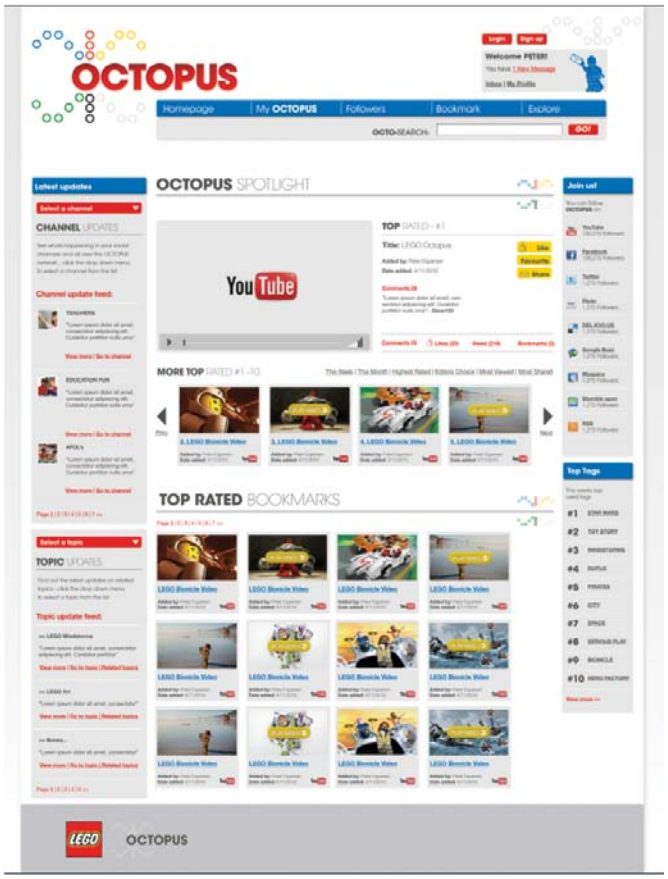
Developing "House Rules."

SL: But also since I am moderating a lot, I thought there were better moderation tools that could be in place. One thing is that the Fan Community joins; another, as the site gets more popular, it wouldn't be long before we might get users that we don't want on the site, that could post things that are not related to the LEGO Brick. We need to remove these as fast as possible so it is a place where people will like to be.

PE: Our relationship with the Community is extremely valuable to us. The LEGO Fan Community members that we have worked with have been great, very strong and capable of making things happen. They have deep insite into not just technical issues, but the needs of the Community, and have an understanding that LEGO is not just one of the greatest toys ever created, it is also a business. It is very reassuring as a person coming from the LEGO Group that they always 'get it'. Of course there are the requests to bring back metal train tracks, Bionicle, and my own personal favorite Fabuland. They understand if things go well for us we can put out better products and create better bricks for them, and that is important for everyone.

***BrickJournal:* Thank you Tormod, Peter, and Signe for taking time out of your very busy days to share ReBrick with our readers.**

You can go to ReBrick at www.rebrick.com or you can jump to ReBrick by scanning this QR code!



An idea for Octopus.

Refining Octopus.

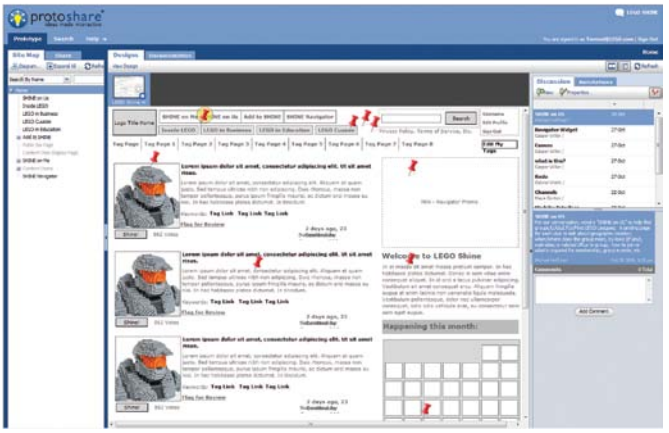
From Shine to Octopus to ReBrick: What's in a Name?

From Peter Espersen:

The name for this top secret project started as Shine because we were "shining a light" on the community. We thought maybe we should use that, but then our legal department found out that other sites used that name, so it was back to the drawing board. While meeting with the development team, they needed a name to use. I had watched a cartoon with my nephew the day before that had a friendly octopus who grabbed things with his arms, rearranged them, and put them back. So we named it Octopus and I thought it was also neat to use the LEGO Octopus as the logo for the site. The good thing about having all of these names for the project was that no one could figure out what we were doing.

At the beginning of 2011, after a long naming meeting, we finally decided on the name ReBrick. The reason was it is all about re-tweeting, re-arranging, re-amplifying, re-building, re-sending. We were quite cautious of using the word 'brick' because, well — *BrickJournal*, Brickset, BrickFair, Brothers Brick and so on. It is a word that has been used by the Community to represent itself. There were a lot of discussions with everyone about it, some were not too keen at first, but after awhile thought it was good to use 'brick'.

If you look at the site there isn't a LEGO logo at the top — the reason is we want it to be a collaborative process with the users and signal that what you see on the ReBrick site is not LEGO products made by the LEGO Group, but creations made by LEGO fans — not just "here is LEGO and this is what all of our fans are doing with our products because we let them." It is more like 'we are very blessed we have these amazing fans that can do these things with LEGO bricks.' We don't hide that we are involved in it, so at the bottom of the site it says that the LEGO Group is facilitating the site. It is meant for the LEGO Fan Community.



A prototype design for Shine.

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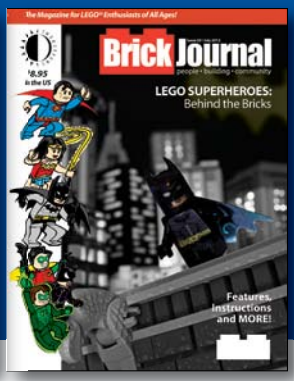

BRICKJOURNAL #20

LEGO SUPERHEROES! Behind-the-scenes of the DC and Marvel Comics sets, plus a feature on **GREG HYLAND**, the artist of the superhero comic books in each box! Also, other superhero work by **ALEX SCHRANZ** and our cover artist **OLIVIER CURTO.** Plus, **JARED K. BURKS'** regular column on minifigure customization, building tips, step-by-step "You Can Build It" instructions, and more!

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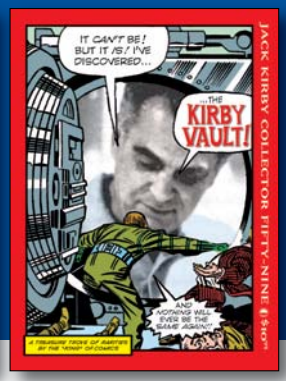

KIRBY COLLECTOR #59

"Kirby Vault!" Rarities from the "King" of comics: Personal correspondence, private photos, collages, rare Marvelmania art, bootleg album covers, sketches, transcript of a **1969 VISIT TO THE KIRBY HOME** (where Jack answers the questions **YOU'D** ask in '69), **MARK EVANIER,** pencil art from the **FOURTH WORLD, CAPTAIN AMERICA, MACHINE MAN, SILVER SURFER GRAPHIC NOVEL,** and more!

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BACK ISSUE #58

"JLA in the Bronze Age"! The "Satellite Years" of the '70s and early '80s, with **BUCKLER, ENGLEHART, PÉREZ,** and **WEIN,** salute to **DICK DILLIN**, the Justice League "Detroit" team, with **CONWAY, PATTON, McDONNELL,** plus **CONWAY** and **GEOFF JOHNS** go "Pro2Pro" on writing the JLA, unofficial JLA/Avengers crossovers, and Marvel's JLA, the Squadron Supreme. Cover by **McDONNELL** and **BILL WRAY!**

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BACK ISSUE #59

"Toon Comics!" History of Space Ghost in comics, Comico's Jonny Quest and Star Blazers, Marvel's Hanna-Barbera line and Dennis the Menace, behind the scenes at Marvel Productions, Ltd., and a look at the unpublished Plastic Man comic strip. Art/comments by **EVANIER, FOGLIO, HEMPEL** and **WHEATLEY, MARRS, RUDE, TOTH, WILDEY,** and more. All-new painted Space Ghost cover by **STEVE RUDE!**

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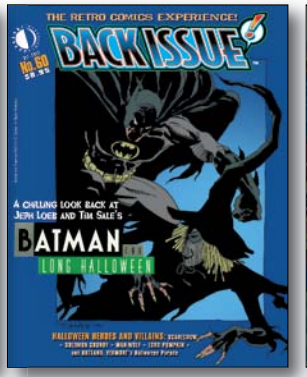

BACK ISSUE #60

"Halloween Heroes and Villains"! **JEPH LOEB** and **TIM SALE'S** chiller Batman: The Long Halloween, the Scarecrow (both the DC and Marvel versions), Solomon Grundy, Man-Wolf, Lord Pumpkin, Rutland, Vermont's Halloween parades, and… the Korvac Saga's Dead Avengers! With commentary from and/or art by **CONWAY, GIL KANE, LOPRESTI, MOENCH, PÉREZ, DAVE WENZEL,** and more. Cover by **TIM SALE!**

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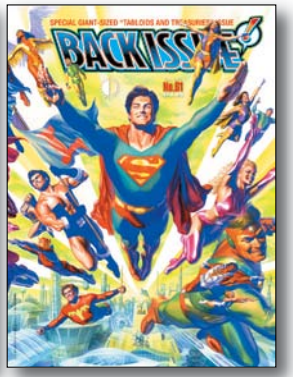

BACK ISSUE #61

"Tabloids and Treasuries," spotlighting every all-new tabloid from the 1970s. Superman vs. the Amazing Spider-Man, The Bible, Captain America's Bicentennial Battles, The Wizard of Oz, even the **PAUL DINI/ALEX ROSS** World's Greatest Super-Heroes editions! Commentary and art by **ADAMS, GARCIA-LOPEZ, GRELL, KIRBY, KUBERT, MAYER, ROMITA SR., TOTH,** and more. Wraparound cover by **ALEX ROSS!**

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DRAW! #23

PATRICK OLIFFE interview and demo, career of **AL WILLIAMSON** examined by **ANGELO TORRES, BRET BLEVINS, MARK SCHULTZ, TOM YEATES, ALEX ROSS, RICK VEITCH,** and others, **MIKE MANLEY** and **BRET BLEVINS'** "Comic Art Bootcamp", a "Rough Critique" of a newcomer's work by **BOB McLEOD**, art supply reviews by "Crusty Critic" **JAMAR NICHOLAS**, and more!

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ALTER EGO #110

SHAZAM!/FAWCETT issue! The 1940s **"CAPTAIN MARVEL" RADIO SHOW**, interview with radio's "Billy Batson" **BURT BOYAR, P.C. HAMERLINCK** and **C.C. BECK** on the origin of Captain Marvel, **ROY THOMAS** and **JERRY BINGHAM** on their Secret Origins "Shazam!", **FCA** with **MARC SWAYZE, LEONARD STARR** interview, Mr. Monster's Comic Crypt, **BILL SCHELLY**, and more!

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ALTER EGO #111

GOLDEN AGE NEDOR super-heroes, **MIKE NOLAN**'s Nedor Index, art by **MESKIN, ROBINSON, TUSKA, MOIRERA, SHOMBURG,** and others, unknown facts about ACG writer/editor **RICHARD HUGHES**, with photos and never-published Herbie scripts! Plus **FCA, MR. MONSTER,** more 2011 Fandom Celebration, and part II of **JIM AMASH'S** interview with **LEONARD STARR**! Cover by **SHANE FOLEY!**

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ALTER EGO #112

SUPERMAN issue! **PAUL CASSIDY** (early Superman artist), Italian Nembo Kid, and **ARLEN SCHUMER**'s look at the **MORT WEISINGER** era, plus an interview with son **HANK WEISINGER!** Art by **SHUSTER, BORING, ANDERSON, PLASTINO,** and others! **LEONARD STARR** interview Part III—FCA—Mr. Monster—more 2011 Fandom Celebration, and a **MURPHY ANDERSON/ARLEN SCHUMER** cover!

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ALTER EGO #113

MARV WOLFMAN talks to **RICHARD ARNDT** about his first decade in comics on Tomb of Dracula, Teen Titans, Captain Marvel, John Carter, Daredevil, Nova, Batman, etc., behind a **GENE COLAN** cover! Art by **COLAN, ANDERSON, CARDY, BORING, MOONEY,** and more! **AL FELDSTEIN** interviewed by **JIM AMASH** about his pre-EC Comics work, FCA, Mr. Monster, **BILL SCHELLY,** and more!

(84-page **FULL-COLOR** magazine) **$8.95**
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ALTER EGO #114

MARVEL ISSUE on Captain America and Fantastic Four! **MARTIN GOODMAN**'s Broadway debut, speculations about FF #1, history of the **MMMS**, interview with Golden Age writer/artist **DON RICO**, art by **KIRBY, AVISON, SHORES, ROMITA, SEVERIN, TUSKA, ALLEN BELLMAN,** and others! Plus **AL FELDSTEIN** Part II, **FCA, MR. MONSTER** and **BILL SCHELLY**! Cover by **BELLMAN** and **MITCH BREITWEISER!**

(84-page **FULL-COLOR** magazine) **$8.95**
(Digital Edition) **$2.95** • Ships Dec. 2012

The Hayabusa set.

LEGO® CUUSOO Goes to Space!

Article by Joe Meno
Photography provided by the LEGO Group

Cuusoo means "wish" in Japanese. It's also a firm that joined with the LEGO Group in 2009 to create a online platform to submit proposals for LEGO sets and other ideas. Initially started in Japan, the partnership has yielded two LEGO sets: The Shinkai 6500 research submarine, and now the Hayabusa space probe.

Inspiration

Hayabusa ("Falcon" in Japanese) was a space probe that was launched in 2003 to land on an asteroid, retrieve surface samples and return to Earth. This was a pioneering mission in that it was the first space probe to accomplish a sample return from an asteroid. The mission is what inspired Daisuke Okubo, a Japanese graphic designer of user interfaces and web design, among other things, to submit Hayabusa to the LEGO CUUSOO website.

Daisuke was not the builder of the model he submitted, though. When asked about his building skills and if he is a LEGO builder, he replies, " I am, but I am not a good builder. I submitted a model built by in81212 (who collaborated with Daisuke)." He continues,"I was inspired by the mission of Hayabusa and the success of the Shinkai 6500 as a LEGO CUUSOO set."

LEGO CUUSOO's Japanese platform allows an idea to be considered for production when 1000 people vote to support the idea. Naturally, the challenge is to find those supporters. Daisuke used Twitter—he searched for people who were fans of Hayabusa, fans of space, and fans of LEGO. He also added

links to his CUUSOO project webpage and his profile to his Twitter profile. With those in place, anyone who saw these could go and become a supporter.

Daisuke didn't have any doubts about reaching 1000 supporters. He says, " I believed that I would gather the needed supporters. Since Hayabusa was very popular (in Japan), once I announce my project, I thought that many supporters would come. It was also publicized on Twitter by my tweets and many other retweets."

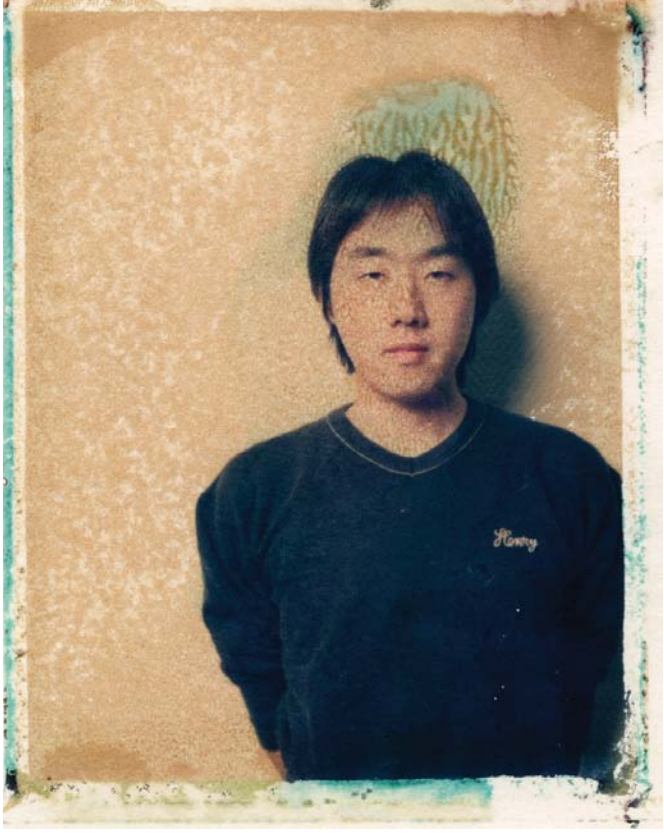
The Hayabusa project was first posted on LEGO CUUSOO in January 2011. By April, thanks to the efforts of Daisuke and many Japanese websites and blogs, the 1000 supporter threshold was achieved. The LEGO Group sent a congratulatory message to Daisuke:

> "Congratulations Daisuke on reaching 1,000 votes on your product idea: The Hayabusa!
>
> "We are very encouraged by the strong support this model has from the voters, and I hope that we will be able to reward your support with a new Hayabusa LEGO product. We wish to thank all voters for their great interest and enthusiastic engagement."
>
> Here at LEGO we are amazed at how fast it reached the threshold and we are now really looking forward to evaluate the model. We will now do some serious analysis on the business case and other decision parameters. We will therefore get back to you in 4 weeks time with a decision on whether it will be produced and if so, when we will launch it. We are looking forward to working with the model. "

By July, the decision was made to produce a Hayabusa set. Daisuke was able to meet with staff from LEGO Japan, JAXA (the Japanese Space Agency), and LEGO CUUSOO. At the meeting, the Hayabusa concept model was shown and reviewed. Daisuke also discussed the possibility of including a minifigure of Junuchiro Kawaguchi, Project Manager of Hayabusa. From there, the project proceeded under the guidance of LEGO CUUSOO.

Reflecting on the process, Daisuke most enjoyed the online engagement he received from the project. He tells, "I was able to meet many people through Twitter. I first met people who wanted to support LEGO Hayabusa, but after that, I chatted on Twitter, and got to meet several people. I was happiest about meeting many people who share the same hobby as I do in this project."

Daisuke isn't standing still either. He's proposed another CUUSOO project, this time the Japanese Venus Climate Orbiter, Akasuki *(http://lego.cuusoo.com/ideas/view/486)*. As he puts it, "Akatsuki is the younger brother of Hayabusa." He's also created a LEGO fan page on Facebook, LEGO FAN *(http://www.facebook.com/LEGOFAN.jp)*. With these, his projects continue to engage the community.



Daisuke Okubo

The first model, built by in81212, and posted online by Daisuke.

Set designer for the Hayabusa set, Melody Caddick.

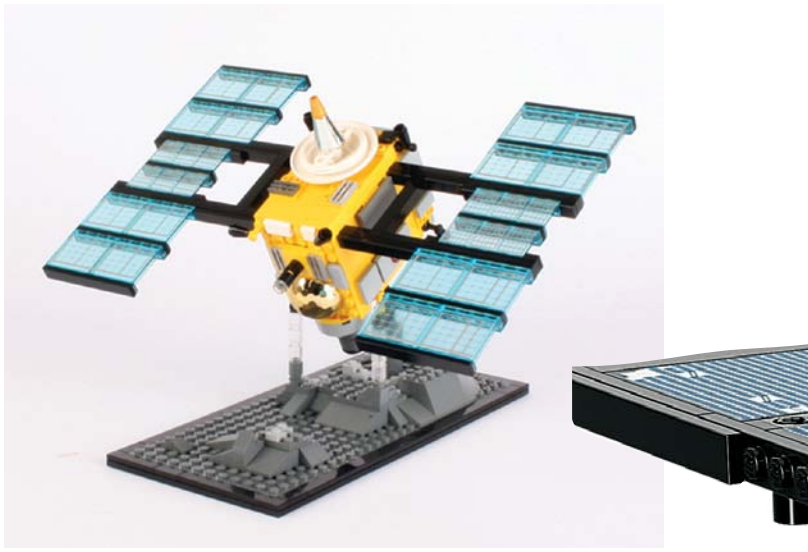
Creating

Once the decision was made to develop a commercial version of Hayabusa, the LEGO Group began design work on the set. Melody Caddick, a set designer for LEGO Direct, began the project in the middle of 2011. Previously, she had designed a couple of other sets, including an exclusive molding machine set for the LEGO Inside Tour. When asked about her approach to her job (and the constantly changing subject matter), she replied, " Yes, the sets are all different, but that is the nature of my job. I design many different products and not one particular theme, so I often find myself building products I wouldn't ordinarily build at home. It's fun and sometimes a challenge, but I really love it — I never really know what I am going to build next!"

Mel continues, "For Hayabusa, there was already a model proposal (concept model), so it was a matter of doing some research on the actual Hayabusa and observing the 'concept' model. Basically, I took it from there and turned it into a LEGO product, using specific elements and making sure it meets our requirements. When building the model, I also thought about the base which it needed to stand on. Due to the construction of the Hayabusa, it needs to be stable in order to 'stand' upright. So I decided that the base and asteroid should tie together somehow. As a result, I recreated the shape of the asteroid and used a rough surface of it as the base for the Hayabusa in microscale form."

Using pictures of the Hayabusa craft and what online reference was available, Mel wanted to make a model that "looked as close to the real one as possible, but also taking into account the concept model." She states, " There are many things to consider when designing an actual LEGO model, so there's always some changes from the concept model."

While accuracy was a primary concern, there were some design compromises that had to be made. While the boxy body wasn't so difficult to design, the solar panels were another matter entirely. Mel



explains: "It was initially hoped that we could have them fold. But on Hayabusa, the panels do not only fold over, but also down to the side of the body. This was not so easy to replicate in LEGO and build it to LEGO standards, so I concentrated more on making them stable and buildable. You can imagine there were several versions of the solar panels as I tried many different ways of creating them."

The design phase turned out to be what Mel enjoyed most. Being the first CUUSOO project that she worked on, she found it fun recreating the model and taking it from the concept stage to the final stage. " I like the idea of building something from reality, that's a nice challenge!" she states. "Of course, credit goes out to those behind the real Hayabusa and also to the designer of the concept model, in81212."

Wishing

With the production of Hayabusa, LEGO CUUSOO's Japanese-exclusive sets will make way to international distribution. While Hayabusa was progressing, LEGO CUUSOO was also expanding, opening an international beta site for submitting ideas. With that, the user base has expanded from 20,000 to 40,000, a two-fold increase!

With the expansion, the threshold of supporters needed for LEGO CUUSOO to consider an idea was also increased from 1,000 to 10,000. Incredibly, an idea reached that number and is being set for production. *BrickJournal* will be covering that set and how you can create a LEGO set in the next issue.

Scan this QR code to see Daisuke's next CUUSOO project, the Akatsuki!

Poster announcement for the party.

Jumpei Mitsui's LEGO® Certified Professional Celebration!

Article by Nathan Bryan of BrickZen.com
Photography by Akihiro Youshimura and Nathan Bryan

On September 22nd, 2011 there was a party at Morph, a live house in Roppongi, Tokyo, for Jumpei Mitsui to celebrate his becoming a LEGO Certified Professional (LCP). There are only 13 such people in the world, and he is the first Japanese person to obtain this certification.

Over fifty people came to celebrate, including many famous Japanese builders such as Yoshihito Isogawa (Technic Master), Yoshihiro Osawa (Osaka Builder and LEGO TV Champion Contestant) and Yoshiharu Nakahara (Tokyo Builder and LEGO TV Champion Contestant). Many LEGO Japan employees, including Kazuyoshi Naoe (LEGO Japan employee and Certified Model Builder), as well as many people from LEGO Education were in attendance as well.

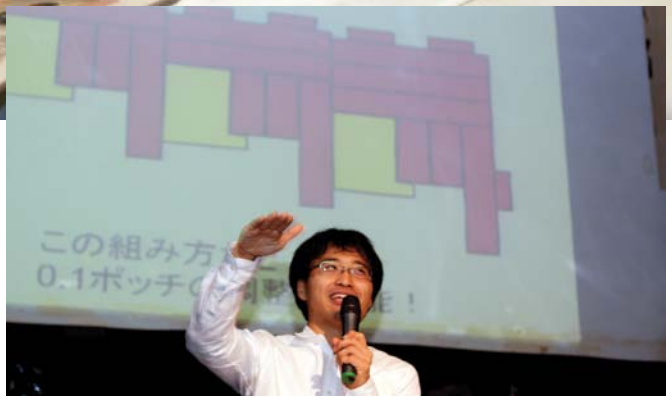
Jumpei has also been a LEGO TV Champion Contestant, going all the way to LEGOLAND in Denmark to compete and is famous for his 6.5 meter Yamato MOC (see *BrickJournal* #7). In Japan he is known for creating the LEGO Club at Tokyo University and has been featured in many Japanese newspapers, magazines and TV shows. He has done a great deal to promote education through LEGO bricks as well.

Mixing, meeting, eating, and talking LEGO!

Yoshihito Isogawa and Kazuyoshi Naoe have a chat.

Mini LEGO display by Toshiya.

Jumpei's White Tiger.



Jumpei explaining how to make .1 stud offsets using headlight bricks and jumper plates (1 x 2 plates with 1 stud).

The event featured food, drink, his "White Tiger" model on display, congratulatory speeches and two presentations by Jumpei himself on his road to becoming a LCP builder and building LEGO Models. One presentation was very technical and included such topics as building round models with square bricks (one of his specialties) and creating offsets of 0.1 studs. There was also a lively Q&A section of LEGO and personal questions.

At the end Jumpei personally thanked each individual for coming, and as a thank you gift, gave everyone a small bag of Bricks with instructions to take home and build a miniature model.

It was a wonderful LEGO evening enjoyed by all and we look forward to seeing many new and interesting models by Jumpei all over Japan!

Jumpei's models can be seen on his new homepage, which can be scanned from the QR code on the right or:
http://www.jumpei-mitsui.com

or on Jumpei's Blog (Japanese):
http://www.geocities.jp/jun_brick/

Tomoko Tamura (LEGO Japan's Head of Marketing) congratulates Jumpei.

A thank-you gift: a mini-bus!

The LEGO Group

Kazuyoshi Naoe: Building in Japan!

Article by Nathan Bryan of Brickzen.com
Photography by Nathan Bryan and Kazuyoshi Naoe

Kazuyoshi Naoe is the Official LEGO Japan Certified Model Builder. He builds many of the LEGO models that are used for LEGO Store displays as well as big dioramas and large scale LEGO models for special events. BrickJournal *got a chance to sit down with him at the LEGO Japan Head Office in Tokyo to talk brick.*

Kazuyoshi Naoe with his favorite magazine.

