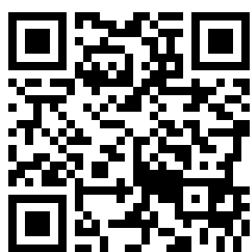




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Editorial

By Car_mp

This 2013 is about to finish, it has been a year of changes.

On one hand, LEGO® has directed its efforts towards the emerging markets of the East, where a lot of great builders are wishing to make themselves known among the rest of the AFOLS of the world. In absence of official figures, this effort seems to have resulted in a growth of the company in these markets, which has offset the economic crisis that affects, to a greater or lesser extent, the Western powers. It may be curious to see LEGO fighting for a market so far dominated by copycat brands.

On the other hand, MINDSTORMS, the flagship of technology in LEGO themes, has launched a new model. It clearly reflects the opinion of the AFOLS who participated, in one way or another, in its development as it responds to many requests in recent years.

Regarding the 2013 sets, only a personal opinion can be given, everyone has their favorite theme and sets, and it is very difficult to give an objective opinion. Still, the star sets of each theme have lived up to their name, like The Tower of Orthanc, the new Technic crane, the X-Wing UCS, the modular building...

2014 seems to bring some new features, a new theme of sets dedicated to the much anticipated LEGO film, a drastic modernization of the Ninjago theme, new tribes in Chima, and what are still just rumors... The first images of the 2014 sets and an analysis of the sets we have had access to, seem to bring good vibrations.

Regarding the magazine we can only say thank you for the ever increasing number of readers. Stay tuned to our website and Facebook page because this year there will be surprises where you may win something.

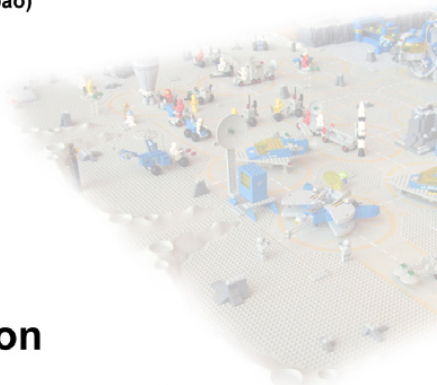
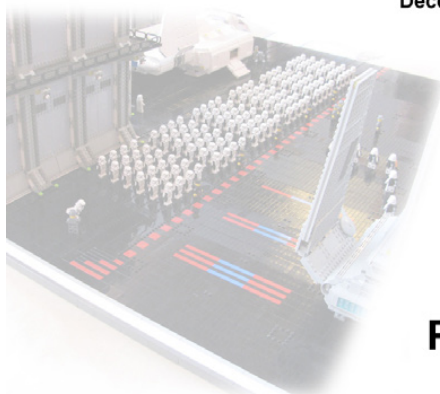
In this issue we inaugurate new sections and it is full of fantastic collaborations. We really want to thank all of them once again.

And finally, special thanks to Joe Meno, a pioneer in this world of LEGO brick publications, for agreeing to kindly answer our questions.

#

HISPA BRICK MAGAZINE EVENT 2013

December 14th & 15th 2013 (Bilbao)
- Activities for attendees -



Public Exhibition



Exhibition "TOYS OF ALL TIMES"
Exhibition Hall of the Euskalduna Congress Palace

From December 16th 2013
To January 10th 2014



Kaneda's Bike

By arvo

Sometimes half a second is enough.

A brief glimpse.

A flicker of the eye like a reflex camera captures the snapshot and lets it travel down the nerve to connect, directly with a memory... with "its" memory.

A puzzle to which a piece is added giving rise to new ideas, to new puzzles. A chain reaction, a loop; and in the centre, us. Kaneda's bike is a construction that is repeated over and again in our heads. A new solution, an untried technique, a shadow, or simply too much observation lead to a constant questioning, to resolve again... to take the step to the next stage, relaxation, forgetfulness.

At this stage we are at a loss to tell whether or not we enjoy the process that is reactivated every so often. What we can confirm is that it is quite uncomfortable that it happens unexpectedly, unwillingly, completely beyond our control, without being able to predict when, how and where to stop...

... but above all it is exhausting. Although thanks to that very experience that tires us out we are able to identify the end without any doubt. So this motorbike, with its fuel tank almost empty and with more mileage its tyres can handle needs a stop, putting it on its stand and letting it rest.

BIKE V4.0

This new (and definitive) model is the fourth since we recovered our old and (more or less) dusty pieces in 2002, although it is a clear and direct revision of the construction we published in 2007, which awakened us from a certain "constructive lethargy", showing us endless possibilities and defining our style from that moment on.

There are several details that have led to this revision, but the main defect we could attribute to the 2007 version was a certain lack of character. It is a stylised model that is not very aggressive, homogeneous, without excesses, but it works as a whole. It is difficult to pinpoint the defects under those circumstances, and only time (and a certain predisposition) can end up bringing them out.

We had part of the equation. But it is one thing to be conscious that something is missing and another to find exactly what it is. The real difficulty lay in identifying the problem and to a lesser degree in finding the solution.

It must have been while seeing one of those commercial models that we suddenly saw the light. The problem and the solution went hand in hand, crystal clear, obvious and unmissable and it wasn't any detailing or add-on; it was simpler than that... it was "the disproportion"!

This disproportion between the tyres we one day discovered (or overlooked, blinded by the emotion of finding a large diameter wheel and its perfect complement, the x-pod) is, from our point of view the basis that holds together the entire design. Something similar happened while building the Ford

GT40 MKII; without that disproportion all you have is a sports car, nothing more, and until we saw it in excess we didn't comprehend the bike is exactly that: an excess.

Even so we have been somewhat restrained in this version and although we tended to deliberately exaggerate we have kept it to a vitamin cure, especially in those areas where it really needed it, leaving the essence of the styling model unaltered.

Having arrived at this point, it would be completely unforgivable on our side not to dedicate a few lines to its creator; Katsuhiro Otomo (author, among many other things, of the manga known by many, AKIRA), who gave it to us a comic over 30 years ago, with timeless characters and designs that are a part of our own history. Our gratitude is infinite and each and every attempt we have made to build this a model that lives up to the original design, becoming more and more demanding and taking care of every minute detail, reflects this.

Especially on this occasion, on which the design process has been described in a book that, to us, embodies a completely new and different way of living out this hobby, that amplifies, intensifies and completes the experience.

In any case, the objective of this article is to concentrate on the construction and its process, describing some of the details that due to lack of space have been left out of the book.

Let's get started.



FIND THE 8 DIFFERENCES

We wanted to be sure!

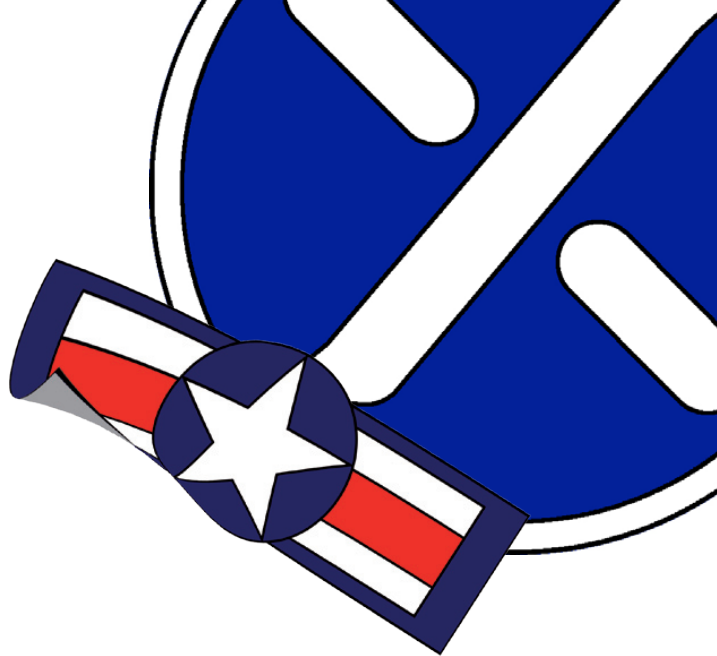
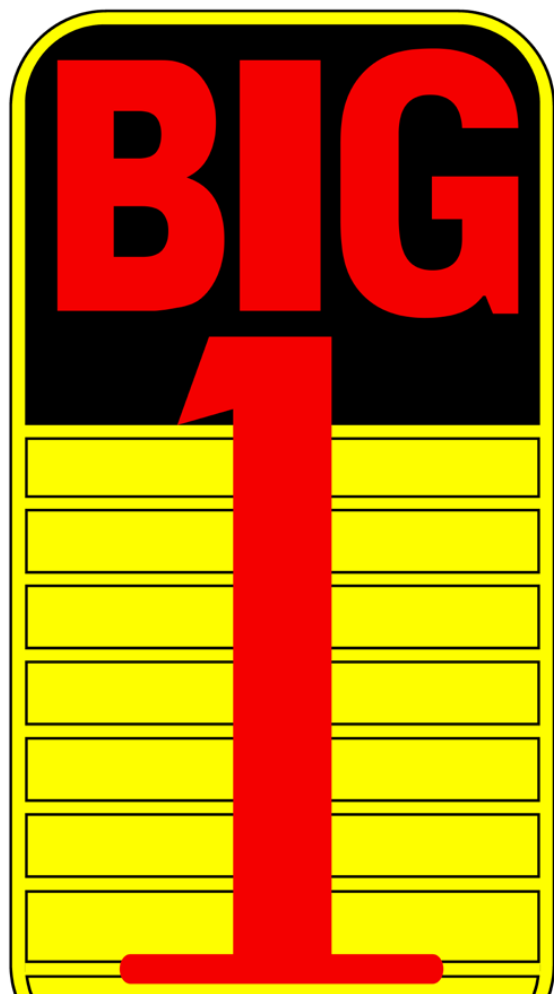
It was the closest thing to inviting your misses for dinner and leaving your wallet at home. Failure is not an option!... or maybe the only one... but there is no middle ground.

Diameters, angles, heights, distances... any parameter that defined its geometry had to be studied and analysed using all means at our disposal and going further than the typical references you can find on the Internet. We got several books with illustrations that allowed us to examine the design in detail, with more definition and, to loop the loop, we even bought a 3D 1:12 scale model to be able to look at it from every possible angle, studying every corner. Seeing as we had never seen it before.

Its a mystery we haven't come to abhor red!!!

With this disposition we started our new adventure, giving it all and as always without any guarantee of success, quarrelling and with a dry mouth from eating cheetos!

The time needed to carry out this project was extended due to different reasons and it took us 3 years to complete it. The first of these was devoted exclusively to redesigning the model with a self-imposed restriction that marked a big difference with any earlier project. The model had to live up to our expectations and IN ADDITION, the result would be published as instructions that were clear and legible for anyone who is even remotely familiar with this toy. An additional difficulty that multiplied the work by several factors and that forced us to build without letting go of the mouse of the computer, especially during the last months due to several modifications and rectifications.



What follows is an enumeration of the main modifications compared to the 2007 model:

1- Rear Wheel: The first in the list as it is the main change that has been introduced and represent the very purpose of the revision: giving more importance to the rear of the bike, looking for the disproportion we mentioned earlier. The diameter is increased, but above all the width. In addition, certain details have been added, like the "cylinders" that are so characteristic of the rear rim.

2- Rear Arm: Both sides of the bike are different, just like the original model. The effect of a single lateral rocker has been maximized.

3- Seat: This has been given more presence and depth.

4- Profile: We put the accent on the break that occurs at medium level, making the union between seat and fuel tank as thin as possible.

5- Tank: Trying to obtain a geometry that evokes the original design as faithfully as possible. We are especially fascinated by this part. It is in this part of the bike where the time it was created in is most obvious, years dominated by SIMMONS® and the glitter in the eye shadow are perfectly reflected in the polygonal reminiscences that are seen in the fuel tank.

6- Handlebar (x2): There are new details. Two versions.

7- Front wing and fork: Volume is added and some extra details are introduced, like the signal lights and the mirrors. Two versions.

Up to now we haven't mentioned a "small" detail. This revision goes beyond a simple "modification", as we have built the model in its two versions; with and without fairings, the latter showing all the mechanics of the front.

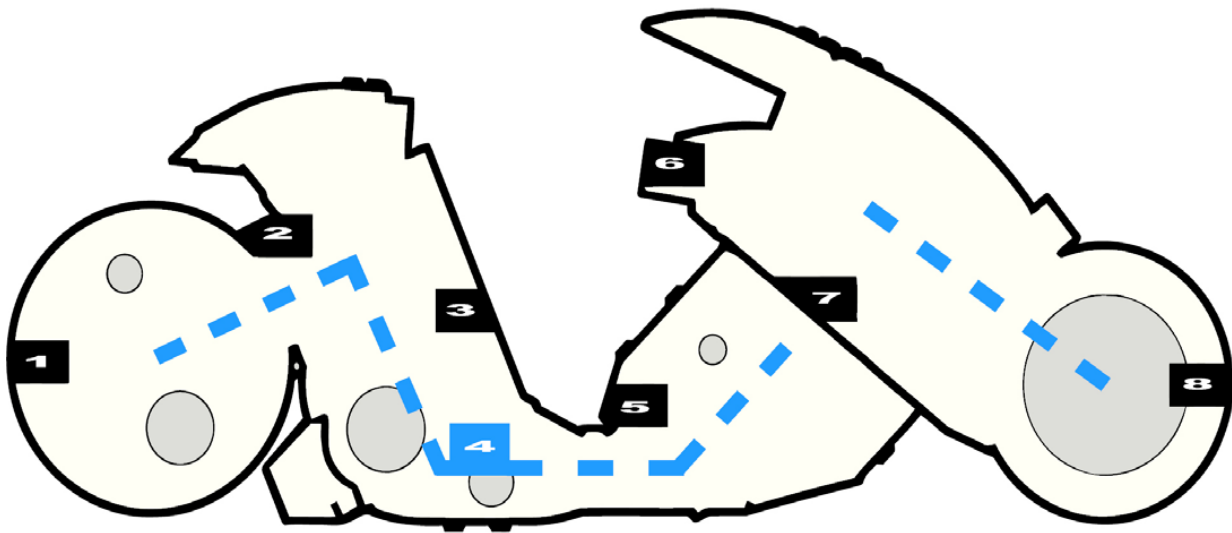
This "naked" version responds to the rediscovery of this variation, unknown to the great majority, but with its very own personality and well worth being reproduced.

8- Front Wheel: Following the look that was introduced with the rear wheel and with the necessary size to enhance the image we were looking for.

We would like to point out that this list of changes that has been described from rear to front, just as we tackled it during construction. In the instructions however, the order is different in order to follow a logical step by step sequence.

The bike shows a profile that is out of the ordinary with some critical points that made designing it a real challenge, especially when you try to get a strong a stable model. This objective should be clear from start to finish. It is a great advantage if you can handle a model at every construction stage without fear that it will come apart.

It makes the whole process easier and faster.



With this in mind, a DENSE structure was designed, that adapts to the special geometry of the design and facilitates in the smallest space possible the different encounters that follow. This set of parts constitutes the nucleus of the model. It is where everything starts, so it needs to be especially strong, with reinforcements in the main directions that ensure the integrity of the model at all times. The use of plates (some no longer in production) as a substitute for simple bricks gives it more fibre, resulting in a better behaviour of the core when faced with forces that originate in its own weight or the manipulation of the model.

The use of brackets has been fundamental. It is definitely the star item of this model, and with the arrival of the new versions it is possible to solve situations in very little space a very few "resources" that were impossible until now. For us they are, without a doubt, the most useful piece in the entire catalogue. It fulfils a function that goes beyond providing studs on the orthogonal sides, It has allowed us to "tie" groups of pieces together with minimal effort and maximum sturdiness. These pieces allow for simple solutions and when you are seriously limited in the available space they achieve primary importance.

We have made a great effort to use a reasonable number of pieces and to use simple techniques (thanks to the brackets). Except in some very specific points of the construction where very specific parts are required to get the desired result, the remaining parts are absolutely common and we are happy to have achieved our goal.

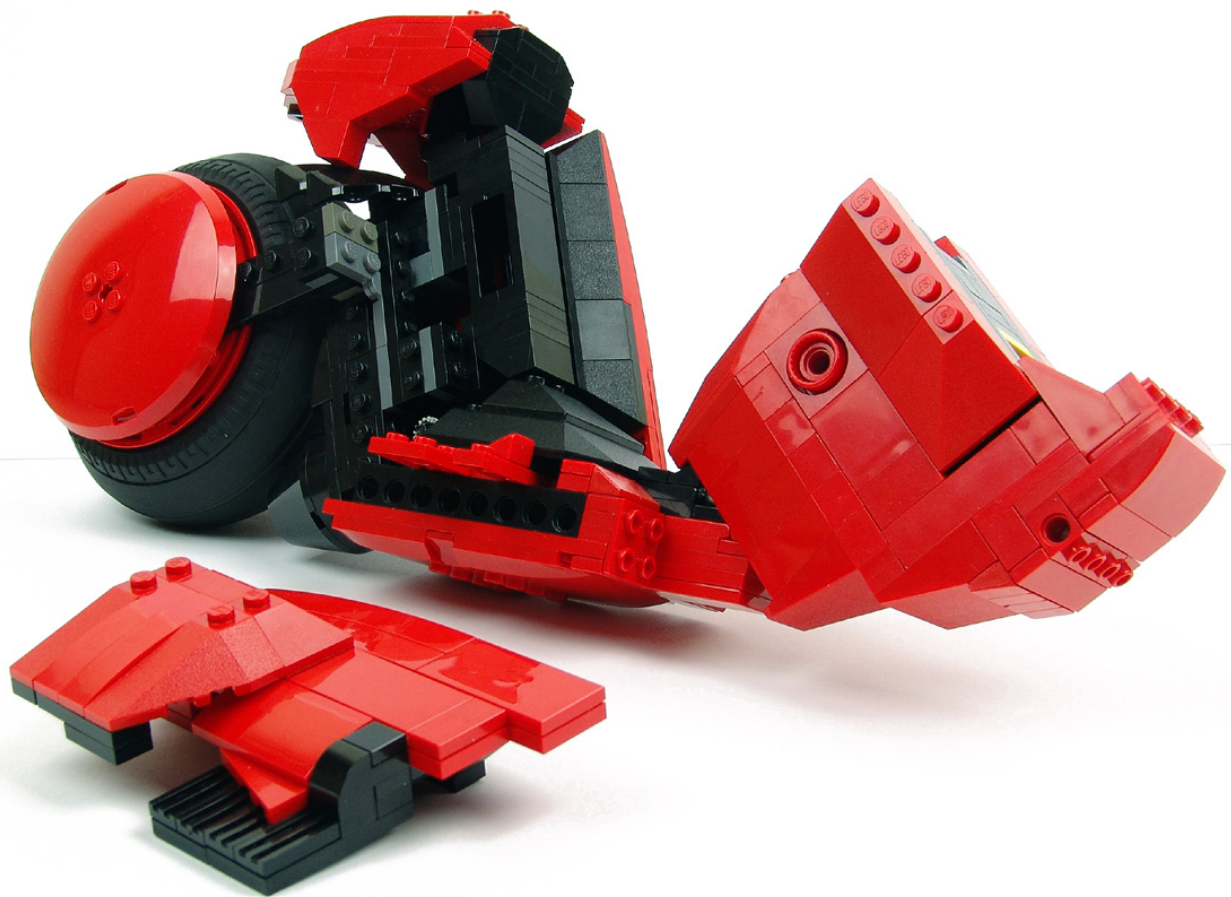
One example that illustrates this "philosophy" is the design of the seat. It is quite different from the original, but its simple and clean design more than justify this choice.

It is made up of 5 parts: the base, back, side (x2) and front. Each of them are perfectly integrated in their corresponding "section".

Once you build the structure that is the core of the build, the model is completed adding 4 parts, built independently, but that integrate as if they were accessories (like an armour). To this end the structure was conveniently prepared to receive each of the 4 parts: side (x2), back and front

We very much like the way the different parts meet, without actually touching and leaving a minimal breathing space that





adds definition to its general appearance. On the other hand they were perfect checkpoints that would have revealed any anomaly in the construction by appearing to be asymmetric, overlapping or touching in anyway.

To be honest we have to say these are the kind of details you “stumble upon”, although we like to think they are the result of an organised build.

BINGO!

To us, the great “bingo-slash-lucky-slash-jackpot” moment was not the seat however, nor the wheels; not even the clean way the fuel deposit fitted the construction... no! It's in the wind shield.

It is very typical in us to postpone the biggest and most complicated tasks to the last moment. We redid the model without even glimpsing this part of it, knowing that the real technical difficulty of the model lay in the reproduction of the wind shield. It is enormous, with its own personality.

That being so, common sense dictates we should have designed the front depending on that shield..., but...
... why do it like that if you can do it completely backwards!? Complicating your life to toxic levels and turning something fun into an experience you want to get away from at all cost!? Welcome to our world. Evoking it was hard, fitting it in even more so.

Trial and error, trial and error ... 100 times, until you give up and one day, you see it!

Now we remember that kind of uncertainty with a certain “warmth”, but we guarantee that we lived through it in quite a different way. It was liberating to finish the build. And refreshing, as it allowed us to face the second part of the project: one that we felt a special need to broach. A book that described the construction process of the model that has been the perfect excuse to renew our “vows”. A change in register, wise or not, but absolutely necessary and very, very healthy.

CANDIES

That is how we perceive some of the details we have included in the model. Parts that appear to have been specifically designed to fulfil a role in our build.

Parts that add a special extra, that improve the model, that make it more sophisticated and that, definitely, can make the difference.

We will finish this article with some of those “candies”.

Basically there are three:

1- **Radar 5x5**. These have become essential thanks to their characteristic “base-cone” shape and that sets them apart from other radar parts. We chose to use them in red even though the “real” model has grey (or rather metallic) ones. A



little licence we've allowed ourselves as a tribute to our 2007 model.

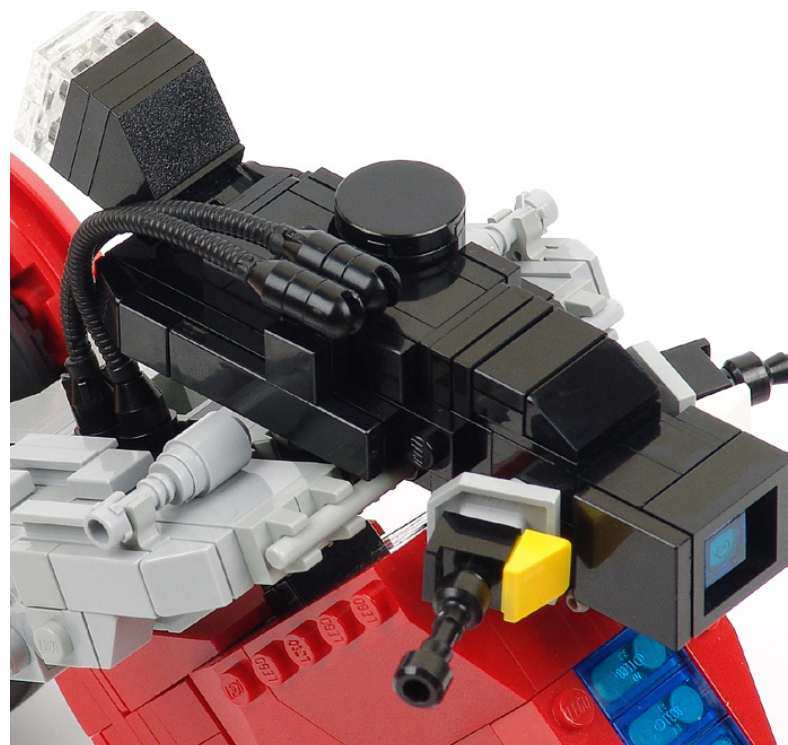
On this occasion they have been so thankful as to allow the addition of a "plate round 2x2 inverted... a beautiful piece, no doubt the result of a fling between M&Ms and plates round :D:D

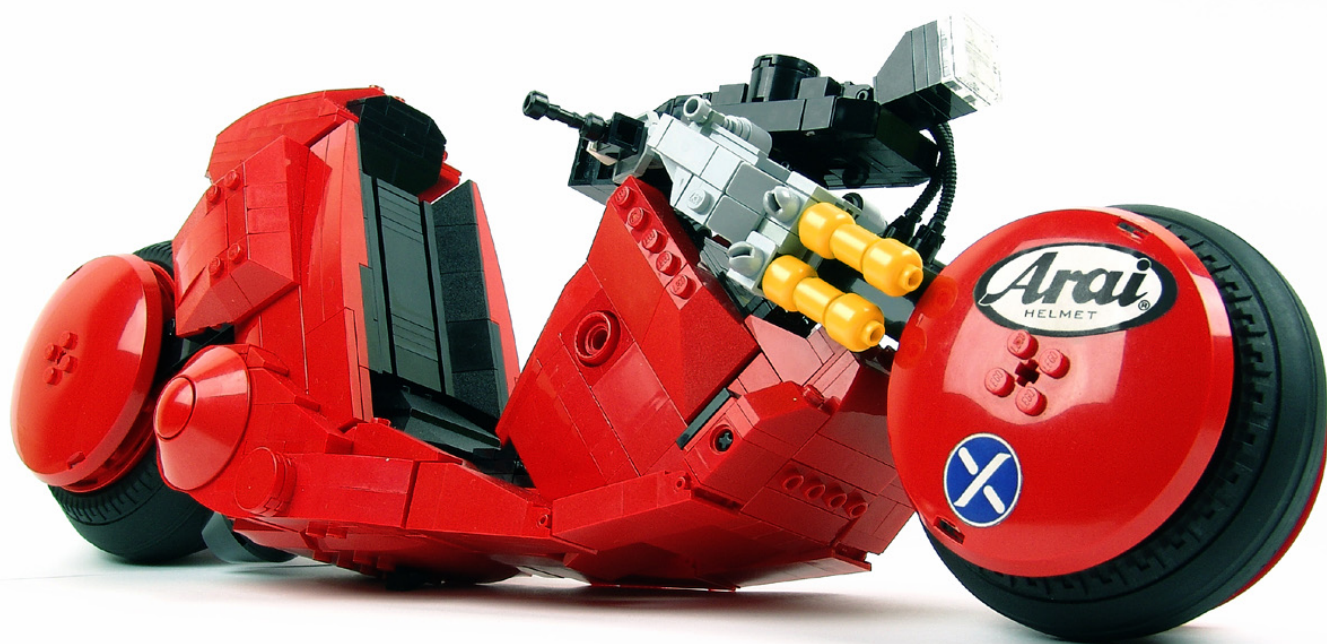
2- **Hose, flexible.** These evoke the cabling on the bike really well. The effect is subtle, but adding pieces of a different material adds credibility to the build. It gives a sensation of special care with details that we love to show in our builds.