***BrickJournal:* How did you become a model builder at LEGO Japan?**

Kazuyoshi Naoe: In high school I worked part-time in a small toy store, then I worked for a large company with LEGO Japan as one of the clients. In 2000, I started with LEGO Japan in the Marketing section which is where I still work now. I was asked to help with some building for an event and I found out that I really have a knack for it.

LEGO Japan used to have most of the large models sent from the LEGO head office, but the shipping cost was very high and sometimes the models got damaged and needed to be repaired. It made more sense to build them here in Japan, so that became one of the things I do.

***BrickJournal:* Do you just build models every day at LEGO Japan?**

KN: I am still part of the marketing department, so the majority of my time is spent working on setting up LEGO events in Japan, not building, unfortunately. I need to write up proposals, find venues, sponsors and put together the events. I then will build special models for display at the events.

Naoe's model of Times Square for Nasu's LEGO Stadium.

Matsue Castle LEGO model. Inset: The real present-day castle.

Whale Shark, also built for LEGO Stadium.

***BrickJournal:* What type of events do you do?**

KN: Generally we try to set up or be at four or five events each year. Until August of 2011, LEGO Stadium at Nasu was the largest and longest event for LEGO Japan and it took a great deal of time to support it. There were many models for the main areas, plus I worked with many AFOLs from all over Japan to support their Brick Fan Town and Brick Fan Castle models.

Many events are much smaller, just for a few days or a week as part of larger toy or children's events. We also hold brick building classes several times a year all over Japan. They are usually for 40 minutes for around 50 or so people, mainly for children ages 3 years and up. We build small models such as a swan, frog or other small item; I usually try to keep them under 30 pieces.

It is very difficult to explain in words how wonderful LEGO bricks are. The best way is to get kids, and parents, to feel them, play with them and really experience the many wonderful things that one can make. Also through actually feeling and playing with LEGO bricks, one can really understand the quality of the materials used in the bricks and how they are different from other blocks or toys.

Hopefully in the future we could have an event such as BrickWorld in Japan in Tokyo. One in Kansai would be even better.

***BrickJournal:* What events are you working on now?**

KN: In January and February of 2012, we are going to have a huge "City Build" event in Sapporo (North Japan). Usually they have a huge snow festival there, but each year there is less and less snow. We are going to have around 2,000 children build a large 30 meter by 2.5 meter city all out of white bricks to simulate snow. I hope to build a white city with white buildings, white cars and even an all-white train. (Some parts I might not be able to obtain in white, though….) To give the children a base to work off of and some ideas, I will be building a center section, probably 10 meters by 1 meter, that they can look at as they create the rest of the city.

***BrickJournal:* Did you play with LEGO bricks when you were a child?**

KN: Actually my parents never bought me LEGO bricks, maybe they were too expensive back then. I did enjoy building many other models; tanks, trains and super cars.

***BrickJournal:* Do you go to Denmark often?**

KN: Actually, I have only gone about three times. Once was in 2008 for the World Build Contest when I went with the Japanese winner to meet with the other child winners from the other countries.

***BrickJournal:* What model would you like to build most?**

KN: On June 25th Hiraizumi in Tohoku (where the March 11 earthquake struck) became a UN World Cultural Heritage Site, so I would like to do a model of one of the temples there and some type of event to support the people of Tohoku. Maybe even a LEGO World Heritage 3.

***BrickJournal:* Tell us about how you go about building a model.**

KN: First I try to get as much information as possible about the actual building or object that I am trying to build. I study pictures and background information pertaining to it. Then I start to collect parts and just build. I do not use plans but just build through a bit of trial and error.

I try to know as much information as I can so that I can capture the essence correctly, so when someone looks at the LEGO model they know immediately what it is representing. Recently in building a model of Matsue Castle I changed the

dimensions to make it look more like what one would see when looking at the real castle, not how it would look if it was just built using the floor plans. Since most people look up a building and not down at one, I made the base a bit larger and then the middle section proportionately smaller and the top even smaller yet. So when one squats down and looks at the model, it looks proportionally the same as if one was looking at the real one.

***BrickJournal:* How long do you spend building each day?**

KN: Many days I am working in the office so not building, but when I do build it is always so much fun that I forget the time, and forget to eat or sleep sometimes too.<grins>

***BrickJournal:* Where do you build?**

KN: We used to have a room at the LEGO Japan office building, but since the elevator door is only 90 cm wide, I had to create models that could be broken down just to get them out of the building. Now I have a model studio in Ichikawa city, Chiba prefecture at the same place where the LEGO delivery center is.

***BrickJournal:* What is the most difficult model you have ever built?**

KN: The Great Whale Shark for Nasu Stadium was a very difficult build, but an 80 cm Globe I made for a toy store event was the hardest because I wanted the curvature and continent map to look correct no matter what angle it was viewed from. It was hollow inside, and someone actually leaned up against it taking a picture and caved it in……

***BrickJournal:* Are there any parts that you wish The LEGO Group would create?**

KN: Actually one of the things that I like most about building with LEGO bricks is a "freedom within limitations." One can really create almost anything, but there are set pieces that need to be used. I think almost any builder or modeler has at one time wished for a 1x1 double stud piece, but with over 8,000 different shapes of LEGO pieces, there is always a way to figure out how to make what one wants. That is a large part of the fun of building with LEGO bricks.

***BrickJournal:* Do you have LEGO bricks at home or do you try to keep work and home separate?**

KN: My entire house is filled with sets and bricks.

***BrickJournal:* Are there any particular LEGO Sets that you like personally?**

KN: I am actually a really big LEGO Star Wars fan. I have almost every model put out, many still in their boxes that I am saving for my grandchildren.

***BrickJournal:* Anything you want to personally build?**

KN: Most of the building I do is for work, but I would really like to build a large LEGO town for my home.

***BrickJournal:* Any other hobbies?**

KN: Actually since I started building with LEGO bricks, I have really learned to enjoy cooking. I used to only be able to cook "by the recipe," but now I can just look at what is in the kitchen and refrigerator and create something with whatever

Space Shuttle model built by Naoe.

is there.

***BrickJournal:* Any advice for people wanting to become LEGO builders?**

KN: The most important thing is to have an interest in many things. The more objects and places you see, feel and go to, the better you will be able to build. One must really *know* something before one can build it. For children it is very important to broaden one's imagination by contact with as many things as possible; technical building skills can be learned later. Of course, get lots of practice playing with LEGO bricks!

***BrickJournal:* Any message for LEGO fans around the world?**

KN: Although language is a barrier, I hope that there will be more and more global exchange between builders from around the world and Japanese builders.

For More Information:
Kazuyoshi Naoe's Blog (Japanese):
http://blogs.yahoo.co.jp/kaznao055
or use the QR code to the right.

Taxon at his building space.

Japanese Builder: Takuya Harajo

Article by Nathan Bryan of BrickZen.com
Photography by Nathan Bryan and Takuya Taxon

A mountain temple, with "visitors."

Takuto Harajo (Takuya Taxon on Facebook) is a Kansai area builder living in north Osaka. He first started playing with LEGO in elementary school and remembers his first set as having LEGO figures without faces and only a solid body and feet. He played with LEGO all the way up to around the release of the Space series and then stopped. A few years ago, for a project at work they were using some LEGO bricks for a design. He used them and hasn't stopped since. He even went so far as to auction off his other hobbies, like his air gun collection and model figure collection, to have funds for purchasing more LEGO sets and bricks.

Being a graphic and web designer by trade, Taxon is constantly looking at many things to get inspiration for work. Often he comes across a television picture or a scenery picture and thinks about what it would be like to create that out of bricks. He particularly likes old movies and nostalgic scenes. When he has an idea to build something, he might spend up to three hours a day or so building. Many days, though, he might just work with a few bricks for a few minutes.

Trains are his favorite genre to build in and he likes to reproduce landscapes to run the railway lines through. He really enjoys building minifig-scale buildings, especially those with a European influence. In seeing an old European town on television, he will start to visualize and simulate the construction in his head first. When he gets a clear idea he will start to build.

Taxon also likes to create old vehicles and various motorcycles. Recently he turned his sights towards Japanese buildings and landscapes.

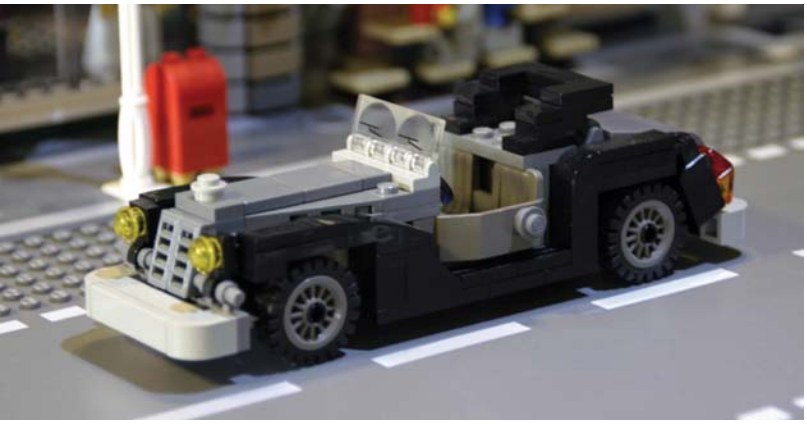
In creating Japanese style buildings he came up against the problem that, while a lot of the architecture leans towards odd numbered building, most LEGO bricks are even numbered. Also there are not a lot of traditional Japanese colors represented in the brick spectrum, so he had to adjust whereever he could. Dark grey plates work great for Japanese roofs, he has discovered.

When the Cafe Corner set was released, Taxon was really happy. Having the LEGO Group putting out such great buildings made him want to create more and more. These types of building sets also made it easier to get parts for creating one's own buildings.

A round 1 x 1 with studs on each side is a piece Taxon wishes was available. He has come upon a number of instances where

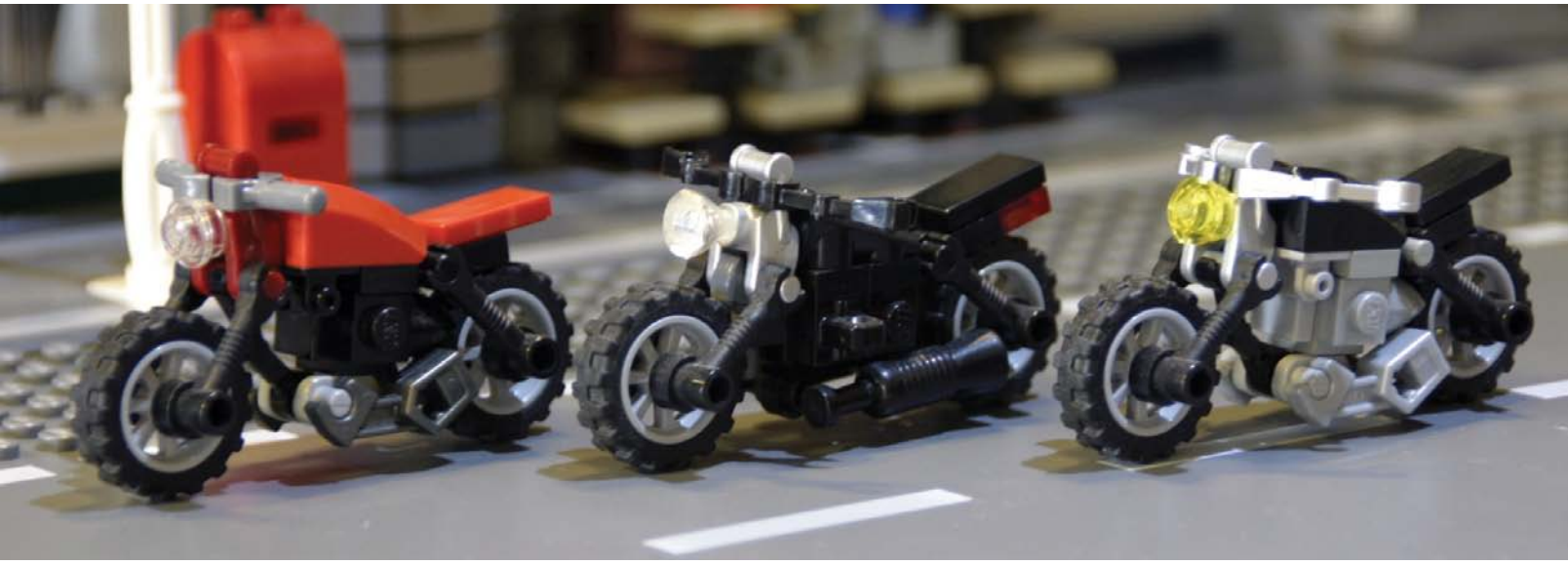
Miniature traditional Japanese doll display.

Japanese house.



Antique car build.

Japanese Bath.



Various motorcycle builds.

that would be just the piece to make things work a little bit better.

Currently he is increasing the number of Japanese-style buildings that he has made and hopes to display them in the near future.

As most Japanese builders are individual builders and there are not many building groups in Japan, Taxon is working on setting up a LEGO Users Group on Kansai and hopes to some day have a large scale city diorama with lots of contributors on display for the public to see.

You can see his models at:
BrickShelf: *http://www.brickshelf.com/cgi-bin/gallery.cgi?m=taxon55*
Flickr: *http://www.flickr.com/photos/taxon55/galleries/*

You can jump to Taxon's Flickr gallery by scanning this QR code!

Set Reviews

LEGO Employees' Choice

I was thinking one day about the set I should review for this issue of *BrickJournal* when I got an idea of something a bit different to do. I contacted some employees of The LEGO Group and asked them what sets they would like to see me review. I also asked them to tell me why they liked the sets.

As a bonus, I like the set I got for Christmas so much that I decided to review it as well. Below is the list of people that contributed, and their position within the company.

Article and Photography by Geoff Gray.
Official set photos provided by The LEGO Group.

Jørgen Vig Knudstorp
Chief Executive Officer

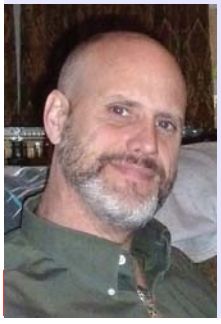
Lighthouse Island (#5770)
"This one is special to me as it was given to me by the executive assistants in my office."

Tormod Askildsen
Senior Director, Community Engagement & Communications

Life of George (#21200)
"There is a lot of humor involved, and the way people contribute to build and expand the story is wonderful."

Jamie Philip Berard
Senior Designer, Creator Design Team

Bounty Hunter™ Assault Gunship (#7930)
"I even make my own sound effects when tilting the engines back and forth during take-off and landing!"



Geoff Gray
Photo Editor, *BrickJournal* Magazine

Queen Anne's Revenge (#4195)
"I love the use of skeletons and bones to make some of the detail unique and appropriate for the model."

Lighthouse Island

Chosen by Jørgen

Jørgen's Thoughts:

My pick would be the Creator set with the light tower (sorry, on a plane I cannot remember the set number). I love building all our creator sets because it is such a classic and versatile building experience and there are many good elements that can be used for later play experiences. This one is special to me as it was given to me by the executive assistants in my office, when I celebrated my ten years of service anniversary earlier this summer. I built it with my son Zacharias (7) and he had many hours of play with it afterwards. The functionality (the side of the tower opens, there is real light in the tower) was much appreciated by Zachy.

I wanted to have a "night-time" shot of the set where the light could be seen. I grabbed a fog machine we use during Halloween and set up this scene. I love the way the light, reflecting off the silver sticker, pierces the fog and mist.

Geoff's Review:

The lighthouse set is one that I have looked at many times and almost purchased each time. When I found out that Jørgen picked this set, I was very excited. Being a Creator set, there are instructions included for three different builds. I chose to go straight to the main model when I started the build. The things I really like about the set are the small details throughout, including the interior of the light-keeper's living quarters, which are seen by opening the side wall of the structure. However, my favorite two things are the functionality of the light itself, and the seagull carrying a fish.

The light element is the standard Power Functions light brick with a push button on the back side. One of the big advantages of this light is the fact that it contains a replaceable battery. The light is at the very top of the lantern house and shines straight dome onto two slopes that have a silver sticker. This acts as the mirror. The slopes are different angles so the light will reflect in two beams (see the photo of the light in the fog). The mirror is hooked to a gear set that has a crank on the back of the lighthouse, allowing the mirror to spin. The light is illuminated by pressing down on the black roof of the lantern house.

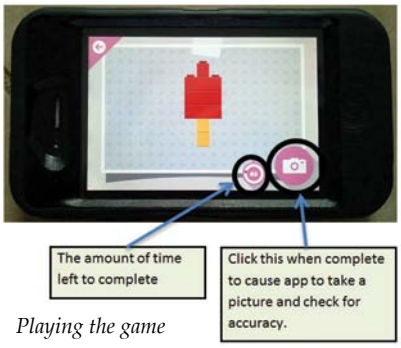
The Creator theme is one of my most favorite because the models show how to "get back to the basics" and be creative with building models. It is designed to be built, torn apart and built again differently. With other sets (such as Queen Anne's Revenge, reviewed later in this article) I hesitate to take it apart because the kit was designed for a specific model and the pieces are geared toward that model, but I rarely leave a Creator set built because I want to see what else I can build with it.

Life of George

Chosen by Tormod

Tormod's Thoughts:

I love the storytelling around George. The Facebook "I am George" page and contest invited thousands of adults, teens as well as parent/child duos together to participate. There is a lot of humor involved and the way people contribute to build and expand the story is wonderful. The "Life of George" product itself adds a unique and pretty seamless physical/virtual experience which is fun, challenging and to some degree competitive. I'm playing the game with my daughter and we have a lot of fun together.



Playing the game

Geoff's Review:

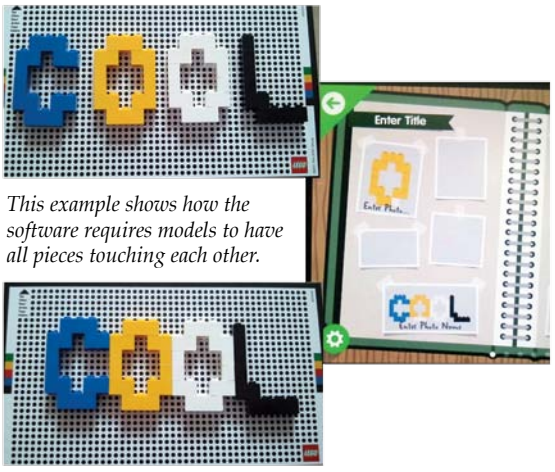
I didn't get the appeal of this set when I first heard about it. Many friends were telling me how cool it was, but I still postponed getting it because I do not own any Apple devices and it requires an iPhone or iPod touch.

However, when Tormod responded to my request by picking this set, I had no choice but to get it. Luckily my older son has an iPhone (which kills me; I work for Microsoft and therefore Apple is a competitor).

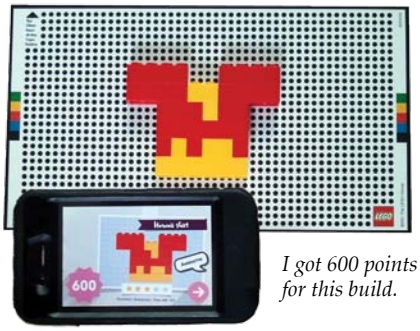
I got the app downloaded from iTunes and started playing. The app walked me through the steps to follow and I was soon completing the first series of builds. The concept is simple. You are shown a picture of a particular item to build. You build it as fast as you can, then you set it on the provided grid board and hold the camera over the grid. The software will determine if you built the model properly and will award you points based on how quickly you built it.

There is also an option where you can build your own item and have the software store it for you. You can then keep this for future use and/or share it with friends. There is also an option to compete against other players, and to follow George on Facebook. You can see more at http://george.lego.com.

One thing I noticed when designing my own model is that you cannot have more than one separate piece in the model. I tried to save the word "cool", but it only saved one of the 'o' letters. When I pushed all of the letters together so they were touching, then it saved the whole thing.



This example shows how the software requires models to have all pieces touching each other.



I got 600 points for this build.

Bounty Hunter

Assault Gunship

Chosen by Jamie

Jamie's Thoughts:

After debating back and forth between a few sets, I decided to go with the Star Wars 7930 Bounty Hunter Assault Gunship as one of my favorite sets of the year.

It's just an all-around fun experience. I thoroughly enjoyed the build. It comes together quite nicely considering its unusual shape. The mechanism for rotating the engines is so clean and simple--yet effective. The colors are great and the swoosh-ability is top notch. I just can't help myself from picking it up when I get home from work and flying it around the house. Yes, I even make my own sound effects when tilting the engines back and forth during take-off and landing!

I like this set so much I actually bought a second one. I'd consider buying a third, but I only have two hands.

Geoff's Review:

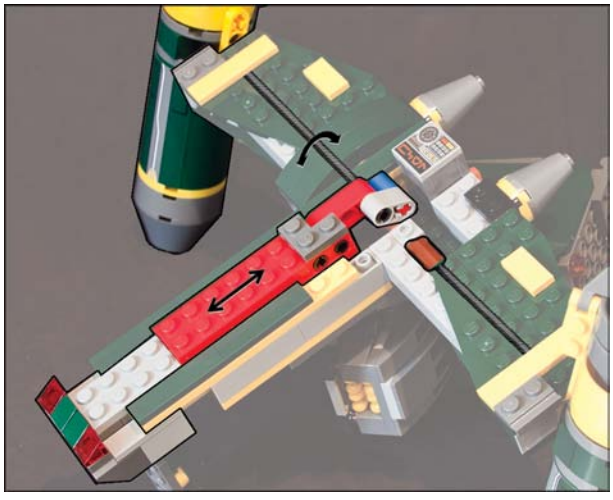
When I first saw the Bounty Hunter Assault Gunship on the shelves at the local store, it did not immediately catch my eye. The LEGO Group has released a great many Star Wars sets and so it takes a bit to catch my eye. After I got the kit for this review and started to build it, the set grew on me. I have to admit that while I am not ready to "swoosh" it whenever I get home (sorry Jamie, I couldn't resist), I do like this set, and I love the minifigs.

The build was rather straightforward and fairly quick. There are a few neat techniques used for the set, such as the pod rotation mechanism, the connector for hooking the front of the ship to the wings, the side door hinge design and the "hidden" features.

The model uses four click hinges for the connection. The female sides are stacked together (two by two) on the front and the male side on the wing assembly. This provides a solid connection but still allows the front to be taken off. I agree with Jamie that the pod rotator is the coolest feature. The slider bar is comprised of enough elements to make it easy to grab, and the weight distribution of the pods and the overall model make it easy to push and pull.

While this set is still not one of my favorite models, it does provide excellent "playability" and can offer lots of fun for Star Wars fans of all ages.

The gunship with the main cabin opened and the pods vertical.



The rotation mechanism exposed. When you pull back on the aft fuselage, the pods will go vertical.

Queen Anne's Revenge

Chosen by Geoff

Geoff's Thoughts:

I first saw the Queen Anne's Revenge set in a store during a business trip. I immediately loved it, but I couldn't justify buying it. Eventually I sent a link to my wife and asked for it as a Christmas present. Santa was good to me, and after building it, I love it even more.

As with other pirate ships, this one offers plenty of small details throughout, including the captain's quarters. It also has three working cannons. I mentioned in an earlier review how glad I was that The LEGO Group has added these back to the list of active elements.

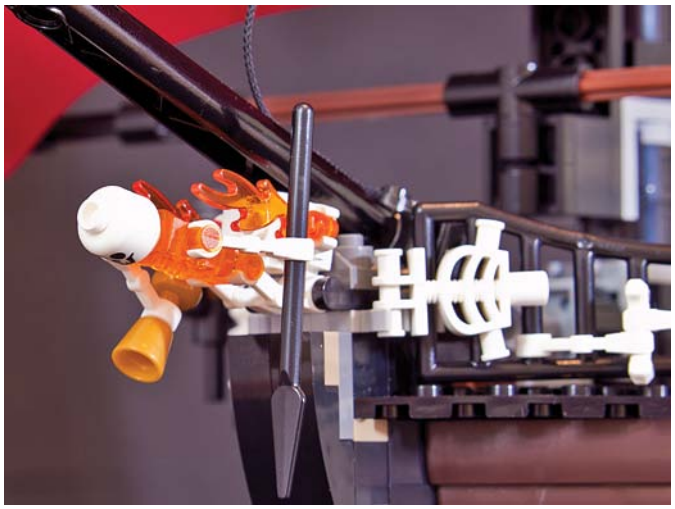
Geoff's Review:

This set maintains the high quality of past pirate ship sets. The details are excellent. For example, the bowsprit figurehead employs a spear that can be a dolphin striker (see the photo at the bottom of the page). The use of bones and skeleton parts throughout add to the sinister nature of the ship in general. The proportions of the ship and masts are excellent and the sail set is quite complete.

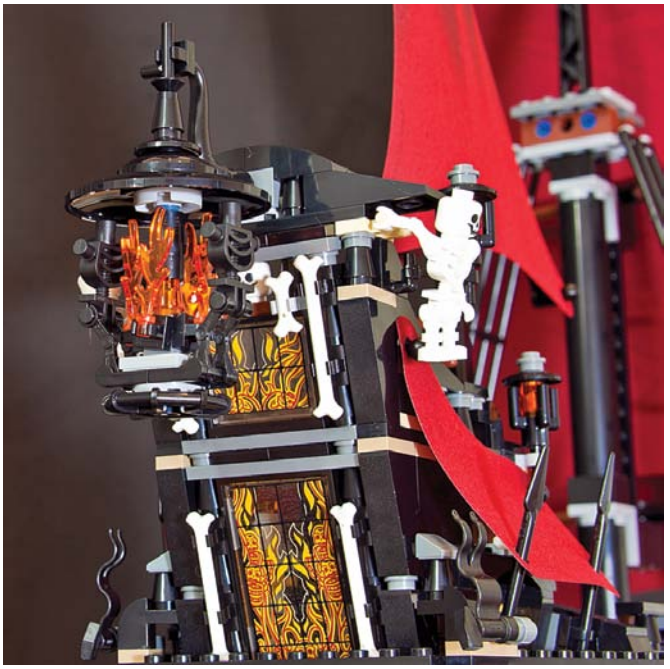
The sails come inside a chipboard envelope and all instructions, stickers and the sails are in a bag with a thick piece of cardboard to keep them flat. The detail of the minifigs is great, and the more fragile and colorful pieces come in their own small bags to protect them. There are lots of different angles around the stern superstructure that lend to the authenticity of the design. There's even a working winch to raise the massive anchor.

This set has a great deal of "playability", but it also stands out as a model to display. The masts seem quite sturdy, even when moving the ship around. I have been carrying it all over the house (setting it up for the photo shoot and moving it out of this room or that since my wife wants the house semi-clean) and the ship is still as stable as when I first assembled it. As with all other pirate ships, the use of the convex 2 x 2 tiles on the bottom make the ship very easy to push around on the floor.

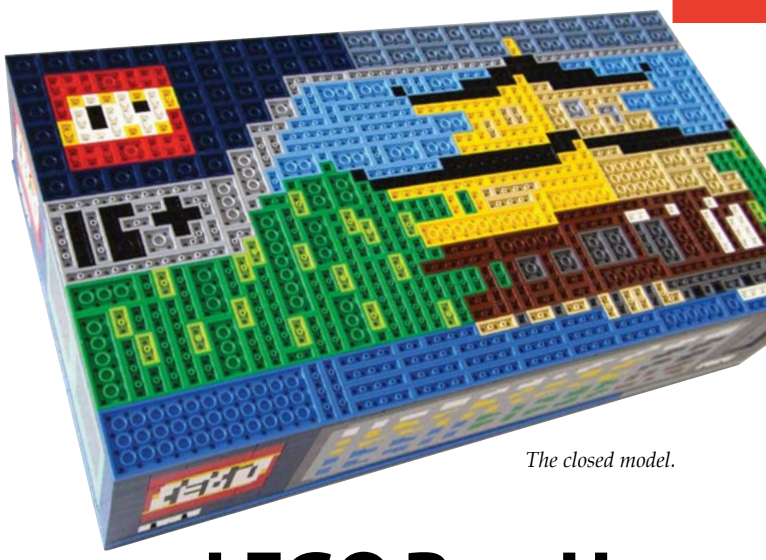
I will most likely keep this model assembled and on display for a long time. Now all I need to do is find a place where I can display it.



The bowsprit of the ship is made with a transparent orange skeleton body. Notice the use of a spear in the skeleton to mimic the dolphin striker.



The massive lantern on the stern uses black skeleton bodies, while the rest of the stern employs other skeletons and bones for detail.



The closed model.

LEGO Pop-Up: Kinkaku-ji of Takayuki Kawahara

Article by Nathan Bryan of BrickZen.com

If you have yet to see Takayuki Kawahara's "LEGO Pop-Up Kinkaku-ji" then first put down this article, fire up your computer and check out:
http://www.youtube.com/watch?v=uYlA3NV0rFA

Pretty amazing, yes?

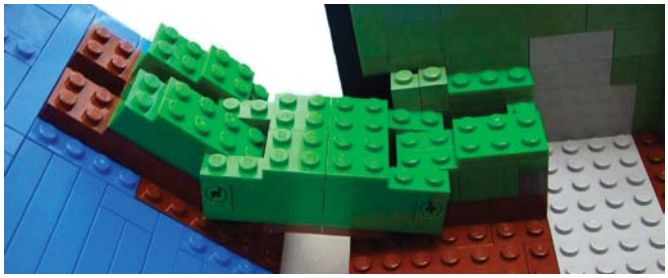
The 3-minute and 40-second video put on YouTube in 2009 has received over 1 million views and been featured on quite a few LEGO and web blogs. The model consists of over 4,500 pieces, weighs more than four kilograms and took about 200 hours over a two-month span to build.

The creator of this ingenious model, Takayuki Kawahara, first started playing with his older brother's LEGO "London Bus" when he was a little child. He switched to video games but four years ago when building a simple LEGO car for a relative's kid, he got hooked again.

Takayuki is quite an avid fan of puzzles, having once run a site for puzzlers, and was looking to try something that no one else had ever done. Being a fan of mathematical and three-dimensional puzzles, he originally tried to create an origami crane out of LEGO elements. He gathered a number of LEGO airplane wings and plates, but the plate thickness of the LEGO pieces made things too difficult. Then he hit upon the idea of trying a "Pop-Up" something. He did some online searches and could not find any examples of other people doing this and so he made it as a puzzle challenge for himself to figure out.

At first Takayuki could not decide if he wanted to do Kinkaku-Ji (Temple of the Golden Pavilion) in Kyoto or a five-story pagoda such as those found throughout Japan. While the folding mechanism for a pagoda might have been easier, since it has five stories, he felt the weight would be too much, and focused on Kinkaku-ji, a three-story structure.

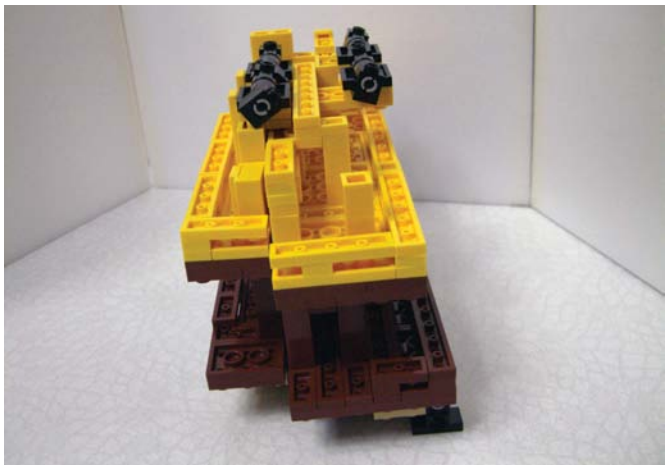
The open model.



One of the box hinges used in the model.

A look at one of the building hinges: Turn around...

...and as the box closes....

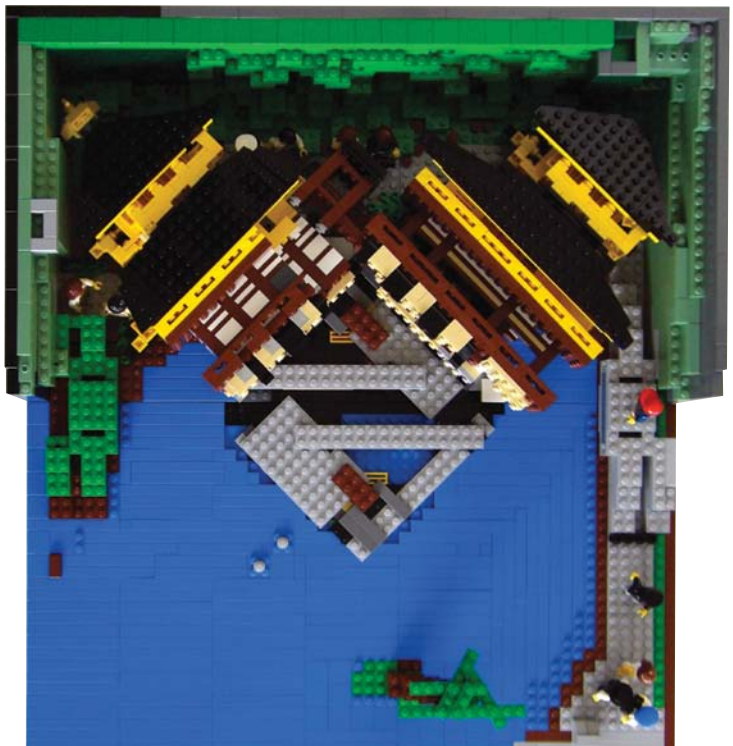


...the wall folds together to fit in the box.

If one was to make a Pop-Up Kinkaku-Ji out of paper, one would need to make the walls, floor and roof all fold flat. Since it is not possible to really "fold" LEGO pieces flat, he figured that he wouldn't worry about the floor and just concentrate on getting the walls and roof to fold a reasonable amount. The most difficult part was getting the small "partial roof" on the first floor to fold. He was able to do this by separating the small roof from the wall a bit and getting it to "store" itself next to the wall when folded. By using this technique he was able to get things to fold flat with a relatively small amount of thickness. Since he was going to end up with some thickness anyway, he figured out that instead of trying to have the entire model fold flat, he would have it fold into a "box" and that he would make it look like a standard LEGO box. This was the main breakthrough that enabled the model to be built.

Another challenge was getting the entire model to hold together when opening or closing. He had never really used Technic parts and so in the build, he tried to use as many standard bricks as possible. Since he did not want to use any glue, he needed to rely solely on the clutch power of the LEGO bricks to keep the model together when being opened or closed. In the beginning, there were many times that the model came apart, falling into many pieces as he tested the opening and closing. While this was one of the most challenging parts of building the model, in liking puzzles, figuring out what would be needed to hold it together was also one of the most enjoyable parts. In its final form, each quarter of the folding pieces of the temple is held by around 10 studs at any given angle. For the pattern of the box he created a mosaic plan, but for the rest of the model he just used trial and error.

After he had the model almost completely finished, he really wanted to try to create a "mirror pond" that reflects a "Reverse Kinkaku-Ji" similar to what is at the real temple. He managed to do it with polished blue tile pieces, but still isn't as happy with the result as he would like to be. Due to the weight he has never displayed the model anywhere; in fact, it hasn't left his house.



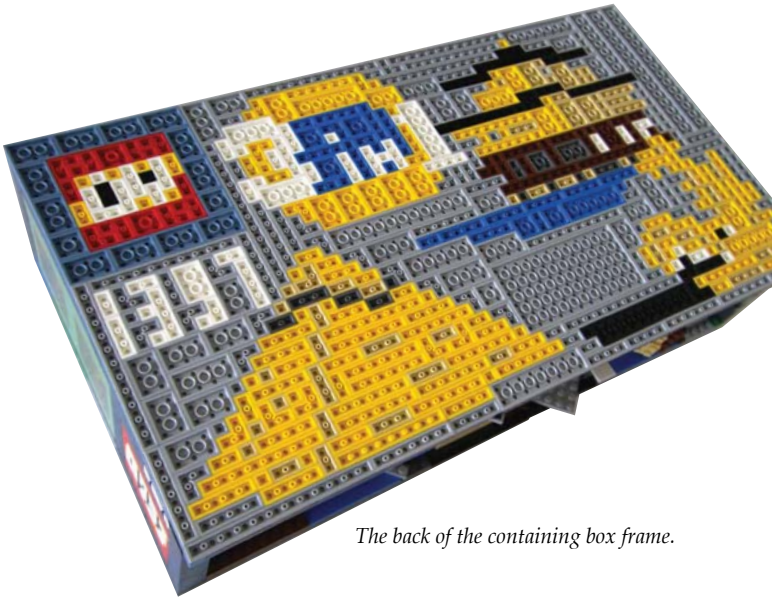
Right: The model folded in the box.

He obtained most of the parts through websites in Japan. As an adult building with LEGO he had the financial resources that many children would not have (this he also found is not always a good thing….)

He first posted a video to NikoNiko (a Japanese video site) but it wasn't until he put it up on YouTube that it really got notice. At first he was happy to see comments like "awesome" and "wonderful" but got a bit scared by some of the slang comments he got where he wasn't sure if they were praising him or cursing him. Also since he had heard that the LEGO Group does not support any religion in particular, he was a bit concerned, since the model is of a Buddhist Temple. When the video reached 80,000 hits he was actually pretty concerned.

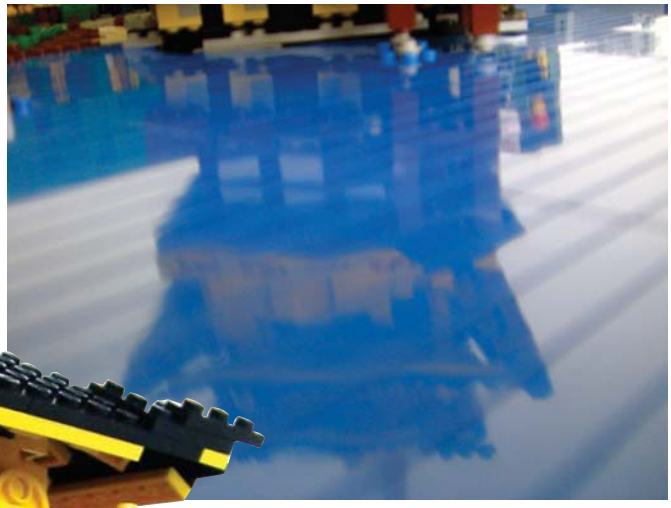
Many people have asked for plans to build this model. Maybe in the next version after he gets the hinges a bit stronger and the pond reflecting better, he will post them. Maybe even the LEGO Group might be interested in making a set, with lots of gold pieces!

See Takayuki Kawahara's LEGO Tea-Serving Robot and Stop Motion Animation movies at: *http://www.youtube.com/user/talapz* or scan the QR code at the left.



The back of the containing box frame.

The model's "mirror pond."



Another view of the temple.

Figure 1: EL wire TRON Light Cycle, illuminated with 1.5 ft of EL wire and a 1 AA battery box/inverter.

Minifig Customization 101:

Introduction to Lighting Custom Minifigures and LEGO Elements

Article and Art by Jared K. Burks

You can go to Jared's webpage by scanning this QR code!

It's an area of customizing all its own: it has the ability to completely transform an awesome figure into a completely unforgettable figure. The LEGO Group has even tried to accomplish this area of customization. This area of customizing can be a bit overwhelming as it involves electricity and batteries, which means caution must be used. Well, the title has already given it away — it is lighting the figure. Hopefully after reading this article you will feel more comfortable attempting a lighting project on your favorite figure. Lighting projects are typically done by one of two sources, LED or EL wire. This is a very complicated set of modifications; as such, this article will cover the basics and give one example with some photos of what can be done. Later an additional, more advanced article will cover a more involved project. Please note, unless kits are used, soldering is required for many of these projects. This is an advanced skill and beyond the scope of this article. There are many great tutorials online (one is noted in the reference section), so please review a tutorial before attempting this yourself.

Lighting: LED and EL

LEDs, or **L**ight **E**mitting **D**iodes, have been around since the early '60s and have recently become very small and very inexpensive. You will find them everywhere from flashlights to light bulbs to TVs and even in stores like IKEA. They come in a wide array of colors and sizes. These little lights practically never burn out and use very little power, which make them perfect for LEGO lighting projects. Most often LEGO projects use small surface mount (SMT) LEDs (common size for minifigure projects are 1.25 mm x 2 mm). These can be found very economically on

eBay in small quantities. Single LEDs can easily be powered by a small watch battery (size CR1025). Because LEDs can be powered by such a small battery, these can be contained inside the minifigure body. With a rotary tool, the torso can be converted into a battery pack. This can be done with fuse taps and a small switch. Part of the interior of the minifigure torso and hips needs to be removed to make room for these parts. All the details about this sort of lighting are in a tutorial on the Brickmodder (www. brickmodder.com) website, so while basic details are listed here, I suggest visiting Rob's website for a very helpful step-by-step tutorial link in the resource section.

EL wire, or **E**lectro**L**uminescent wire, is a thin copper wire coated in a phosphor which glows when an alternating current is applied to the wire. This sounds quite complicated, but there are small voltage inverters that alternate the current and merely plug into the length of the wire or are incorporated into the battery holders. The really cool feature is that because the current alternates direction, the EL wire can dead end and not be connected at both ends of its length. EL wire is a much newer product and really came to the forefront through its use in the film *TRON: Legacy*. Note figure 3; look at the end of Wonder Woman's lasso. EL wire gains its color from the PVC sleeve applied to the wires, thus EL wire merely emits a white light unless coated. EL wire also comes in various thicknesses, with the thinnest being approximately 0.9 mm in diameter.

Lighting Differences

So now that the light sources have been introduced we need to understand the main differences. A LED is a simple lighting device that merely needs a switch, battery, and battery connectors. However, EL wire needs a switch, battery, and a voltage inverter. The biggest difference is the voltage inverter, which is critical and needs some discussion before this article proceeds. A voltage inverter allows the EL wire to illuminate. It raises the voltage, while lowering the amperage and reverses the current flow. Because of the necessity of this device EL wire requires an external battery pack as the inverter is too large to be contained inside the figure body. However, with some planning a small base can be constructed out of LEGO to conceal the battery/inverter pack. The other key to EL wire is that the length of the wire dictates the amount of power required to properly light the wire. For most minifigure projects 1-1.5 feet is plenty, which can be easily powered with 1-2 AA batteries (1 foot or less can be powered by two small watch battery AG13 size). If you have larger projects using EL wire, please refer to the resource section below for additional information.

So now that the basics have been covered, the remainder of the article is going to show how I recently converted Jack "Ewok in Disguise" Marquez' TRON Lightcycle with EL wire. This is a nice simple start to using EL wire. Jack was very nice to supply instructions for his design on Flickr, which I modified slightly for my version. His instructions can be found in the resource section below.

Now that you have seen that LEDs and EL wire are simple to use and that many kits are available, many custom figures, vehicles, and lighted vignettes can easily be created. Show us what you can create!

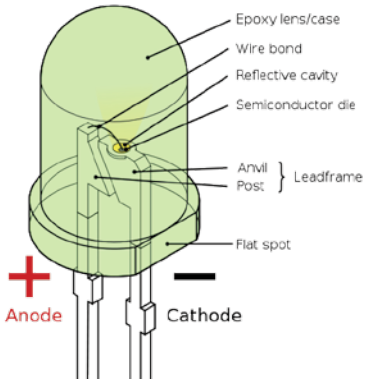


Figure 2: Diagram of an LED. Note directionality of power flow.

Figure 3: LED lighting for a Clone Trooper minifigure.

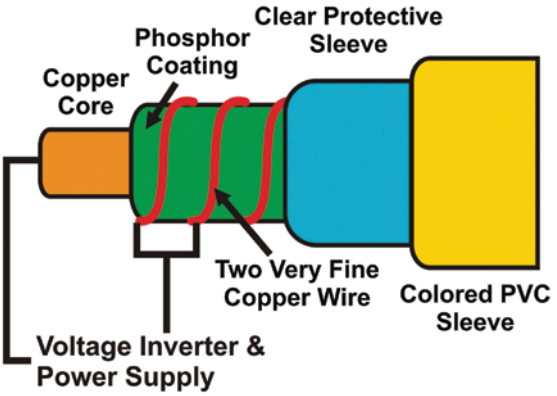
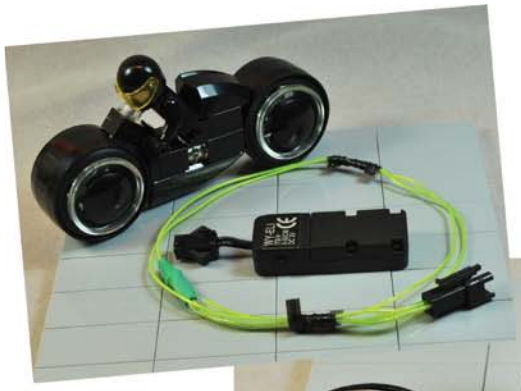


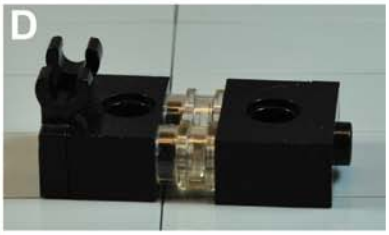
Figure 2: Diagram of an EL wire. Note wiring of two small copper wires to one battery pole with the other pole connected to the copper core.

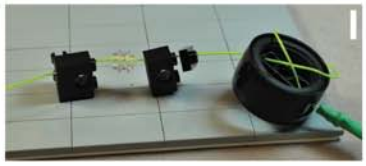
Figure 3: EL wire lasso for Wonder Woman!

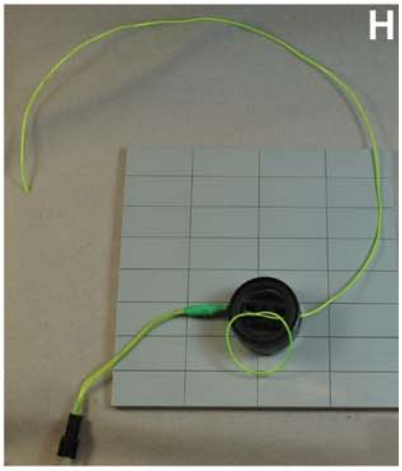
Step-by-Step Lighting of Lightcycle

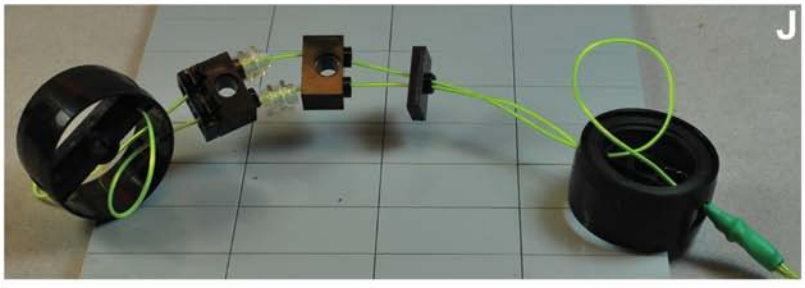
A. Exploded view of lightcycle, note the center core of cycle. **B.** Wheel. **C.** Inner portion of wheel, LEGO bicycle tire, note the groove: this is critical for holding EL wire. **D.** Center core needs to be drilled out. **F.** Jumper Plate (1 x 2 plate with 1 stud) is drilled through center. **G.** Bottom of Jumper Plate has small "pole" removed. **H.** Enter hole in back of wheel, pass through and loop. **I.** Traverse down one side of center core. **J.** Drill two small holes in front wheel. Look and travel back down other side of center core into back wheel. **K.** Loosely assemble center core. **L.** Starting from the dead end tip of EL wire start loop. **M.** Superglue tip into groove in back wheel, spot glue along loop. **N.** Glue in front wheel. **O.** Glue in other side of front wheel. Pass excess EL wire out back, glue in back wheel. Reassemble Lightcycle.

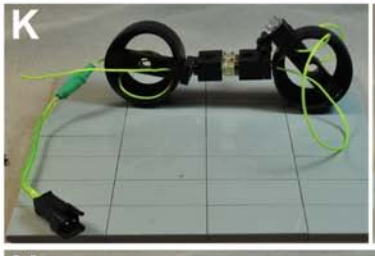


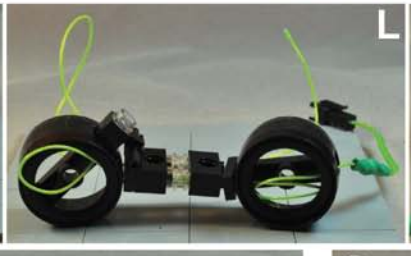












RESOURCES:

Tutorials:

Rob "Brickmodder" Hendrix — Lightsaber Modification Tutorial:
http://www.brickmodder.net/tutorials/howto/BFDC04%20-%20Brick%20Modification.pdf

EL Wire Tutorial: *http://www.ladyada.net/learn/el-wire/*

Jack "Ewok in Disguise" Marquez Tron lightcycle instructions: *http://www.flickr.com/photos/28177764@N07/sets/72157626348735081/with/5609117928/*

Basic Soldering: *http://www.aaroncake.net/electronics/solder.htm*

Examples:

Light-up Minifigure Flickr Pool:
http://www.flickr.com/groups/1274076@N23/

LifeLites Flickr Pool:
http://www.flickr.com/groups/1221775@N25/

Supplies:

LEDs: *http://www.ebay.com* Search for LED and size needed
Fuse taps:
http://www.radioshack.com/product/index.jsp?productId=2102780

Switch for LED:
http://search.digikey.com/us/en/products/AYZ0102AGRLC/401-2012-1-ND/1640121

LED kits: *http://www.lifelites.com/*

EL wire, kits & inverters: *http://Thatscoolwire.com*

Next Time:

Minifig Customization 101 – 3D Printing Minifigure Accessories!

Japanese Stone Lantern (Ishidoro)

Design by Kunie DeVorkin
Instructions by Joe Meno

Kunie DeVorkin is a LEGO builder who resides in the DC area. This model is one of her many works that have been seen at LEGO fan events, such as Brickfair and BrickMagic. She talks about this model here:

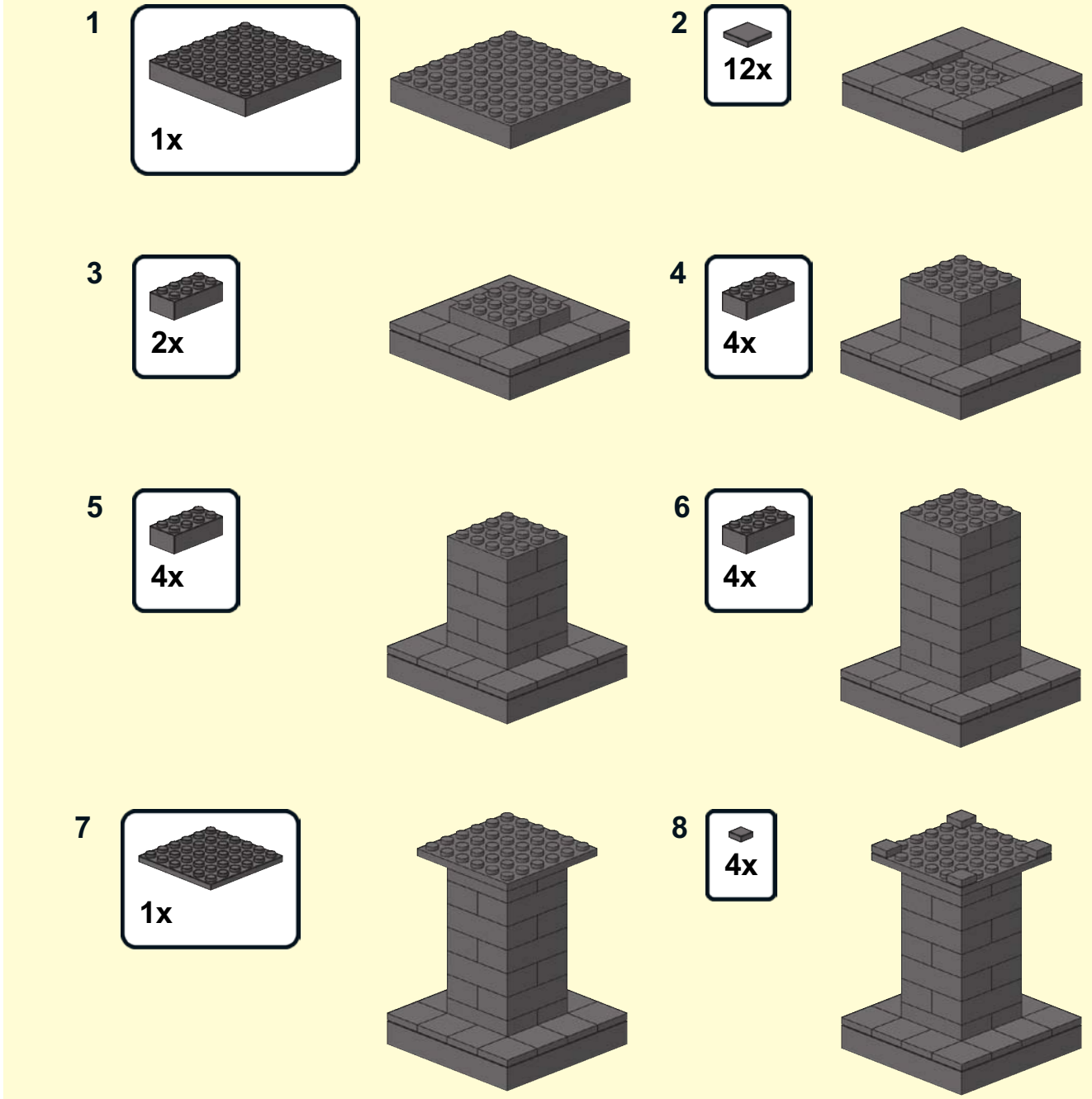
> A few years ago, I was asked to come up with something simple and Japanese for the Cherry Blossom Festival in DC. "Simple" was a challenge since there are lots of Japanese things one could build but they often involve lots of bricks. Then I thought about a stone lantern.
>
> The house I grew up in Japan had a small but formal garden. And it had a stone lantern like a lot of gardens that other houses had. It was in the center of the garden behind a pine tree and had lots of moss growing on it.
>
> I don't think I ever touched it since I would have had to go around some bushes that had prickly leaves. Stone lanterns are everywhere in Japan; in private gardens, formal gardens, temples and the like; and they come in many different shapes. But I never saw it with any lights or fire in it.