3- **Skateboard wheels.** Like hand grips on the handle bars They are perfect. They have the ideal length and diameter, completely proportional. In addition, they have a kind of grooves that add shadows and lines that make the effect even stronger.

Despite these details, the loving care that we put into each piece and the dedication in each and every solution... despite all of that the model will suffer the passing of time, as it happened to its predecessor and everything else really, but this time there is a big difference...

... we promise not to look this time! ;);)
#





And now the book

Kaneda's Bike, a book by the arvo brothers

By car_mp

Pictures by arvo

It is always complicated to critique a friend's creation. If these friends are also the original inspiration of this magazine with their MOC Alien some 5 years ago, it is even more complicated on a moral level. But in the end when they ask your opinion about a product they don't expect an objective analysis, but rather your personal view with whatever baggage that entails.

Their way of creating, building and seeing things has always been an unreachable mystery to me. Their capability to use parts in order to create realistic volume and angles is something I will never achieve. I have stopped trying. So when they said they wanted to present their latest work exclusively, and they wanted me to give my opinion, I prepared my senses for a new instalment of their exploits. And it turns out it's a book.

I really appreciate the arvo brothers, but... a book? really? is that what they have been working on instead of the mother of all Aliens?

In the end I decided to give them an opportunity Over the last couple of months there has been a frenzy of LEGO® related books and I can't blame them for having been infected.

KANEDA'S BIKE

A R V O B R O T H E R S

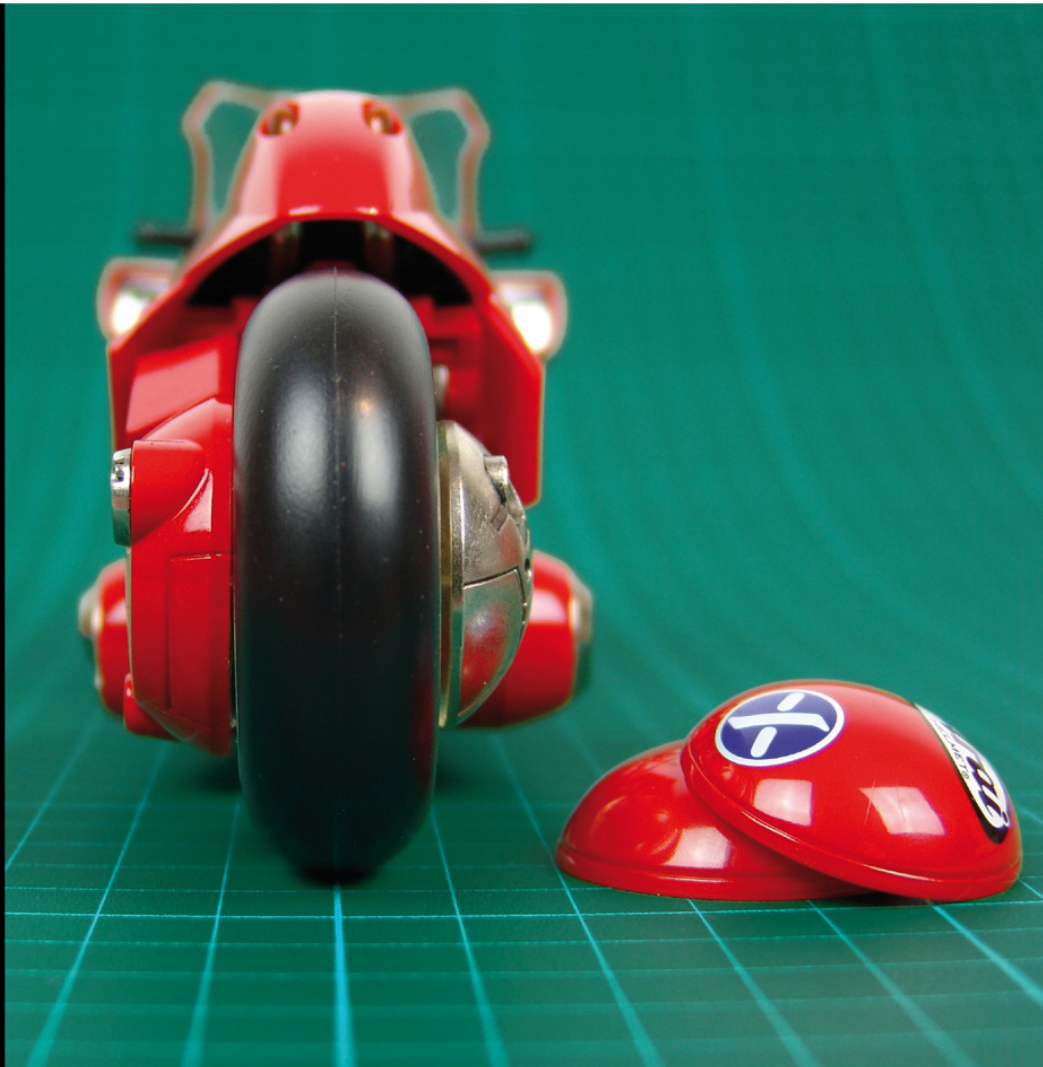


"Wheels"

Even though they are not included in a specific area of this initial study, the wheels are undoubtedly the most characteristic feature of the bike. Above the family-size glass, the large seat, side drums or the many small details that make this bike a real "delicatesen", we come across the wheels and their bulky spherical rims. Truly spectacular.

It is a challenge to include some details, but we will not ignore them as long as the solution does not compromise the polished look we aim to achieve. Yet another difficulty that we face when building is that of obtaining evenness in the solutions. It is not sufficient to find them; these solutions must also be in line and in harmony with each other. Occasionally, we have been forced to renounce solutions that looked pretty good when isolated, but "strange" within the model as a whole.

Returning to the idea that we mentioned at the beginning of this chapter, which deals with the slight disproportion we aim to achieve between the front and the rear, it is worth mentioning a last remark in relation to the wheels. It is easy to note the difference in size between them. Some models exaggerate this feature a lot, and from our point of view, this is a very wise detail that really helps to obtain the desired disproportion.



"Rear Wheel & Covers"

But let's turn to the book, after all that's what we're here to talk about. As always it's good to start at the beginning. We all know the aesthetic taste these guys have, we've seen it in their MOCs over the years, so the presentation is very elegant and the photos are close to perfection. But the contents are probably the most surprising part.

Throughout the chapters we witness the birth, development and construction of the legendary bike of Kaneda from the Akira manga and anime. Nothing more, nothing less. Without secrets, without holding back. The entire creative process, all the decisions and sacrifices regarding the original model they have had to make. Rarely does a book reflect this, not only because of how hard it is to find someone willing to show their creative process, but also because of the consciousness self-examination that underlies showing the how your brain works when creating something.

It isn't a book about ideas, although in its pages you can find many, nor is it a book about building techniques even though from its pages you can decipher the way these guys build. It isn't an instruction manual either, even though one is included. It is all of that and more. It is a book about an evolution, the evolution of a model and its builders, about a constant search for perfection to confer physical qualities to a dream that arose from a manga.

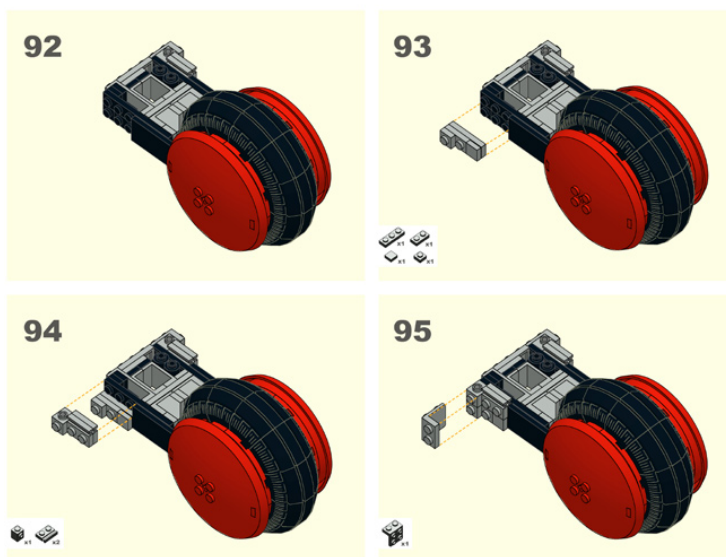
It is a different book, maybe not something for everybody, but it is clear that it is a little treasure of LEGO construction.

And what's more, when you finish reading it, the only thing you can think about is that bike, you need that bike...

The book will be available from December 14 through email: arvobrothers@hotmail.com
And later on page:

www.arvobrothers.com (still under construction)

#



On wheels

By Lino Martins

My name is Lino Martins but I go by Lino M on Flickr. I run a wildly successful LEGO® automotive club online called LUGNuts, where I propose monthly challenges to our nearly 800 members worldwide, and some of them build accordingly. We've been doing this for six years now so you can imagine there is a vast array of cars, trucks, and bikes in our group pool. You may have seen my recent works such as the outlandish Popcorn Wagon (photo 1) and my Russian Ural motorcycle, (photo 2) but many ask...where do I seek my inspiration and what is my build process, exactly?

I can answer these questions and more by showing you different steps and my thought processes while working on my recent VW Dragbus.

What drives me to build so frequently are the LUGNuts monthly challenges. Even though I write and propose these challenges to all the other members, I like to lead by example, so I always build right along with everyone else. Building so frequently keeps me active so I am constantly learning new things. In August, we had a challenge called Redo And Redemption...



Photo 1

Photo 2



Photo 3

the idea was to find an old MOC from our past-preferably one we were not so proud of and redo it and make it better. We were supposed to provide a link to our old embarrassing flub so that others can see the before and after effects. I found my inspiration in my old and abandoned brickshelf file. I wanted something that would be fun to redo, something different from what I have done lately, and most importantly, something in bad need of redemption. I'm almost too embarrassed to publish it, but here is a photo of my original model built back in 2006. (photo 3)

There was no photo booth, the lighting was horrible, and my build quality had a lot to be desired back then! With new parts and several years of experience, I was hoping to do the old model some justice. The original was inspired by a popular Hotwheels design so for this one, I went right back to the original source and collected photos of the toy car and stored them in a file on my laptop.

The new VW Dragbus needed a more coherent color scheme than my haphazard looking original model. At the Vintage Races a month or two before, I saw a car that had a neat yellow and grey color scheme so I wanted to replicate this design with my new model. Next, I set aside certain curved parts I knew I'd use a lot of. This enables me to see how many of these specific parts I have and if Bricklink orders are needed in order to complete the project.

With my reference photos on my computer screen, I usually begin building a car by laying out a simple modular chassis with Technic beams and pins. This helps me figure out the wheelbase and overall size of the vehicle. If, later on, I realize I have made the wheelbase too short, or too long, a modular chassis helps me to easily expand or contract the design if need be. For this model, I had the good fortune of having the official LEGO® VW T1 Microbus set on hand. This helped establish the correct proportions but usually I would have to rely on photos of a car. Straight on side views, front views, and rear views are ideal for this if they can be found. With a straight side view photo, I can use a LEGO brick to measure proportions of the photo...for example, a side door may translate to 10 studs long, a wheel well 8 studs, etc. (photo 4)



Photo 4

Because my design had no doors, would eventually open like a Funny Car, and the roof would have a radical chop, the official LEGO set would only act as a guide so I could not simply copy it, with the exception of the front face plate, which I replicated with only minor changes. (photo 5)

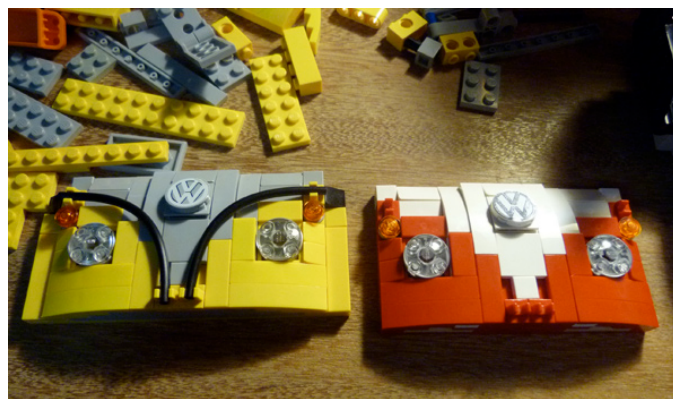


Photo 5

Much of my work involves lots of trial and error...with the emphasis on error. This design needed the shell to be able to open fully and rest flat on its face while in the fully open position. Clearances were low, so it took about three or four tries to come up with the right hinge configuration that would enable me to do this. Finally I went with three oldschool 2x9 hinge plate assemblies (part # 3324c01) and that offered the right amount of clearance, strength, and flexibility. (photo 6)

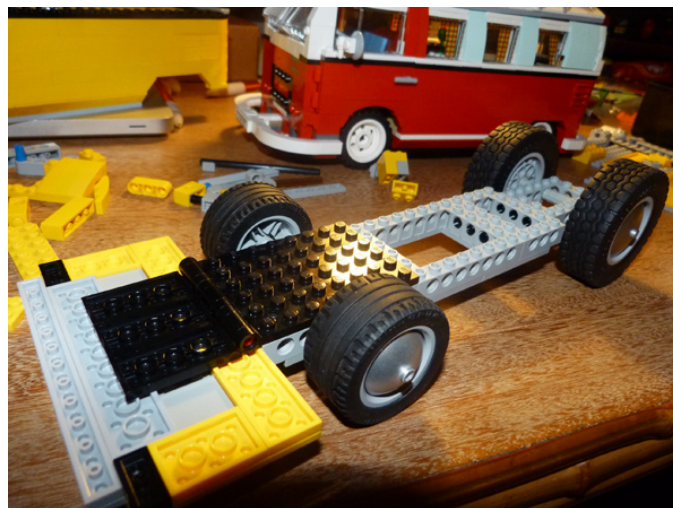


Photo 6

With several reference photos on hand, I continue to build the shell and chassis. (photo 7)



Photo 7

An early trial yielded a roof that sat a little too high. I wanted a radical chop, just like in the original Hot Wheels model, so a different method was later used. I was much happier with my second choice. (photo8 and 9)

Photo 8



Photo 9



Once the shell was built, it still took several test fits to make sure it would still function. An ill-fitting roll cage or a poorly placed oil filter can disrupt its ability to open or close properly. The oversized exhaust pipes also needed to be seen through the back window. (photo10)

Photo 10



Official LEGO® stickers were used to indicate racing sponsors. I was careful to use stickers that only had yellow or black borders. Redo And Redemption was the group's 70th build challenge, so I designed the large "70" logo in Microsoft Publisher, then printed it on decal paper. Careful cutting was needed to get the round shape just right.

Unlike my first attempt in 2006, I now have a portable photo studio, a better camera, and some acquired skill and experience with photography. Here is my typical set up. (photo 11)

Photo 11



I may take 30 or 40 photos from all different angles. After the photo shoot, I load the photos onto my laptop, pick my favorite five or six and do some minor post-production editing in Photoshop or similar design programs. Finally I post my final images onto Flickr for the whole world to see. (photo12 and 13) I redid this VW Dragbus from an earlier, more embarrassing model and I hope that I was able to redeem myself and set the Universe right! What do you think? Did I pull it off? You can find more of my work at http://www.flickr.com/photos/lino_m/ and if you'd like to join our LUGNuts group to participate in our monthly challenges yourself, you can do so at: <http://www.flickr.com/groups/lugnuts/>.

Thanks for reading.
Lino Martins
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Wonders of the humanoid frame

By Alex (FateHeart) and Ryan (graybandit2000)

Alex:

A long time ago (ten years can be viewed as a long time for some!) a young boy borrowed some VCR tapes from one of his friends. Within the tapes were episodes of the Japanese mecha anime TV series Mobile Suit Gundam Wing and After War Gundam X. The young boy was me and to say it didn't have an effect on my life would be an understatement. It instilled a love for humanoid mecha in me that I still have to this day. Naturally, when I started to build with LEGO as a hobby rather than just as a childhood play thing what I wanted to build the most were the humanoid mecha which amazed me when I was smaller. My initial attempts were crude to say the least as I had yet to fully understand the concept of SNOT building. Exposure to amazing builds on the LEGO® sharing

website MOCpages helped my transition to SNOT building and not long afterwards I discovered the photo uploading site Flickr. After a year or so of lurking and much stealing of other respectable builders' techniques from the LEGO groups there I finally made an account on Flickr and began to upload MOCs for the world to see.

When I was approached by HispaBrick Magazine® to write an article for them about mecha I jumped at the chance reasoning that it was a good opportunity to show readers of the magazine just what made humanoid mecha so awesome for me. I've dragged Ryan on board with me to discuss our favourite mecha format. We'll be covering tips on how to build humanoid mecha and why we just keep on building them as well as why we love them so much!

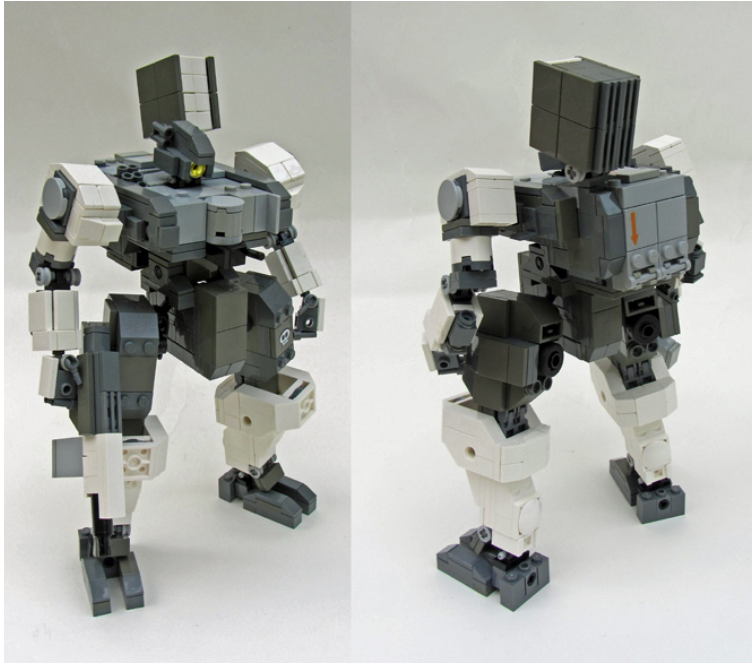


Ryan:

I first got into building LEGO® mechs and mecha after playing the old PC game Mechwarrior 2 in 1998. The idea of battle machines with legs that had the punch of tanks was a revelation for me, and I immediately felt the need to reproduce it them in LEGO. After only a few of my own attempts, I found Ron Perovich and Primus' LEGO Battlemechs, and began to take some design cues and ideas from them, but still making

my own models. While representative of the source, they were more statues than anything, with only cosmetic joints.

After a couple years of building large mech armies, I stumbled across Bryan Cooper's gigantic Gundam builds. His Teknomecha frame was amazingly large, but a bit beyond the scope of my collection. Determined to emulate his style, I began designing and building very rough Gundam models. While they were very basic aesthetically, they were my first big



models to try and include “human” joints, such as multi-axis hips and shoulders.

Eventually, I dropped out of building LEGO® entirely for a while, instead focusing on working towards college in 2004. However, my interest in the various Gundam anime continued to expand. I even found other Japanese mecha designs online, and looked up many different mecha builders. From 2004 to 2011, I had my LEGO in storage, with only a small amount of little sets that friends and family would give me as gifts.

In late 2011, I started to slowly get back into LEGO, and soon had a growing collection, including my old bricks out of storage. The Exo-Force click ball hinges and brick ball-and-socket joints that had been released in my absence from LEGO were a revelation for my building style.

As I started to attempt new Gundam-style builds, I quickly realized that I would need to develop some goals, as I do not do well with free-building. I decided that the important aspects I wanted to incorporate were somewhat human-like pose-ability, a minifig pilot, and about an 11-12 inch size. With these goals in mind, I worked on several basic frames, eventually settling on one that compromised the least to achieve all my goals.

Tips and useful information for construction of humanoid mecha

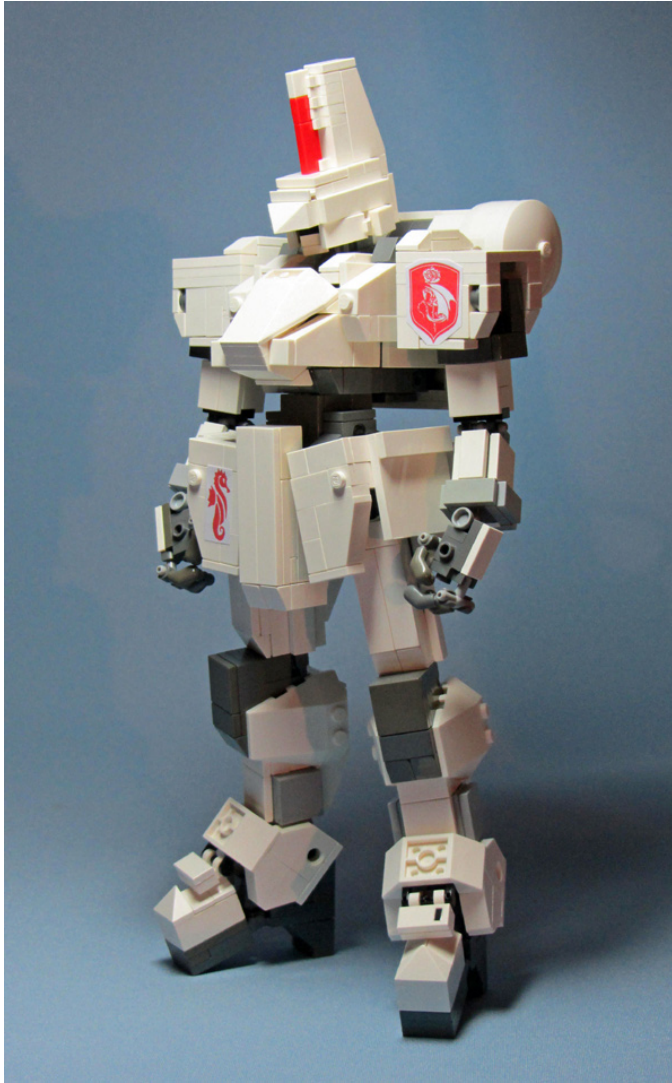
Alex:

I generally start the build process by finding a reference which appeals to me. I will admit to the fact that the majority of my builds tend to be inspired by a pre-existing design from an anime or manga series, usually Gundam, or hobby plastic models such as the Frame Arms series. Not much starting from scratch on my part when it comes to building humanoid mecha. The reference is important when

building as it helps to provide me with an idea as to proportions and detailing where appropriate as well as make it easier for me to imagine any details I wish to include into the design which are not in the reference. After running through ideas in my head I will start building usually starting with the mecha's head. It's a well known notion amongst mecha builders that mecha heads can be really hard to build in the brick due to size constraints, shaping and detail. However, once a decent head has been built it's usually easier to continue construction. After the head I usually build the torso due to the fact that the majority of the joints come out of the torso which makes it an important section to get right. I make it a personal goal of mine to try and cram a minifig into the majority of builds so the torso is usually large enough to just cram in a pilot, cram being very literally in most cases.

In regards to joints I try to emulate or stick to the joint layout that the human body has, such as ball joints at the hips which ensure a similar range of movement to what our bodies have. However, in some cases it is not possible to entirely copy human joints due to problems with elasticity with examples being the elbows and the knees. As skin is stretchy our bodies are fine with only one joint however as LEGO bricks tend to not be stretchy in any sense of the word, the solution is to use 2 joints allowing for the same range of movement as the single joint employed by you and I. Admittedly, sometimes trying to fit a double joint whilst keeping a high level of detail and general appearance good-looking can be hard which can sometimes lead to the unfortunate choice of 'good aesthetic appearance' or 'good range of movement' but neither at the same time. The general guide to joints that I use but not necessarily stick to has joints with three axes of movement or similar (ball joints) at the neck, the waist, the hips, the shoulders, the wrists and the ankles. The elbows and the knees however only have one axis of movement so parts like click hinges are perfect there.





Proportions of a mecha play a large part in what style you are aiming for. Longer arms can lead to gorilla like proportions whilst longer legs can lead to almost supermodel like proportions. Due to the experiences I had as a child, the Gundam system of proportioning, namely the work of the mecha designer Hajime Katoki, is what I use when working out mecha proportions. A rough guide I use for a generic humanoid Gundam figures is to have the length of the leg, from the foot to the knee, as the same length of the main body, from the crotch to the top of the head. The arms, from the shoulder to the hand, should be the same length as the lower leg, from the knee to the foot. The head should be of similar size to the hands. Finally, the upper legs, from hip to knee, should be the same length as the lower arms, from elbow to hand. Once again, this is a very rough guide and probably isn't for everyone but it hasn't let me down quite yet!

Ryan:

My build process generally involves me building a frame roughly the size I want to reach, then figuring out a colour scheme. I then start fleshing out the model, generally building the feet first, then working my way up the frame, leaving the head for last. Heads are always tricky for me, so leaving them for last helps the rest of the build move along without me getting frustrated.

While I strive for my own form of accuracy to a source inspiration, be it Gundam or other mecha, I'm told my style is

almost a 'caricature' of sorts. I make compromises based on what parts I have available, as I don't really BrickLink at all, so my models often take on their own look entirely, merely inspired by a source model.