Stone lanterns came to Japan from Korea and China in the sixth century and were used as votive lights at temples and shrines. In the 16th century, stone lanterns were adopted by the secular community and placed in the gardens of tea houses and residences.

Parts List

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

Qty	Part	Description	Color
4	30039.dat	Tile 1 x 1 with Groove	Dark Bluish Gray
8	3010.dat	Brick 1 x 4	Dark Bluish Gray
1	4201.dat	Brick 8 x 8	Dark Bluish Gray
8	3005.dat	Brick 1 x 1	Dark Bluish Gray
4	3069b.dat	Tile 1 x 2 with Groove	Dark Bluish Gray
14	3001.dat	Brick 2 x 4	Dark Bluish Gray
1	3958.dat	Plate 6 x 6	Dark Bluish Gray
12	3068b.dat	Tile 2 x 2 with Groove	Dark Bluish Gray
8	2357.dat	Brick 2 x 2 Corner	Dark Bluish Gray



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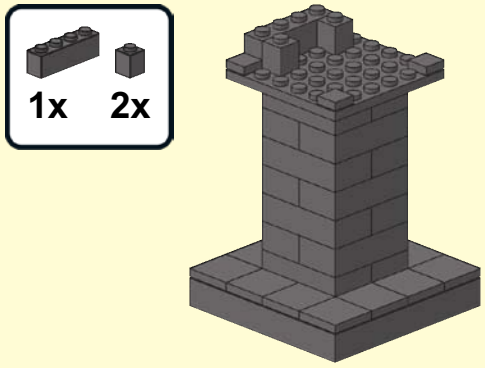

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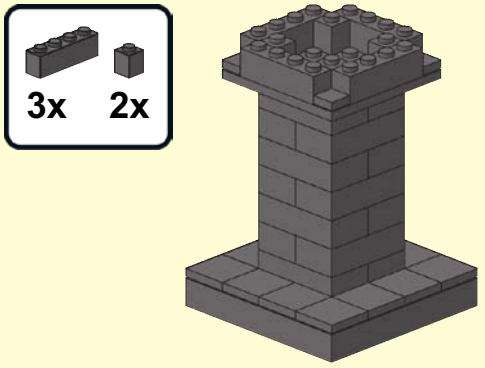

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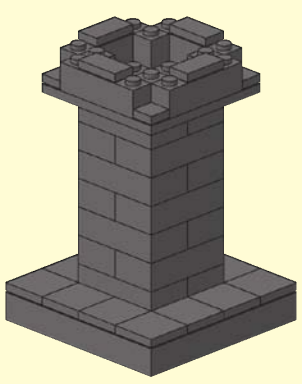

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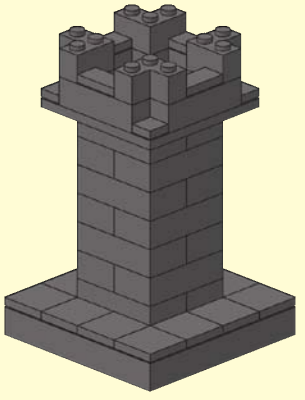

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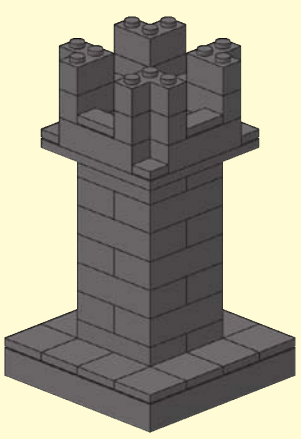

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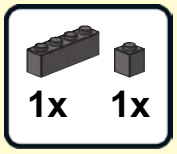

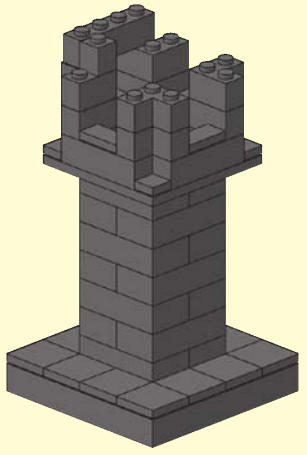

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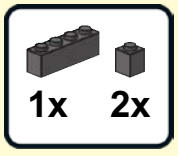

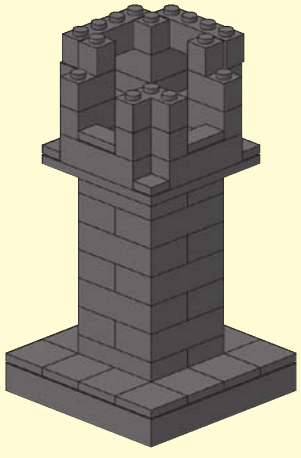

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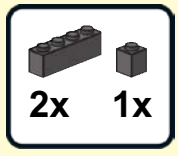

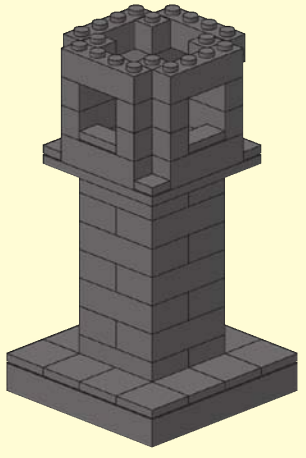

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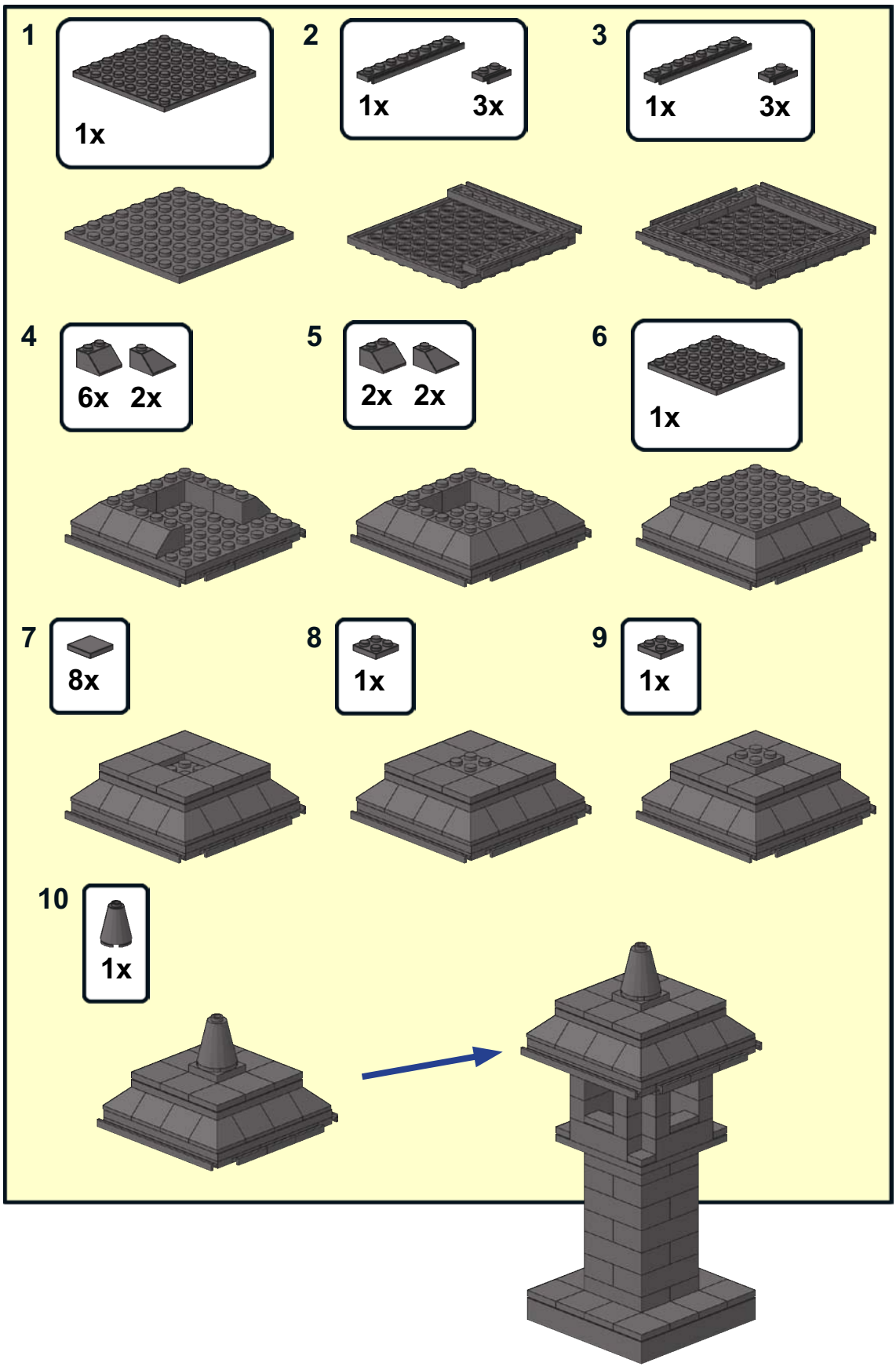
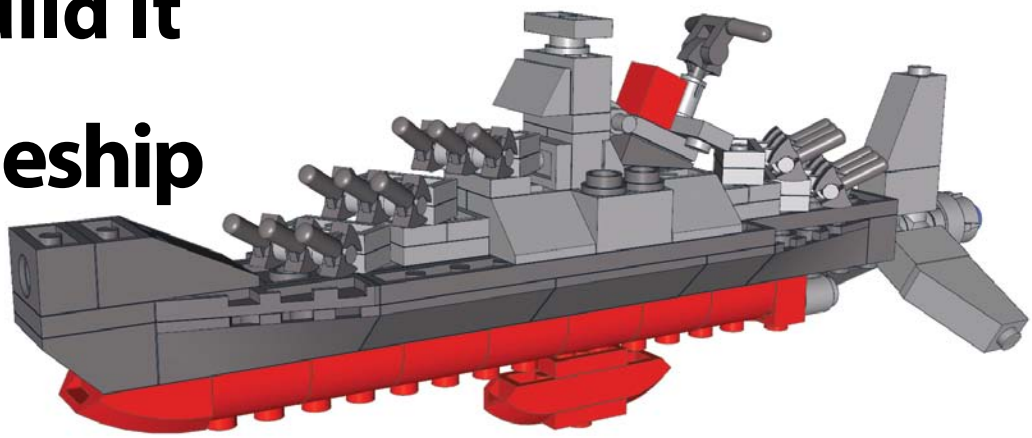


You Can Build It

MINI Model

Space Battleship *Yamato*

Design and Instructions by Christopher Deck



Hello everybody! I am glad to join you again for the newest issue of *BrickJournal*. For this issue, themed around Japan, we want to build a mini model from the Japanese anime series *Space Battleship Yamato* which was first aired in 1974. In fact, we want to miniaturize the gargantuan space battleship itself.

The Space Battleship *Yamato* is based on a real naval battleship, modified for space operations. No longer afloat in water, this means that we now see the entire boat hull, especially the bottom of the vessel which is difficult to construct. In order to get the rounded shapes for the hull and keel right, the entire ship was constructed studs-down. This way it was possible to use sloped wedges for the hull and curved bricks for the keel. The bricked miniaturization also comes complete with command tower, signal mast, space engines, maneuvering fins and bristles with cannon turrets.

Enjoy building and see you next time!

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

Main Hull

Qty	Color	Part	Description
2	Light-Bluish-Gray	3062b.dat	Brick 1 x 1 Round with Hollow Stud
2	Light-Bluish-Gray	4070.dat	Brick 1 x 1 with Headlight
3	Light-Bluish-Gray	3004.dat	Brick 1 x 2
1	Red	40996.dat	Brick 1 x 4 with Sloped Ends and Two Top Studs
7	Red	30165.dat	Brick 2 x 2 with Curved Top and 2 Studs on Top
1	Light-Bluish-Gray	3001.dat	Brick 2 x 4
1	Trans-Blue	6188.dat	Cone 1 x 1
1	Light-Bluish-Gray	6141.dat	Plate 1 x 1 Round
4	Dark-Bluish-Gray	6141.dat	Plate 1 x 1 Round
1	Red	3023.dat	Plate 1 x 2
6	Light-Bluish-Gray	3023.dat	Plate 1 x 2
1	Dark-Bluish-Gray	3023.dat	Plate 1 x 2
1	Red	3794.dat	Plate 1 x 2 with 1 Stud
1	Light-Bluish-Gray	3794.dat	Plate 1 x 2 with 1 Stud
1	Light-Bluish-Gray	2540.dat	Plate 1 x 2 with Handle
2	Dark-Bluish-Gray	4477.dat	Plate 1 x 10
3	Light-Bluish-Gray	3022.dat	Plate 2 x 2
1	Dark-Bluish-Gray	3022.dat	Plate 2 x 2
2	Dark-Bluish-Gray	3034.dat	Plate 2 x 8
2	Light-Bluish-Gray	85984.dat	Slope Brick 31 1 x 2 x 0.667
1	Dark-Bluish-Gray	3747a.dat	Slope Brick 33 3 x 2 Inverted without Ribs between Studs
3	Dark-Bluish-Gray	3039.dat	Slope Brick 45 2 x 2
4	Light-Bluish-Gray	3660.dat	Slope Brick 45 2 x 2 Inverted
4	Dark-Bluish-Gray	3037.dat	Slope Brick 45 2 x 4
3	Light-Bluish-Gray	60481.dat	Slope Brick 65 2 x 1 x 2
1	Red	30602.dat	Slope Brick Curved Top 2 x 2 x 1
1	Dark-Bluish-Gray	6587.dat	Technic Axle 3 with Stud
1	Dark-Bluish-Gray	32064a.dat	Technic Brick 1 x 2 with Axlehole Type 1
1	Dark-Bluish-Gray	3700.dat	Technic Brick 1 x 2 with Hole
1	Red	32000.dat	Technic Brick 1 x 2 with Holes
1	Light-Bluish-Gray	32000.dat	Technic Brick 1 x 2 with Holes
2	Light-Bluish-Gray	57585.dat	Technic Bush with Three Axles
2	Light-Bluish-Gray	4274.dat	Technic Pin 1/2
1	Light-Bluish-Gray	32187.dat	Technic Transmission Driving Ring Extension
2	Dark-Bluish-Gray	43721.dat	Wedge 4 x 2 Sloped Left
2	Dark-Bluish-Gray	43720.dat	Wedge 4 x 2 Sloped Right
1	Dark-Bluish-Gray	43719.dat	Wing 4 x 4 with 2 x 2 Cutout Signal Mast
1	Dark-Bluish-Gray	48729.dat	Bar 1.5L with Clip
1	Red	3005.dat	Brick 1 x 1
1	Dark-Bluish-Gray	30031.dat	Minifig Handlebars
1	Light-Bluish-Gray	63868.dat	Plate 1 x 2 with Clip Horizontal on End
1	Light-Bluish-Gray	3623.dat	Plate 1 x 3
1	Dark-Bluish-Gray	61409.dat	Slope Brick 18 2 x 1 x 2/3 Grille
1	Light-Bluish-Gray	4274.dat	Technic Pin 1/2

Turrets

Qty	Color	Part	Description
15	Dark-Bluish-Gray	48729.dat	Bar 1.5L with Clip
5	Light-Bluish-Gray	3794.dat	Plate 1 x 2 with 1 Stud
5	Light-Bluish-Gray	2540.dat	Plate 1 x 2 with Handle

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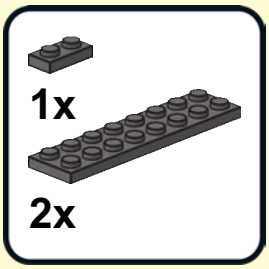

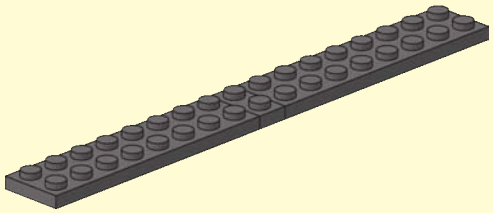

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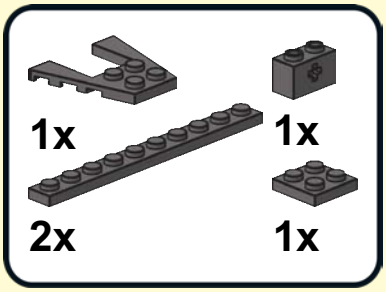

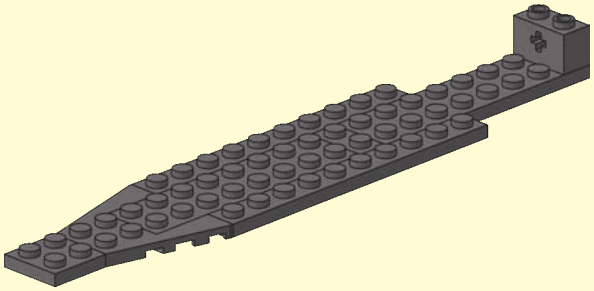

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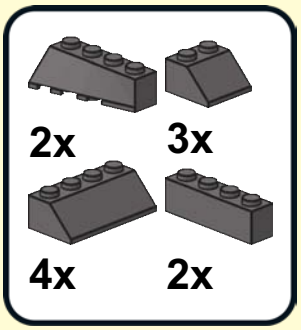

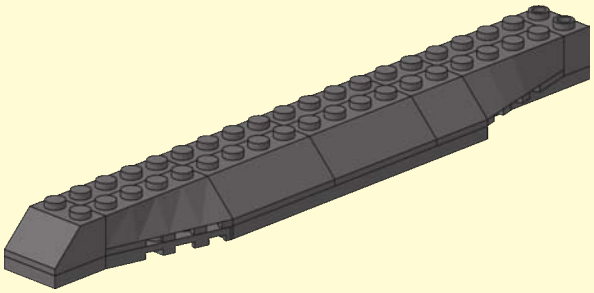

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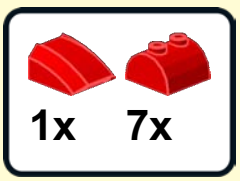

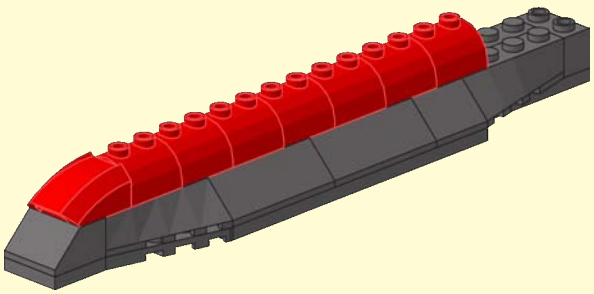

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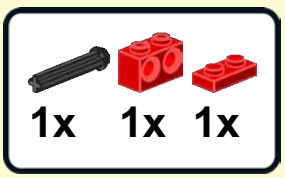

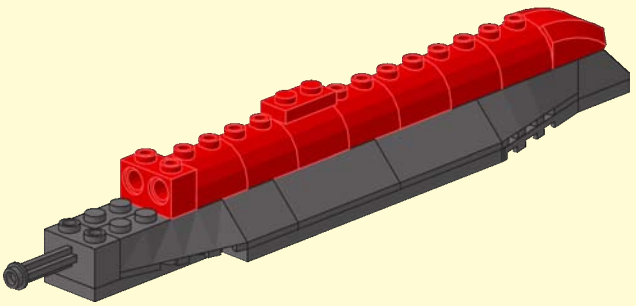

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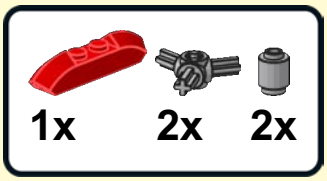

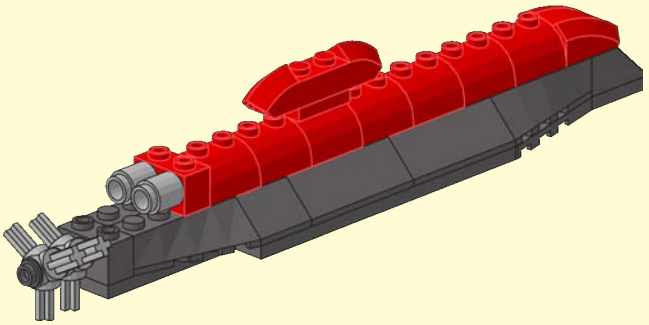

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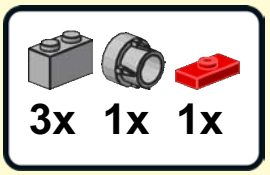

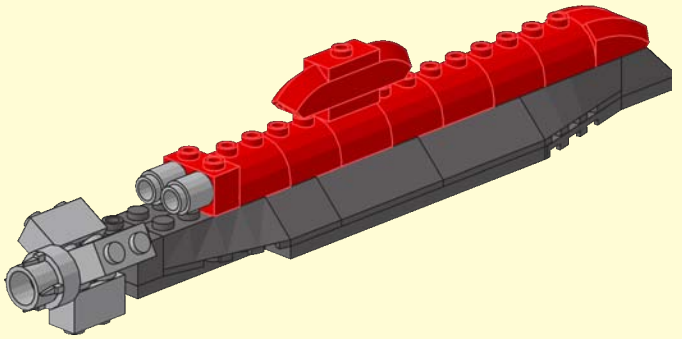

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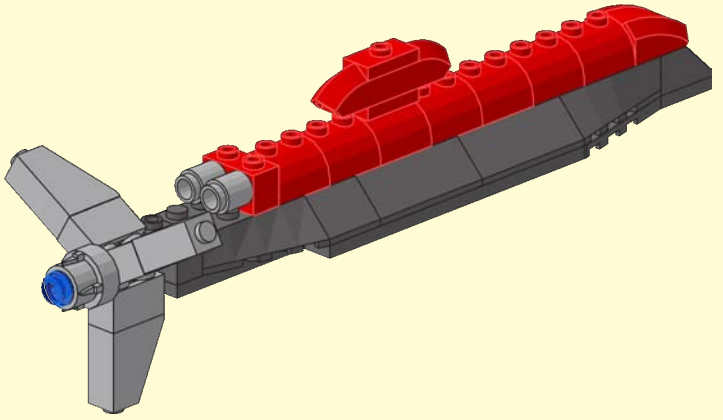

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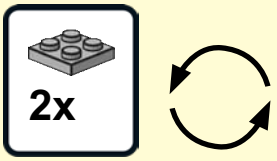

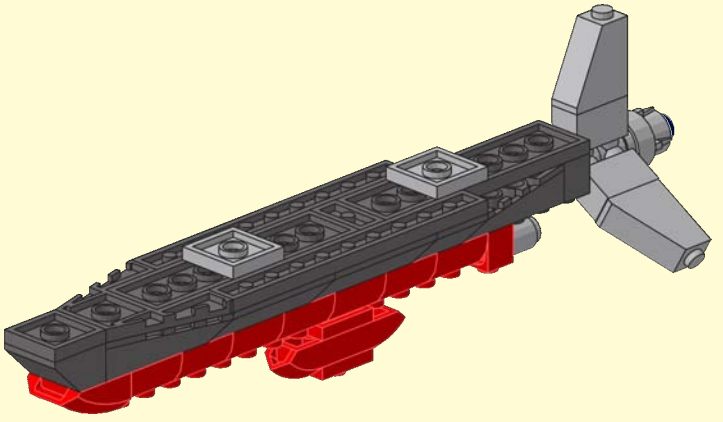

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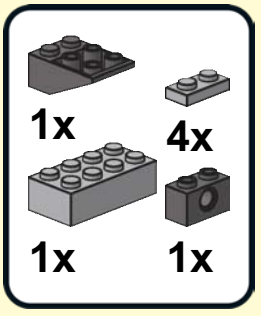

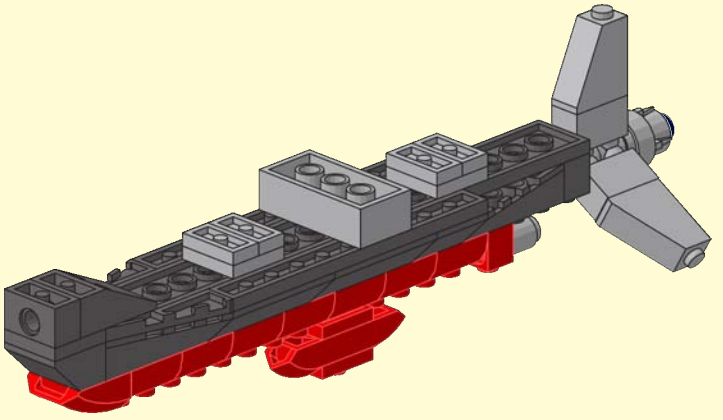

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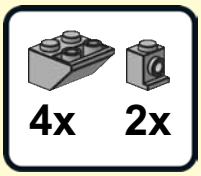

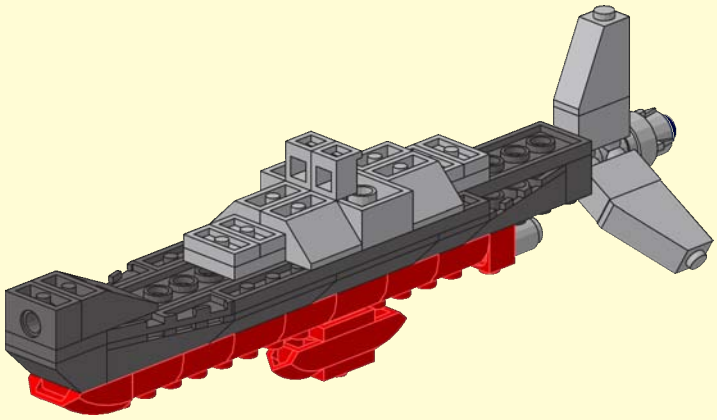

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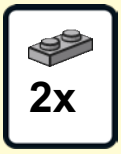

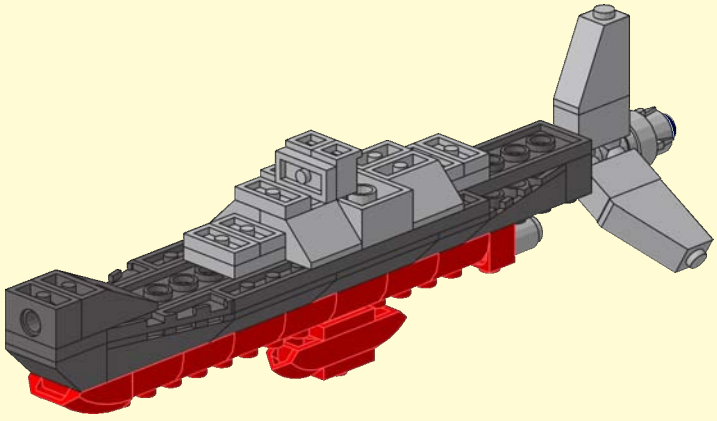

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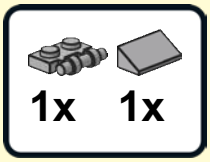

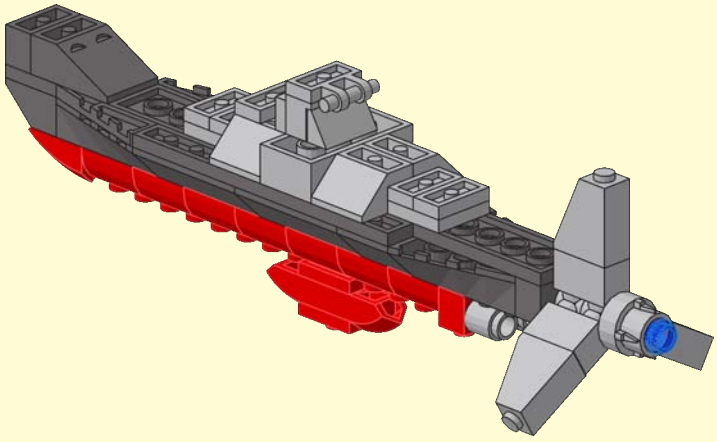

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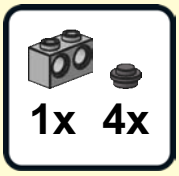

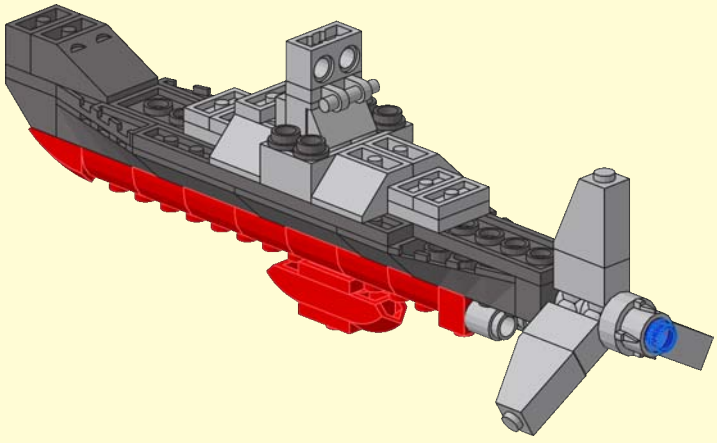

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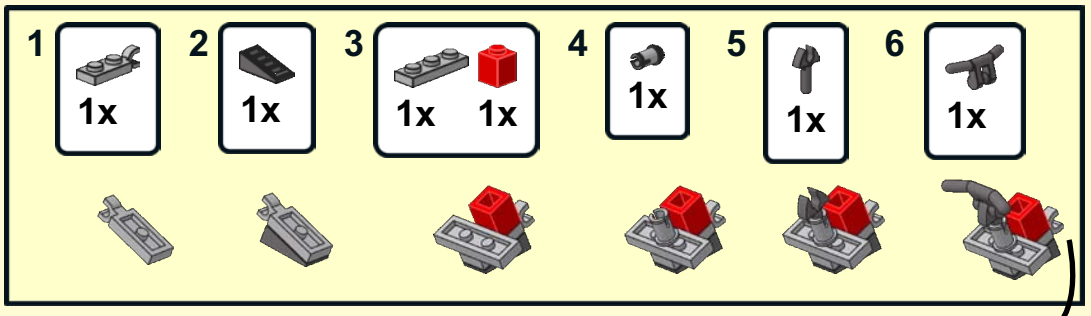

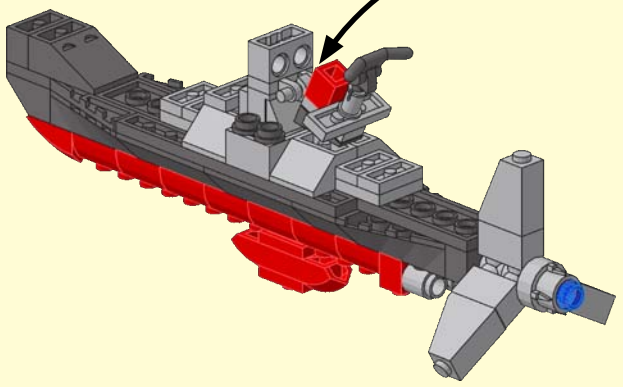

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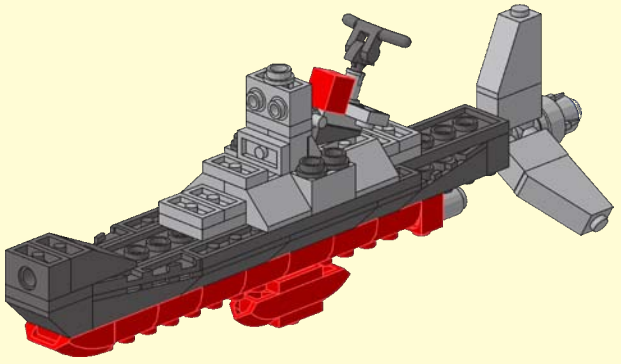

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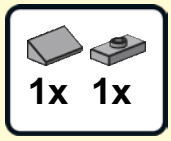

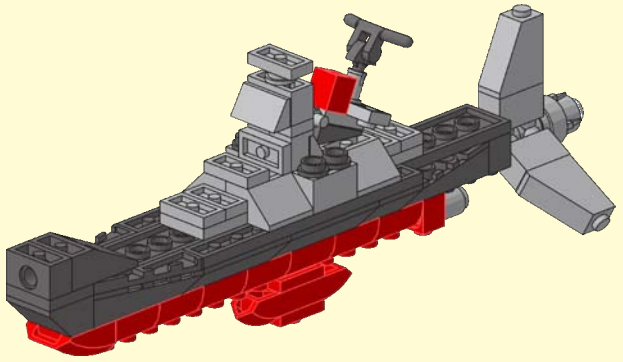

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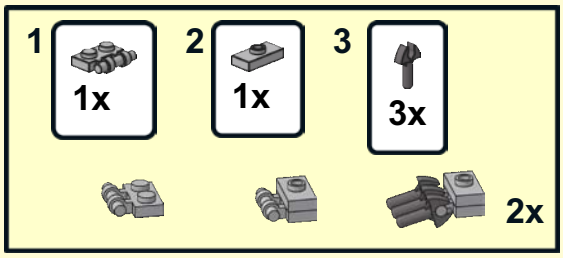

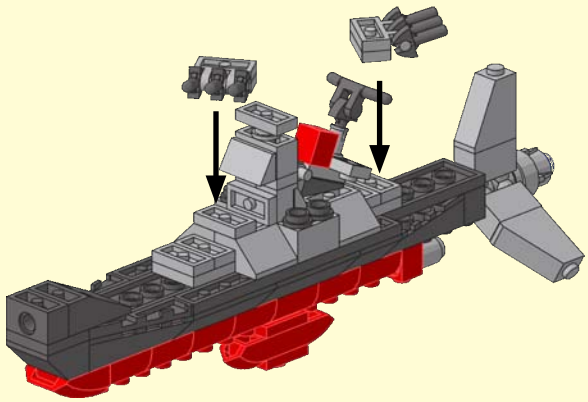

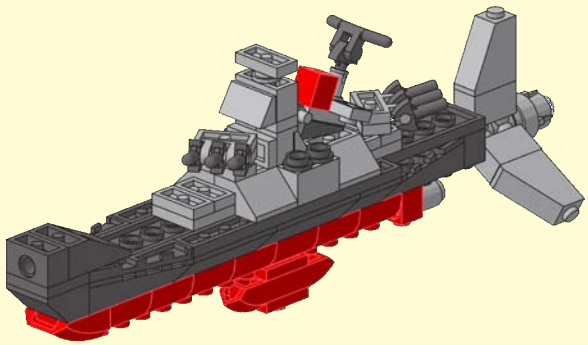

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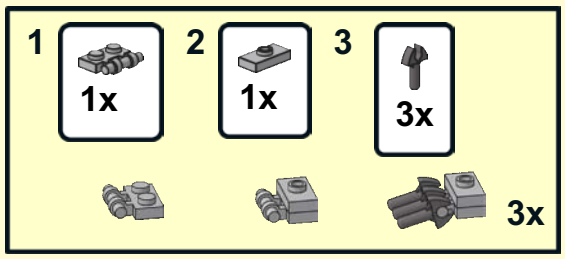
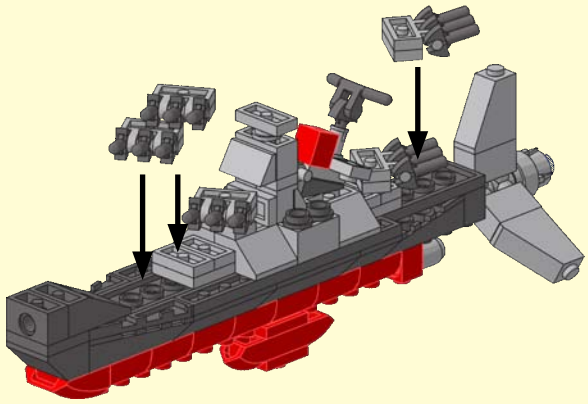
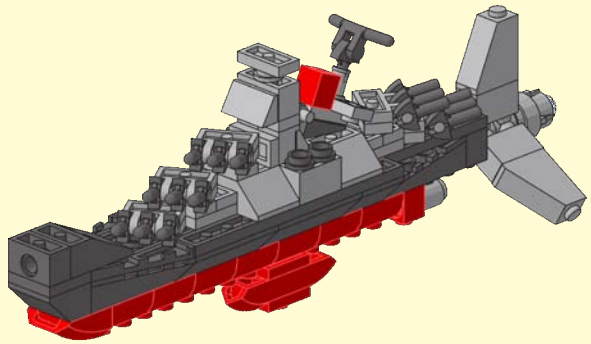






The University of Tokyo's logo, rendered in LEGO bricks.

The Todai (University of Tokyo) LEGO Club

Article by Jumpei Mitsui, LEGO Certified Professional Builder
Translated by Nathan Bryan of BrickZen.com

In Japanese universities, when people get together to deepen their interest in a certain hobby, these groups are called "Circles." Some are for indoor things like Shogi (Japanese Chess) or Go (another game), others are for sports like tennis or karate. At one time there was no Circle for LEGO bricks. I decided to setup a circle for LEGO building with a few friends the year I joined the University of Tokyo (Todai). As a result, the university now has a club called the "Todai LEGO Club." Just a few years ago, things were much different.

In 2005, when I was still a high school student, I saw a post on an internet community site (like Facebook). A student, Keiichi Morita, had posted, "I would like to make Yasuda Auditorium (The University Clock Tower) out of LEGO bricks." Several other Todai students had joined him to make it a reality.

Keiichi had never built a large model with LEGO bricks, but he was fascinated with the architecture of the Yasuda Auditorium and was determined to "recreate the Yasuda Auditorium with LEGO bricks." None of the other people involved at that time had any experience in building large LEGO models, and were facing the difficulties of not knowing how to design a large model, or even how to procure the bricks needed for one. When I entered the University of Tokyo in April of 2006, I immediately posted to the community and told them that I would like to get involved. I had made quite a few large models, many with tens of thousands of

pieces. I knew how to obtain bricks through BrickLink, how to design models with LEGO graph paper and other experience for the construction of large models. There was around six months of preparation and, in the autumn of 2006, production began. Around that time, I had also discovered at the University of Tokyo a very good builder who had been posting nice models on BrickShelf, Koichi Omura. Being an excellent builder of minifig-scale propeller airplanes, I had seen many of his works on the internet and was a big fan of Omura. I remember being very surprised to find out that not only was he also a Todai student, but was the same age as me.

Including him, the five of us started on the project. Omura had other projects he was working on, but over a period of four months, we were able to complete the building of the Yasuda Auditorium out of LEGO bricks. Some of the people participating were very experienced with building with LEGO bricks, and some had little experience (and all five of us had different academic majors), but through cooperation and coordination we were able to create a wonderful model. The completed Yasuda Auditorium was displayed at the Tokyo University May Festival in May of 2007. Although it was our debut exhibition, we won a popular vote by visitors and took first place in the Model Division. It was also published by newspapers all over Japan and the model was featured by national media after the exhibition.

Although there was a lot of hard work put into the build, the Yasuda Auditorium model was scheduled to be dismantled after the exhibition. However a savior appeared. An event planner that had come to see the festival, saw the Todai LEGO Club model and offered to have it shown in a department store. The store proposed was the Nihonbashi Mitsukoshi in downtown Tokyo, one of the most prestigious venues available. It proved to be an extremely popular exhibition there and during this time the University of Tokyo contacted us about the model and purchased it as a souvenir for the university's 130-year anniversary. In this way the LEGO brick Yasuda Auditorium was saved from destruction and will be held and displayed permanently by the university.

Yasuda Auditorium LEGO model.

The rear of the Yasuda Auditorium LEGO model, showing the roof detail.

We had achieved the goal of "Creating the Yasuda Auditorium out of LEGO bricks." Since there was such great teamwork, we decided to create the Todai LEGO Club and continue making and displaying models. Since then we have created many models for exhibition at each year's school festival. None of the original members remain, but each year new students join, and currently there are more than ten members in the club. So far the Red Gate (the university symbol gate), Todai Characters, the Tokyo Metropolitan Government building, and Budokan have been some of the models created. All have been featured in newspapers and magazines as well as shown

Tokyo University campus model.

Red Gate of the University of Tokyo.

on television. Also various members have had their own individual models featured on television programs and in newspaper articles. Models are also not only exhibited at the yearly school festival, but at many events throughout the year. When the Guinness height record of 29.70 meters was achieved by the LEGO Tower in Japan, the Todai LEGO Club was an important production unit (since then, the record has been broken). Recently there have even been models exhibited in Shijuku Station (the most heavily used train station in Japan). The club also participates in a wide array of events such as LEGO classrooms. I have even heard that there are some students that want to go to the University of Tokyo just so that they can join the Todai LEGO club.

I believe that there are three main reasons why the Todai LEGO club has been popular. The first two reasons are

the quality and scale of the work done. In Japan there are not many LEGO Fan organizations or models made by groups of builders. Therefore, there are few large-scale group models, so it is a rare treat to see one. For the quality of work, we have a reputation of creating models "just like the original!", so even people that do not know a great deal about LEGO building can really enjoy and appreciate the models. The third reason is the element of surprise in learning about the actual builders. Since LEGO bricks still have a image of being "a children's toy," people are really surprised to find out that the models are created by adults. On top of that, since Todai students have an image of only studying, people are further surprised to find out they enjoy playing and building with LEGO bricks.

In the future, I hope that the Todai LEGO Club becomes a catalyst for more adults to enjoy LEGO building as a hobby, and that it encourages group models in general. It would be really interesting if other universities or even corporations started their own "LEGO Clubs" and realized the enjoyment to be had.

For More Information:

Tokyo University LEGO Club (Japanese):
http://blog.goo.ne.jp/toudai_legoclub

Jumpei Mitsui's Site (Japanese/English):
http://www.jumpei-mitsui.com/

Koichi Omura (Brickshelf)
http://www.brickshelf.com/cgi-bin/gallery.cgi?m=HIEN

You can see Jumpei Mitsui's work by typing in his website above or scanning this QR code!

Tokyo Metropolitan Government Building.

Tokyo Tower and Tokyo Metropolitan Government Building.

Brick Fan Town.

Japan AFOL Challenge:

Brick Fan Town & Brick Fan Castle

Article by LEGO Ambassador Yoshikazu Saito
Translated by Nathan Bryan of BrickZen.com
Photography provided by Yoshikazu Saito

Designing Brick Fan Town & Brick Fan Castle

When many people think of Japanese MOCs they usually think of "compact models" or "models with detailed special parts" but through the cooperation of many builders, Brick Fan Town and Brick Fan Castle, large dioramas jointly built by Japanese AFOLs, were built very large while still maintaining an attention to detail.

Both displays were very well-received during their long exhibition at the "LEGO Stadium" in Nasu Highland Park, Japan. The size of the BFT was 7.5 meters by 4.5 meters (33.75 square meters or 35.6 square yards), the BFC 2.5 meters by 1.5 meters (3.75 square meters or 4.385 Square yards).

The models were dismantled at the end of August 2011 along with the closing of the "LEGO Stadium." This is a look at the displays, from sketches to models for those who may not have seen the display. Though having small workspaces, normally Japanese builders are not able build large models or projects. Hopefully, you will feel the passion that went into these projects.

Brick Fan Town: Making a Modular European Town!

In the early stages of planning our first display, we decided to make a "LEGO Town." With members scattered all over the country, the first problem was how to get everyone to work together on this project. Luckily "Café Corner" (10182) was released and everyone agreed to use the module specifications and build at minifigure size instead of miniland scale—a larger scale used at the LEGOLAND parks.

Since we wanted to have ocean, road, and sidewalks, instead of a standard flat layout, some improvements were made. First, the ocean would be raised one plate higher than the baseplate. The roads and ground would be one brick and one plate higher than the baseplate. In this way we could be able to simulate cobblestone roads of Europe by literally building the

roads. The reason for raising the ocean at baseplate plus one plate was that blue baseplates were unavailable at the time and we were not able to obtain enough of them.

While the target was to make a "European City," there was not an actual town that this was to be based on. This was more of a town that incorporated the symbolic buildings such as castles and cathedrals of Europe. The actual buildings were left to the imagination of each builder. A map was sent through the internet, and it was decided to have certain area themes (such as a "tourist destination"). Participants then filled in their name to the areas they wanted to work on. This system proved to be very efficient and the collaboration helped to unify sidewalks and neighborhoods a bit. This improved the quality of the entire model.

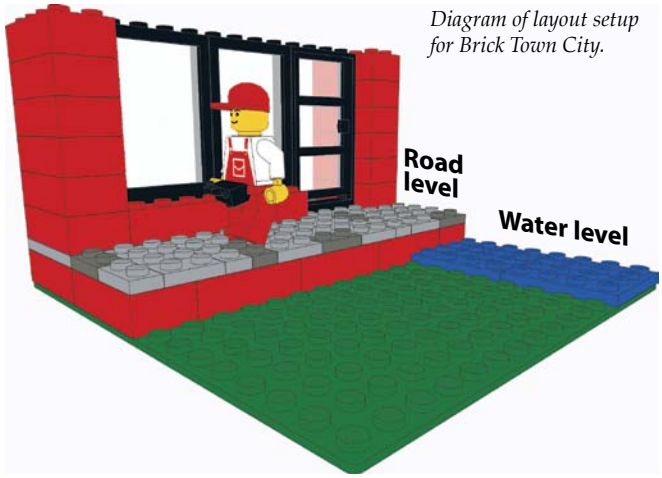
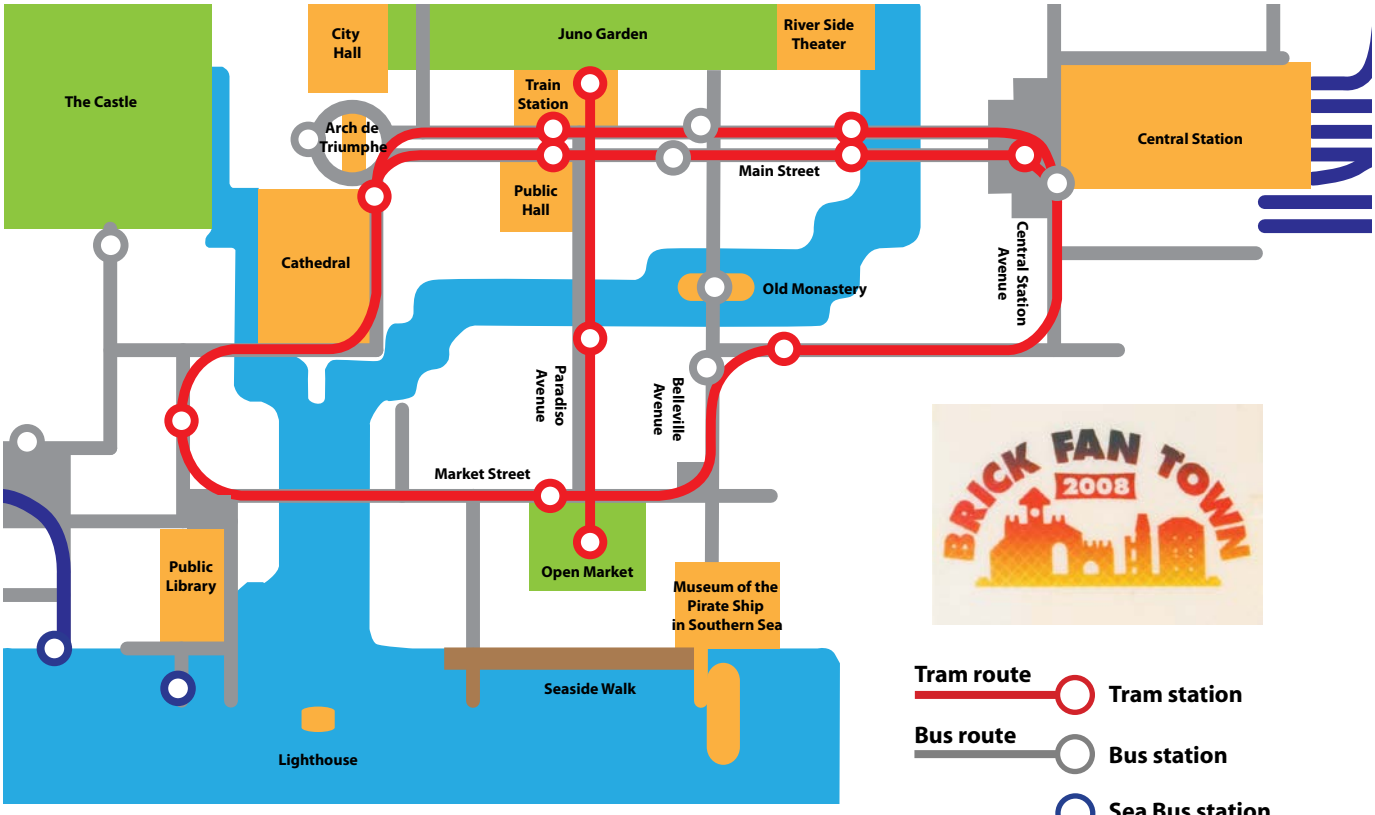


Diagram of layout setup for Brick Town City.


Cathedral waiting for positioning.


Setting up Brick Fan Town.



The graphic above is the final map layout.

So, what type of town was actually created with this map? Let's look at it by area.

The river side amphitheatre.

Juneau Gardens.

Old Town Area

First is the main town district which is built around the remnants of an ancient town. From the Arc De Triomphe, to the Fountain Square, through the amphitheater and Juneau Garden, places to soften the hearts of the residents. The main street is lined with a variety of hotels, shops and eateries. Visitors can move freely through the Archways. The main tourist highlight is the Cathedral at the heart of the area. In addition, this area also features public facilities, such as a City Hall and Central Post Office.

The mountainside castle.

The Mountains

The mountainous area has a castle, one of the many symbols of the city which gives it a very historic feel. It also has aqueducts and ruins, which are features of many historic sites.

Train station.

New Town Area

This area is symmetrical with the older area. Its centerpiece is the central rail station, which is the entrance to the city. The station is surrounded by office buildings and a newspaper office and is the business district of the BFT.

Pirate ship museum.

Harbor District

The Harbor District is a tourist area as well as an industrial area. The tourist area has a large pirate ship and wooden boardwalks to view the ocean as well as a barbecue square to dine, along with a resort hotel and other facilities to entertain people. In the industrial area, there are shipyards and warehouses.

Shipyards in the Harbor District.

A Chinese gate greets visitors to the Immigrant Area.

Immigrant Area

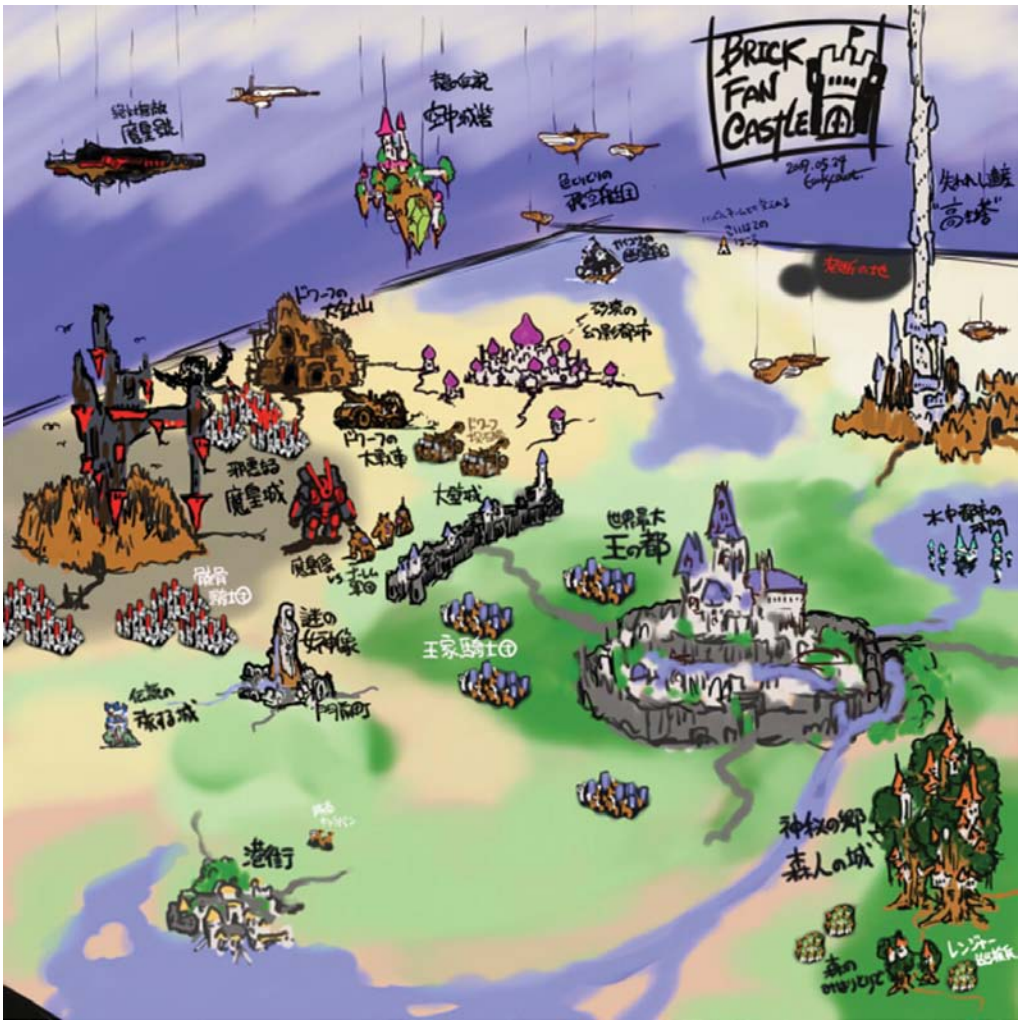
A third tourist destination spot for the city, this is an area for immigrants and foreign visitors. Indian, Chinese and even Japanese exotic landscapes highlight the cultures of these different countries.