The final words

Alex:

I guess the most important piece of advice for any aspiring mecha builders or even just LEGO® builders in general is to have fun and enjoy it! For me LEGO mecha builds come in two stages. The first stage is the building itself whilst the second stage is simply enjoying the build as it stands on my shelf. If I'm happy in both stages I know I've done something right.

Ryan:

The most important thing to achieve when building LEGO is satisfaction with your own model. I often revisit and rebuild parts of my models as I come up with different ways to do things. Build for yourself, not for your peers. Often this means I leave studs exposed, but it's a compromise I am happy with. That's not to say I don't accept critique from my peers and superiors in mecha building, but in the end, it's all about what I like in my model.

#



Technic Excavators

By Manticore

After the article about the best Technic cranes designed by LEGO® we couldn't start building our city without a good army of excavators of the same type. So here we are again, ready to do a review of what, in my humble opinion, are the best excavators of the Technic theme.

I won't describe every single detail of each set. To me Technic is a challenge I prefer to enjoy without worrying too much about how to make complex functions. I am very much an 80s sets guy and everything that has come out in the 21st century I simply enjoy as a builder. I prefer giving my personal (rather than a professional) opinion of all the excavators I have had the pleasure of enjoying.

But why excavators? It seems clear that to a child with advanced knowledge, the Technic theme is a step up in play. The possibilities it gives for building construction vehicles with mechanisms is a unique experience for LEGO fans. And as far as construction vehicles are concerned, what better examples than cranes and excavators. They provide the best playability within a theme that is generally marked by the contrary. Because despite being family guy and AFOL, after building a Technic excavator I play with it Don't you? None of you? Really?... I believe we could skip the last comment.

The first thing we should do is define the concept of what is an excavator and the different types that exist. How do we classify them? There are many models where size and design are concerned, but fundamentally they are classified by the way they dig:

- Front loader: with a wide bucket facing up and capable of moving large volumes of earth or other materials.
- Excavator/Backhoe: with the bucket facing down, with a smaller capacity but able to dig deeper, like in pits, ditches or foundations.
- Bulldozer: not exactly an excavator as these are used mainly to push or pull earth or other materials. It cannot carry materials as it has no bucket, but it has a larger capacity for pushing than excavators.

Following this classification, the LEGO models we will remember in this article are the 8265 front loader, the 8043 excavator, the 856 and 8275 bulldozers and 8856, 8455 and 8069 which are backhoes, excavators that in addition to a rear bucket typical of excavators have a front bucket similar to a front loader and so could be classified as both at the same time.

Following my personal tradition with Technic sets, most of them were flagships in their time. The 8069 doesn't exactly fit in though. I have included it, despite its medium size, since the relationship between size, functions and price is quite

surprising. But let's get a move on; as always, in chronological order.

856 / 951

The first Technic excavator, model number 856 (951 in the USA) dates back to 1979. Its official name is "Bulldozer", although the front bucket makes it look more like a front loader. Just 386 pieces. Compared to any of the current sets, this number of pieces may look insignificant. However, Technic fans who witnessed the duels between Magic Johnson and Larry Bird have a certain age, and know that the first Technic sets from the late 70s and early 80s and current sets are as different as chalk and cheese. The Technic pieces were basically a bunch of bricks with holes, pins, axles and gears. As an example, the elevation movement of the front bucket was done with a couple of interconnected gears that slid in the inner structure of the vehicle. When they slid forwards, the arms of the bucket were lifted.



The elevation of the bucket as well as the mechanism for tipping it was controlled by two wheels at the back of the vehicle. The bucket was built with a couple of plates 4x12 and specific parts for the sides (Vehicle Tipper End) which appeared in black in set 912 and later in set 744. What sets are these? If the editors of this magazine keep on paying me as generously as they do now, I may talk about these sets at a later time.

To avoid the bucket tipping over due to its weight, a couple of rubber bands were used. The treads of 106 links weren't seen in another Technic set for many years; and they gave the set an incredibly realistic look for its time. To me it's endearing and the set fills me with nostalgia. As I've already mentioned,

I quite a bit older than Justin Bieber, and I received this set as a Christmas present in 1979. It was my first Technic set and it gave me countless hours of fun.

8862

The only thing I missed in the 856 was the rear arm and bucket. The gods of the Olympus heard my prayers, although I had to beg them for 10 years before anything similar was seen again. The answer was the 8862 Backhoe in 1989, a set with 671 pieces.

The official name was Backhoe Grader and simply by the set number you can already see this one was special. If you don't believe me, just take a quick look at all the Technic sets that begin with 88.

The first thing that drew my attention, apart from the obvious (the combination of front loader and rear arm), were the two rear wheels 24x43. Anyone who knows anything about these sets knows what I am referring to. These are THE wheels for large scale vehicles (the first three supercars for example). And yellow to boot. Apart from this fact, the excavator incorporated the Pneumatics system, which was very much in vogue in the late 80s, to control the movement of the rear arm.



Three cylinders were used to lift the main arm, expand or contract the secondary arm and to control the rear bucket. But that was only the beginning. In addition to these three functions, the vehicle had 4 control wheels for the 2 stabilizers and the movement of the front bucket, in a similar way to its predecessor, but in this case using a worm wheel for the lifting mechanism. The bucket was not built, but was a single piece. True, it was much more realistic, but some of the innocence its predecessor radiated was lost.

As if that were not enough, the steering could be controlled by a Hand Of God (HOG) mechanism, transferring the control of the front axle to a control wheel at the top of the vehicle, camouflaged as a Tr-Yellow siren.

The two stabilizers opened at the same time; They lower the rear wheels slightly to give the excavator added stability. The transmission of the movement from the lateral control wheels through gears of different sizes results in a reduction of 48:1. At the front of the vehicle a brick 2x6x2 is installed to

compensate for the weight of the rear arm when it is extended.

And that's all my experience with 20th century excavators. Because, despite the fact that LEGO® marketed more models before 2001, they are not included in this review which focusses on sets of a certain size and complexity.



8455

We had to wait until 2003 to contemplate THE Pneumatics set. Backhoe Loader, 8455. 704 pieces and with a look that is quite similar to its predecessor, 8862, but with absolutely all functions controlled by pneumatic cylinders. Except for the steering on the front axle which is done with a "Hand Of God" mechanism through a control on the top of the cabin. All other movements, including the front and rear bucket, are controlled by a total of 10 pneumatic cylinders.

Two for the stabilizers, one to turn the rear arm, three for that very same rear arm (lifting/lowering of the first and second stages of the arm and opening and closing of the bucket), two for lifting the front arm and another two for controlling the front bucket.



The incredible thing is not just the fact that everything is controlled with Pneumatics. It is a veritable work of engineering art to see all this included in a set that is quite compact

Including all those tube is not a task for the impatient. By way of an aside, I have built this set three times and the first two times I had to take it apart again because not all the cylinders worked as was intended. It is true that in the instructions the tubes appear colour coded, but even so it is quite complicated not to make any mistakes and end up with bad connections. As a result you may end up with air going where it was not supposed to and functions combining in odd ways, like a stabilizer expanding while the rear arm rotates. Anyway, after over 30 years it turns out I'm not the Technic expert I thought I was.

In order to generate the necessary air pressure, the set included two pumps that are used together. They are well integrated in the front part of the cabin, avoiding in this way the appearance of two "exhausts" which would have looked quite strange.

Another aspect in which this set is an improvement is the three-cylinder engine.... indeed, three. It is a little strange, but there wasn't any space for more in this set. It's predecessor (8862) can't really be criticised for not including an engine as when it came out (in 1989) the compact Technic Engine Cylinders did not exist.

The wheels are also different, "balloon" type on both axes. Yes, they are more attractive for younger generations, but for me the Technic 24x43 wheels are absolutely spectacular. As a fun fact I will tell you this set includes a single brick, of the round type. So the entire structure is built with liftarms and a couple of panels as decorative elements. As much as I dislike it, we can't evolve without accepting some changes. You know what they say: If you can't beat'em, join'em.

In summary: a complete, functional, compact highly playable excavator, controlled entirely with Pneumatics. The only drawback might be the lack of precision of the cylinders, but that is inherent to the Pneumatics system. A set with ten linear actuators would be a Utopia. Its size would greatly increase and it would lose the compact look of this "little beast".

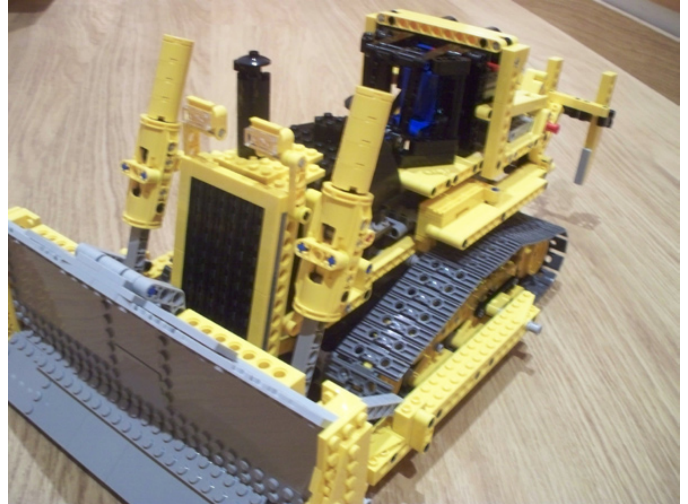


8275

Some years later (in 2007), LEGO® surprised us with the Power Functions system. And what better way to celebrate this new material that by including it in a Technic mega set. There you have it: 8275, Motorized Bulldozer. 1382 pieces that together make for a large set that can be completely remote controlled. Yes, that's right. Aside from the technical

advantages of the PF motors over their predecessors, finally something any LEGO fan will have dreamed about comes true: wireless control of the motors.

This set completely changed the way my wife looked at LEGO Technic. When she forgets her slippers in the living room I no longer need to get up to get them, thanks to the enormous shovel on the front that lets you push a variety of objects, including my wife's Hello Kitty slippers, with considerable force.



The two Power Functions XL Motors are connected individually to either track. I must admit that the nice links of the first Bulldozer are no match for the new ones. Aside from the fact that they are bigger, they provide better traction. There's nothing for it but to adapt to modern times.

The two Power Functions M Motors control the lifting and lowering of the ripper at the back and the blade at the front. Although they are less powerful, they manage to elevate the heavy machine some centimetres off the floor, leaving the tracks in the air.



Two infra-red receivers receive the signal and communicate it to two motors each. One of the channels allows you to control the two XL motors and move the Bulldozer almost at will. Turning is done in the same way as in tanks, turning both treads in opposite directions.

The other receiver controls the two M motors: the front blade and the rear ripper.

They say comparisons are odious, but it is at least curious to compare this Bulldozer with its predecessor, the 856:



8265

Two years later, returning to the typical LEGO® Technic designs, the 8265 was marketed: Front Loader. 100% front loader. No rear blade or bucket, no stabilizers, juts a huge vehicle with the single purpose of loading and moving material.



The huge wheels 81.6 x 38 R Balloon push this excavator up and hill of material that is ready to be loaded. The bucket is once again a single piece, but a huge one. Of course it is much more realistic (and the 856 bucket tended to come apart under heavy usage).

Despite the lack of rear arm, it also uses cylinders to move the front bucket. However, no Pneumatics this time, but Linear Actuators (LA). In stead of transmission by air pressure, transmission by gears. Much more precise than the Pneumatics system, but it is more complicated to transmit the movement by means of axle and gears than with flexible tubes. Personally I am 100% in favour of this new system. The LAs have been a real revolution. This set in particular includes 3. The two that are located at the sides lift the main arm, and with the third, located in between, the movement of the bucket is controlled.

The only negative aspect of this set is that it does not include a PF motor. You can of course add one, which is what I, and probably every Technic fan, have done. The battery box is added to the base of the excavator without many trouble.

There should be a law against marketing excavators and cranes without motors. The PF motor kit includes a couple of LEDs to increase realism if you want to work in the dark. The pity is that with a single motor you can only control the movements of the arm and bucket. The excavator itself doesn't move.

Steering is once again controlled from the top of the cabin (HOG), but in this case it is not the front axle that turns as the wheels on that axle stay in the same position. The steering wheels makes the entire front structure of the vehicle turn. I wonder how this works in the real vehicles, as I've seen they use the same system.



8043

Arriving to 2010, and thinking we had seen it all, LEGO markets "the beast": the 8043: Motorized Excavator. 1125 pieces, 4 PF motors, two remote controls!! With a formidable look and, more importantly, realistic and functional as no other Technic excavator set had been before. Already in 2008 LEGO gave warning with the 8294. An excavator with a similar look and an arm controlled by an LA, but much smaller and without any motors.

The first thing that comes into your mind upon seeing this set built and moving is that it looks real. It is as if someone had shrunk a typical excavator like the ones you can see on construction sites.



With the same treads as the 8275 Bulldozer, and with the same turning system (same as in tanks), but that is the only similitude at first glance. This is a true excavator, without any strange elements. Just what you see. The top structure can turn 360° thanks to the motors; and everything is controlled by infra-red. Wait a moment.... motors? Yes, the set includes four PF M motors that are used to control 6 different functions. That explains the need for two remote controls if you want to control up to three mechanisms at the same time.

The most novel thing is the way the other three functions are accessed. Using Technic Knob Wheels, the fourth motor makes a gear change in the gear box. In this way the movement of the three remaining motors is used for the other three functions. The fourth motor has a single function: changing from one set of functions to another. Let me explain: the first set of functions are the movement of the two treads and the turning of the upper structure. In this way you can better place the excavator to do its job. After placing it you select the second set of functions and you can control the main arm (which can be raised and lowered with two LAs due to the weight of the structure), the secondary part of the arm and the large bucket (with another two LAs, one for each function). LEGO® had some issues with the first sets due to the LAs. They were not strong enough to support the enormous pressure the arm generated. Of course customer service solved the issue quickly making new LAs that were more resistant.

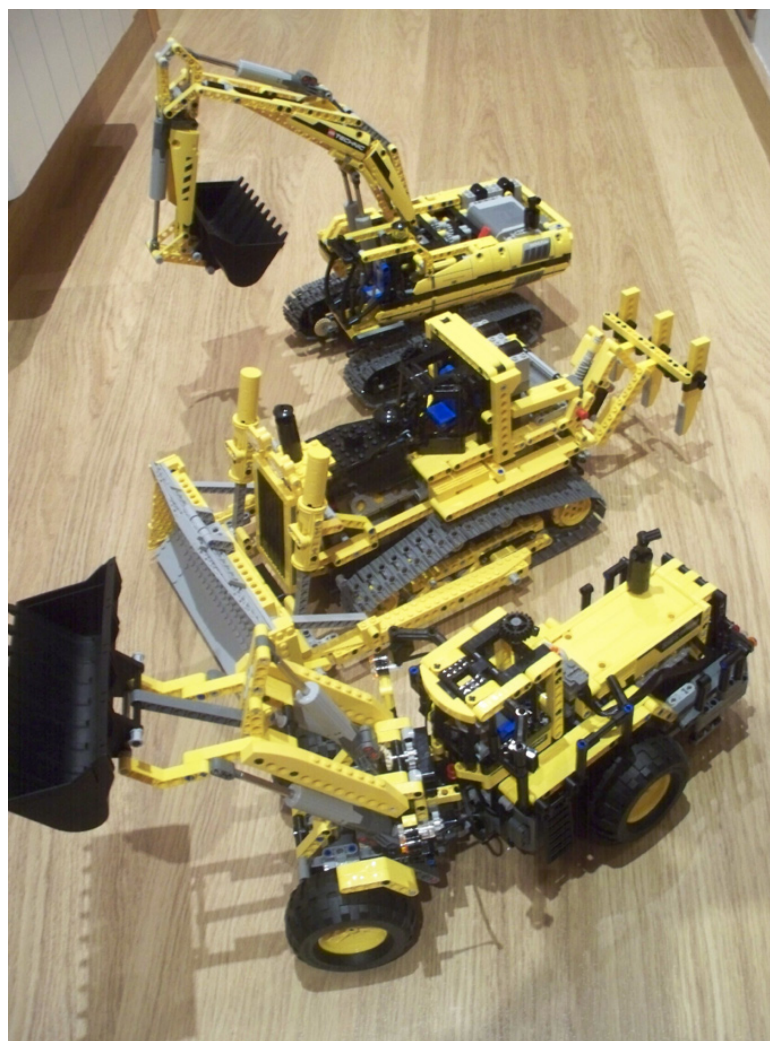
As I have said, the result is virtually impossible to improve. Absolutely everything in the excavator is remote controlled. And it's a great kitchen help... to put the chickpeas in the pot! But seriously, It's a perfect set, and it sets the bar very high if ever LEGO wishes to make an even better one. As a matter of fact, I have only built it twice, the second time 2 years ago. And it is still in the display cabinet in my living room, right next to the Lladro figurines. It is obvious which is the most highly valued element in the display case, isn't it?

COMPILATION

By way of epilogue, I would like to highlight a more humble set of smaller size that I haven't mentioned so far. It isn't motorised, but it has all the mechanisms that will provide hours upon hours of fun building and playing. It is set number 8069. With a front bucket, rear arm, stabilizers and mini LAs. An exceptional price/quality relationship.



Little can I add to what I have said so far. Some sets provoke nostalgia (856 and 8862), others are powerful, functional and real (8265, 8275 and 8043), others are complex (8455), but they all add something to the history of this mythical theme.
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LEGOSTAR GALACTICA

By HispaBrick Magazine®

Pictures by D.M. Jeftinija PH.D.

About nine years ago, during a period of my professional life when I worked in shifts, I discovered LEGOSTAR GALACTICA through a link on the famous blog The Brothers Brick. And though I had accumulated two years of comics to read, that did not discourage me and I started from the beginning, as it should be. It became one of my required readings during night shifts, seduced by the irony that already prevailed in those early years. I did not know how to express my thanks for all these years of daily effort, so here's my little tribute in the form of an interview with its creator D. M. Jeftinija Ph.D.

HBM: To start off, tell us a little about yourself and how your relationship with LEGO® bricks started.

LG: My parents started buying LEGO sets for me when I was 4 years old. When I was little my mother would build the set (6073 Knight's Castle primarily, I'm pretty sure that was my first set if not one of the first) and then I would destroy it and we'd repeat that pattern until I started building on my own. I always liked building expansive things, cities, castles with villages nearby, I had a lot of space in the basement of the house I grew up in and spent a lot of time building various things as I gained more and more bricks.

HBM: How did Legostar Galactica start?

LG: Since around the summer of 2000 when I first discovered webcomics I wanted to do one of my own, but I've never been very good at drawing and never had the time I wanted to practice. By summer 2002 I began to realize that I didn't have to be able to draw well, there were lots of comics that found ways around that and I had a huge collection of something I could use. The very first comic I made was intended just as something to make a friend of mine laugh. He found it very amusing and so I made another one for the next day, and it just kinda kept going.

HBM: What is your method when creating a story? How long does it take you?

LG: My methods have matured over the years, but the writing has always come first. I used to plan out comics one week at a time and write the text directly into Photoshop, since then I've put it into a program called KeyNote that helps me keep everything organized and gives me a chance to actually spellcheck (though I still miss things). Once I start writing it usually doesn't take me long to come up with a full 15 comic storyline. I have ideas stacked up for a couple of years in advance but I get the writing done anywhere from a year in advance to a week in advance when I get behind on things. Once the writing is done I pull out the sets or build new ones as the plot dictates. Building new sets is probably the most time consuming part, but once that's done I can get the pictures taken pretty quickly, imported into the proper Photoshop files and then adjusted and the pacing set up. I add the text and special effects once that's done. I tend to do things in stages. For example I'll do the writing for a couple of storylines one day, then a few days later I'll do all the photography, and then

over the course of a couple more days adjust the files as needed. When I first started I had no problem getting 5 days of comics done in an hour or two on the weekend, I doubt it takes me much longer now, it's just more spread out.

HBM: Where do you find inspiration for the stories?

LG: EVERYWHERE. TV, Movies, Books, Real life, games, anything and everything. My wife has inspired quite a few of the Second String comics with rather strange conversations we've had. Sometimes weird ideas pop into my head and try desperately to find ways to put it in the comic. I'm always looking for new things to inspire comedy or drama for the comic.

HBM: Although there have been many turns in the story - parallel stories, jumping in time, etc. - in 11 years of daily stories, how would you describe the main storyline in the comic?

LG: The lives of a starship crew that seem to be magnets for trouble.

HBM: Over the years there have been comic references to all adventure and science fiction movies imaginable. IS there any movie you have "pending issues" with?

LG: Well I don't want to give away too much, but I have plenty of ideas for things I haven't done yet, Dune for example, the Magnificent Seven, and I've done "episodes one two and three" so obviously I'm going to do "four five and six" and I guess since Disney is moving on with the franchise I'll have to come up with some kind of humor around the new episodes. I'm not sure how I'll manage.





HBM: What is your favourite character and why?

LG: Probably Belinda because I feel like I've done the most development with her and she's the most conflicted and complicated member of the crew.

HBM: The main characters have been in the series since the start 11 years ago. Have you ever been tempted to give any of them a "Game of Thrones" like exit?

LG: Please, I've given Red a "Game of Thrones" like exit on multiple occasions. It's not my fault he keeps coming back. Actually I'm very attached to my characters. I've only recently read the first "Game of Thrones" and while I feel it's very well written I'm a little jarred by the exits. I like my fantasy and sci-fi to be less like real life where anyone can die. I wondered for a long time how so many show and movie and book characters could get into so much trouble and survive until I realized something important. That's why the stories are about them, if they didn't survive every time (or most of it anyway) they

wouldn't be the heroes at the center of the story. Besides, there's worse things than death that you do with a character and still keep them around.

HBM: Why did you decide to create two comics that are (more or less) independent from the main one to publish on Saturdays and Sundays?

LG: Summer 2009 I managed to finish a year's worth of comics ahead of time so that I wouldn't have to go on another hiatus when I moved back to the States from Canada. It only took a few months to get settled back in and I found I had nothing to do for the comic for around 8 months, which was when I realized I had so many one-off jokes that wouldn't really fit all that well into the main comic. That's where Sunday Second String comics came from. I was also approached by Star Pirates earlier that year about add space. Since it went so well for both of us I suggested a more permanent add campaign and when they agreed I also decided to do a regular Saturday comic with crew members playing Star Pirates for added advertising and fun. Like everything else once I started doing that, along with the vote incentive comics I just can't seem to stop.

HBM: What does your family think of all this?

LG: My mother and wife are very supportive (both of the comic and my LEGO® purchasing habit), my father doesn't exactly understand it but he's gotten more supportive over the years. I think his initial response when I told him how many readers I had was if he could sell some of the fish he was raising over the internet via my site. So, if you or your readers are in need of carp...

HBM: How many times have you felt you couldn't go on? What has helped you to continue?

LG: There have been times I've considered cutting back, but I don't think there's ever been a time where I didn't feel like I could go on. I've still got stories to tell and I want to tell them. The only reason I can think of right now to stop would be if I decided to do a different comic, several of which I have in my head and just don't have the time to do. I would really like one day to do a comic that is already written from beginning to end by the time I start it. If you think I plan out things now, imagine if I had it all planned out from the beginning.

HBM: What future is in store for Legostar Galactica?

LG: More of the same, really. Comedy, some drama, I've got some big storylines planned, but obviously it's more fun if you see them unfold rather than me blabbing about them. I would like to expand my reader base and I'm constantly trying to do that, I've not fully figured out how to go about making social media work for me just yet. Ultimately I just love telling stories and I love telling them to as many people as will listen. I would like to continue to do that in any way that I can.

<http://www.legostargalactica.net/>
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Game of Thrones display

By Jonathan Petrongari

The Inspiration

When I saw the TV show Game of Thrones for the first time (April 2012) I immediately knew what I wanted to make the year after for the RomaBrick events. I was enchanted by the majesty of Winterfell, the history of those mighty walls, so I started designing it in my head. Before seeing it on TV I did not know the saga which inspired the television series so much. It was a first for me as a fan of fantasy.

The birth of GoT Diorama project

After the success of our event ItLUG RomaBrick where we presented our medieval diorama in RomaBrick – ItLUG Latina 2012, together with Marco Cancellieri, Jody Padulano and Federico Micocci, we started by sitting around a table to organize the areas for the new Castle diorama inspired by the saga of the Songs of Ice and fire. The areas were divided in the following way: Mark would have created the imposing barrier of ice called The Wall with the Black Castle of Nightwatchers; I would build Winterfell, the great North Castle, home of Stark, Jody and Federico Frey of the Twins stronghold. We immediately realized the majesty of the project; each area was formed by a minimum of 24 bases of 48 studs to form a 6x4 rectangle. We decided to concentrate our efforts

on recreating the northern part of Westeros, trying to be faithful to the story. The idea was to develop each and every area in a completely autonomous way; only the boundaries were decided together with the presence of a road (King's Road).

What does the future hold?

The project will continue to expand. At the events in Ludica Rome (29-30th November, 1st December) and Porto San Giorgio (7-8th December) we will introduce a new part by Maurizio di Palma who will represent Moat Cailin. For the next year, in Latina 2014, there will be two other modules that will allow the diorama to reach nearly 27 m2

The Wall and Black Castle (Marco Cancellieri): The great wall of ice, over 300 meters high, was built to defend the Seven Kingdoms from the invasion of the undead, the "Strangers". At the time in which the story takes place it had already existed for thousands of years. I built my own version of the Barrier using over 20,000 white bricks and various other bricks, bought by weight, that make up the internal structure. The width at the base is 5 studs, large enough to guarantee a certain solidity. It consists of 5 basic block panels of 48x22 studs wide and 70 brick high, meant to be placed side by side. The build time was 2 weeks.



The Black Castle is the headquarters of the Nightwatchers who defend the civilized world from what lives beyond the Wall. Watching the TV series I was convinced that the castle of wood and stone, now in ruins, very small compared to the wall of ice that emerges majestically behind it, demanded to be built entirely in plate. I already had a lot of material at home and using plates would also be more realistic. Paradoxically, the construction time was much higher than the two weeks of the biggest "barrier", but we are very satisfied with the success! Taking an approximate count the entire area of 30 48x48 baseplates is expected to contain around 80,000 parts.