Brick Fan Town: A Great Success

Brick Fan Town had more than 50 AFOL participants from all over Japan and became an event of unprecedented scale for Japan. There were more than 130 large and small buildings. An area of around 40,000 studs was filled. There were many visitors and the display was featured in newspapers and television. For approximately two years, from September of 2008 to July of 2010, it delighted the visitors of Nasu Highland Park. It was very popular until it was replaced by the Brick Fan Castle at the "LEGO Stadium."

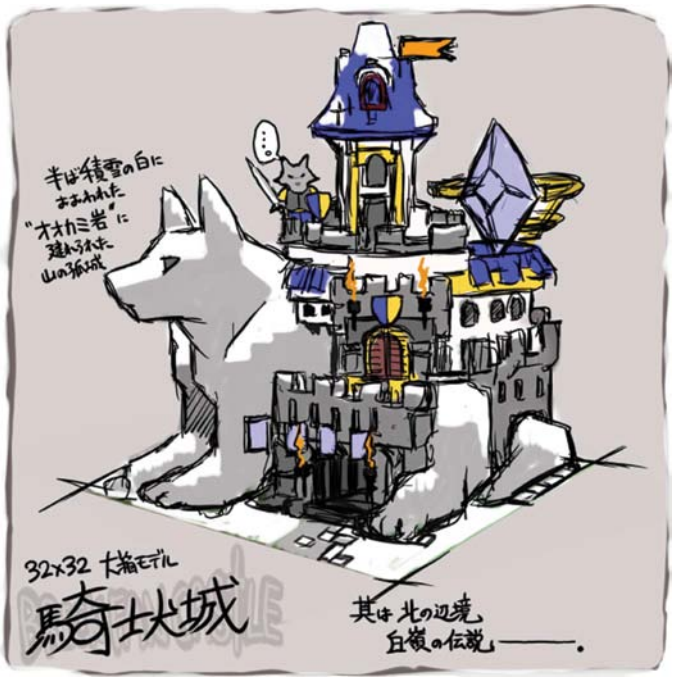
A decision was make to produce a second model, which became Brick Fan Castle. Initially there was some thought to make a future Brick Fan Town, but there was a strong sense to do something really different. So a we decided to create a "Fantasy" work reminiscent of Medieval Europe. This led to Brick Fan Castle.

This graphic (right) is one of the earliest image boards. Originally we thought of using the base of Brick Fan Town since quite extensive landscapes were available.



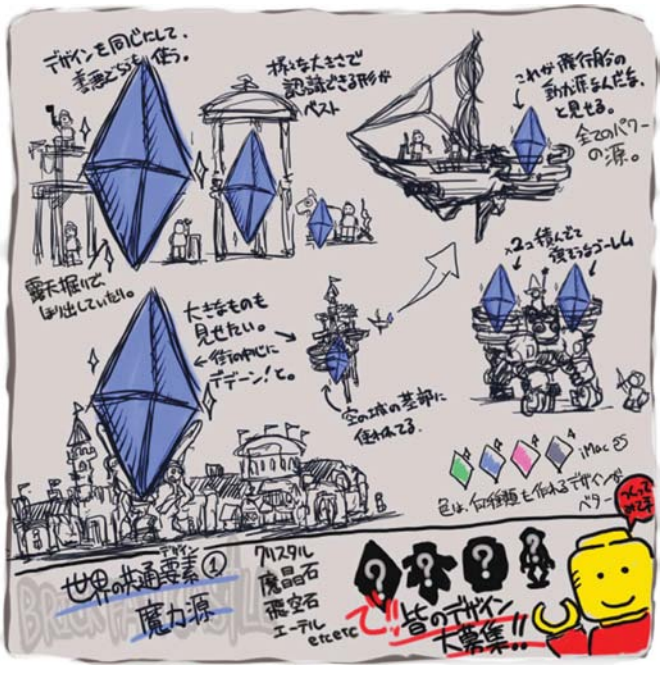
Early sketch of the layout.

The scale is based on Minifigures but it is not a realistic scale in the sense of one Minifig being one person, but each representing or symbolizing an "group of people."



Early sketch of one of the castles.

As depicted in this image (below), a "power stone" was devised to be a key element and produce a unified element in this world for the builders to use.

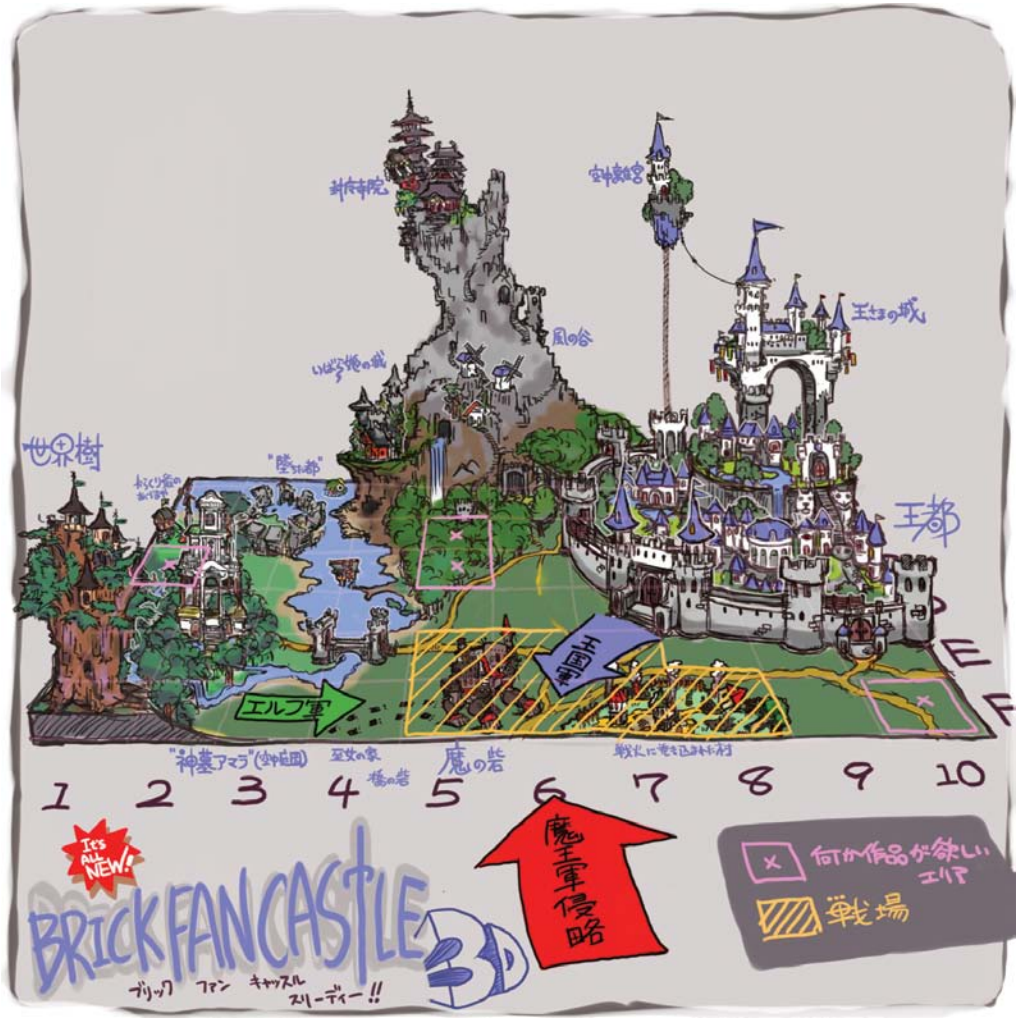


Sketching out what became the "power stone."

Size standards for Brick Fan Castle are noted above.

Structures are explored above.

However, for buildings located in the Castle City, in addition to setting the size of 8 x 8 studs, we went for a consistent look by regulating the roofs to be blue and the walls to be white (above). It might seem to be a narrow standard, but in a world that does not have well-developed transportation or trade, it was thought that there would not be major differences in construction methods and building materials. In this way, the background for the Brick Fan Castle was set with a realistic tone. With all this planning, and several other problems sorted out, this final image board was created (below).



The final sketch, showing much of the planned models.

The size of the Brick Fan Castle was 2.5 meters by 1.5 meters (3.75 square meters or 4.385 Square yards). Compared to BFT it is about a quarter of the size, but due to the height of the mountains and the castles, it has a much more solid feel.

River bridge.

River ruins.

River Area

The river area is a forest of trees and has hanging gardens and ruins of magical cities floating in the sky. On the western borders of the kingdom there is a bridge guarded by soldiers to protect the kingdom from outside intrusion.

Mountain Area

The towering mountains are a landmark of the Brick Fan Castle. The summit has the "Temple Of Sealed Wards" and there is also a "Sleeping Princess Castle." The mountain itself contains a maze where various monsters live and guard their own treasures.

Temple of Sealed Wards.

Sleeping Princess Castle.

Hill Area

The hill area has already been invaded by the troops of evil and has become the battlefield of the Brick Fan Castle. An evil walking castle is burning a village and the royal soldiers and wizards meet the enemy in battle.

Wizards battle!

The walking castle.

Castle Area

The main city is centered around huge castle of the king and is surrounded by robust walls to keep out evil intruders. The castle is where the majority of people live and work. Through the main gate there is an eye-catching bazaar of goods such as food and magic items. Next to the castle is the Water God Hall, a symbol of the people's faith.

The king's castle.

Behind Brick Fan Castle

Brick Fan Castle, compared with Brick Fan Town, was produced by about 30 AFOLs. Unlike the previous construction, the castle and mountains were not made by a single builder, but through collaboration of many working together. As a result, a model larger than one that could be made by one person was able to be created. In addition, the height of the model gave it a very different viewing experience compared with BFT. Brick Fan Castle was on display for about one year from July 2010 to August 2011 and is without doubt the pride of Japanese AFOLs.

Conclusion

Did you enjoy these models by AFOLs of Japan? For those that did not get to see these in person, I hope you enjoyed seeing and learning about them.

Although the site is in Japanese, there is a web site for Brick Fan Town at: *http://www1.atwiki.jp/legoblog/*

On a final note, a great amount of thanks and appreciation goes out to Kazuyoshi Naoe and the people at LEGO Japan and at Nasu Highland Park who provided this exhibition space for the work of us amateurs. Thank you so very much.

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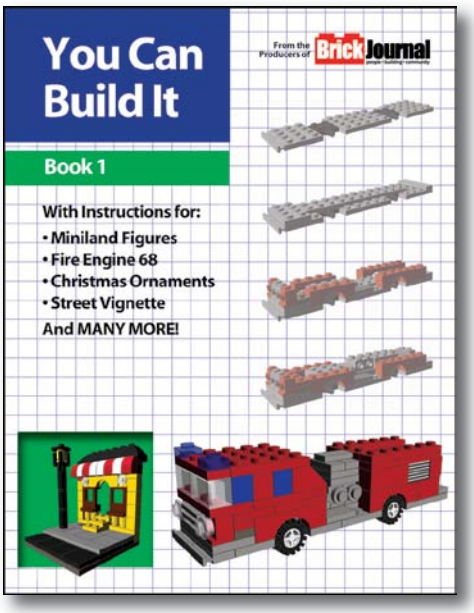

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Nasu Highland Park: Japan's LEGO Sacred Land

LEGO Stadium Entrance at Nasu Highlands. Photo by Yoshikazu Saito.

Scheduled to close around the end of August 2011, the Nasu Highland Park's "LEGO Stadium" started as a place where people could go to view LEGO models, but quickly became a pilgrimage place for many LEGO fans in Japan and was where the BrickFan Town and BrickFan Castle dioramas were built and displayed. It was also where a LEGO Tower event was held. BrickJournal *looks back at the events and displays at the park.*

Article by Nathan Bryan of Brickzen.com
Photography by Nathan Bryan and Yoshikazu Saito

You can go to Brickzen.com by scanning this QR code!

About three hours north from Tokyo is the resort area of Nasu Highlands. Located at 550 meters above sea level and surrounded by nature, it is a very peaceful place that many people from all over Japan go to relax and recharge. While the area has many second seasonal homes for people, there are also many homes and inns that people rent or reserve to stay in the area. Along with horseback riding, swimming, hiking, golf and other outdoor activities there is also the "Nasu Highland Park" amusement park.

At 500,000 square meters of space, the park features everything from rides for babies and their parents up to high-tech rollercoasters and water slides. Along with numerous amusement rides, it has animal attractions, character-based shows, and even fishing, where one can grill and eat their catch on the spot.

It was also the site of "LEGO Stadium" which became a pilgrimage place for all Japanese fans of all things LEGO for nearly a decade. And like all LEGO projects begin, it was started with an idea of a display.

Building a Display (or two)

Around 2001, attendance was down at Nasu Highlands. Shoji Zenimura (the "Father" of "LEGO Stadium" and a director at Towa Nasu Resort Company, which owns and runs the park) was thinking of ways to increase attendance. Having a fondness of LEGO bricks since childhood, he thought some kind of LEGO attraction was what the Park needed. Starting with a small display, "LEGO World" was

Above: Space Shuttle built by Kazuyoshi Naoe. Photo by Yoshikazu Saito.

Right: Downtown Shibuya Tokyo miniland model. Photo by Yoshikazu Saito.

Below: One of the many LEGO play tables set up in the area. Photo by Nathan Bryan.

planned and displayed in 2002. The response was so positive that they then held a "LEGO Museum" in 2003 which was so popular that it led to the "LEGO Exposition." By this time, the displays had outgrown their upstairs location and space, so plans were made for the "LEGO Stadium."

Opened in March 2005, it became the largest collection and exhibition of LEGO creations in Japan and a must-see for any LEGO fan here. Over 1 million people visited the exhibition.

Filling a Stadium

The main attractions were in two joined pavilions filled with different LEGO areas. There was an area devoted to LEGO history, various areas set up for LEGO themes such as a Star Wars area and an Atlantis area. There were lots of tables with bricks for people visiting to freely build, with even a large Duplo building area for smaller kids. There were many large models by Kazuyoshi Naoe (LEGO Japan's Official Builder) including a 4.2 meter high Space Shuttle display that had a "Control Center" where one could control various cameras placed around the model to get different views of it. He also visited many times to give LEGO building lessons and do onsite building so that people could watch a master builder at work.

Large diorama displays of dinosaurs, insects, and underwater scenes were built for people to walk through and experience a small taste of visiting a LEGOLAND park. There were also several miniland scale models of Japanese areas such as a European town, Times Square in New York City, Asakusa, Shibuya, Tokyo Tower and other famous buildings in Japan. There was also a miniland scale castle diorama with soldiers defending a skeleton and dragon attack.

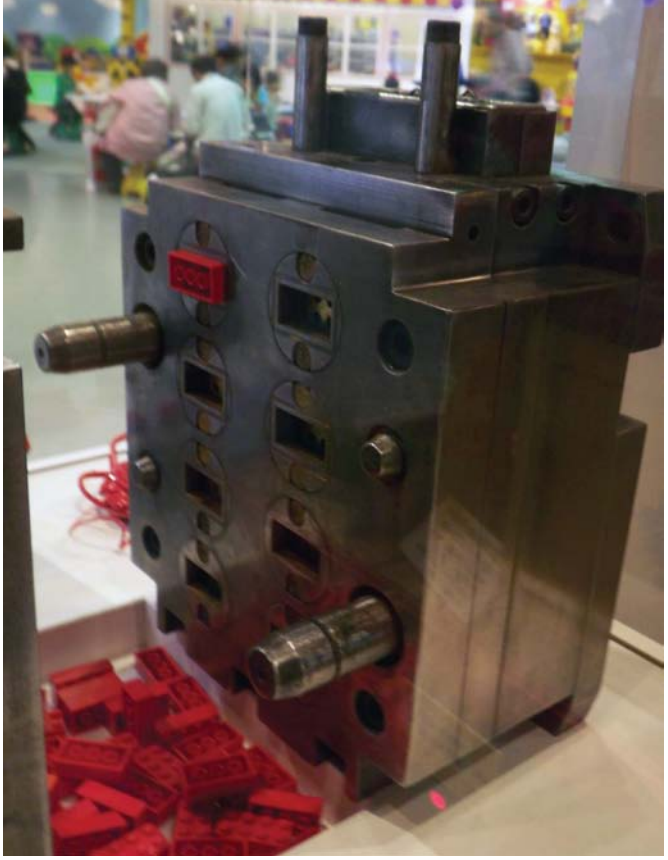
Masao Hidaka's furniture, seen in the Japanese Fan of LEGO section. Photo by Yoshikazu Saito.

Musha's mecha, seen in the Japanese Fan of LEGO section. Photo by Yoshikazu Saito.

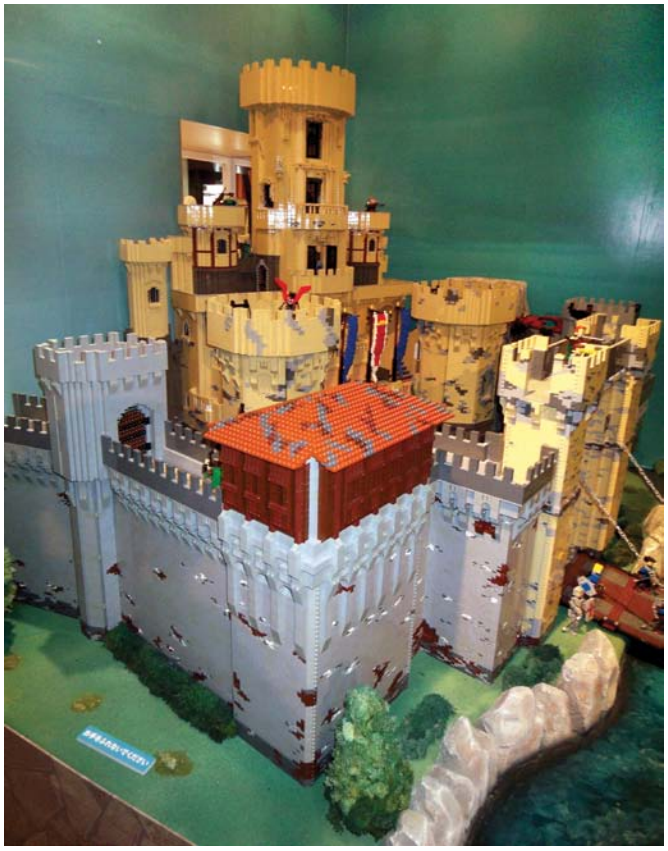
AFOLs from Japan had a jointly-built LEGO Fan Town display and later a LEGO Fan Castle display, and there were also showcases devoted to various Japanese builders. There was a LEGO-built LEGO Factory model and a real 2 x 4 LEGO brick press that people could look at. Finally, there was a fully stocked LEGO Shop for people to purchase LEGO sets and other LEGO brand goods.

But more than just the LEGO Stadium area, all around the Nasu Highland Amusement park there were various LEGO displays for people to see. Large animal displays outside, various moving displays in cases throughout the park, and building tables where people could take a load off their feet and build for a bit. It seemed anywhere one went there were wonderful LEGO models on display. One could visit the "Bug

Below: Outside park display. Photo by Nathan Bryan.



LEGO brick mold. Photo by Yoshikazu Saito.



LEGO castle display. Photo by Yoshikazu Saito.

Hotel reception models. Photo by Nathan Bryan.

House", where kids can play with Japanese rhinoceros beetles and other large insects, and on the wall would be enormous LEGO Bugs. Restaurants had LEGO displays and even the local hotel had LEGO models at the reception and a building table in the lobby.

One could hear many people saying such things as "Wow I didn't know anyone could make that with LEGO!" or "Incredible what can be made with those bricks." And it certainly made many new fans of LEGO bricks.

With the support from LEGO Japan, Nasu Highland really went out of their way to make a LEGO Paradise here in Japan. Unfortunately, LEGO Stadium closed on August 28, 2011. Hopefully there will be another in the not so far future.

One of the LEGO history displays. Photo by Yoshikazu Saito.

A Japanese FIRST LEGO League team at World Championships

LEGO Technic® and MINDSTORMS® in Japan

Article by Yoshihito Isogawa
Translation by Nathan Bryan of Brickzen.com

In Japan, it is not easy to build "Moving Models" with LEGO bricks. The LEGO Technic series can only be found in ClickBrick LEGO Stores, major toy stores and on Amazon.co.jp., and there are even fewer places to purchase MINDSTORMS. Furthermore, there is no official Japanese retail edition of the MINDSTORMS NXT 2.0.

Fortunately, for the educational market, there is a Japanese version of MINDSTORMS NXT 2.0 available. As a result, many Japanese children are enjoying playing and building with LEGO Technic and MINDSTORMS at schools, cram schools (accelerated schools for college exam preparations), or in classrooms. Many of them participate enthusiastically in FLL (FIRST LEGO League) and WRO (World Robot Olympiad).

FLL: FIRST LEGO League

FIRST (For Inspiration and Recognition of Science and Technology) LEGO League teams participated in more than 150 local qualifying rounds across the country. From there, the winning 36 teams competed in the finals in Tokyo, Japan. The teams with the highest honors there then went on to compete at the FLL World Festival in St Louis, Missouri. At the 2010 World Festival, the team "USB" beautifully finished in fourth place. However, in FLL, there is an emphasis on strong presentations, and children with poor English skills have to deal with a language barrier. Japanese education is improving its English education, but it is still a growing process.

Japanese FIRST LEGO League team USB.

The leaders of the FLL Japan are strengthening their public relations agents and support network in hopes of making young people who love robotics to flock to FLL in the same way that those that love sports flock to "Koshien" (The sacred ground for the High School Baseball tournaments) and "Kokuritsu" (for High School Soccer).

For more information see: *http://www.firstlegoleague.org/*

WRO: World Robot Olympiad

From all over Japan elementary schools, middle schools, and high schools, over 700 teams participate in this tournament. Similar to FLL, those teams that survive the qualifying regional tournament heats advance to compete in Tokyo and then on to the World Finals. Japanese teams have had high honors at the World Finals. At the WRO emphasis is on performance, so "stable and accurate" qualities are what is required. One can not win by just being fast.

The leaders of the WRO Japan say that similar to Japanese products, the Japanese children are good at making small, light and powerful robots. Furthermore, the children growing up through WRO will help create a prosperous future society.

For more information see: *http://www.wrouae.ae/intl/en/index.php*


Japanese team working at the World Robot Olympiad Finals.

Winner of the Open category for Best Technical Prize, the Kashii WPC *model.*

Children competing in LASER.

Outdoor tournament of LASER.

LASER: LEGO bricks Activity and Space Elevator Race

With the introduction of new materials such as carbon nanotubes, we are getting closer to the reality of a "Space Elevator." To increase general recognition and accumulate basic technology for this mode of transportation, the LASER (LEGO bricks Activity and Space Elevator Race) was started.

Started just three years ago and with around 50 teams currently participating, it is a lot of fun to watch the various climbing machines race at breakneck speeds up a 5-meter high, 2.5 centimeter wide tether. Speed and energy efficiency are the factors judged.

For the "Space Elevator Kit Class," only LEGO Technic and an infrared remote control are used. It is a valuable tournament in that children who are not yet ready for MINDSTORMS can participate in it. Many organizations from around the world have shown interest, and the day when tournaments around the world are held is surely not far off.

For more information: *http://jsea.jp/* (In Japanese)

Yoshihito Isogawa demonstrating at an Exhibition of Moving Brick Models.

Spreading LEGO Technic and MINDSTORMS in Japan

Many readers of *BrickJournal* probably recognize that "Japan is good at making things." However, over the years there has been a "moving away from science" situation that has continued. Also there is a strong orientation towards software engineering which has led to a serious shortage of hardware engineers.

To stem this movement away from science and the decline in hardware orientation, I am putting together LEGO Technic Classroom events for small children.

I, myself, also participate in a variety of activities to spread LEGO Technic and MINDSTORMS in Japan. One activity that is especially popular at many Science Museums all over Japan is an "Exhibition of Moving LEGO Brick Robots." The glowing eyes of the children when they actually get to handle and play freely with the various robots really is wonderful.

Yoshihito Isogawa is the author of the English "LEGO Technic Idea Books" (above, from No Starch Press) as well as many books in Japanese about LEGO Technic and LEGO Mindstorms. He can be seen, always dressed stylishly in a Japanese Kimono, at many LEGO Technic and MINDSTORMS related events all over Japan.

For more information, check his home page at:
http://www.isogawastudio.co.jp/legostudio/

You can jump to Isogawa's studio webpage by scanning this QR code!

Cooperation for this article was given from the following organizations:

NPO Foundation Promoting Science and Technology to the Young

NPO WRO Japan

Japan Space Elevator Association (JSEA)

LEGO Education Center in Nishinomiya, Japan.

LEGO Education: Big in Japan!

Article by Nobuo Miki
Translated by Nathan Bryan of BrickZen.com
Photography by Nobuo Miki

From Building to Learning

In Japan, the LEGO brick has been regarded as an educational toy. Using the LEGO brick as an educational tool, though, was something that happened only in the last decade. As a result, LEGO Education Centers are now in Japan, Australia and Hong Kong. The first steps toward developing the centers began in the US at MIT Media Lab.

Located at the Massachusetts Institute of Technology (MIT), the Media Lab has been the place for many technological advances, such as holograms, virtual reality, and computing. At this facility, there are generally over 200 research projects in progress at any given time. It was here in the '60s that Seymour Papert developed a method of education called constructionism, based partly on his professor's work in developmental psychology and what was later dubbed developmental learning.

One of the projects he worked on alongside his development of constructionism was a computer programming language called LOGO. Using this, children could program a robot (called a turtle) with a pen to draw graphics by using simple commands.

Papert's work on both education and programming got the attention of the LEGO Group, who began to fund his efforts in the Media Lab in the '80s. In 1998, the LEGO MINDSTORMS Robotic Set was released, named after a book Papert released in 1980, Mindstorms: Children, Computers, and Powerful Ideas. He is now regarded as the world's foremost expert on how technology can provide new ways to learn.

A LEC classroom.

In 2004, a Media Lab sponsor and chairman of Sega (a Japanese video game company), Isao Okawa established the MIT Okawa Center for Future Children. His initial funding of $27 million opened the way for the Center to begin its mission in children's education and media education. He also opened another educational establishment, the Children's Art Museum and Park (CAMP), in his hometown of Kyoto. A graduate of the Waseda University Institute of Technology, Okawa established CAMP to spread the teachings developed at the Media Lab directly to Japanese children. CAMP runs workshops using LOGO, MINDSTORMS, as well as Picocricket, another robotics system developed by Media Lab professor Mitchell Resnick.

From LOGO to LEGO

The LEGO Education Center (LEC) concept was developed by the LEGO Group in Denmark as a private classroom to teach with LEGO bricks and MINDSTORMS. These opened in Japan in 2004, and presently, there are 12 official LECs in the country. 23 other locations use the same curriculum and materials in Japan, with most of the classrooms centered around the major cities of Tokyo and Osaka. There are also LECs in other countries in Asia and Europe. A US LEC was opened in 2007, but closed three years later.

In Japan, all classrooms use textbooks and materials that have been developed in Denmark and translated to Japanese.

The curriculum is organized by age from 3-year-olds up to 10-year-olds. broadly divided, 3- and 4-year-olds play with soft bricks and Duplo, and 5-year-olds use normal LEGO bricks. 6-year-olds use Early Simple Machines, which are axle and gear wheels based around Duplo bricks. 7-and 8-year olds use gears and Technic elements and from 8 years and up they start to learn MINDSTORMS programming. Almost all the sets are specially made and can only be purchased at the LEGO Education Center.

In most classes, the children are first presented with a 'problem.' For example, in a 7-year-old class of World Science, the main character is Gary, a young boy that runs into many difficulties. He might get stuck on a deserted island and need to create a tool to open coconuts or lose something down a well and need to build a machine to retrieve it. In each case, the children use LEGO bricks to create objects to solve the problem. This learning by experience and by building is a hallmark of constructionism and what is now called 'problem-based learning.'

The people who teach at these centers are special too. A perfect example of a LEC teacher is Goshi Maruyama. In 2007, as a student in the Department of Information Systems Design at Dosihisha University in Kyoto, he was inspired by Hideki Mori, a visiting researcher from the Media Lab, and worked for one year as a facilitator at CAMP. He felt that instead of teaching Java of C++, his field of work should be teaching programming to children. As a result, after graduation, he chose the LEGO Education Center as his career destination.

In terms of tuition, for a 7-year-old class, the monthly cost is around 13,000 yen (about $165 USD). Also about 30,000 yen (about $375USD) are needed yearly to buy materials (LEGO Sets) for the class. For 8-year-olds, which use MINDSTORMS sets, the materials cost is 54,000 yen ($675 USD). Since the classes are expensive, many might wonder who sends their children there.

As Maruyama-sensei, now a LEC teacher explains, many of the parents are enthusiastic and passionate about education and take their children to three or four other types of lessons each week. Many of the parents are upper middle class, and in fact many of the LECs are based near wealthy areas in Japan.

Some classroom materials: Common bricks for 5-year-olds and Technic for the older students.

Many parents are surprised at their initial visit to an LEC and discover that the class materials are LEGO sets and elements. For many of the parents who have looked into the myriad range of educational classes available for kids and have even attended those trial lessons, what the LEGO Education Centers are teaching is very different. Exact answers or short-term goals are not the main focus of the LEC classes. The class format and approach is a fresh one, and one that is being followed by some European public schools. Private elementary schools in Japan, such as Ritsumeikan Elementary School in Kyoto and Gifu Shotoku Gakuen Universities Elementary School have also begun using the LEC curriculum. With exposure to LEC lessons just in the initial stages, going to an LEC and using LEGO elements and robotics is quite a rare treat. As Maruyama-sensei says, " In Japan there is a lack of education that teaches children to think spontaneously. Most Japanese education is based in favor of teaching rote memorization skills."

Certainly Japanese elementary education cannot be said to be the best for any given situation. For example, in many Japanese elementary schools when a composition is written, the teachers check to make sure that the who, what, when, why, and how (5W1H) are included and that there is a proper amount of Japanese Kanji characters used. The actual content is seen as being personal, so it cannot be evaluated by a third party (the teacher). As a result, the writing is not evaluated for any learning of expression or as a form of expression.

For mathematics, for many children, and even some adults, their line of thought is, "Is there really any use to studying mathematics?" This is because their reality is completely separated from math problems. This matches with Seymour Papert, who stated, "It is very difficult for children to try to learn theories that are completely detached from their reality." He called this Mathophobia and in some ways it's even more pronounced in Japan than in the US.

For Maruyama-sensei, our Far East Seymour Papert, he became a teacher at LEC to help change the educational system in Japan. Along with the expectations of the parents attending the classes, he hopes to encourage creative thinking and learning as an extension of education with LEGO bricks. Maruyama-sensei states, "I want to think of an education system that really stretches the flexible ideas and thoughts that children have. To do so, I hope to spread the educational curriculum inspired by using LEGO materials."

LEGO bricks and MINDSTORMS sets have become more than toys. Thanks to the pioneering work of Seymour Papert, Mitch Resnick and MIT Media Lab, developmental learning has become a growing part of education. At the LEGO Education Centers, constructionism has taken center stage to impart the teachings of all of these people through teachers like Maruyama-sensei... and through the LEGO brick. Hopefully, there will be more LEGO Education Centers and more like-minded educators.

You can find information on LEGO Education Centers here: *http://education.lego.com/en-us/after-school/center-locator/* or scan this QR code:

Goshi Maruyama, LEC Instructor.

A student creation.

The Vacuum Records LEGO Tokyo shop. Photo by Kozo Takayama.

From Vacuum Records to ClickBrick:

LEGO® Bricks and Fashion in Japan

Article by Nobuo Miki
Translated by Nathan Bryan of BrickZen.com
Photography by Kozo Takayama, nyangroove, and Nobuo Miki

In 1962, when Asahi Trading (now CCP Co., Ltd) first started sales in Japan, LEGO sets were expensive toys that were available for purchase by wealthy families. Parents thought that by buying upscale Western style toys, their children would grow creatively and be strong in theoretical thinking. What the parents bought were not toys, but educational materials with a high value.

Eventually the price of LEGO sets came down so that everyone could buy them. While the sets were still more costly compared with other Japanese-made toys, LEGO's customer base slowly expanded. Still, the image of LEGO bricks as 'educational toys' did not go away.

This changed significantly in the late '90s. The LEGO brand became stylish and fashionable for young twenty-somethings (people who had never purchased the sets) when Vacuum Records, a record shop in Osaka, Japan began selling LEGO items. The sales were the idea of Mr. Yoshiaki Fukushima, the owner of the record store. He was an "idea man" and had a hit by selling portable record players and doing tie-ins with musicians popular with the younger crowd. One day, he spotted a young woman wearing a watch with the LEGO logo on it. He purchased a lot of them and started selling them in his shop, where they became an instant hit with students and young people. With his specialty of music, it only seemed natural to combine LEGO in some way. The way? A CD player shaped like LEGO bricks! Being a hands-on type of business person, he flew directly to Denmark and convinced the people there (who thought he was quite a wonder) to grant him a license. His idea became a product.

From top left going clockwise: The LEGO-themed qmpo CD player, speaker wires and remote control, and booklets. Photos by nyangroove.

Up until that time, the only LEGO items available were T-shirts and hats with a simple print on them, or watches and stationery goods. Mr. Fukushima not only stylized the CD player like a LEGO brick, but also the speakers, remote control, electric adapter, and packaging as well. All of this was designed by TGB Design, a famous company with experience designing apparel logos as well as mobile phones.

With this, Fukushima went to Harajuku in Tokyo, the center of young fashion and opened an exclusive LEGO shop with an interior rivaling the neighboring high end clothing stores around it. Most people did not understand Mr. Fukishima's way of selling LEGO. After all, Harajuku had some of the highest rents in all of Japan, and there he was setting up a shop to promote and sell an adult-oriented CD player with the logo of a children's toy on it.

However, the CD player proved to be quite popular. Through word of mouth and the Internet, the talk was of how "kawaii" (cute) the player was and many interviews were done by magazines and television. Magazines focused on young fashion and music really liked it. However, what people worried about came to pass. The CD player, named "qmpo," and having a cute logo that resembled the Duplo logo, was well-received, but it hardly sold. Ironically, this was because of the level of detail Mr. Fukishima had given it, it was very expensive: 38,000 yen, or around $400 USD. Not too long after that, Vacuum Records ran into trouble raising capital and went bankrupt. The remaining LEGO specialty stores in Harajuku and Osaka were renamed "STORES" but they closed soon after.

Vacuum Records started and increased the popularity of the LEGO brand for marketing and promotion. Fukushima showed that "LEGO can be sold as fashion."

As LEGO products began to be seen beyond as just toys, a Sony subsidiary, Sony Creative, started to release LEGO date book organizers and other LEGO-branded goods. In 1999, at the Parco shopping center in Shibuya Tokyo they held an exhibition called "LEGO Maniax." This exhibition showcased the LEGO Star Wars sets that were due to come out the next year. Shinya Fujita, a builder from Hokkaido recreated classic Star Wars scenes in huge dioramas, such as a one-meter-long Imperial Star Destroyer. The venue was aimed at adults, featuring apparel as well as the dioramas. The following year, in Tokyo at the Ometesando Spiral, there was a LEGO and Architecture exhibition and at the same time, a LEGO Deluxe exhibition at the Parco. LEGO and Architecture featured LEGO renditions of the work of architects such as Shunsaku Miyagi, Kengo Kuma and Klein Dytham Architects and was visited almost entirely by adults. As a result, the notion of LEGO being just a toy ended around the end of 2000.

LEGO Star Wars accelerated the trend. The concept of getting a group of people who would not normally purchase LEGO sets to show interest and buy was exactly what LEGO Star Wars started, thanks to the enthusiasm for the sets by young 20-year-olds. The urban youth, open to new things, were the first to show interest. Fashion-conscious graphic designers, web designers, and apparel designers were the first to pick up the X-Wing and TIE-Fighters. It was considered "cool" to have one of these hanging overhead or sitting on top of one's Mac monitor. LEGO had always been the icon of creativity, so adding in the Star Wars element made the brand embody the free spirit of the West Coast.

A ClickBrick store.
Below and below right: A look inside ClickBrick.

In November of 2000, at the Rinku Premium Outlets in south Osaka, a store specializing only in LEGO named ClickBrick opened. Where LEGO Brand Retail stores in the US use yellow as their key color, the Japanese went with a primarily white interior with red accents. The interior was designed with a Nordic image that the Japanese consider to be well thought-out design, with display cases prominently featuring finished models of almost every LEGO set currently available. The sales staff were all in their twenties to early thirties, dressed fashionably in a colorful pop style. Surprisingly to many Japanese, all of the display items were built by the female staff.

Hiroshi Takahashi, the LEGO Japan ClickBrick Division Head, says, "Old toy stores or even the toy areas in department stores cannot really convey the charm of LEGO. To really convey the appeal of LEGO, the store needs to be stylish, cool, bright and rich, and on top of that portray a sense of versatility and ease of changeability." The female staff should be hip and colorful on one hand, but also have a knowledge and technical prowess that would make any LEGO fan envious. The basic image is "very LEGO knowledgeable cute kids."

This type of sales staff and the store fashion goods (which make up 40% of the store stock) lure in mainly teenagers. "By attracting trendy teens, the stores bustle with energy and become a fashionable place to be and be seen," Takahashi says. "One can create a place more suitable to the type of children that are the target audience for LEGO... a place is created that communicates the charm of LEGO better than an average toy or department store can."

Some covers of the LEGO Times.

Along with the LEGO catalog issued in Japan, ClickBrick publishes its own free publication. Beginning in summer of 2003, LEGO Japan commissioned a publisher, KneeHighMedia, to produce a series of five magazines: the LEGO Times. Each issue had a cover model wearing casual LEGO brand items, and if there was no large LEGO logo on the cover, one would have thought that the magazines were fashion magazines for young people. The content inside is even more surprising. LEGO bricks and elements were seen here and there, but they were mainly used as props for the models to hold, such as a LEGO-built guitar. The catchphrase on the cover was Looking at the Current LEGO Brand.

The first issue was a special titled "Magical Summer: This Year's LEGO Clothing for the Summer of 2003 for the Beach, Camping, and the Street." It was almost as if LEGO Japan

was ignoring the universal recognition of LEGO as bricks and trying to make one wonder if they were serious about selling sets. It was subconscious marketing at its best.

In 2007, LEGO Japan redesigned the free magazine from "LEGO Times" to ClickBrickBook (CBB). The content remains oriented more to a Nordic brand than to just showing LEGO bricks. When a reader opens the CBB, they are greeted by mash-up models of LEGO official model builders and original models that the ClickBrick staff have created. There is a mini catalog of all the LEGO releases that year as well as detailed explanations of things such as the relationship between the various Star Wars minifigures or how a particular model was designed. There are articles from Duplo to Technic. Looking through one, it is as if a LEGO picture book became a magazine. Not only are the models explained, but one is surrounded by the fashion and culture of the LEGO brand.

Clickbrick also issues a specialty apparel only catalog showcasing clothing and accessories available, without a single LEGO product shown. It looks like a seasonal catalog for clothing store.

By looking at these catalogs and visiting the ClickBrick stores with the Scandinavian image and female staff, it is easy to look at LEGO as something more than a toy. The notion of LEGO being fashionable has only become stronger in the 21st century. Those young 20-year-olds in the '90s are now parents taking their children to buy LEGO sets at the fashionable ClickBrick stores. This will continue to grow, perhaps making Japan a LEGO Kingdom. Right now, the kingdom is building.

Some covers of the ClickBrickBook.

Above left: The cover to the summer 2011 Clickbrick apparel catalog.

Above: A spread from the summer 2011 catalog.

Far Left: Cover to the Fall 2008 catalog.

Left: Cover to Spring 2008 clothing catalog.

A LEGO® Space Elevator? The Sky's the Limit!

NASA Artist Pat Rawlings' rendition of a space elevator. Art courtesy of NASA.

Article by Kenichi Tohya
Translation by Nathan Bryan of Brickzen.com

Defining a Space Elevator

Connecting an elevator from space to the Earth is an unprecedented idea of transportation. At the equator, satellites at an altitude of about 36,000 km rotate at the same speed as the Earth, so these geostationary satellites remain stationary at a point high in the heavens. Stretching a cable from the ground to one of these satellites could allow an elevator system to be created, which could transport people and goods to and from orbit. How to stretch a cable from one of these geostationary satellites to the ground without having the weight of the cable pull it down still remains a challenge. If possible though, this would make a Space Elevator.

Building Prototypes

In building a space elevator prototype, rather than cutting aluminum and attaching a motor and driver system, using LEGO bricks, especially Technic pieces, enables one to easily build something one can imagine. By making it into a competition, many people are able to participate, fostering a learning experience for people that might actually create a space elevator in the future. These competitions have been named the "LEGO bricks Activity and Space Elevator Race," or LASER for short.

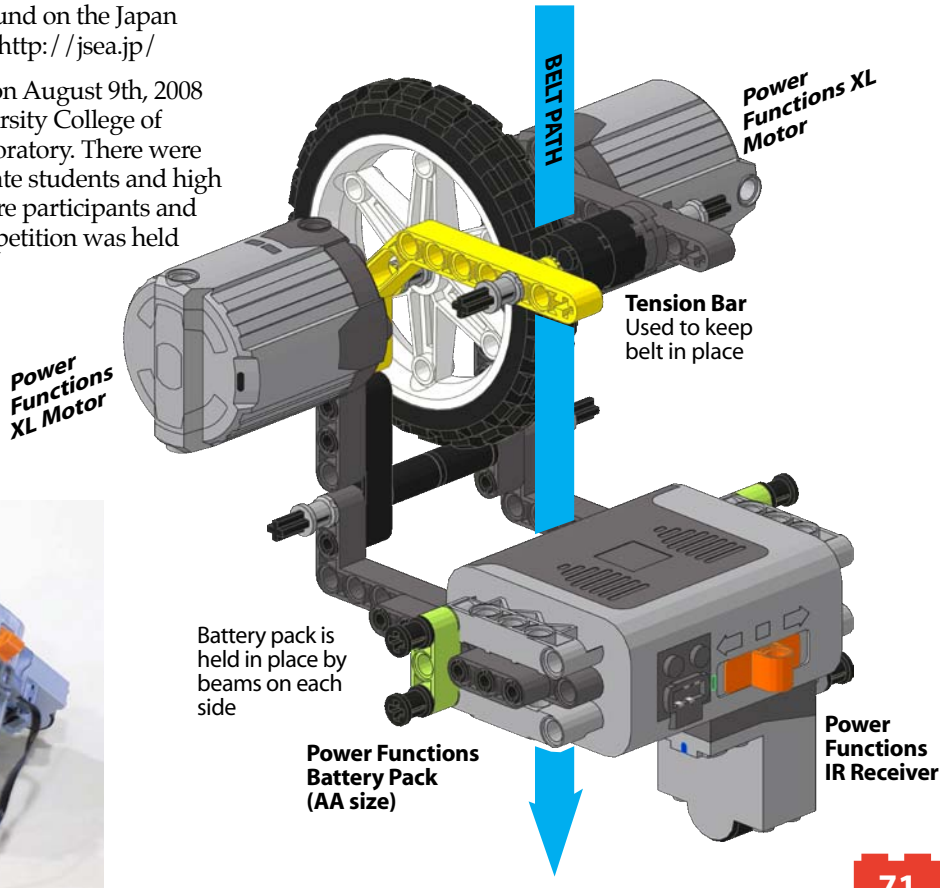
The aim is for everyday people, from elementary children to adults, to participate and learn the concept of a space elevator by creating their own "climber" (a device to transport people and goods like a space elevator) out of LEGO elements and compete in a race of vertical climbing. Everyone learns the joy of communicating and "making something" along with learning about space elevators through these competitions.

Many climbers aim for speed by incorporating two Power Function motors in their design. Top teams have been able to achieve 7 meters in about 14 seconds.

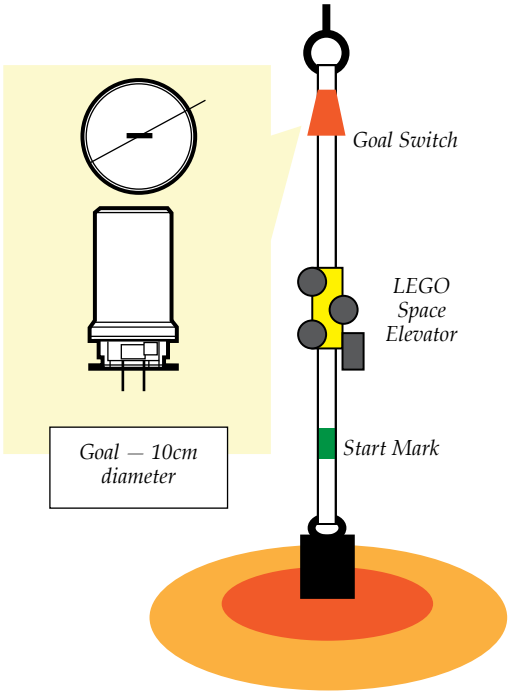
Children competing in the Indoor Competition.

More information in Japanese can be found on the Japan Space Elevator Association home page: http://jsea.jp/

The first LASER competition was held on August 9th, 2008 in Funabashi, Chiba at the Nihon University College of Science and Technology Aerospace Laboratory. There were 20 participants, undergraduates, graduate students and high school students. Each year there are more participants and on November 21st of 2010 the fifth competition was held featuring 36 teams.



A sample climber.



Outdoor Competitions

Generally the competitions are held indoors, but on August 7th and 8th of 2010 at two locations of the Nihon University College of Science and Technology, there were competitions to see if a LEGO climber could reach at height of 100 meters.

As usual a 25mm polyester tether was used, but this time connected to balloons to raise it. Each climber needed to climb up and back on its own power. First 30 meter tests were done and then the real challenge, 100 meters.

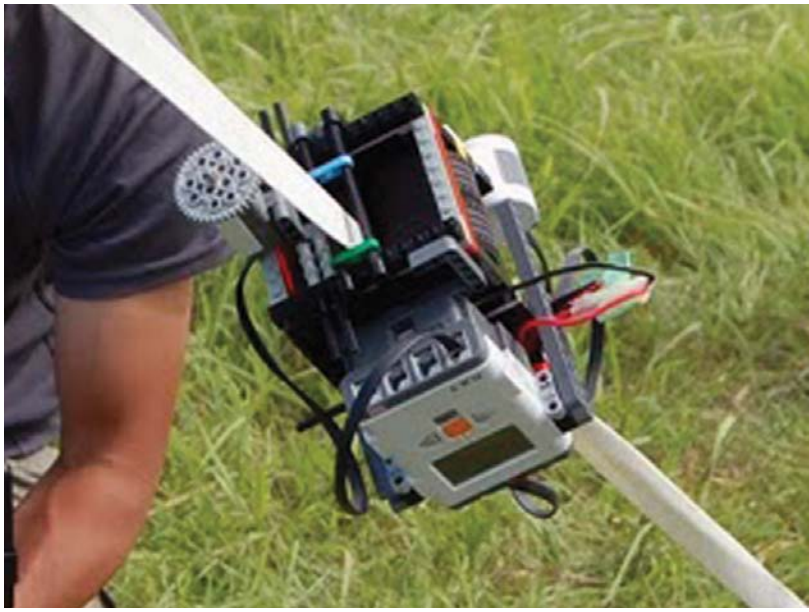
Team Falcon.

LASER Competition

Each year differs slightly, but the basic competition is to climb a polyester belt (about 1mm thick, 25 mm wide) to a height between 4 and 7 meters.

Many climbers aim for speed by incorporating two Power Function motors in their design. Top teams have been able to achieve 7 meters in about 14 seconds.

To make it easy for people to get started, Narika Corporation even sells a "Space Elevator Test Kit" that contains everything needed to build and test your own LEGO Space elevator. (http://www.rika.com/lego/stem_elevator)



Team Eritakenchan's climber.

Team Gomazawa Gakuen Girl's School's climber.

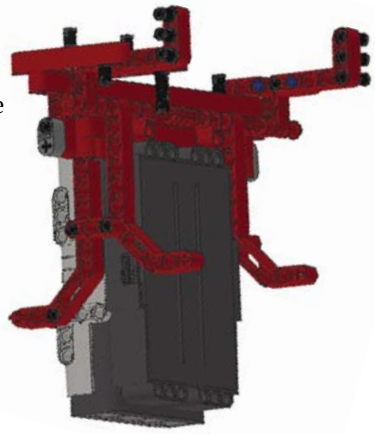
One climber that was able to climb 100 meters was built with:

- Around 320 parts
- 1 MINDSTORMS NXT
- 1 Touch Sensor
- 1 Rotation Sensor
- 2 Power Functions XL Motors
- 1 Hitechnic Acceleration Sensor
- 1 Compass Sensor
- 2 41mm Znap Wheels

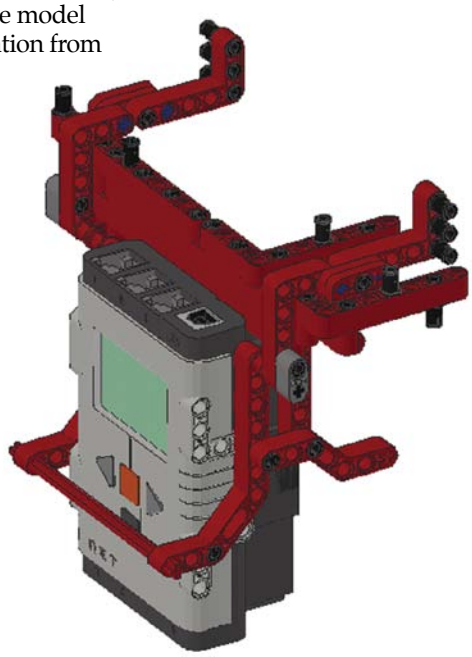
It weighed 822g, and is a good example of a LEGO climber. Building an outdoor climber isn't as easy as building a simple climber, so here are some building tips.

Building a LEGO Outdoor Climber

To make a climber structure as lightweight and rugged as possible, start building from the NXT block. Use the body of the NXT block for the main structure. Envelop it with Technic beams and build the guides for the polyester belt so that they come out of the top and back of the layout, as seen on the right.

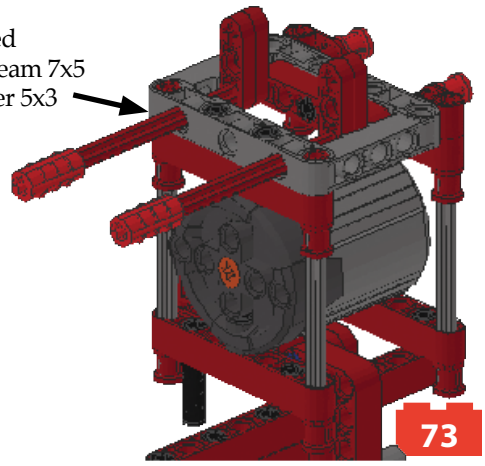


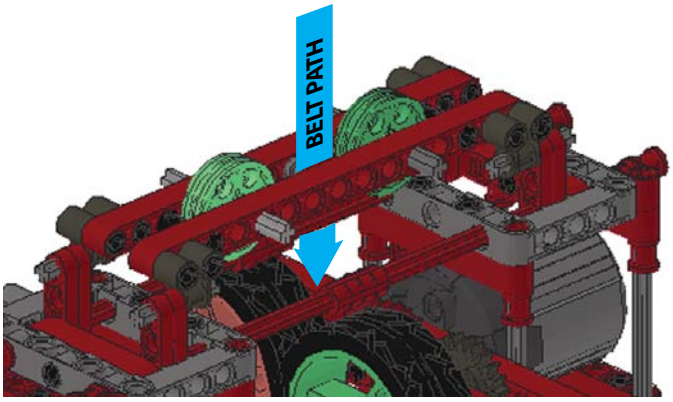
Sandwich 3x5 bent 90 Technic Beams horizontally to strengthen the model to prevent vibration from making it loose.