Winterfell (Jonathan Petrongari): Winterfell is the biggest castle in the North, house of the noble Stark's family. The castle creation was influenced by two factors, dimension and creation

of modules that would be easily transportable in standard boxes (40x40x40cm). This made it necessary to first create an LDD version in such a way as to structure the walls so that they could be independent in each module, maintaining the geometry of the arcs present outside. This has determined the shape of the castle and the use of some techniques at the expense of others. Honestly, I lost track of the number of the parts used for the construction of Winterfell, however I could estimate a number close to 45000. I tried to be as faithful as possible to the TV version. It's easy to recognize some of the famous areas in the castle such as Godswood, the training camp where Joffrey challenged Bran, the Broken Tower, Hunters' gate and Winterfell Great Hall. It took me 4 months to finish it, unfortunately the time available was not enough; at most I could work between 8 and 12 hours for week and I collected the pieces between August and February. The peculiarity of this creation is that every single base is treated in detail, starting from each steam for the flowers up to the plate for the decorations on the walls. The construction took longer than I expected because of my continuous pursuit of detail, which slowed down building speed considerably. The Winterfell area is large, 24 bases of 48 studs (5.19 m²). The castle occupies 16 bases with a total area of 2.30 m². For the event in Ballabio I created a special module that contains the Cave of the Brotherhood without Banners and for the next year I'll create a small village outside the castle.

Jonathan Petrongari is the RomaBrick's Ambassador and a fan of LEGO® since he was 4 years old.

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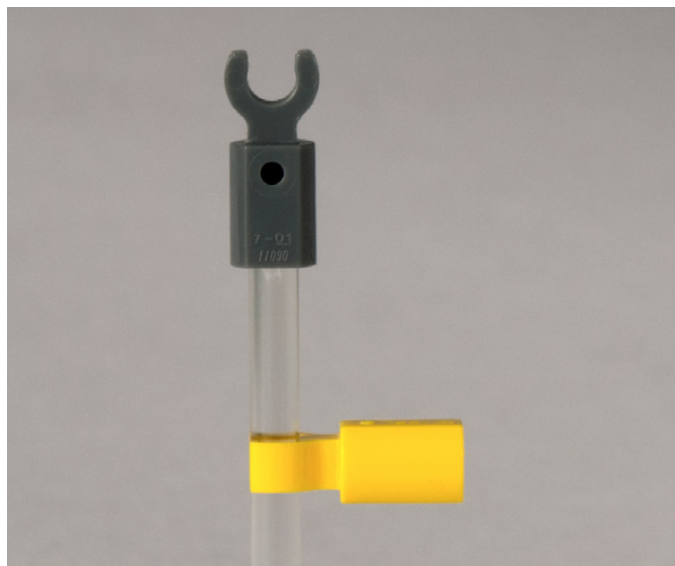
2013: a year in parts

By Tim Johnson

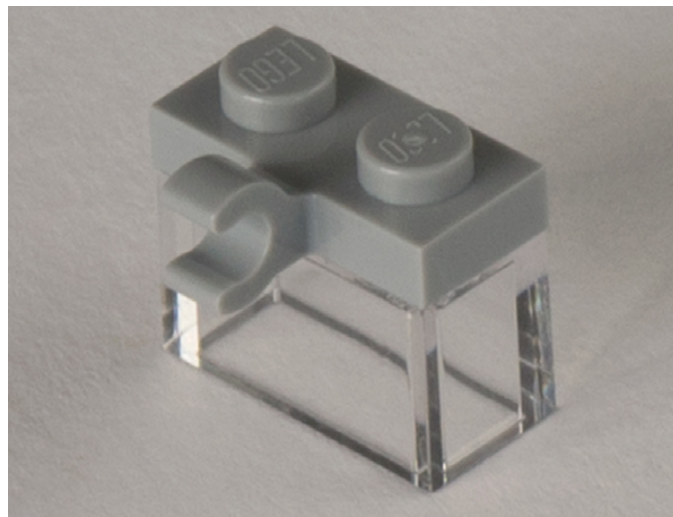
Something I really hate on the internet at the moment is the glut of picture-based articles with titles like “22 Things You Really Need To Look At”. What irritates me is - I obey and I look at them. What is the human obsession with numbered lists anyway?

Just needed to get that off my chest before I... um... how can I say this... well, here are 13 New Parts From 2013 Sets That You Really Need. Not a complete list by any means; just the ones I think are the most useful or beautiful, and great inclusions in your parts collection. They're in no particular order.

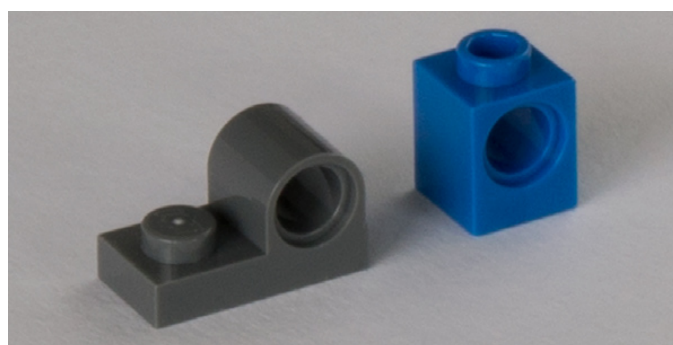
It's been a great year for small parts - and this little clip is about as small as they come. There are of course a great number of small parts with clips already, but this one has a hole that fits a bar. With so many parts having bars, and of course the ability to rotate the clip 360°, the possibilities are effectively infinite. In terms of functionality, I think this is the most useful part of 2013. They also have aesthetic use – they make great hands or claws! Currently they come in Black, Dark Bluish Gray and Yellow.



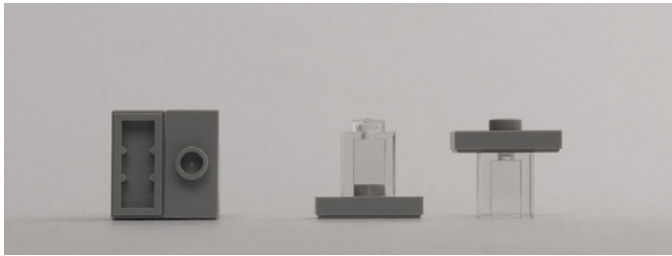
Here's another addition to the world of clips. Nowhere near as exciting as the last, but excellent nonetheless, as this plate with an offset clip will help you out in some tight situations. For example, set designers have been using these to attach handlebars to little vehicles; it's smaller and more stable than using a 1X1 clip on a jumper plate. A similar brick (95820/30237) has been around since 1999, but having a plate version is of course preferable.



This part is another that bases itself on the 1X2 plate, for the extra stability that brings. Essentially it does what a 1X1 Technic brick does, but without requiring the addition of a stabilising part on top. And of course the pin hole is of the Technic beam style rather than the Technic brick style, meaning greater flexibility. I'm no master of Technic but this is definitely a useful piece for everyone to have. Aside from all that – it just looks beautiful on its own! It could be a very interesting decorative piece.

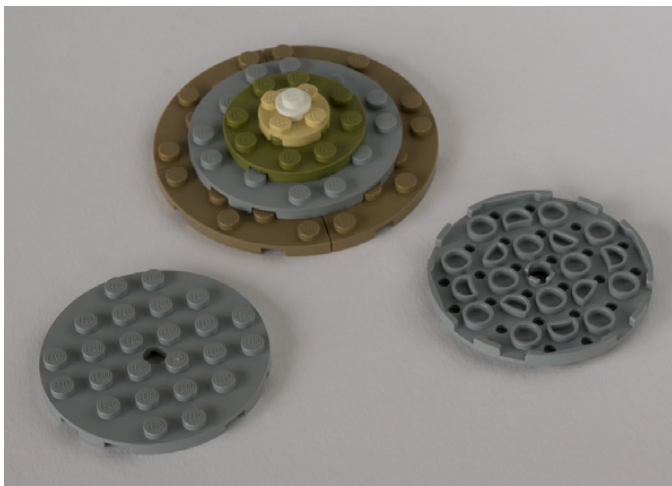


They say that you can't teach an old dog new tricks, so I guess it's best to replace your old dog with a puppy. The beloved jumper plate has been helping us to build 'off the grid' for 35 years now, but the new mould for 2013 has added functionality: as well as centring parts placed on top, you can now centre parts placed underneath thanks to the addition of the 'nail rail'. Of course the humble 1X2 tile allows the same effect, but the new jumper plate offers stability and of course the option to continue building on top. At time of writing these have appeared in White and Light Bluish Gray, but will certainly get rolled out across all required colours over the coming years.

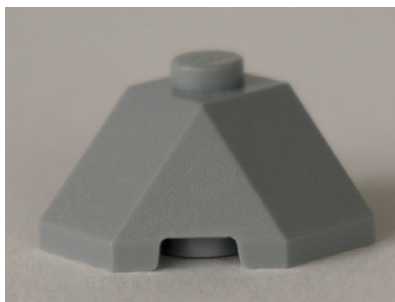


1980 saw the introduction of the 1X1 and 2X2 round plates but it wasn't until 2008 that the family grew to include the 4X4. An 8X8 is easily made with four of the 4X4 quarter-circle plates (introduced in 2001), so with the addition of this 6X6 in 2013 it feels like an important gap in the family has now been filled – especially as it matches part 48092, the 'large macaroni' brick. But the round plate family still has areas ripe for expansion – one of my favourite parts of 2012 was the 4X4 with a large 2X2 hole.

It's arguably the simplest part in this list, and that's a nice thing. It's great to see that half a century on, there are still basic parts to be created. It has almost always appeared in Light Bluish Gray - the exception being that we got a Medium Azure one in 41008 Heartlake City Pool. Medium Azure is denoted as a "Friends colour" and 2013 has seen significant expansion to part availability including basic bricks and plates.



At last, the perfect way to top off a wall that has a faceted corner. All sorts of 45° slope bricks have been included in the LEGO® inventory since 1958, including some that have since been discontinued, so it was a little surprising when this new one turned up – but of course welcome. Even more surprising is the happy accident of geometry that results in one side being a perfect equilateral triangle. It's only been in four sets so far, but happily in three colours: Blue, Dark Brown and Light Bluish Gray.

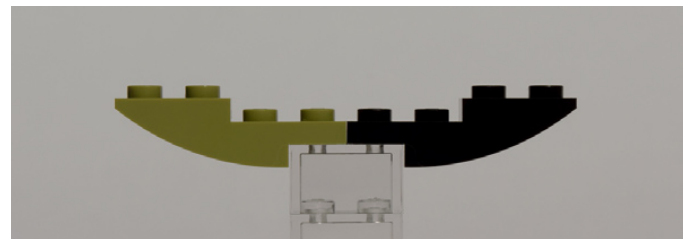


This ice cream cone is far superior to the goblet that minifigs are regularly seen eating ice cream out of. But in fact no minifigs have officially got their clippy little hands on this great new part as yet; to date it has only appeared in two Friends sets and a Friends polybag. This will change in 2014; set 70804 from The LEGO Movie is an ice cream truck that uses

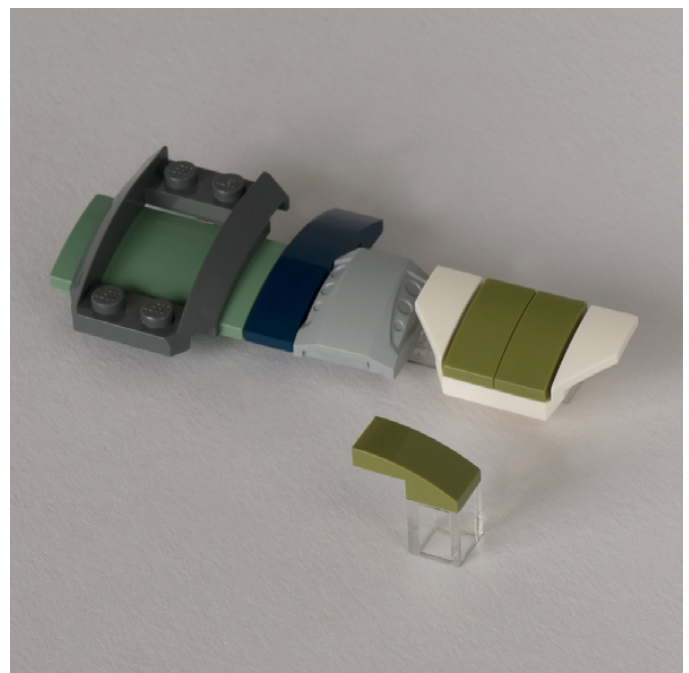
this part. An inverted cone is not common in LEGO and quite aside from dairy trade retail applications, is a very fun piece to build with. Tan is a good colour for architecture and this shape certainly has some uses there. But we're desperate to see this in more colours, right? Even just bley, for the spaceship builders. They love a cone.



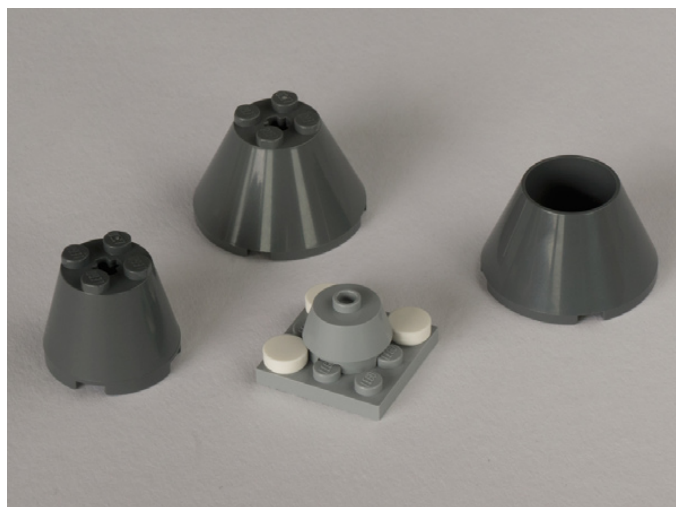
More inverted goodness here. This new curve is almost a mirror reflection of the regular 1X3 bow, 50950. Although the curve is very close to the existing 1X6 inverted bow (42023), it's great to have a new inverted bow – especially a smaller one. The staggered rear end might look odd, but it's quite clever: it allows the part to be secured above and below whilst still remaining only one brick tall. So far it only comes in the two colours shown here; Black and Olive Green.



The category of curved slopes, or bows, has seen great expansion in recent years. This 'baby bow' has been all over the place since its appearance in the summer – it's already appeared in 15 sets in White, Olive Green or Dark Bluish Gray and plenty more colours have already been spotted in 2014 sets. Aside from the obvious benefits of having such a wee curved slope available, it also seems to get used in official sets as a simple way of additionally securing a plate onto a larger plate. As shown here, its curve matches other existing bows, and this family is growing fast - a 2X2 version (15068) will soon be with us.



I'm cheating a little by including this - it's not a new part, as printed versions appeared in many 2012 Star Wars™ sets. But it is a new element, in that 2013 saw the introduction of this part without any printing on it, in White and Light Bluish Gray. BrickLink named this part a 'truncated cone', which is a good description... and yet it sits in their category of round bricks. Arguably, it should reside in the cones category where you'll find the other truncated cones pictured here. Nomenclature aside, it's a lovely piece with some unusual features. Namely; the diameter of the top (which is about 1.5 studs), the slightly recessed base (like the 1X1 cone has, but the 2X2 cone does not), and the larger 'notch' holes at the bottom. These larger notches allow it to do something rather mysterious – you can offset the part by rotating it 45° and centring it directly on a stud, as shown in the pic. That little trick isn't unique to this part – you can also do this with the 2X2 round brick with grilles (but not the regular smooth 2X2 round brick). But the truncated cone can do something the grided round can't – as shown, the recessed base allows 1X1 round tiles to sit alongside. What use that is, I don't know, but I hope you find one!



Sticking with truncated parts, here's a truncated half-arch. This excited me more than any other new part this year. Mostly because I've always loved arches (oh how I coveted the plethora of yellow arches in my sister's 375 Castle) but also because two of these make a Gothic arch! This is wonderful news for church builders, but of course releasing a church is something LEGO® have avoided (since 1958 anyway). Instead, this appears in three Lord of the Rings sets, in Black or White. Happily, Gothic arches are not locked to usage solely within this licensed theme; single ones are used as support structures for roofs in City's 60020 Cargo Truck and



the forthcoming 2014 Modular, 10243 Parisian Restaurant. But I know what you're really all desperate for: pink ones, yeah? Fear not. Those will come in the craziest 2014 set yet seen (or indeed, probably ever seen), 70803 Cloud Cuckoo Palace.

Some decorative parts to finish and fittingly enough they come from the Decorator, from Series 10 of the Collectible Minifigures. For me this figure was all about the accessories. His paint roller handle, with its interesting bends, instantly became favoured by Spacers, for greebling or an interesting corner in pipework.

Secondly, his paint can is a new design. The top is identical to the existing 1X1 bucket, 95343, but the sides are straight instead of tapered. Note also, there's no recess at the base like 1X1 round bricks have. So, ignoring the little lumps where the handle attaches, it's a perfect cylinder that is a bit wider than a 1X1 round brick. This makes it an attractive part for detailing, however its usefulness is severely limited by its top, which doesn't connect to anything nor does it allow a 1X1 round brick to slide within. A shame, as this would have made it an extremely interesting part – and even more so if there was a stud in the bottom.



So that's the best of 2013 – well, my favourites anyway. I've listed these 13 parts online in this Wishlist, a neat feature of the Brick Owl site. As for 2014, it's already shaping up to be an amazing year for parts, with the introduction of a new friction ball-and-cup connection system, which has been in development for years. I can't wait.

Tim Johnson is the author of the blog New Elementary and has built for DK Publishing's recent release The LEGO Play Book: Ideas to Bring Your Bricks to Life.

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

Low Light Photography and Practical Lights Effects

By Simon Liu

Warning, this is not for the faint of heart, many of these results can be done by simple photoshopping, and it might be much faster. But do you get a better result? That's up to you, but I believe if you can do it for real, it looks that much more real (or even surreal).

Let me preface and admit that I am not a photographer, I have never studied photography, and while I'm somewhat familiar with the concepts and science - I am by no means an expert. What I am is lazy - I know the bare minimum to get cool pictures. So what does that make me? I would say I have practical experience. I have a bag of tried and true tricks that have historically worked for me. The object of this tutorial is not to talk about the theory of low light LEGO® photography, but to share my practical tips and a layman's how-to guide to shoot in the dark.



Lighting Overview

Before going in depth different ways to light (or lack thereof) your build, there are roughly 5 types of lighting strategies I will cover:

- **Ambient light:** This is the amount of light in the room anywhere from bright, to low to even none.
 - **Embedded light:** Lights that originate within your actual build.
 - **Directional or Spotlight:** Using an additional light source to provide light to a specific area of the build
 - **Special lighting:** Using coloured lights to change the mood of the picture.
 - **Black Lighting:** Special case of special lighting, with glowing results!
- More on these in the next issue!

Your Build

Wait, build? I thought we were talking about how to shoot and using fancy light? Well we are, but before you photograph your build, you have to build it! And before you build it you have to PLAN on how to build it.

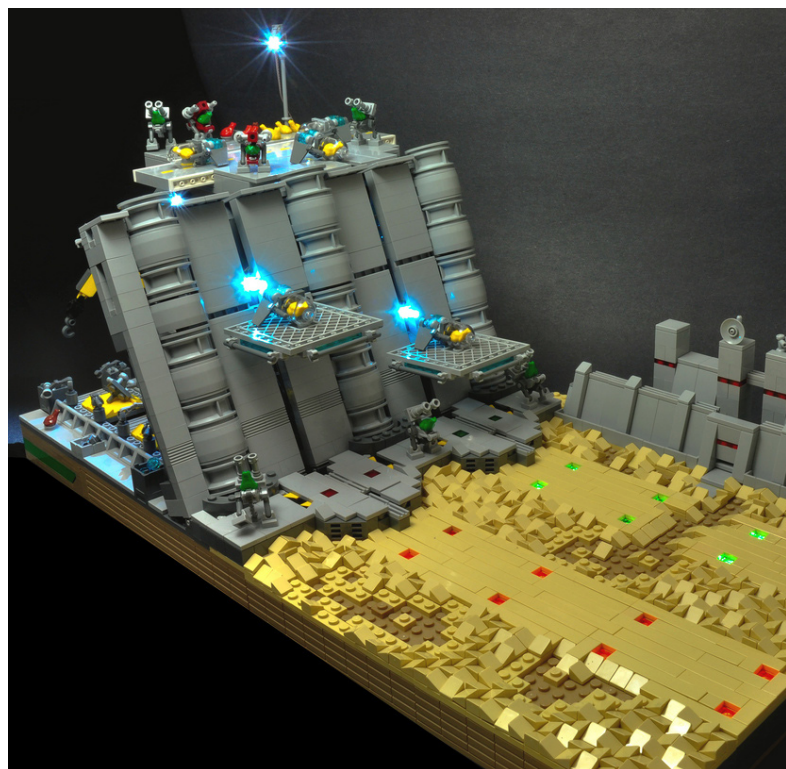
This is probably one of the more important keys to low-light LEGO Photography. You have to build your MOC to suit what method you may use. If you're going to use embedded lights, well you have to put them in ahead of time! Do you have small lights? or big lights? You obviously can't put a massive light into a micro, but you could put in small lights with wires hanging out (to Photoshop out later).

Or if you're going to use black-lights, well you need to use one of the LEGO elements that glow!

Other things to think about when you're building - which angle(s) will you be shooting from? Do you need to hide wiring? or even where the lights will be. Do you want to actually see the LED/Light bulb? or do you want it hidden/away from view? Don't forget that if you're shooting at really low light, even the weakest light will wash out all your other details - so light placement will be key.

As you start off, remember: patience.

This will take time for you to set up, to photograph correctly, and often rebuilding to get things 'just right'.



Required items.

Before you start there are few things you need to have, and know how use.

Mandatory:

- Patience

This is the most important thing to have. It takes time to set up, it takes many shoots, and it can be frustrating. So have patience and just know that it will look cool in the end.

- Camera!

Most cameras, even the smaller pocket cameras have the ability to set the shutter speed - which is the amount of time your camera 'takes a picture'.

This will become important, as the darker the room, the longer picture you need to take.

Some cameras will have a "M" or Manual setting that lets you configure the shutter speed, as well as FStop (or aperture and other fun things). Alternatively you might have a "S" (Shutter priority) setting that controls just that, and the rest are automatically. Note that the FStop is also useful for certain effects.

If your camera doesn't have a "M" setting or "S" setting your best bet is "night time" or "stars" setting - that's the camera's setting for low light, not the best, but it can do in a pinch.

- Tripod!

If you have ever tried to take a picture without a flash in a dark place, you'll know why you need a tripod. Simply put, our hands aren't steady enough to hold a camera to take shots in the dark. Even braced against something we vibrate the camera too much and it becomes blurry (unless you're into that).

Any tripod will do, it doesn't have to be super fancy, or honestly you could use a stack of books, it just makes it harder to reposition and set up. But for me, I have cheap ball joint tripod that lets me quickly rotating the camera and change angles.

Pro Tip said:

Your camera probably also has a timer function (think family photos where your dad sets the timer and runs back into the picture). I would recommend learning how this works on your camera and set it to the lowest possible setting (3s usually).

Why?

Because when you take the picture, you push down on the camera, that causes vibration and can be picked up on your picture - especially if you don't have a very good tripod. This also allows you to free your second hand in case you need it for something else (like holding up a light source!).

Expert Tip (for DSLRs) said:

Some DSLR cameras have delayed shutters - this is overkill, but still cool trick. Since SLR's have a mechanical shutter, the opening of this shutter also creates minuscule shaking. What this setting does is will open the shutter, wait a second or two, THEN take the picture. This is pretty much useless for LEGO purposes. It's mainly useful for silly things like photographing points of light... like moons of Jupiter (yup, you can shoot them with a 300mm lens) - but still cool

Optional:

- Light sources

Depending on how you're going to light your build, you may need external light sources, you can use your standard lights, LED's, flashlight, laser pointers, black-lights IR from remote controls, whatever creates light that is visible to a camera. Try different things for different effects!

Pro tip said:

Having the camera on timer frees up your hands so you hold your light sources.

- Light Tent

Ironie eh? But a light tent is still useful. The purpose of a light tent is to disburse light over your build, this rule still applies, you're just not applying AS much light.

Lighting Explained

I will now go through each of the different lighting techniques. Of course for maximum fun you could apply several of these techniques together to create a master piece!

Ambient light

This is the easiest and most important trick that you need to master. Simply put: turn down/off the light. This by itself isn't usually overly useful - if you set your camera right it is almost the same as taking a picture with the lights on. The key here is to change the shutter speed of your camera to take a longer exposure picture.

A regular picture is around 1/60 of a second. If you dim the lights, your picture might be 1 second or longer.

Why this is so important is when you start using the other lighting tricks. You do this to make the OTHER lights seem brighter than they really are. So a very dimly lit fireplace, using normal room lights is barely noticeable. But if you turn off the room lights and set the shutter for 5 seconds and it becomes a roaring fire.

Knowing how to set the shutter speed is also useful for every day MOC taking pictures. Many people prefer to take the MOC's outside to photograph, the sun provides extremely bright light. But if you know how to set your shutter speed accordingly you don't need to wait for a sunny day!

I routinely use long shutter speeds even when I have my large photography lights and light tent...

Embedded light

I hope you were paying attention to the build section. Cause if you've gotten here without adding lights inside, it might be too late

Generally there are two types of lights that can add within a build:

- Small LED's such as the Power Function lights or third party Lifelites.

- Larger less specialized lights can also be used - these are far cheaper than the above and work far better lighting up large areas - downside is you need a lot of space to hide these.