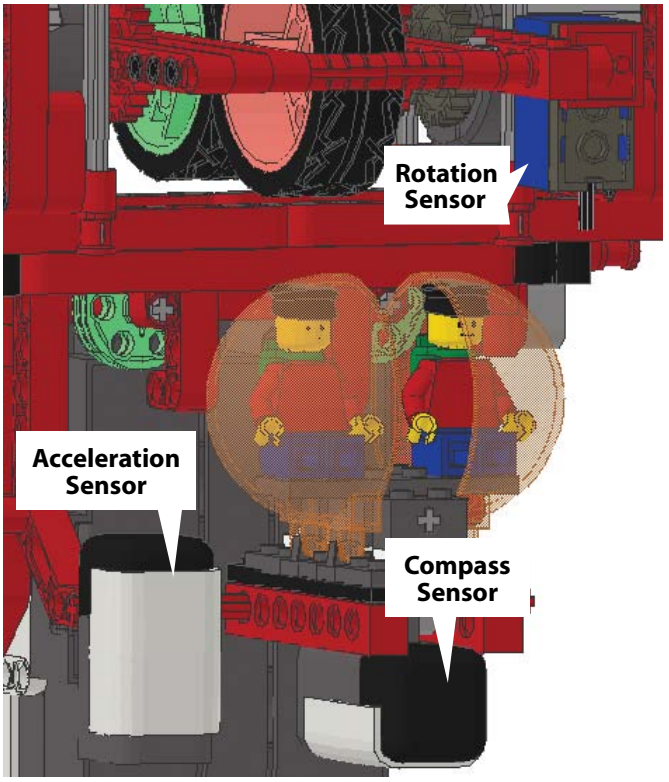
Next for the motors: the normal NXT motor weighs 80g, has a 170rpm rotation speed and maximum torque of 50N.cm. A Power Function XL motor weighs 69g, has a 220rpm rotation speed and 40N.cm of torque, making it almost 30% faster when compared with an NXT motor. (See: http://philohome.com/motors/motorcomp.htm) Hence Power Function XL motors are generally used.

The motor is fixed with a Technic Beam 7x5 with Open Center 5x3 for strength.

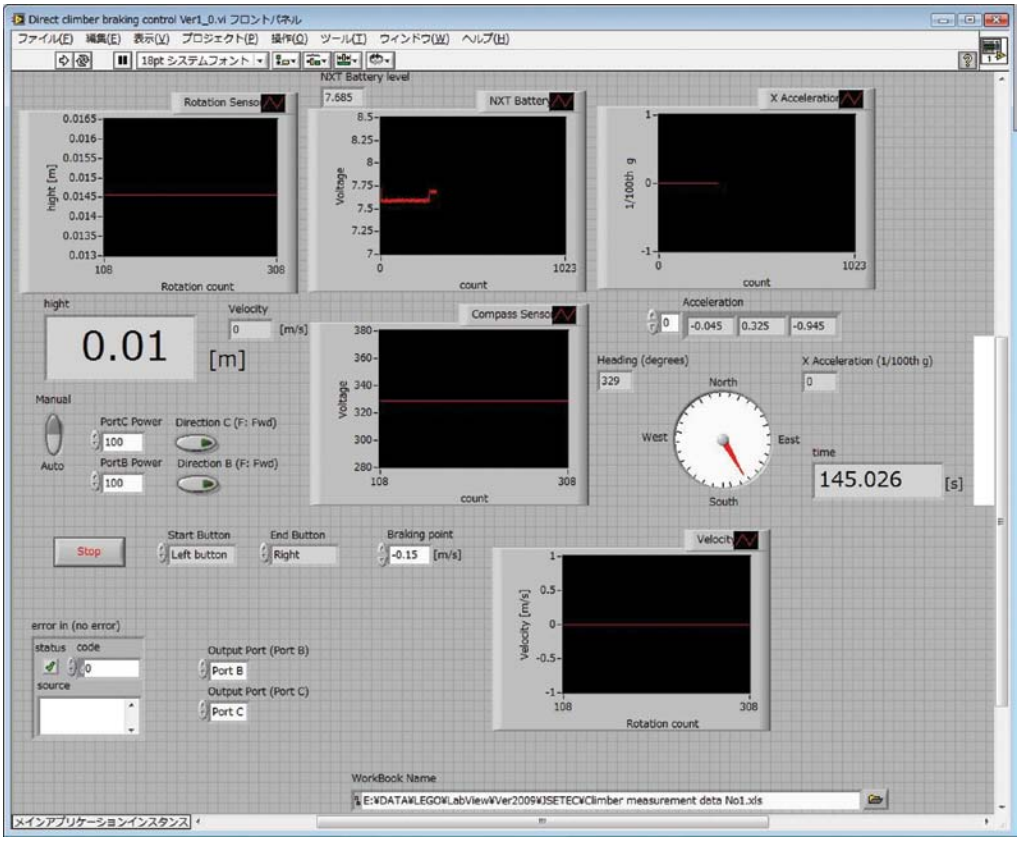




The top belt guide is created with four Technic Wedge Belt Wheels. It keeps the belt from twisting and holds it straight as it feeds into the tire wheels. Without this very important part, the tires can come off of the belt causing the climber to plummet to the ground.



Various sensors, speed, acceleration, and orientation are installed behind the NXT.



The software used for direct control is the LabVIEW2009+NXT toolkit. The PC and NXT communicate via bluetooth.

The screen shot at the left shows the control panel with real time status of the climber. Data gathered is distance traveled, battery voltage, acceleration, direction of climber and speed. The climbing speed can be adjusted as needed.

The black dot below the balloons is the LEGO Climber.

The actual test days had ferocious winds and the data gathered shows the LEGO climbers experienced over 2Gs of acceleration. Even then they were able to climb without coming apart.

The balloons' pull was so great that the belt could not be taken off to put the climber on. As a result, each time the climber had to be taken apart and then rebuilt, sandwiching the belt. A tray was used so that small parts didn't fall and get lost in the field of grass.

On the first day, a few climbers fell from 30 meters and were damaged. On the second day, our laptop almost ran out of battery power during the climb (a gas generator was used to restore power and keep it going), and while there were other unforeseen problems, a climber was able to climb an altitude of 100 meters.

The seemingly impossible target of 100 meters was achieved thanks to the hard work of the Japan Space Elevator Association, Dr. Aoki and the Nihon University students and Dr. Sato and the Komazawa Gakuen Girl's Junior and Senior High School students.

Presently, LASER competitions and classroom experiences continue to grow in number.

The climber preparation tray.

For more information:

Japan Space Elevator Association home page: http://jsea.jp/ (Japanese)

Kenichi Tohya's Home Page: http://www.tohya.org/
http://www.youtube.com/user/TDS200705

You can go to Tohya's webpage by scanning this QR code.

Brick Words: Japanese LEGO Books

Article and Photography by Ashley Glennon

Although not well known to the western world, Japanese LEGO enthusiasts have written quite a few LEGO books that are as vibrant and interesting as the streets of Tokyo. Japanese LEGO books are packed with bold, Kanji text, well organized pictures and curious detail on just about any subject a LEGO fan could imagine.

I've had the good fortune of visiting Japan several times and each time I visit, I make sure to visit a few book stores to see what I can find. I can't read or speak Japanese very well but fortunately LEGO bricks have universal appeal. It usually only takes a few minutes and a friendly clerk to help me collect a few International Standard Book Numbers (ISBNs) and a note written in Japanese to help me on my quest.

Although I still don't have exact translations and authors associated with some of the LEGO books in my collection, here are three of the more common books about LEGO from Japan, and the ISBNs so you can hunt them down yourself.

The LEGO Book Museum,
ISBN: 9784594039974

This book is among the more familiar to westerners and contains LEGO history, photos of sets over the years and a nice collection of LEGO art.

The Book Of LEGO,
ISBN: 9784835441344

This older book from the '80s tends to explore more of the cultural and universal appeal of LEGO bricks with many interesting photos.

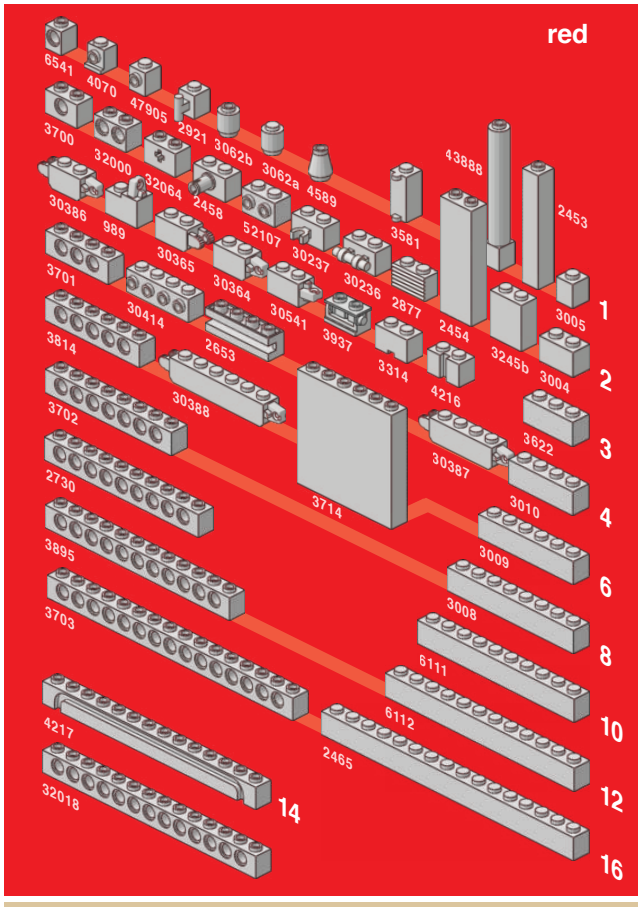
Let's Play With Block Toys
(rough translation)
ISBN: 9784883375967

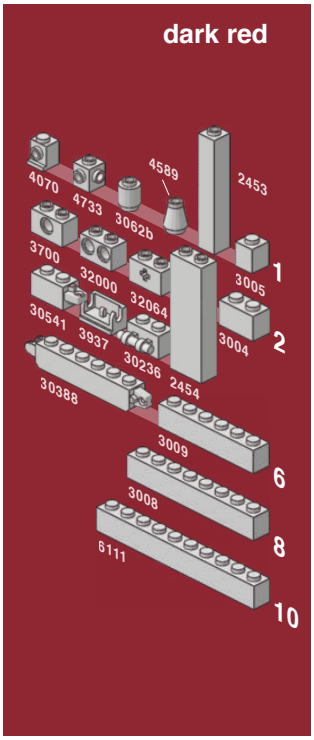
This book contains hundreds of photographs of fan creations and concludes with a parts catalog.

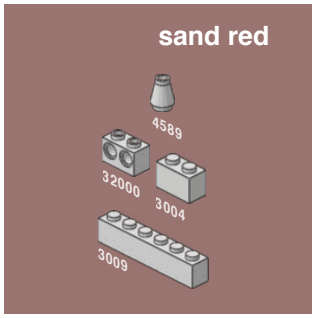
Let's Play With Block Toys, Vol 2
(rough translation)
ISBN: 9784883378285

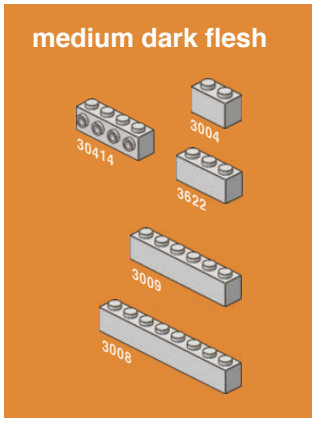
This fairly recent book is a follow-up to the previous book and follows the same format with different creations.

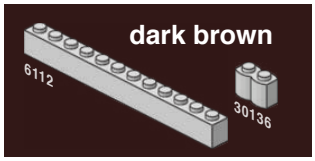
Part Index by Mike Doyle

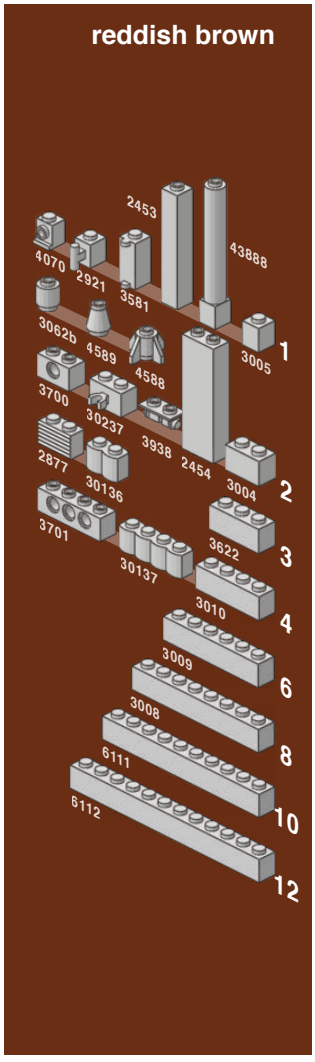


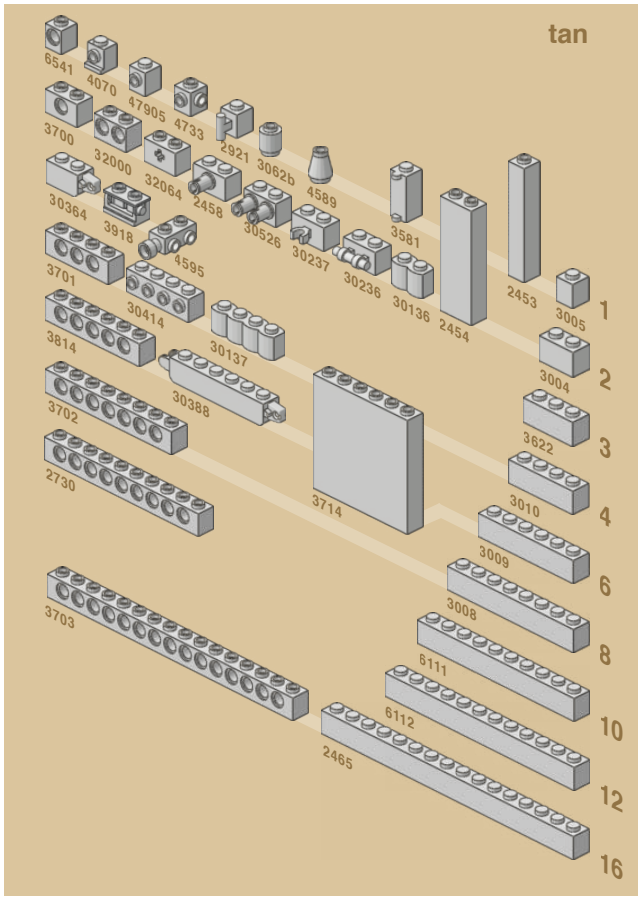


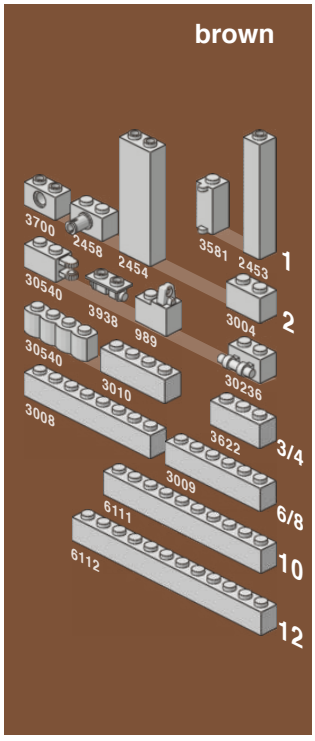


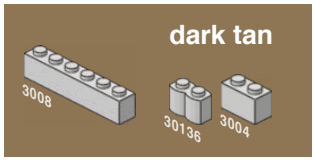












Community Ads

Here's Nathan Bryan with his younger son building. Cute, no?

We all have opportunities to connect with kids in one manner or another, thanks to the brick. I do on a few levels: at events, in the magazine, and now at workshops I do from time to time. While I enjoy building, what I really enjoy is learning.

Yes, I learn from them. The great thing about kids is that their curiosity is raw, so what they build is often without the rules we place on ourselves from being 'educated.' As a result, their view is often uncluttered in problem solving. And I get back in touch with my inner child—you know, the part of you that still has a sense of wonder. Sharing all the things I learn from Nathan and Megan and everyone else here hopefully does the same for you.

If not, build with your kids—they'll teach you a thing or two! We'll see you next issue!

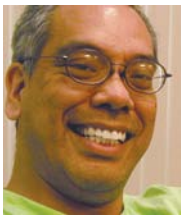
AFOLs

by **Greg Hyland**

BrickJournal

people • building • community

THE MAGAZINE FOR LEGO® ENTHUSIASTS OF ALL AGES!



BRICKJOURNAL magazine (edited by Joe Meno) spotlights all aspects of the **LEGO®** Community, showcasing events, people, and models every issue, with contributions and how-to articles by top builders worldwide, new product intros, and more. Available in both **FULL-COLOR** print and digital editions. Print subscribers get the digital version **FREE!**

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BRICKJOURNAL #1

The ultimate resource for **LEGO** enthusiasts of all ages, showcasing events, people, and models! **FULL-COLOR** #1 features an interview with Certified LEGO Professional **NATHAN SAWAYA,** car designs by **STEPHAN SANDER,** step-by-step building instructions and techniques for all skill levels, new set reviews, on-the-scene reports from **LEGO** community events, and other surprises!

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BRICKJOURNAL #2

This **FULL-COLOR** issue spotlights blockbuster summer movies, LEGO style! Go behind the scenes for new sets for **INDIANA JONES,** and see new models, including an **MINI FLYING WING** and a **LEGO CITY,** a lifesize **IRON MAN,** plus how to **CUSTOMIZE MINIFIGURES, BUILDING INSTRUCTIONS,** a tour of the **ONLINE LEGO FACTORY,** and lots more!

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BRICKJOURNAL #3

Event Reports from **BRICKWORLD**, **FIRST LEGO LEAGUE WORLD FESTIVAL** and **PIECE OF PEACE** (Japan), spotlight on our cover model builder **BRYCE McGLONE**, behind the scenes of **LEGO BATMAN**, LEGO at **COMIC-CON INTERNATIONAL, FIRST LEGO LEAGUE WORLD FESTIVAL,** plus **STEP-BY-STEP BUILDING INSTRUCTIONS, TECHNIQUES,** and more!

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BRICKJOURNAL #4

Interviews with **LEGO BUILDERS** including cover model builder **ARTHUR GUGICK,** event reports from **BRICKFAIR** and others, touring the **LEGO IDEA HOUSE,** plus **STEP-BY-STEP BUILDING INSTRUCTIONS** and **TECHNIQUES** for all skill levels, **NEW SET REVIEWS,** and an extensive report on constructing the Chinese Olympic Village in **LEGO!**

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BRICKJOURNAL #5

Event report on the **MINDSTORMS 10th ANNIVERSARY** at **LEGO HEADQUARTERS,** Pixar's **ANGUS MACLANE** on LEGO in film-making, a glimpse at the LEGO Group's past with the **DIRECTOR OF LEGO'S IDEA HOUSE**, event reports, a look at how **SEAN KENNEY**'s LEGO creations ended up on **NBC'S 30 ROCK** television show, instructions and spotlights on builders, and more!

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BRICKJOURNAL #6

Spotlight on **CLASSIC SPACE SETS** and a look at new ones, **BRANDON GRIFFITH** shows his **STAR TREK MODELS,** LEGO set designers discuss their work creating the **SPACE POLICE** with **PIRATE SETS, POWER FUNCTIONS TRAIN DEVELOPMENT,** the world's **TALLEST LEGO TOWER, MINI-FIGURE CUSTOMIZATION,** plus coverage of **BRICKFEST 2009** and more!

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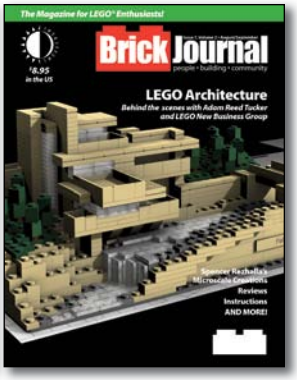

BRICKJOURNAL #7

Focuses on the new **LEGO ARCHITECTURE** line, with a look at the new sets designed by **ADAM REED TUCKER,** plus interviews with other architectural builders, including **SPENCER REZKALLA.** Also, behind the scenes on the creation of **POWER MINERS** and the **GRAND CAROUSEL,** a **LEGO BATTLESHIP** over 20 feet long, reports from LEGO events worldwide, and more!

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BRICKJOURNAL #8

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

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BRICKJOURNAL #9

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

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BRICKJOURNAL #10

BrickJournal goes undersea with looks at the creation of LEGO's new **ATLANTIS SETS,** plus a spotlight on a fan-created underwater theme, **THE SEA MONKEYS,** with builder **FELIX GRECO!** Also, a report on the **LEGO WORLD** convention in the Netherlands, **BUILDER SPOTLIGHTS, INSTRUCTIONS** and ways to **CUSTOMIZE MINIFIGURES, LEGO HISTORY,** and more!

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"Racers" theme issue, with building tips on race cars by the **ARVO BROTHERS,** interview with **LEGO RACERS** designer **ANDREW WOODMAN, LEGO FORMULA ONE RACING, TECHNIC SPORTS CAR** building, event reports, instructions and columns on **MINIFIGURE CUSTOMIZATION** and **MICRO BUILDING,** builder spotlights, **LEGO HISTORY,** and more!

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BRICKJOURNAL #12

A look at school sculptures by **NATHAN SAWAYA**, builder **MARCOS BESSA**'s creations, **ANGUS MACLANE**'s CubeDudes, a Nepali Diorama by **JORDAN SCHWARTZ**, instructions to build a school bus for your LEGO town, minifigure customizations, how a **POWER MINERS** model became one for **ATLANTIS,** building standards, and much more!

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BRICKJOURNAL #13

Special **EVENT ISSUE** with reports from **BRICKMAGIC** (the newest US LEGO fan festival, organized by *BrickJournal* magazine), **BRICKWORLD** (one of the oldest US LEGO fan events), and others! Plus: spotlight on BIONICLE Builder **NORBERT LAGUBUEN,** our regular column on minifigure customization, step-by-step "You Can Build It" instructions, spotlights on builders and their work, and more!

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BRICKJOURNAL #14

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

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BRICKJOURNAL #15

Looks at the **LEGO MECHA** genre of building, especially in Japan! Feature editor **NATHAN BRYAN** spotlights mecha builders such as **SAITO YOSHIKAZU, TAKAYUKI TORII, SUKYU** and others! Also, a talk with **BRIAN COOPER** and **MARK NEUMANN** about their mecha creations, mecha building instructions by **SAITO YOSHIKAZU**, our regular columns on minifigure customization, building, event reports, and more!

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BRICKJOURNAL #16

Focuses on **STEAMPUNK!** Feature editor **GUY HIMBER** gives a tour with a look at his work, **DAVE DeGOBBI**'s, **NATHAN PROUDLOVE**'s, and others! There's also a look at the history of LEGO Steampunk building, as well as instructions for a Steampunk plane by **ROD GILLIES**! Plus our regular columns on minifigure customization, building tips, event reports, our step-by-step "You Can Build It" instructions, and much more!

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BRICKJOURNAL #17

LEGO SPACE WAR issue! A **STARFIGHTER BUILDING LESSON** by Peter Reid, **WHY SPACE MARINES ARE SO POPULAR** by Mark Stafford, a trip behind the scenes of **LEGO'S NEW ALIEN CONQUEST SETS** that hit store shelves earlier this year, plus **JARED K. BURKS'** column on **MINIFIGURE CUSTOMIZATION,** building tips, event reports, our step-by-step **"YOU CAN BUILD IT" INSTRUCTIONS,** and more!

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BRICKJOURNAL #18

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

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BRICKJOURNAL #19

LEGO EVENTS ISSUE covering our own **BRICKMAGIC FESTIVAL, BRICKWORLD, BRICKFAIR, BRICKCON,** plus other events outside the US. There's full event details, plus interviews with the winners of the **BRICKMAGIC CHALLENGE** competition, complete with instructions to build award winning models. Also **JARED K. BURKS'** regular column on minifigure customizing, building tips, and more!

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LEGO-RELATED BOOKS

BRICKJOURNAL COMPENDIUM 2

Before becoming a print magazine, there were nine **DIGITAL-ONLY** issues of BrickJournal produced from 2005-2007, which are still available as **DIGITAL EDITIONS** for only **$3.95 each**! And while supplies last, the original 4th and 5th issues are available in print form in **BRICKJOURNAL COMPENDIUM 2,** a full-color trade paperback with a wealth of information and building tips on all things **LEGO®!** (**NOTE:** These are **DIFFERENT ISSUES** than the newer #1-19 shown on this flyer.)

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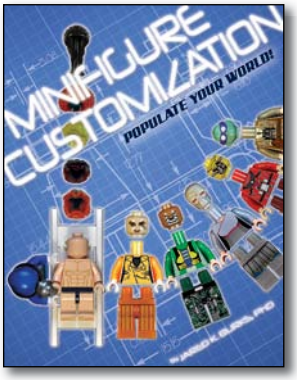
SORRY, COMPENDIUM 1, 3, AND 4 ARE SOLD OUT!

But all nine of these original digital-only issues are available online as **DIGITAL EDITIONS** for **$3.95 each.**



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Full-color book with step-by-step tutorials on customizing LEGO® Minifigures, showing decal design and application, color alteration, custom part modification and creation, plus tips on minifigure displays and digital photography to capture your custom figures in their best light! Learn the tools to use, plus tips and tricks from professional customizer **JARED K. BURKS** (known online as Kaminoan), and see a gallery of some of the best custom figures ever created!

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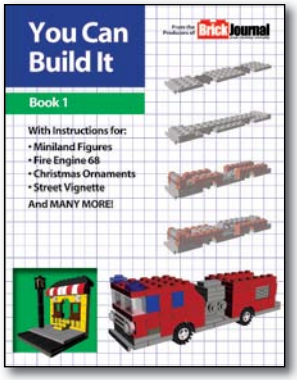

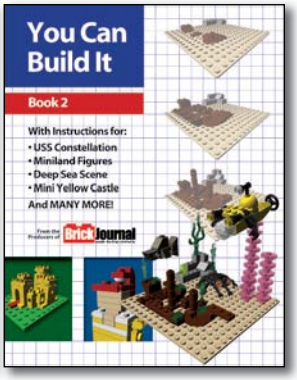

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