An example of a build that uses a standard LEGO® light brick (in the hallway):



An example of a build using cheap LEDs:



Of course you can start combining tricks - such as lowering the ambient light level so that we maximize the lighting effect, the same temple, with lowered ambient light:



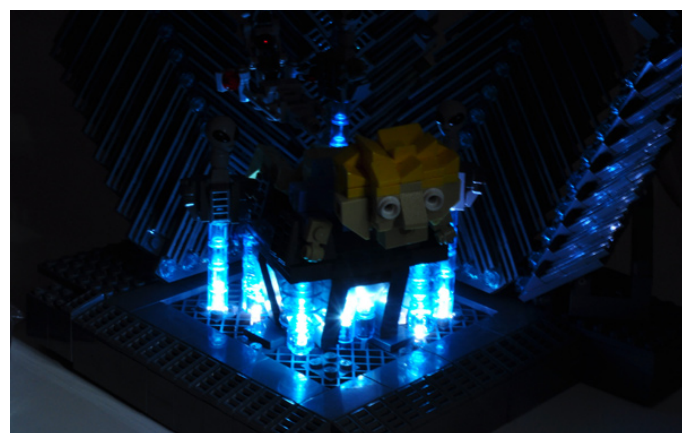
Note how changing the ambient light changes the entire image feel.

In a large enough layout you could even use a combination of smaller specialize LED's and cheaper ones, like here:



The inner ring of the station is lit up by LED light bars that from dollar store.
The rest are light bricks, and Lifelites.

The key to photographing embedded lights is to do a proper light balance - between the ambient light and the embedded light. Here is an example where the embedded light is actually TOO bright relative to the ambient condition:



I turned down the embedded light (switched from wall mount to battery power):



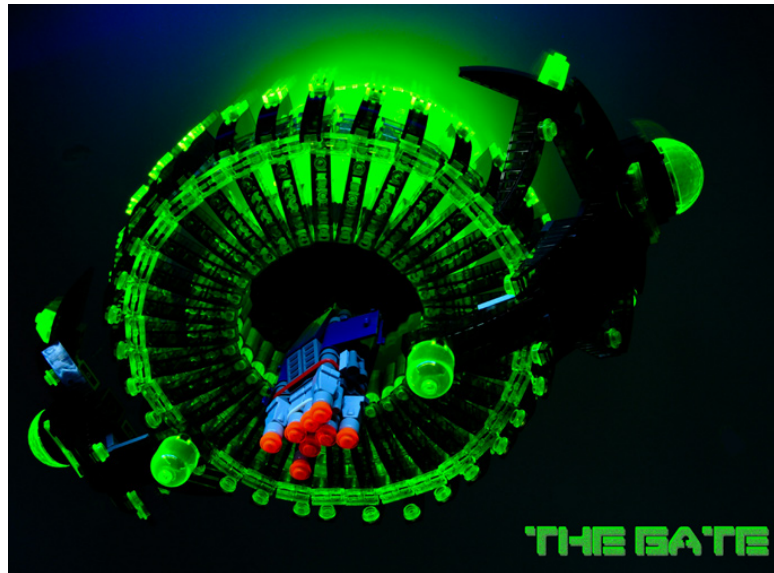
Better!

Now you can see that if I retook the second picture with a longer exposure, it'd be just about right. But the first shot, if I decreased the shutter speed (faster picture) it would be too dark, and the light would still be too bright, so I would have to turn up the ambient light to compensate.

Black-Light

My favorite trick is probably the Black-Light, it gives such a fantastic glow to an otherwise flat picture. Though not all pieces glow - mainly the trans-neon colours. Some pieces that you wouldn't think glow, actually do, take a black-light and go over some of your pieces, you'd be surprised

When you build a black-light MOC - you should think about where and how the black light will be situated and where the camera will be. Another fun trick is to build chunk of the build in a clear brick - so that the black light goes THROUGH your build (see title images), or alternatively situate the light UNDER your build:



Pro Tip: When you shine a spotlight, make sure the light doesn't hit anything else! Direct your light up and away from your build whenever possible.



The black light is actually sitting under a glass table, and there are 8x8 grill plates under each vat and a pile of neon orange dots and pieces to create the glow.

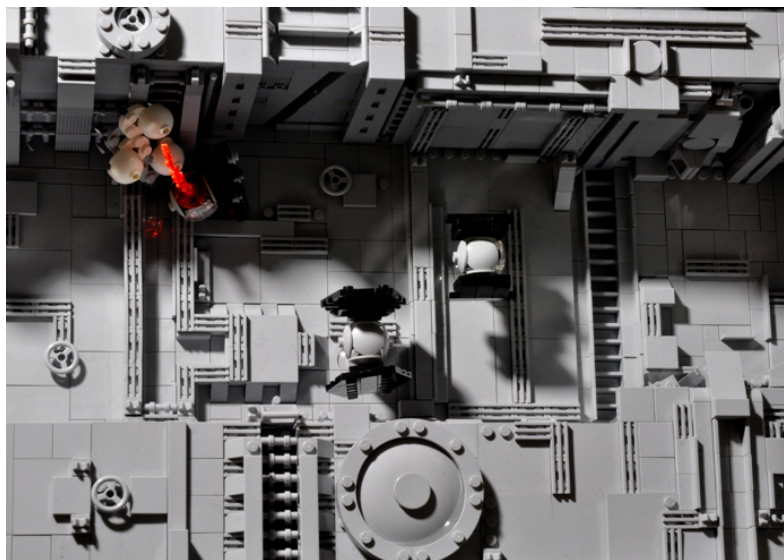
Pro Tip: Get a good black-light. Stay away from the ones that fit in the light bulbs, they're rubbish (usually), get a good old fashioned tube one, they're by far the best.

Directional or Spotlight

Another trick is to shine a light on specific parts of a build. This obviously should be done in conjunction with low ambient light. You can use this to flush out or highlight the subject of your build, while not ruining the lighting effect behind it.

Here, because I had the gate glowing from black light I didn't want to wreck the feel by lighting it up too much. But I wanted to make sure the ship is the subject. So I took a little LED flashlight and lit up the ship.

The other method is using harsh light in one direction to forcibly create shadows. Not overly useful, but it can create some stark pictures.



This entire build is light-bley but you can clearly make out the details.

Special lighting

Last but not least you can use some special coloured lights - like black light, or simply coloured filtered in front of lights. In the past I have used trans coloured LEGO pieces in front of a flash light to add a glow to a build.

Or you could even prop up a laser pointer to create some pew pew action!

One of my most ambitious shoots include all of these:

This shot included every trick here, except black-light. It took me several nights to get this particular picture, by the end there was a entire procedure that took 60 seconds per attempt to align all the tricks:

Laser pointer (not too long otherwise it over-saturates),

No ambient light - pure darkness.

Spotlight - to shine the ship and highlight the space marines

Special light- the background (white backdrop) was actually lit with a light trans red plates to create a sunset type feel.

Pro Tip - another way to change up the feel of your picture without changing the actual light, is changing the "AWB" or Auto White Balance of your camera settings (what your camera 'thinks' is white. An incorrectly set AWB can be useful, but most of the time annoying

Conclusion

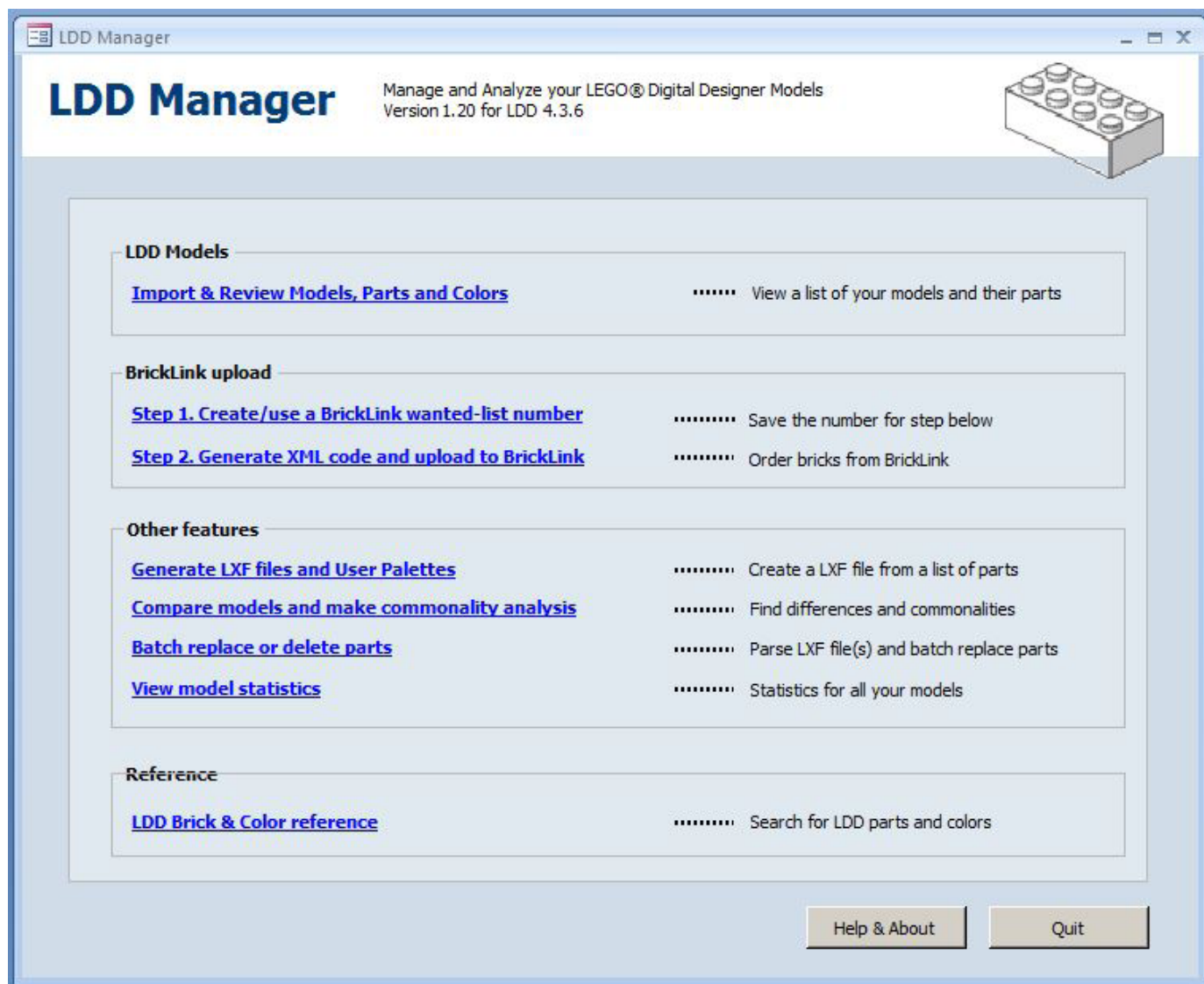
So there you have it. Every single one of my tricks. It's not the easiest thing to do, but it's not really that hard either.

The key is patience.

Take the time to experiment and try new things.

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LDD Manager

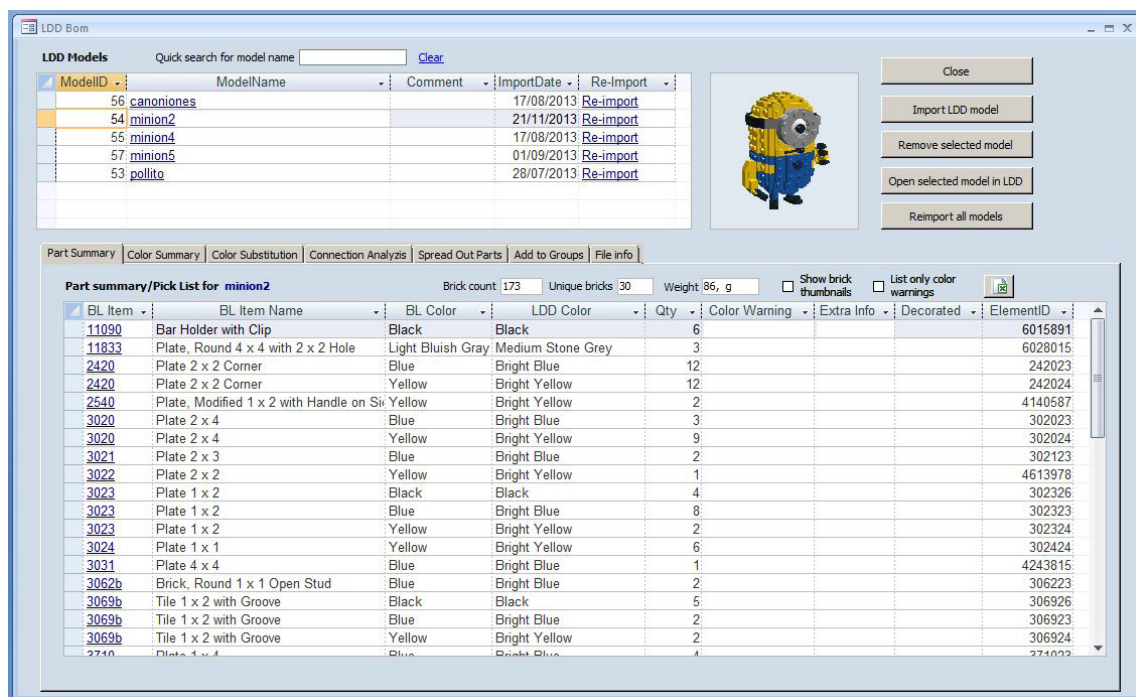
By HispaBrick Magazine®

Pictures courtesy of Superkalle

I am a virtual constructor by necessity, not for convenience. My parts collection is limited because unfortunately I lack the necessary room to store a large collection of them. This has led me to design the models which arise from my imagination in LDD (LEGO® Digital Designer), to order only the necessary parts for the model and reduce stock space to a minimum. I'm not going to say that this is the better way to build but I'm sure it's better than not building at all.

The way to get the needed parts list has evolved over time. At first it was handpicked. Arduous, error prone and useless for many piece designs. Now everything has changed for the better. Even though it sounds like an ad for teleshopping, since I discovered LDD Manager my relationship with LEGO is much easier.

LDD Manager is an application that lets you extract information and analyze LDD files. It has a number of functions that should be in every LDD user's Swiss Army Knife. The feature that pulled me and why I downloaded the application is the possibility to create a list file with the parts of your model.



Once you install the application (you need Access or a free runtime) and open the desired LDD file, a list of parts that are included in your model appears. An alert system warns you about the parts that don't exist, very useful because sometimes while designing you forget which parts exist in each color.

Just with that it had won my heart, but then I discovered a set of tabs that let you do more checks on your model (if all the pieces are connected, change colors, ...) and the possibility to export to Excel. I had almost decided to nominate it as the best application of the year when I found out it could also upload your parts list to a Bricklink Wanted List. Awesome. For a purchase sharpshooter who only buys what he needs this was the ultimate feature.

Then there are other features that are more obscure to me, like creating your own palettes of parts, to generate a LDD file from your list of parts, etc. ... maybe functions for a more expert user than the one who writes this article.

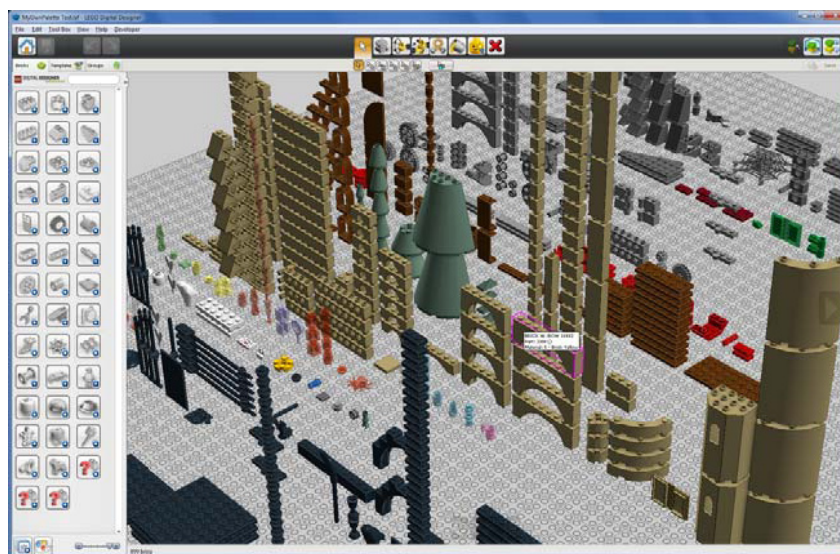
The application is simple to install and uninstall and the developer keeps it constantly updated (I'll never thank you enough, Superkalle) also taking care, in the corresponding Eurobricks thread, of the doubts and errors that you may have. It seems an easy job but it is not. Not only for each new version of LDD but also because of the constant changes in the ID of the parts.

Using the application is simple, and, despite having many functions, it is easy to get what you want when you want it.

Its creator is Johan Sahlström, and is well known in the Eurobricks forums as Superkalle. The thread to read more and find the download link is here:

<http://www.eurobricks.com/forum/index.php?showtopic=41993>

#



Miniland Building: MINILAND Character Build

Extended GuideLines Part I - Introduction

By Didier Enjary



The purpose of this series of articles is, first, to introduce you to the little people who populate the MINILANDs, these miniature worlds that are part of the LEGOLAND theme parks, but also to encourage you to explore them for yourself by explaining how to design and build your own characters.

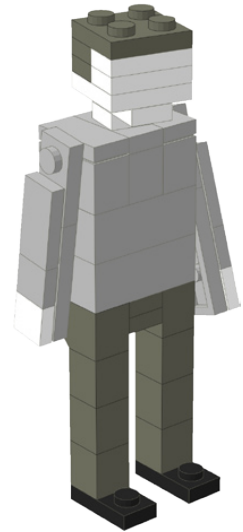
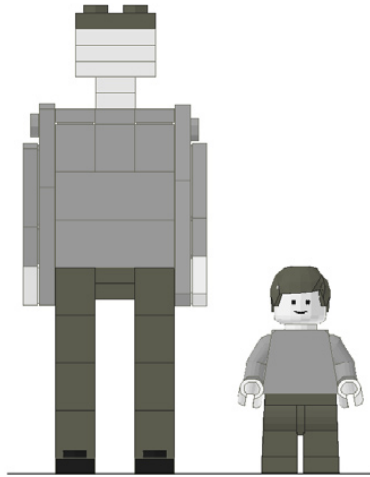
With the famous brick, the best known and appreciated items are LEGO® minifigures (minifigs). But unless you are willing to mod them by cutting, glueing and painting, there are a limited number of opportunities to build your own minifig.

Instead, the MINILAND characters, bigger, leave room for creativity, to design a virtually infinite number of different models in their styles and postures.

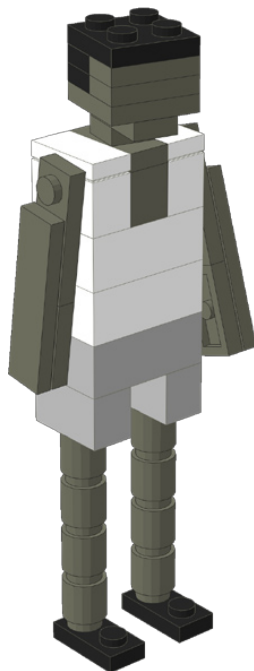
Furthermore, the characters require the use of common parts (plates, bricks), of small size (2x3 or 1x4 at maximum), and in small numbers (a basic character contains about 60 parts). They are therefore accessible to all budding builders.

The MINILAND characters designs are not meant to be very sturdy. You might even find out that some characters can not stand up for long, they tend to fall quite easily. But they were never meant to be sold as sets for kids and they are glued to be exhibited in the MINILAND world.

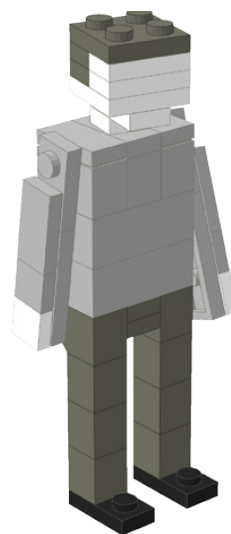
To better understand how characters are built, we will build on the prototype shown on the side. The first thing we consider is the size and proportions of the character. The total height of the character is just under ten bricks. Scaled to the average size of an adult human being (5'7" - 1m70), we obtain a scale of 1:18. As a matter of comparison, a minifig is about 4 bricks high.



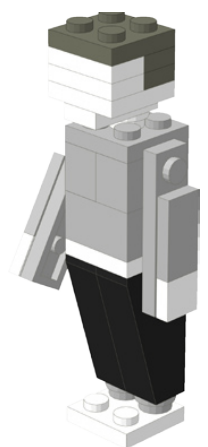
Of course, the prototype dimensions can be changed to fit the figure of the character you want to recreate : you will extend the legs of a Basketball Player or diminish the width of the torso of a child, keeping in mind that the whole should remain constant, sticking, roughly, with the 1:18 scale.



Basketball Player



Prototype

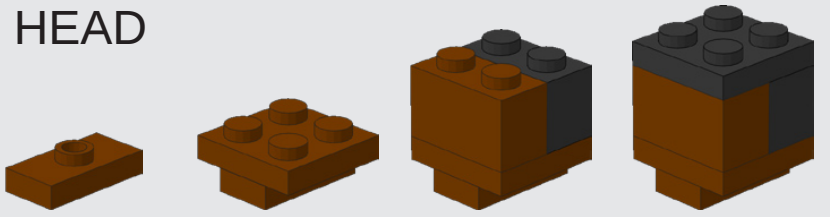


Child

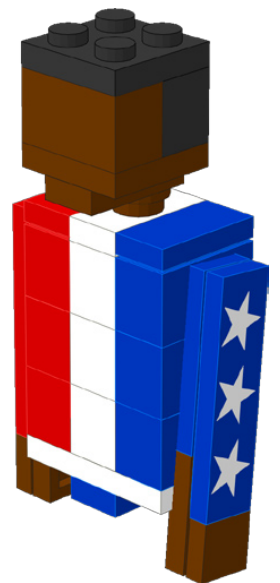
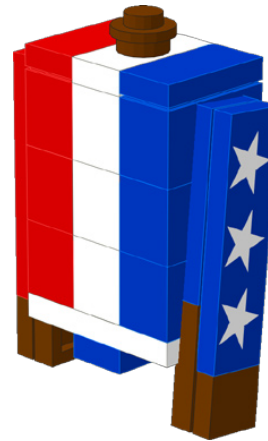
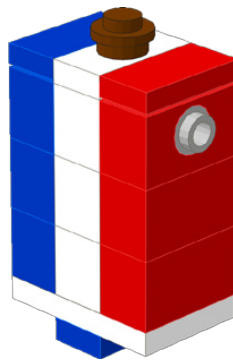
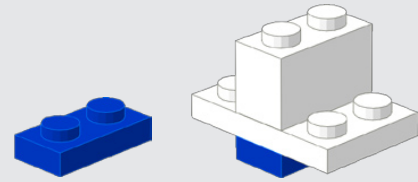
As an illustration of this first lesson on building MINILAND characters, we propose you to build a basketball player, designed by Flickr user «Tom Bricks». This character is made of 50 parts and is 11 bricks and 2 plates tall (6'7" - 2.02 meters at scale).

[illegible]

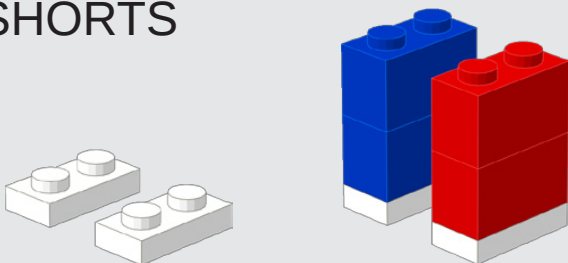
HEAD



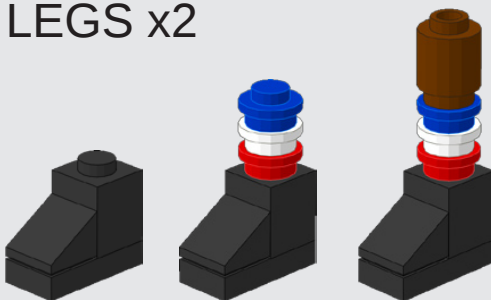
TORSO



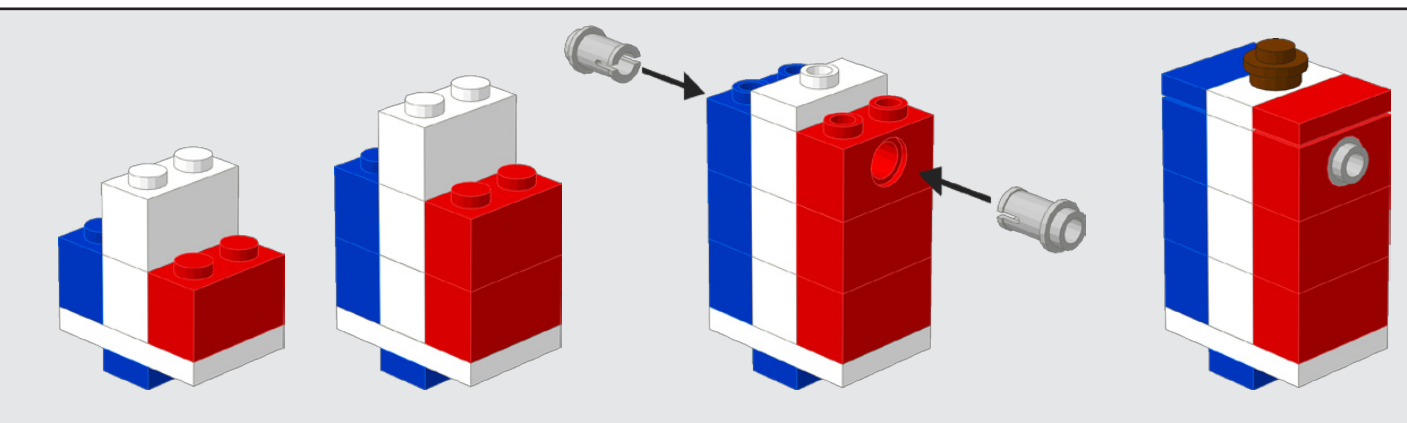
SHORTS



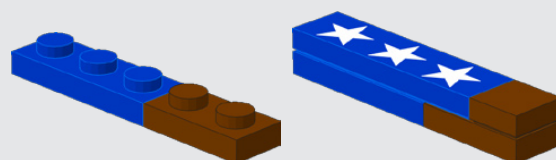
LEGS x2



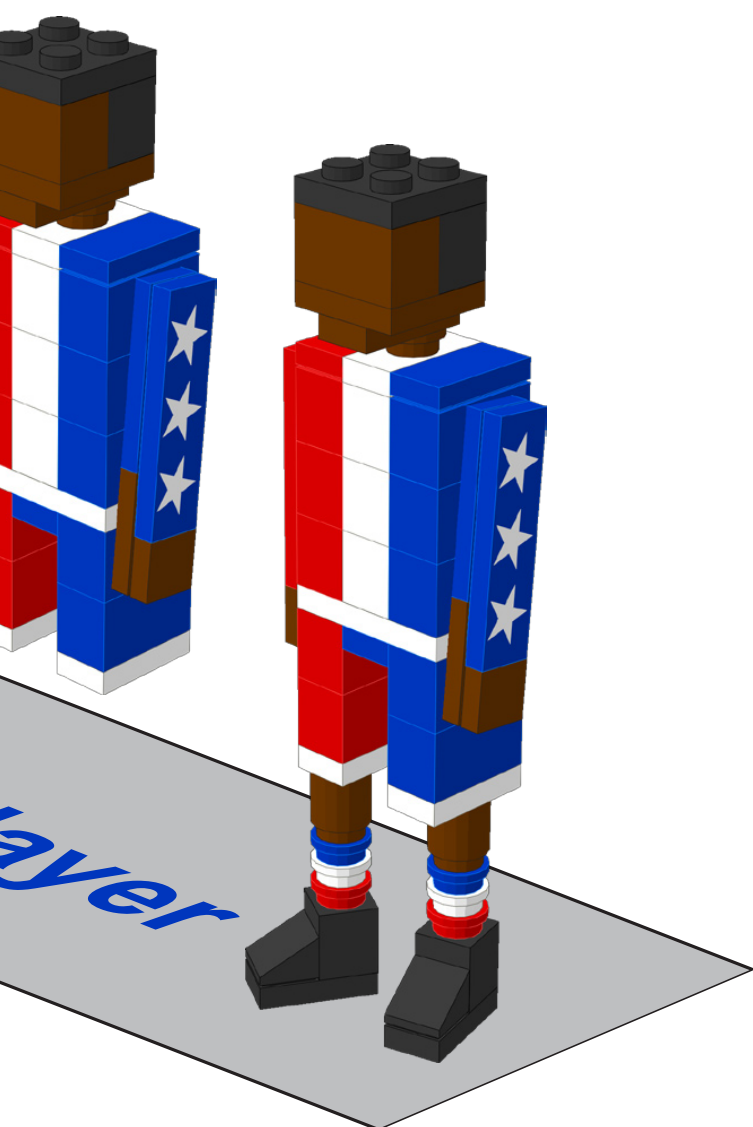
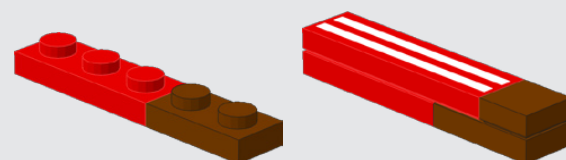
BasketBall Play



LEFT ARM



RIGHT ARM



Original design
by Tom Bricks

Arts created using the
LDraw System of Tools

SR3D Tutorial (II)

Groups, animations, Bezier generator

By legolijntje



Groups

Groups are not very difficult and complicated, but can be very useful. If you're building a model, you can use the groups function to organize all the parts of your model in groups. For example, if you're building a house, you can create the following structure:

- Model
 - House
 - Walls
 - Interior
 - Room 1
 - Room 2
 - Etc.
 - Other stuff
 - Garden
 - Plants
 - Pavement

As you can see in the example, everything is organized by its type or position. But of course, you can organize everything the way you like it. And, using the groups function isn't a must.

You can find the groups function in the Groups tab in the toolbox. As you'll see, there is always 1 group, the root group called "Model". That one can't be changed in any way. Adding subgroups is very simple: right click on the group in which you want to create a subgroup and choose "New Child".

To build in a certain group, just select the group you want to build in and start building.

If you have already built something and you want to organize it, first create all the groups in the groups tab. After that, select all the pieces that belong to the first group (select multiple pieces by holding CTRL) and then press the button "Set to Selection" somewhere at the bottom of the Groups window. To check if it worked, you can hover over the name of the group and it will outline all the pieces that belong to that group.

Using the groups function is not only useful for organizing your model, it also has other benefits. You can select a whole group at once, if you need to replace or recolor it, instead of selecting every part. You can copy groups, for quick building. You can make the unselected groups invisible to show only the selected group. And you can (only in the paid version) export a group to a separate file.

Animations

This is a very special feature of SR3D Builder. It is a one of a kind feature compared to other LEGO® CAD software. It enables you to control your model by pressing buttons or

using sliders. This is especially useful for Technic models. This function is partially free, but it has more advanced techniques in the paid version.

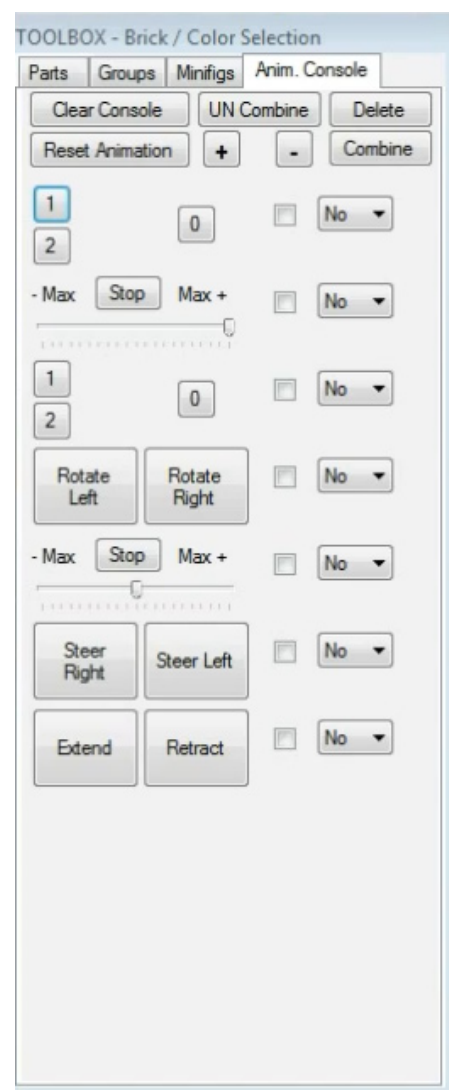
First, you need to know there are 2 "types" of animation in SR3D Builder:

1- The Animation Mode This is the button with gears at the top of the main screen. This is a simple mode to view and test you functions while building your model.



2- The Animation Console

This is a control center where you can add all your functions and control them using buttons and sliders. This is only in the paid version.



The animation mode is very simple to use. Just click the button to enter the animation mode and click an axle or gear you want to animate. Then drag the mouse left or right while holding the left mouse button.

The animation console is a bit more complex, but very cool to use when you've added all the functions in your model. To add a new function, enter the animation mode and click the gear or axle you want to add. Now, press the right mouse and choose "Add to animator console". A window will appear in which you can configure the controller.

There are 3 main types:

1- Slider

This is a sliding control: the further to the left or the right, the faster it will turn to the left or the right.

2- Double Button (state)

This has 2 buttons, press the left one and it will keep going to the left, press the right one and it will keep going to the right

3- Double Button (pulse)

This is the same as the previous one, except that it won't turn forever, it will stop when you release the button.

You can also add a driving ring to the animation console. Do this by placing your driving ring and your lever in neutral positions. Then start the animation on the lever and then add it to the animation console. This will add numbered buttons (the amount depends on the amount of rings). Now, you can switch which function must be used by clicking those buttons. Notice that (if you've done it right) that the lever will also move to the right position.

At the moment, the animation in SR3D Builder already supports complex gear combinations, fake piston engines, pneumatic, actuators and more (some are paid-only and some are still beta). However, do note that there will be things that won't work (perfectly), because the software is still under development.

To get a good view of what the animation console is capable of, take a look at this video: <http://youtu.be/ln4xoQq6JQg>

TIP: when looking at an animation (either by hand or in the console) press T on your keyboard to make all non-functioning parts transparent. It looks very nice!

Bezier generator

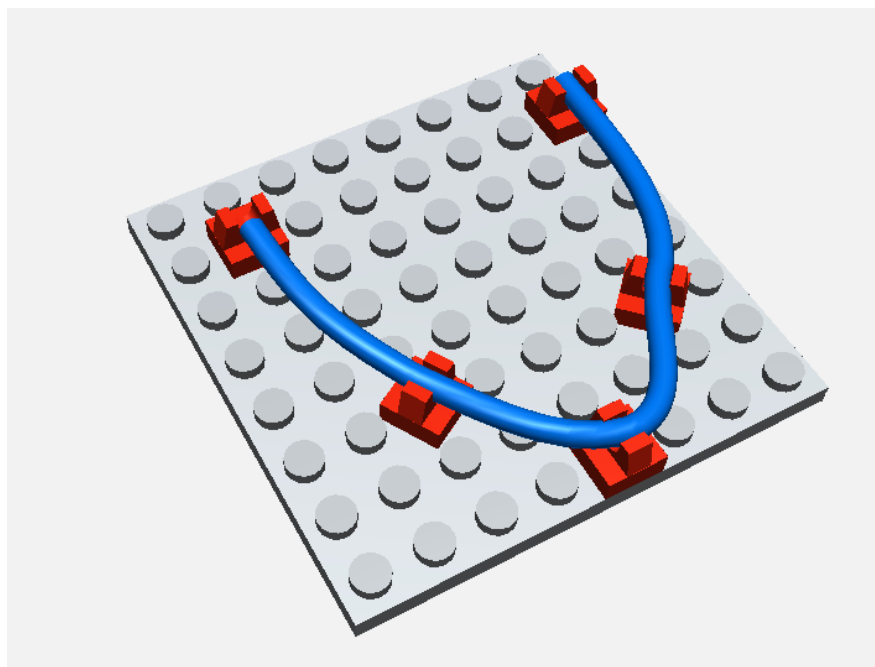
The Bezier generator allows you to add flexible parts such as hoses and flex-axles. Personally I don't like it too much, because it can only create (as the name suggests) Bezier shapes (well, there are exceptions of course). But it does the job very well nevertheless.

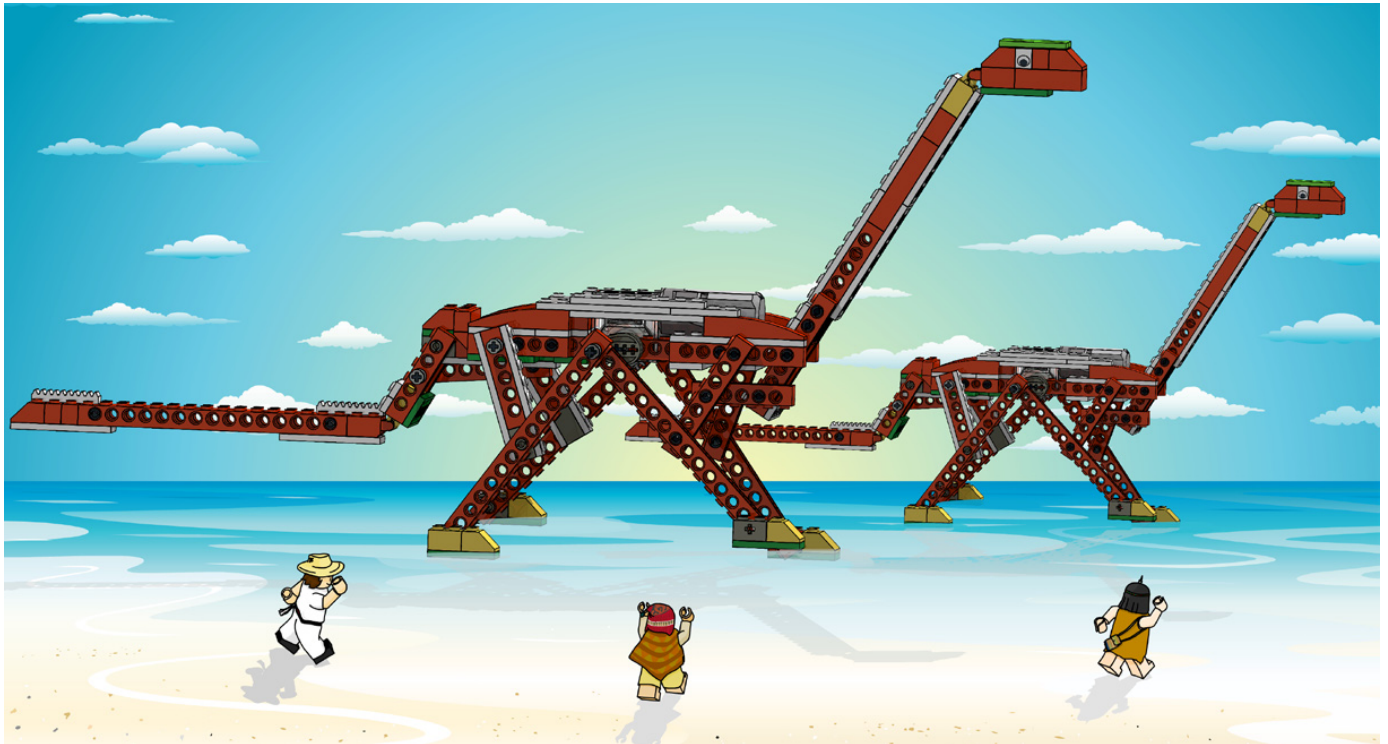
To add a flexible part, right click at the point where the part should start. For example, this can be a hole in a beam, or in a pin. Then select "Bezier generator", choose your flexible part type and then choose the length of the part. Then start dragging the mouse while holding the left mouse button to position your part. It will automatically snap into place like with normal parts. You can also raise and lower the end the normal way. When you're done, just press enter.

SR3D Builder also has a belt generator. The belts generated using this feature can also be used to animate the model, just like belts are used in real models to connect two axles. Adding a belt is very simple. Just right-click and choose "Belt Generator" on the first part to start the belt (for example a thin bush) and right click (and choose belt generator) again on the part to end the belt.

Although this is far easier than the well-known LSynth, it isn't very useful for making building instructions, since LPub doesn't support this type of flexible parts. And when you need to render the file in LDview, POV-Ray or any other software, it's better to export the file as a .DAT file to make sure your flexible parts will show up (this doesn't work in LPub). Go to File>Basic .DAT file export.

Next time I will cover the instruction miner and I will detail some of the smaller functions of SR3D Builder. For more information about SR3D Builder, visit <http://sr3dbuilder.altervista.org/>
#





Robotics with LEGO® WeDo (III)

An introduction to robotics for the young with LEGO® WeDo

By Diego Gálvez

In the last part we saw an introduction to the programming environment of the WeDo software. We used motor blocks to add movement to a prototype. Continuing with the WeDo programming tutorial, we will have a look at the blocks that control the power and direction of the motor.

Motor power

This block allows you to control the power with which the motor turns.



If you drag it into the canvas you will see it comes with another block attached.



Number input

This is used to work with numerical values. The block can be attached to several different blocks (e.g. the motor power block)



If you want to change the number that appears in the block all you need to do is place the cursor over the block until it turns into a T:



Don't click, but the moment you see the T simply write the value you wish to use, e.g. 10.



This way you can change the value for the motor power block. Accepted values for the motor power block go from zero to 10, being zero no power (motor stopped) and ten maximum power. Any other value will not be accepted by the block. Example:



The motor turns slowly.



The motor turns fast.

Motor on for

The next block allows you to program how long the motor should turn before stopping.



Just like the motor power block, this block comes with the number input block attached, to indicate the time the motor should turn before stopping.

What unit of time does the motor on for block use?

The units are tenths of seconds, in other words, if you want the motor to turn for one second you should use the value 10 in the in the motor on for block. If you want it to be 10 seconds you should write 100.

Example:



Motor turns clockwise during 1 sec. and then stops.

Motor off

This block allows you to stop the motor.



Wait block

With this block you can add time between actions, as well as work with sensor values.



The time unit in this block is the same as the one used in the motor on for block (tenths of a second).

Similarities between blocks

If you run the following programs you will notice they both result in the same action.

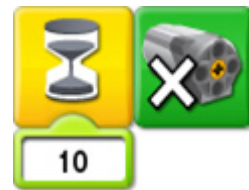


Motor turns during 1 sec. and then stops.



Motor turns during 1 sec. and then stops.

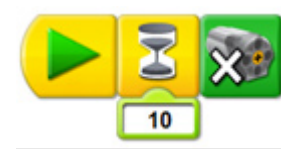
But that does not mean the two programs are the same.



While the outcome for both of the above programs was the same, what would happen if you run the following two programmes?



Motor turns during 1 sec. and then stops.



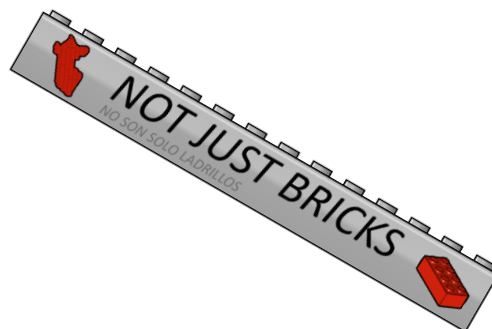
Motor never turns

As you can see in this case the results are completely different.

This brings us to the end of the explanations about the motor blocks you can use to interact with the WeDo motor. In the next instalment we will have a look at the display and math blocks (Add, Subtract, Multiply and Divide).

On the website notjustbricks.blogspot.com you will find multimedia materials (images and videos) of the creations of the author, some of which come with building instructions.

#





LEGO® WeDo (II)

Programming

By Edwar Romero
 Images by Osvaldo Romero

LEGO® is a universe in itself; we can build our own worlds. We know it for sure; we see it in every issue of HispaBrick Magazine®. In addition to being able to build our dreams, the LEGO WeDo platform allows us to program our creations to move as we command from the computer.

Do you want to conquer the world with LEGO creations? Me too, we will do it step by step, but remember the programming will make a huge difference. The software that is available for

programming it is extremely intuitive to use. The image below shows the working environment.

While playing with it you can discover how most of the functions work without requiring a computer engineering degree. You don't need to write a single line of code, using drag and drop is all you ever need. For example, if you want the motor to start rotating, you can place the motor icon next to the play or start button (the green triangle) on the white





canvas. Hey, all those years listening to music comes in handy once in a while, right? To stop the motion, just click on the red button or hit Escape on the keyboard. If you want more specifics on this, you can check the previous HispaBrick Magazine® where Diego Galvez described this in detail.

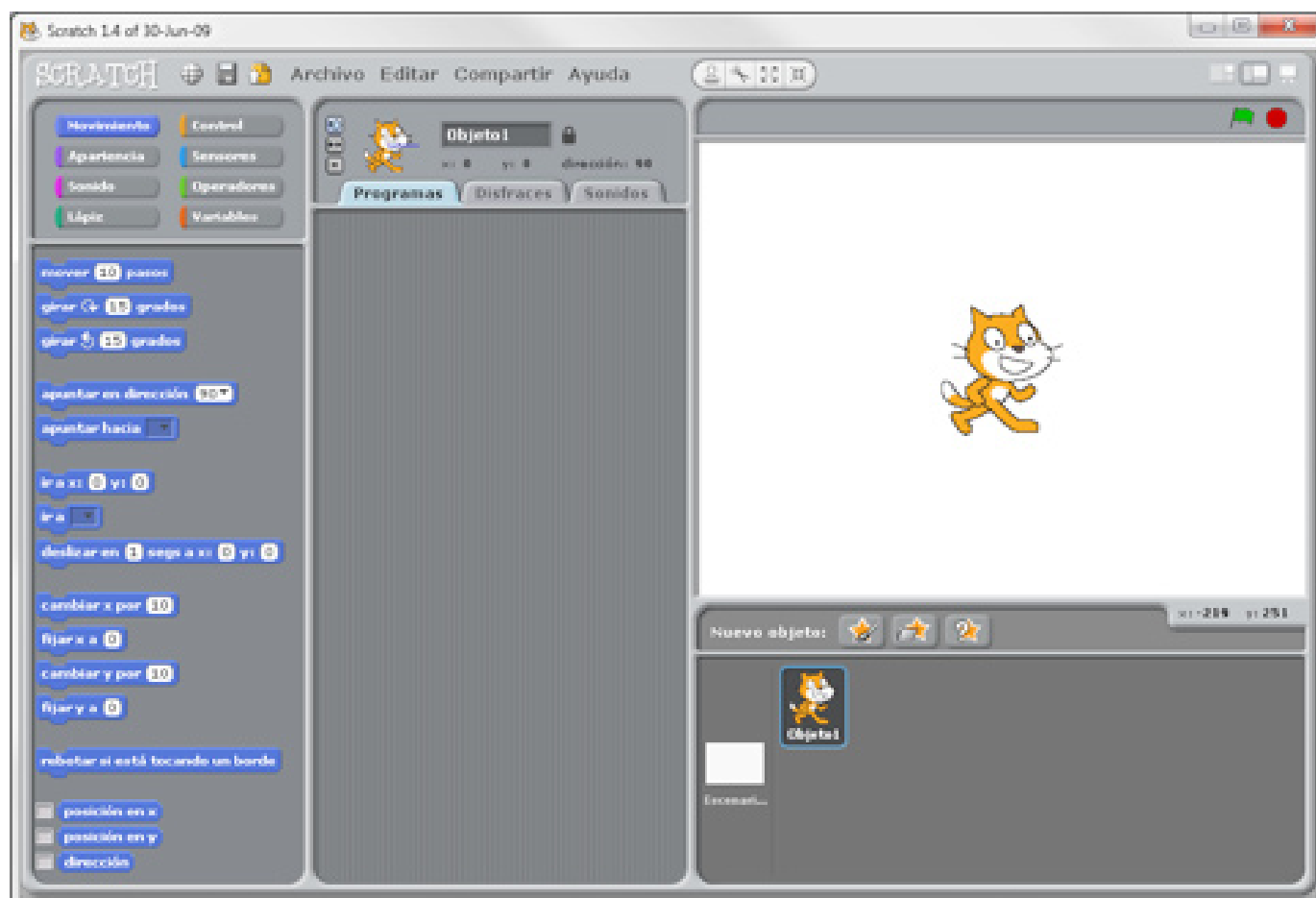
The main advantage of the WeDo software is that no previous knowledge is required beforehand. This software is designed to learn computer programming as intuitively as possible. However, this software is sold separately.

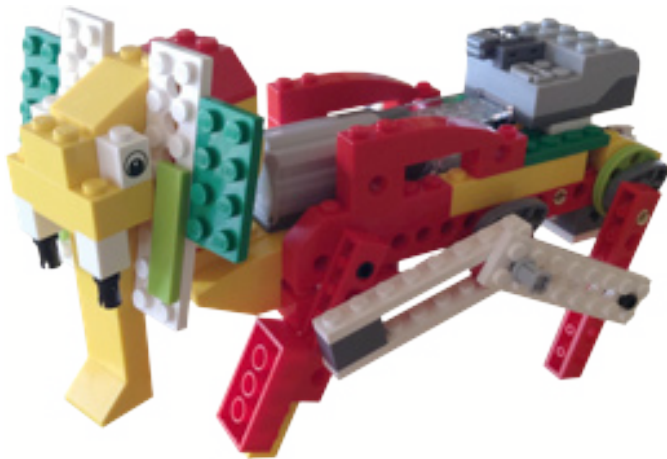
The good news is that there is no need to use this software to program the WeDo robotic set. Here open source software comes to the rescue. This time it originates from the Massachusetts Institute of Technology, better known as MIT. They developed Scratch as an educational programming language. This software allows programming the LEGO® WeDo set and many other new unthinkable things.

The 1.4 version is the latest one compatible with the WeDo platform. The latest available version is the 2.0. This one works in a web browser (no need to install anything, but it an Internet connection). However, it is not yet compatible with WeDo. The 1.4 version is hidden on the web, but you can find it at http://scratch.mit.edu/scratch_1.4/. It is available for Windows, Linux and even OS X.

In the image below you can see a screenshot of this platform. It looks a bit confusing the first time when compared to the WeDo software. Remember, it will allow you to do develop more code than ever.

It also works using drag and drop. The main difference is that in the WeDo software the programming blocks are connected horizontally, while on Scratch they are connected vertically in the central panel. In addition to controlling the motor and sensors, you can control the image on the canvas with the sensors. You can see it allows for many more options.





In Scratch you have the programming commands in the left menu. The central window is where you code your programs, while the top right is where you can see your creation interacting, really cool, don't you think? This white canvas area allows having programmable objects in it, called sprites.

Not every command is required to control the LEGO® WeDo set. We need to find the commands for the sensors (under the Sensing menu, the last options are for tilt and distance), and the commands to control the motor (under Motion at the bottom, but they only appear if you have the USB hub and motor connected).



The image below shows the differences between the WeDo software and Scratch for a code that makes the motor turn.



If you want to know more about Scratch, there are hundreds of resources on the Internet. The best way to know what you can do with it is seeing it in action. Here you can check a few videos about it http://info.scratch.mit.edu/Video_Tutorials.

You can visit the MIT website about Scratch and WeDo at <http://info.scratch.mit.edu/WeDo>. You will find videos of what is possible with this programming language and the WeDo platform. You will be amazed by the things you can do, the projects, ideas and challenges. Boston Public Schools also host a neat PDF tutorial that can be downloaded at <http://bit.ly/19VxnFp>.

If for whatever reason you didn't have the chance to obtain the WeDo software, now you can use Scratch to program your creations. The WeDo software has instructions for assembly and programming of 12 robotic designs. So, you can unleash your creativity.

If you don't have access to the WeDo programming instructions, Barbara Ericson (a researcher from Georgia Institute of Technology) developed educational material for the WeDo set using Scratch. This material covers 8 of the 12 robotic models. The tutorial can be downloaded as a PDF file from Georgia Tech at <http://b.gatech.edu/r7pB1z>. So, no more excuses to start programming.

Like everything related to LEGO, the sky is the limit. But now we can go even further with programming.

You can find more information, and building and programming instructions for the designs presented here and many more at: www.wedobots.com
www.facebook.com/wedorobots

#



Review: MinuteBot Base

By Oton Ribic

It is commonplace to begin many LEGO® System models by choosing a suitable baseplate, of which The LEGO Group produces plenty of sizes, forms and specialized varieties. However, Technic has never had an equivalent part that would provide a foundation atop which the rest can be built.

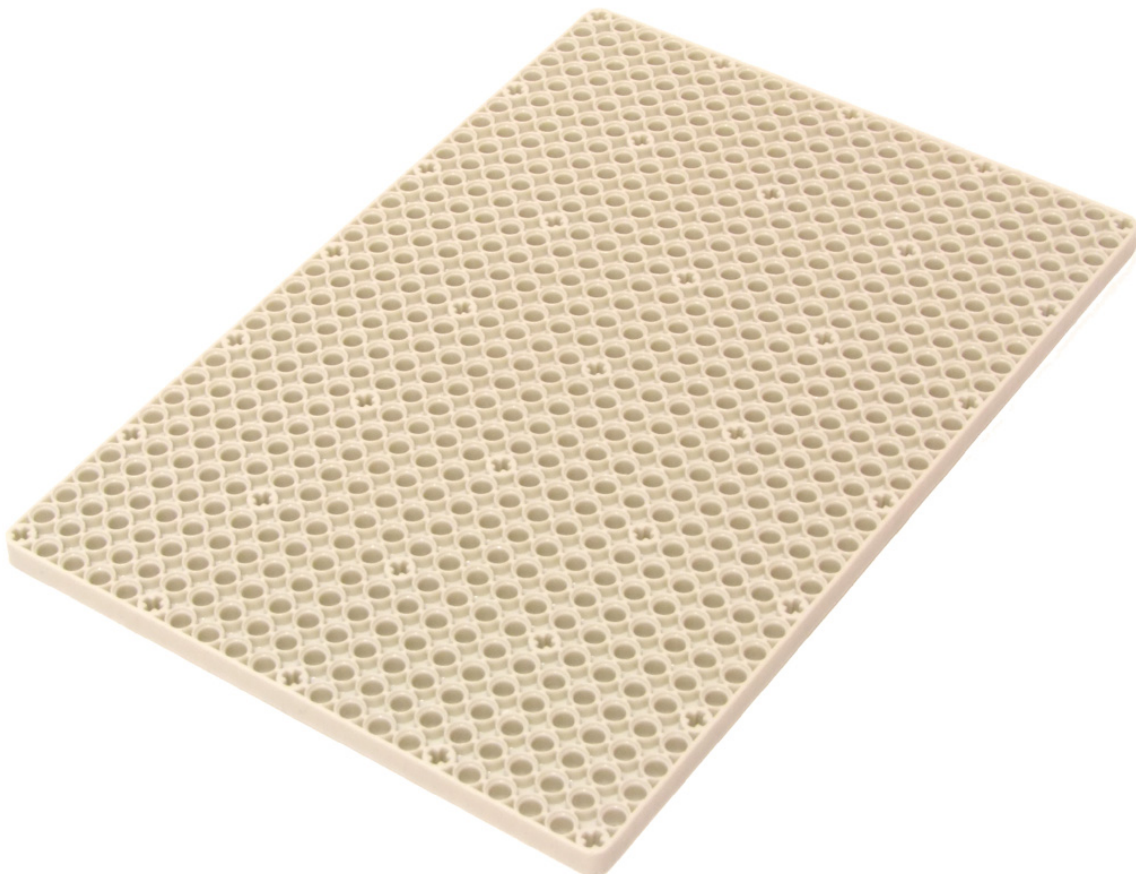
Admittedly, the need for such a baseplate is not immediately obvious since, for example, vehicles that represent a large share of Technic models typically do not require one in the first place. Still, there are many situations where it would help, both as an integral part of models, or as a testing ground for quick prototyping or concept development. When facing a need for such baseplate, builders typically connect series of 7x5 frames into patterns or work around the problem using trusses or stacked beams, but it is still a matter of improvisation over convenience.

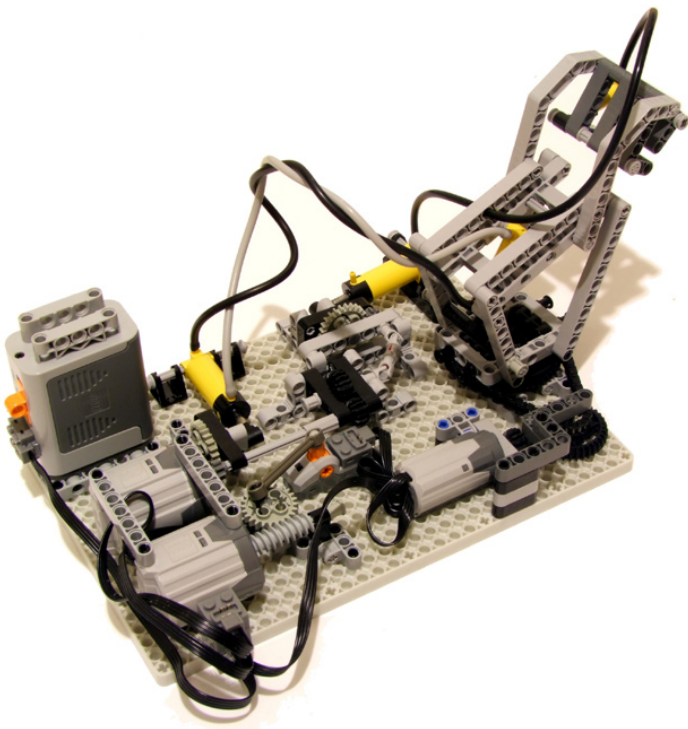
To be very precise, Technic baseplate still does not exist if we restrict ourselves to pure LEGO parts only, but the Heveas

company has started their production under the MinuteBot brand which is probably already known to many Technic builders. Here are my impressions of this interesting product.

It is a rather simple “part” to describe — a light grey studless Technic beam expanded to cover the area 31 studs long and 21 studs wide, which corresponds to 248mm x 168mm (about 9” 1/4 x 6” 5/8), and weighs 146 grams. Every fifth hole from and including the edges in both directions is an axle hole, making a large 7x5 grid of axle holes evenly spread across the baseplate. The remaining 616 holes are all pin holes. Overall rigidity is adequate: supported at its outer edges and carrying a load of 1 kg in the middle, its center bends only 2 mm — so there should be no problems supporting large constructions.

As its name suggests, MinuteBot Base is particularly practical for building small-scale robots and automation mechanisms. Lots of time and effort is usually devoted to creating their stiff underlying skeleton and modifying it accordingly to the

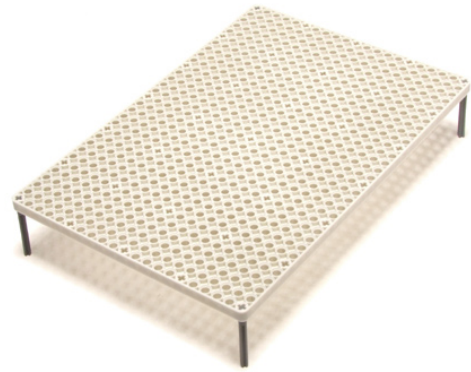




changes that appear on-the-fly. With this sort of baseplate, most of such problems are avoided as any component can be positioned literally anywhere — as long as it fits within the 31x21 studs constraints. Also, most Technic components, including motors and more complex parts, are easily and strongly connected to the baseplate using only a few friction pins — or axle pins if they happen to reside over an axle hole.

As all the holes are oriented vertically, you occasionally need perpendicular connectors for certain components, but it is still much faster than improvising the baseplate from scratch. You just need to keep in mind that the mechanisms on the baseplate may not rely on too much vertical strength which thus relies primarily on pin friction, unless it adheres to the edge in some fashion. Perhaps it would help for the future versions to have a couple of side holes, similar to the existing Technic panels and frames. That would also simplify connecting several MinuteBot Bases together if the need arises, as the manufacturer suggests on the official website.

For some applications it may be useful to have the baseplate suspended; this is where the four axle holes in the corners



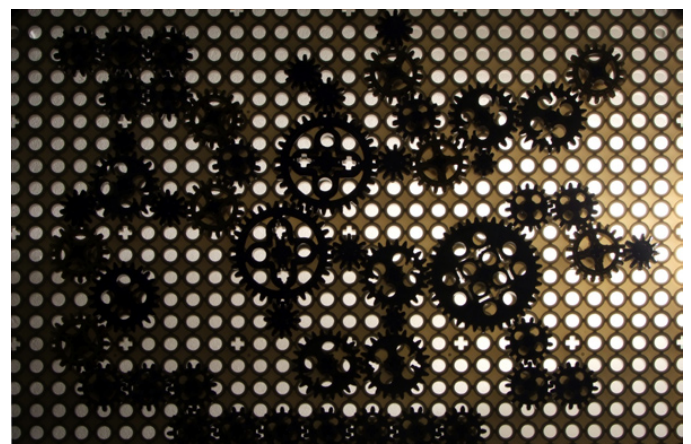
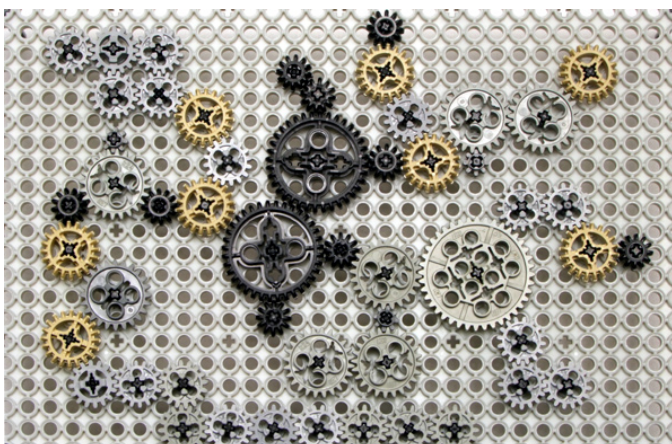
serve perfectly. All you need is four 5.5-stud axles with stop, which are very common. Of course, using the axle connectors the height can be increased further as desired.

Apart from robots and automation, MinuteBot Base is useful for the aforementioned quick prototyping. Checking whether an idea works is much easier when there is a structure in place that provides pin holes everywhere. As the idea is refined and optimized, it is easy to note the important strong points and think up an ideal, economical skeleton consisting of smaller, standard parts.

In a similar fashion, it may be useful as a temporary bracing for building various complex constructions that consist of components that are difficult to connect together and would require too many hands at once (a notorious “octopus effect” when, for example, a large gearbox needs to be assembled by connecting many parts simultaneously). This temporary bracing technique is not uncommon in instruction books in the official LEGO® Technic sets, though this baseplate makes the entire process easier and faster to dismantle.

Overall, this is certainly a welcome addition to any experimental-minded Technic builder’s arsenal, and perhaps in a larger quantities than one, especially if have some more advanced robotics and systems in mind. Its size is well judged, and its rectangular (as opposed to square) shape allows some extra flexibility. While not extremely cheap, at US\$20 (14,49 € at the time of writing) per piece, its price is reasonable in comparison to the usual LEGO System baseplates, especially taking into account the manufacturing quality which is right up to the standard of The LEGO Group. The manufacturer delivers the MinuteBot Bases worldwide for an additional fixed shipping fee of US\$10, and orders can be placed at the official website, at www.minutebot.com/minuteproducts/base.

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An introduction to Robotics with LEGO® MINDSTORMS (XV)

EV3: what's new?

By Koldo Olaskoaga

The EV3 has already been on the market for some time. First the educational version appeared in early August, a launch that wasn't exempt of problems; before the end of August a problem was detected in part of the batteries that had been distributed that made them unusable and at the beginning of October distribution was suspended until March 2014. A setback for the schools and FLL teams that wanted to migrate to the new system.

September brought the Retail version, finally also available in Spanish, something that had been demanded for quite some time and that will make it easier to distribute the product in Spain and Latin America. The EV3 Retail version comes with 5 base models and 12 additional creations from members of the LEGO® MINDSTORMS Community Program.

The EV3 has a number of improvements that go beyond a better controller, more power, a 4th motor post and a memory capacity that will put all the trouble the NXT generated in the past. Let's see some of them.

Projects

While the NXT file system was based on files, the EV3 system is based on projects. This means that different versions of the program, the notes you keep, the images and videos... are all saved in a single file.



But in addition to making it easy to keep your project well-organised, this new system allows you to share it directly from EV3-G and the LEGO MINDSTORMS website. The only thing you need is a LEGO ID

Connecting several EV3 by USB

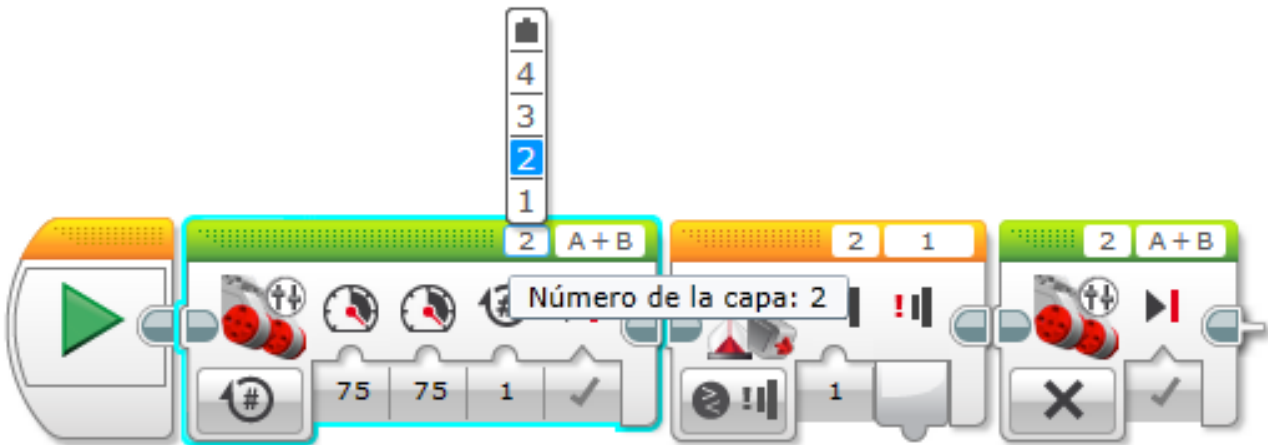
LEGO MINDSTORMS EV3 allows you to connect several EV3 bricks together and control motors and sensors connected to the different bricks from one of them. LEGO MINDSTORMS NXT already allowed two NXT bricks to be connected using one of the 4 sensor ports, but it was relatively complicated to do and not doable for everybody.

Now connecting and programming between 2 and 4 EV3 bricks connected by USB is easy by means of daisy Chaining. For example, if you connect two EV3s by Daisy Chaining, you can control up to 8 motors and 8 sensors from a single program that you need to download to the first EV3.

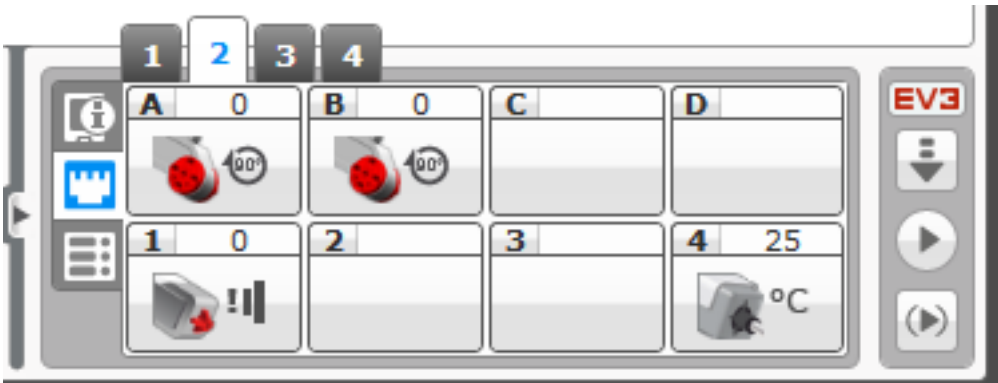
In order to do this you need to select Daisy Chaining on the properties page of the project.



This does not change the way you program compared to programming a single EV3, except for the added difficulty of controlling so many motors and sensors.

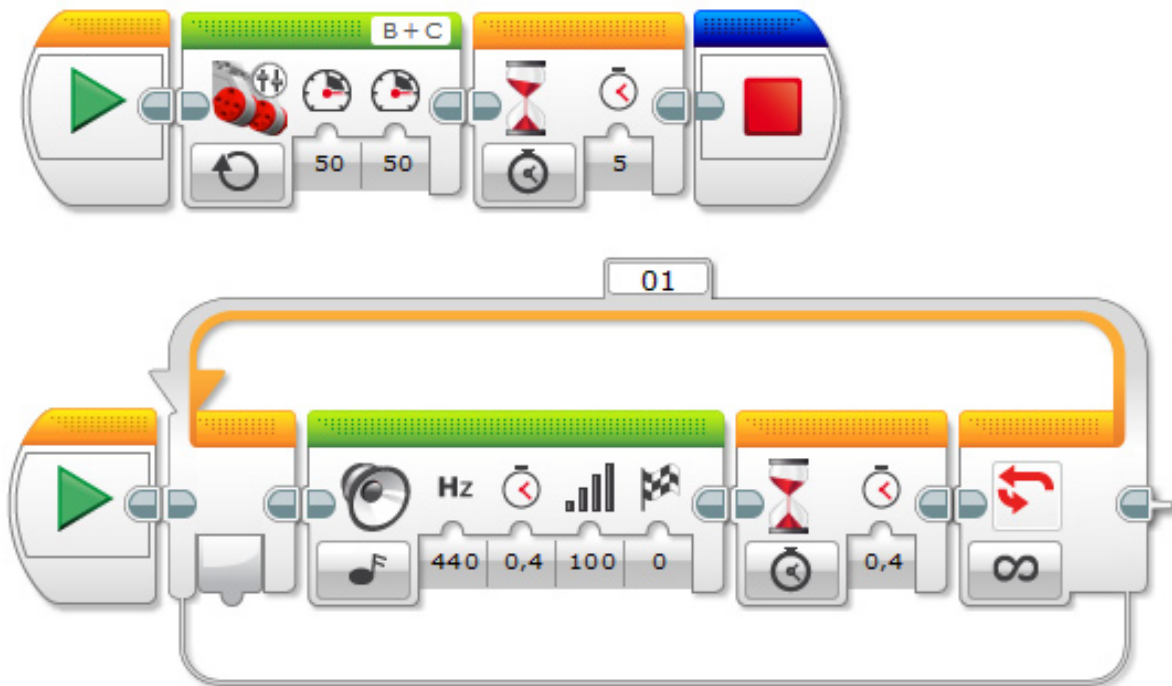


The motor and sensor blocks will allow you to select to which of the EV3s they are connected. In the image, motors A and B of the second EV3 will move until the touch sensor connected to port 1 on the second EV3 detect an input. On the hardware page the motors and sensors connected to the EV3s are shown on separate tabs.



Several sequences in one program

EV3-G allows you to create several sequences that can be executed simultaneously in a single program. All you have to do is add new start blocks to the program to create new sequences, so upon running the program they will be executed at the same time.

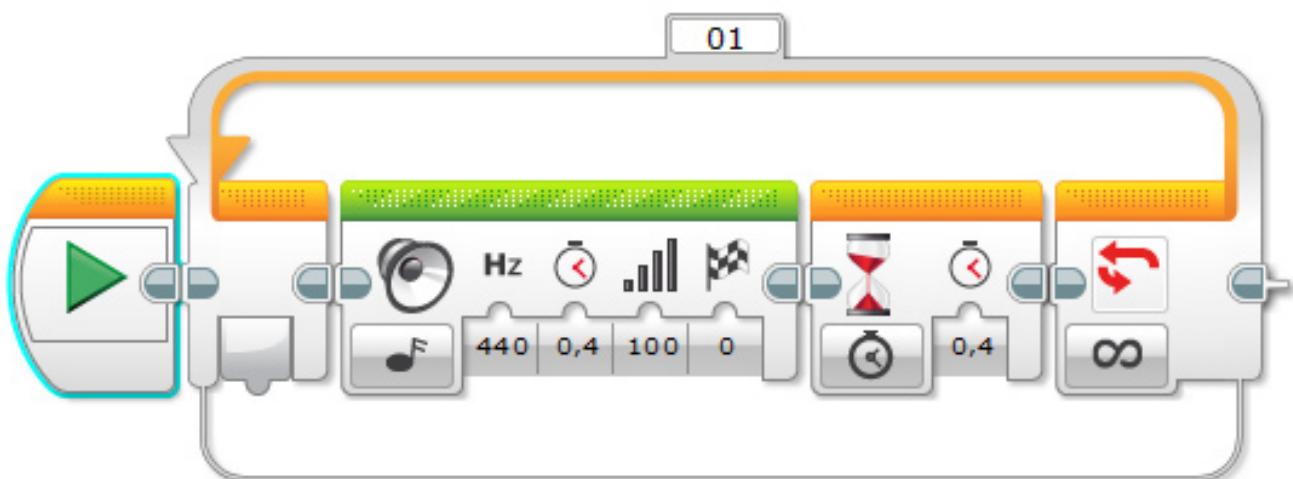


The start block can be found with the flow control blocks (orange) and it is more than a simple representation of the start of the program. If you connect the EV3 and click on the green triangle in one of these blocks the sequence connected to that particular block will be executed. This is very useful for checking the different parts of the program, as even if you have several sequences only the one connected to the start block you click on will be executed.

You can control the termination of a program from one of the sequences, as can be seen in the previous image. The Stop block is in the Advanced block tab and it will stop all the sequences in a program at the same time.

Visualizing program execution

EV3-G allows you to know which block is being executed at each moment in a similar way to how this is done in LabVIEW, the software it is based on. If you run a program with the robot connected to the computer (by USB, Bluetooth or Wi-Fi), the program will show which block(s) are being executed by animating them. The following screen capture was taken while the Sound block was being executed; you can see the angled lines at the top of the block that indicate this.



Wi-Fi connection

The EV3 can communicate via USB and Bluetooth, but also via Wi-Fi. This isn't the most recommendable method since it causes a higher energy demand from the battery, but in some cases it can be very useful.

At first it is a little disconcerting, because if you connect that adapter you have at home most likely it will not be recognised. The reason why to this date you can only use the Netgear WNA1100 adapter is that the Linux system that is installed on the EV3 only has drivers for that particular adapter. Although that is only the case if you use the official firmware, as with LeJOS it is also possible to use the smaller Edimax EX-7811UN. In time other adapters may become usable.

But... what can you do with a Wi-Fi connection on the EV3? I imagine that in time the options will multiply, but for now, with the Education version of the EV3-G software I have found the following options:

- transferring programs from the computer to the EV3
- monitoring sensors connected to the EV3 remotely, using the data collection system.

The first of the applications isn't very recommendable, unless you want to remotely start a program on the EV3. Otherwise the drain on the batteries that is associated with the use of Wi-Fi doesn't justify the exercise.

The second does appear to be interesting. One example could be a weather station that records changes in temperature, wind speed and pressure (when HiTechnic makes the programming block for its pressure sensor available). If the EV3 is connected to a Wi-Fi network you will be able to read the sensors remotely.

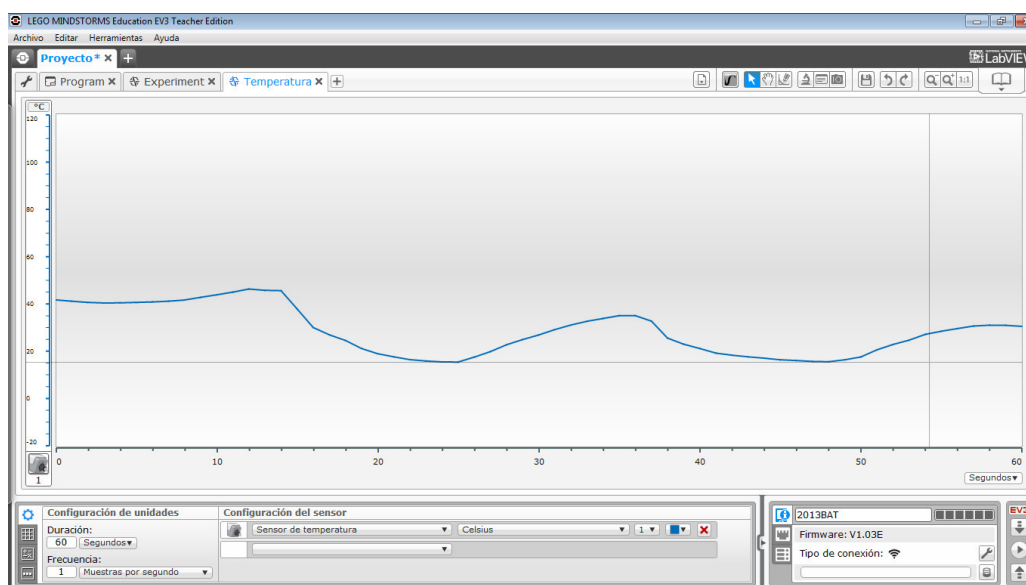
How to do it?

First you will need to configure the wireless connection for which you need to follow these steps:

- 1- Connect the adaptor to the EV3 and activate it under Settings > Wi-Fi on the EV3.
- 2- Connect to the desired Wi-Fi network from Connections, if the network is protected you will have to introduce the network key, after which a symbol will appear in the bottom left corner of the EV3 screen representing Wi-Fi active and another to its right indicating connection.
- 3- To connect the EV3-G software to the EV3 via Wi-Fi the connection must be configured from EV3-G. To this end, after connecting the EV3 to the computer with the USB cable you will need to open Tools > Wireless Setup and then Connect to the desired network. If the desired network doesn't appear, simply click on Add and find it in order to connect. After connecting via Wi-Fi you can disconnect the USB cable.

Once you are connected you can create a new experiment, establish the duration and frequency of the recording of data and run it.

If you just want to monitor without saving the data, clicking the Oscilloscope button you can see the real-time readings.



In the image you can see the result of recording the temperature during 60 seconds taking one reading every second. A glass with cold water was used to quickly drop the temperature, and the sensor was rubbed to increase it.

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Robótica Educativa y Recreativa

Introduction to Headlight Brick Patterns

By Katie Walker

Introduction to Headlight Brick Patterns

Headlight bricks are an essential ingredient for making many different patterned mosaics. Their unique shape allows for them to be pushed together into a “headlight brick square”. This is an ideal starting point for pattern building. Headlight brick squares can be pushed together, and by using different colors of bricks, you can make many different patterns. It is also possible to add other bricks inside of or in between the headlight brick squares, creating more complex patterns.

Part 1: How to make a headlight brick square

Brendan Powell Smith (author of The Brick Testament) has spent a lot of time exploring the different patterns that can be made with headlight brick squares. He made this step-by-step guide on how to make the square (used here with permission). Each headlight brick square needs four headlight bricks, which are pushed together as shown in Steps 1 and 2. Multiple headlight brick squares can then be pushed together to make larger units, as shown in Steps 3 and 4.

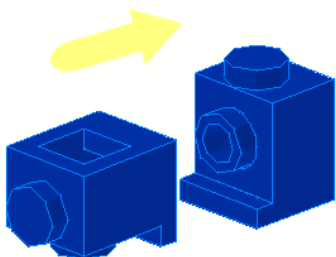


Image 1: Step 1, courtesy Brendan Powell Smith

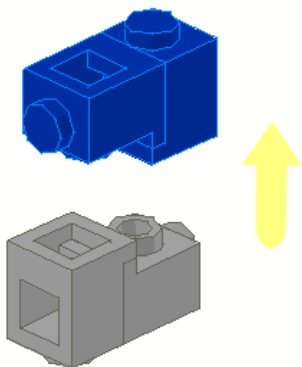


Image 2: Step 2, courtesy Brendan Powell Smith

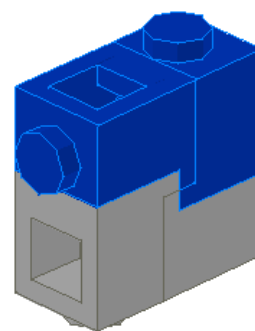


Image 2a: Step 2a, courtesy Brendan Powell Smith

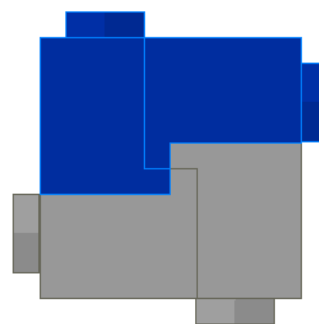


Image 2b: Step 2b, courtesy Brendan Powell Smith

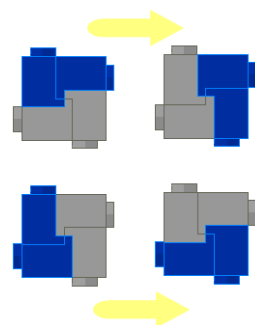


Image 3: Step 3, courtesy Brendan Powell Smith

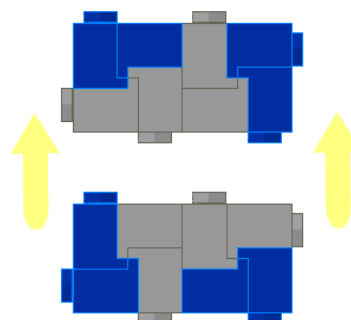


Image 4: Step 4, courtesy Brendan Powell Smith

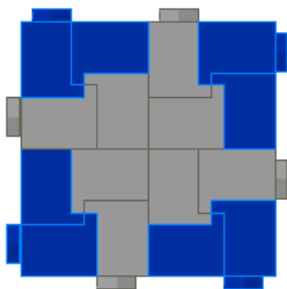


Image 4a: Step 4a, courtesy Brendan Powell Smith

Using different colors in the headlight brick squares will yield many different patterns. When I first experimented with these patterns, I would make a single unit of the square, using two colors, and then tessellate them in different ways. Each of the patterns in Image 5 are made with the basic 2-color headlight square shown in Image 2b. However, changing the orientation in which you put them together (Steps 3 and 4) will result in many different patterns.

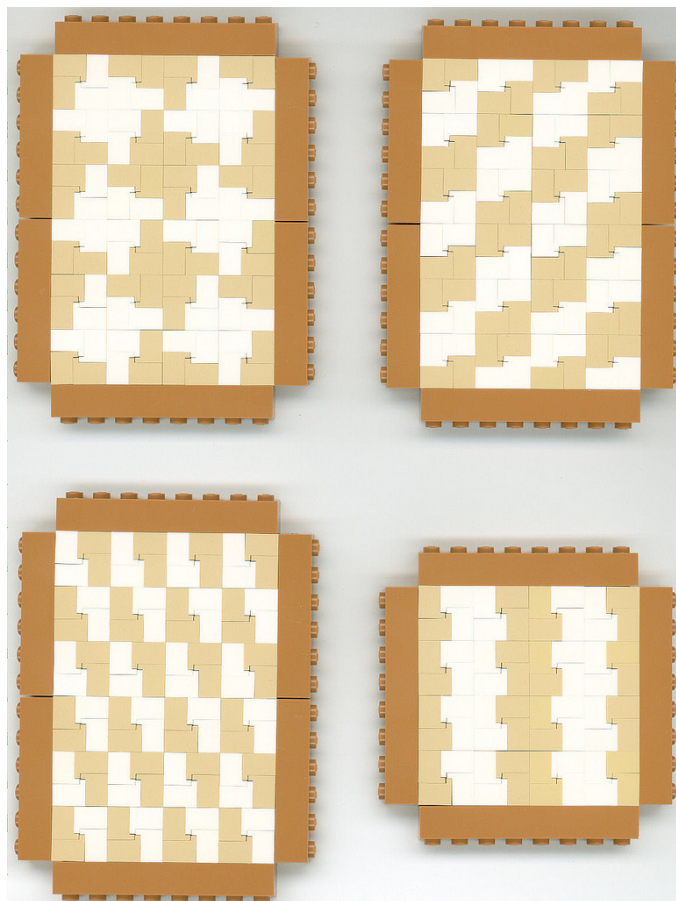


Image 5: Two-tone headlight brick variations, by Katie Walker

The number of color variations and possible patterns is endless. You can see some more examples in Images 6, 7, and 8. You can also see how to frame the headlight bricks patterns that are created. The outside edge of a headlight brick pattern consists of one outwards-facing stud, followed by an inwards-facing stud. You can stick regular bricks and plates onto the outside of the pattern (as shown in Image 5), alternate inwards-facing and outwards-facing plates and tiles (as in Image 8), or use some combination to fit the needs of your specific project.

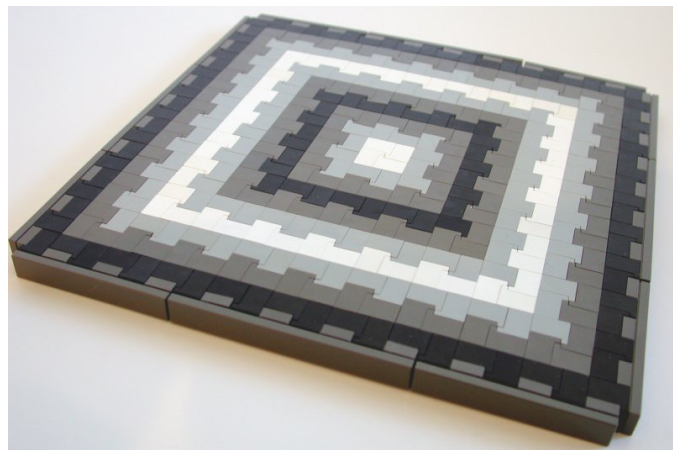


Image 6: Pattern 05, courtesy Brendan Powell Smith

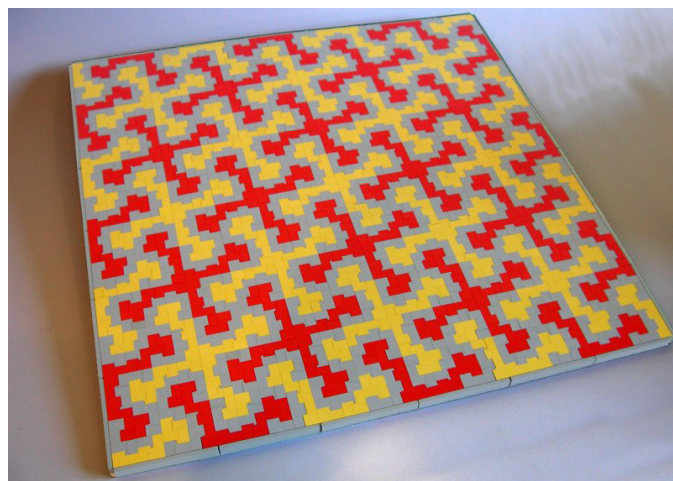


Image 7: Pattern 06, courtesy Brendan Powell Smith

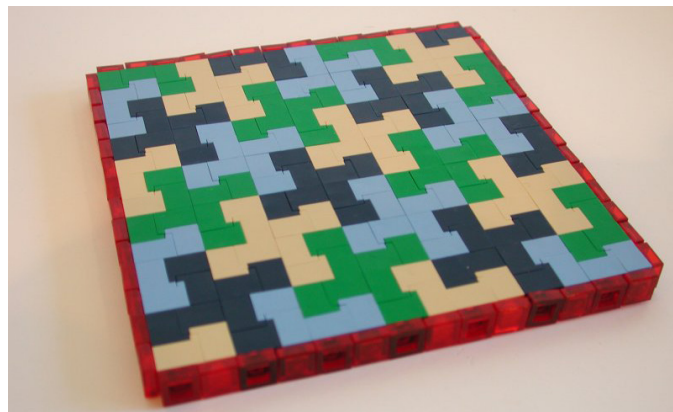


Image 8: Pattern 04, courtesy Brendan Powell Smith

Part 2: Expanding on headlight brick square patterns

Once you have mastered the basics of making a headlight brick square, there are an infinite number of ways to expand upon it. Some of ways of doing this are to insert other bricks (such as plates and different sizes of slopes) between the bricks that make up the headlight brick square, between the different headlight brick squares, or both. As different elements are added into and in-between the headlight brick squares, there will be empty spaces that will appear. These can be left to add texture and openings, or filled with other elements. Cheese slopes and 1x1 plates often work well to fill these holes, but it will depend on the size of the gap and the purpose of the pattern.

Image 9 shows an example of using black and white 1x1 plates in between solid white headlight brick squares. This method leaves gaps at the center where the 1x1 plates meet together, but by using the color black, these gaps are hardly noticeable.

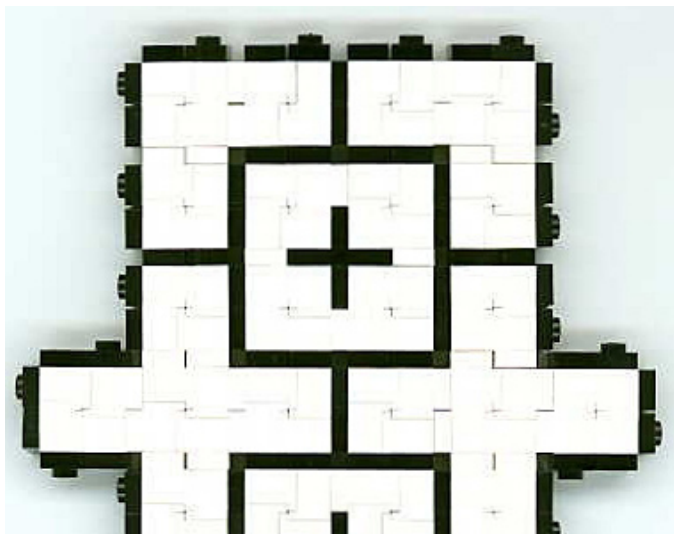


Image 9: Floor Study, by Katie Walker

As you can see in Image 10, adding more 1x1 plates between the headlight brick squares will create larger gaps. The gaps in Image 10 are squares the length of three plates on each side. This is a difficult shape to fill with other pieces.

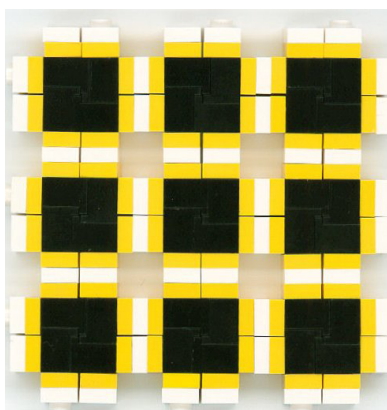


Image 10: Squares, by Katie Walker

In Image 11, the number of plates between the headlight brick squares has been increased to five. In this image, the headlight bricks are trans-clear. In between each part of the square there are 5 1x1 yellow plates. This will leave gaps with each side being two studs long. This is a great size for filling with cheese slopes or four 1x2 plates topped with tiles, among other possibilities. For more information on filling gaps with cheese slopes, check in the references for the article "Cheese Slope Mosaics: A Tutorial."

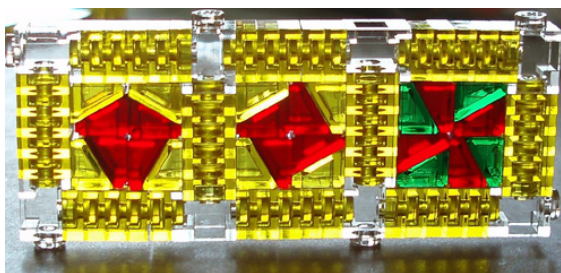


Image 11: Expanded headlight brick squares, filled with cheese slopes

There are many other ways of expanding on headlight brick squares. Image 12 shows headlight brick squares which have been expanded with 5 1x1 plates, as shown in Image 11. But in between each of those squares are two 1x3 slopes. Doing that leaves many of the 2x2 stud squares, which in this case have been filled with a stack of 1x2 plates (alternating colors) topped with a 1x2 tile.

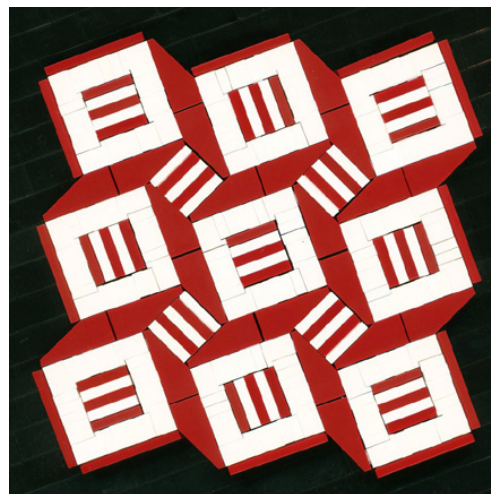


Image 12: Squares and Parallelograms, by Katie Walker

There are many other ways to use headlight bricks and headlight brick squares to make many different kinds of patterns. Although advanced headlight brick pattern-making (such as in Image 13) is outside of the scope of this article, you can find many different examples of these patterns in the flickr photo sets listed in the references.

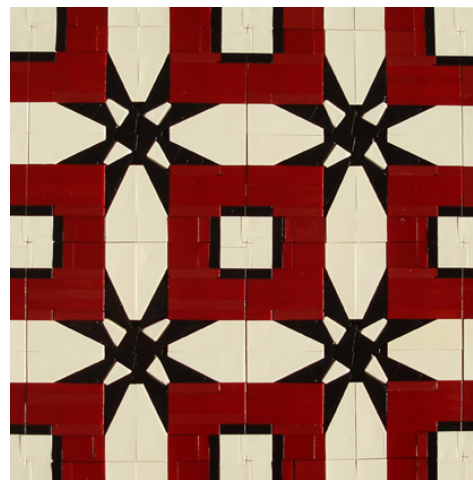


Image 13: Color Variation 1, by Katie Walker

References

- Brendan Powell Smith's set of headlight brick patterns: <http://www.flickr.com/photos/12247552@N08/sets/72157624122077446/>
- Katie Walker's set of headlight brick patterns: <http://www.flickr.com/photos/eilonwy77/sets/72157637281961646/>
- Headlight Bricks photo gallery on flickr: <http://www.flickr.com/photos/eilonwy77/galleries/72157634366152754/>
- "Cheese Slope Mosaics: A Tutorial" by Katie Walker. Published in HispaBrick Magazine®, Issue 014. Also found online at: <http://mosaicbricks.blogspot.com/2012/06/cheese-slope-mosaics-tutorial.html>



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TOYS

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Instructions: HispaBrick Magazine® Newsstand

By ICHIBAN Toys

"I wanted to design this newsstand to be simple with easy to find pieces but without looking boring. I started off with a modern, boxy newsstand but it was... boring! I needed to do something different. I had received a big box of parts that morning from a German seller. He also put in some extra pieces for me that he didn't want - They were those big 10x10 Dark Grey octagonal plates. I had no idea what I was going to do with them. Then I realized they could make a fantastic base for an old fashioned newsstand. Now I had something that was still simple but looked great. Don't ignore those odd pieces as they can often inspire new ideas."

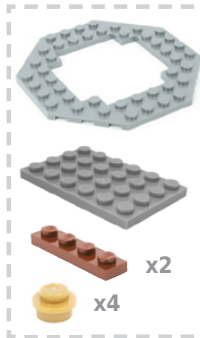
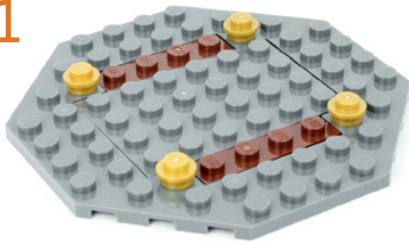
"The beauty of this design is that it will look great in many different colors - how about White? Dark Red? Dark Green? And then collect all of the extra 1x1 Tiles that LEGO throws into each set to create the magazines and newspapers. I had a Marty McFly minifigure on my desk so he was promoted to newsagent. I also created a sticker for the back. The image is included on the step-by-step instructions page - simply print out the page at 100% scale on sticker paper for the right size (paper and glue works, too). The sticker will need to be about 2.5cm wide to fit on the model."

"ICHIBAN Toys specializes in custom LEGO® element kits so of course we made some kits of this newsstand. You will receive all of the brand new, genuine LEGO parts needed including a well-stocked supply of 1x1 Tiles for the magazines and newspapers, step-by-step printed instructions and a "HispaBrick Magazine®" sticker. You can purchase it and many other designs at www.ichibantoy.com."

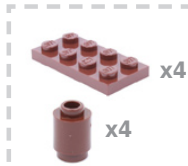
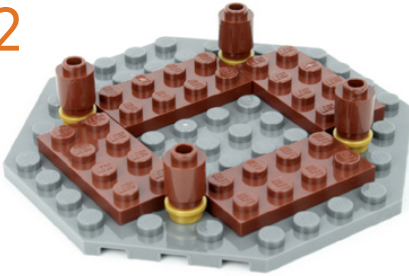
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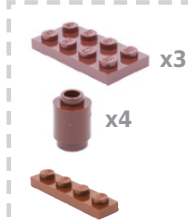
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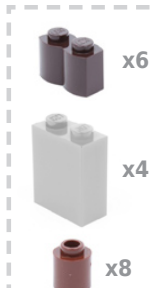
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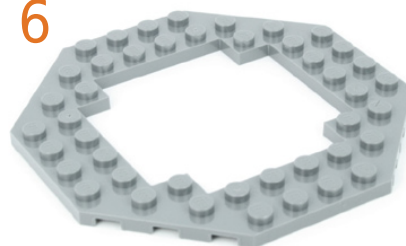
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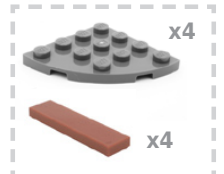
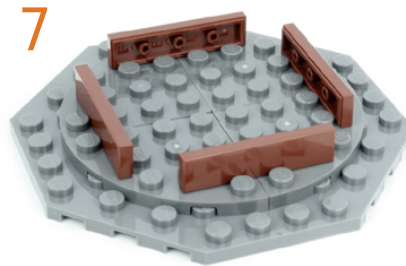
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6



7



8



BrickCon 2013

Seattle

By Car_mp

At the beginning of the last October, I had the opportunity to visit the BrickCon 2013 in Seattle during my vacations. You probably think it's too much of a coincidence that an AFOL visits a city for vacation during the dates on which a LEGO® event takes place... indeed it is too much of a coincidence. How I convinced my holy wife to visit the BrickCon, and what I have to do in return the next few months is something in between my wife and me. But let's talk BrickCon.

To have an idea about the scale of the event nothing better than some figures:

12000 visitors
425 builders
3150 m2 of exhibition
1575 m2 of additional space for conferences, presentations...

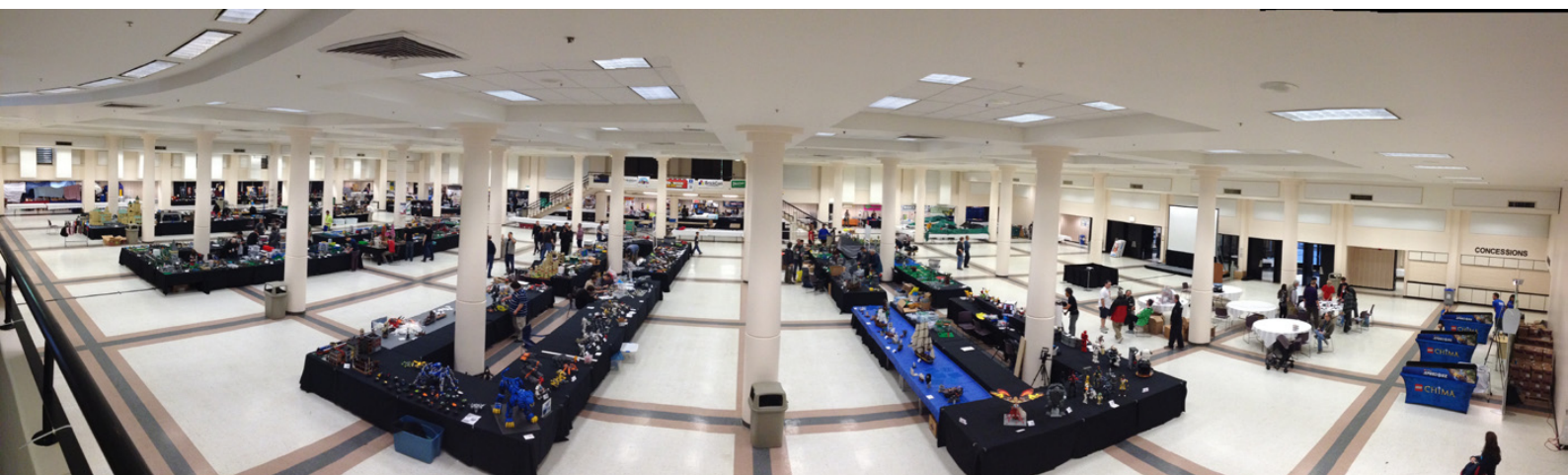
The event was full of great builders and constructions. I had the opportunity to meet some of the collaborators of the magazine in person and greet other members of the community who I already knew from my visit to Chicago. But what really surprises me in this type of event is the number of speeches and presentations that you can attend in the different rooms available. Along with the wide variety of contests available, it almost becomes difficult to take a look at the exhibition.

Once again the great collaborative dioramas seemed to me the most impressive part of the event. Not only for their size but also for their level of detail I would especially like to highlight the one which at the end won the Audience Award: The Rivendell Diorama by Alice Finch and David Frank.

Talking about the awards, the Best of the Show award was for Paul Hetherington for his incredible Joker's Fun House.

It would be hard to list all the wonders that we saw at the event, so I leave you with the photos while I think of possible events in distant cities that I could visit, by chance, for my 2014 vacation. Any suggestions?

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Review: The LEGO Build-It Book: More Amazing Vehicles

By A. Bellón (Legotron)

Pictures by No Starch Press

Review The LEGO Build-It Book: More Amazing Vehicles
Author: Nathanaël Kuipers and Mattia Zamboni
Pages: 152
Publisher: No Starch Press

In the previous issue of HispaBrick Magazine® we interviewed the authors of the book The LEGO® Build-It Book: Amazing Vehicles. Now they are back with a new book with 10 new models built from parts available in the Creator line set 5867 Super Speedster. Yes, they surprise us with another 10 wonderful models. That is why we could not miss the opportunity to take a look at this new book.

First, we must highlight the quality of the book. The cover is very striking, with a color scheme that is very consistent with the presented constructions. You can see the high quality of the layout when you take a look inside. The book is very nicely structured. The graphics are really remarkable, with the part colors clearly differentiated. You can follow each building step without problem and the graphics of the little tricks that have been used are carefully depicted in the book. We shouldn't

forget that it is not a simple instruction book. We have, as well as the referred models, some small sections spread throughout the book, where explanations, tips, and techniques for building are given. They are intended to be used in any construction and there are ideas to develop your own models. This detail is very important, since these techniques can become a source of inspiration for your future builds. In short, it is a very well done book, simple and very intuitive.

Of course, if we are discussing a book about LEGO constructions we can't do this review without any reference of the LEGO models depicted in the book. They are the most interesting part of the book. It is really incredible to see those amazing models, because they were created using the part list of the set 5867 Super Speedster only. We are not talking about many variations of the same car, we are talking about many kinds of vehicles such as vintage cars, trucks, bikes, buggies and excavators. The variety is incredible, with perfect colour combinations and very well scaled. All models have a different degree of difficulty and features and there is only one common feature, they all use the same set of wheels.

03 CHOPPER



Complexity
Functions
Pieces





CHOPPER

Design notes: 4-cylinder engine, high handlebars, big headlight, gas tank, easy rider seat

Technical specifications:
Dimensions (l × w × h): 18 × 9 × 9 studs
Wheelbase: 14 studs
Axle width front/rear: 4/3 studs

Features: working steering

08 BIG RIG



Complexity
Functions
Pieces



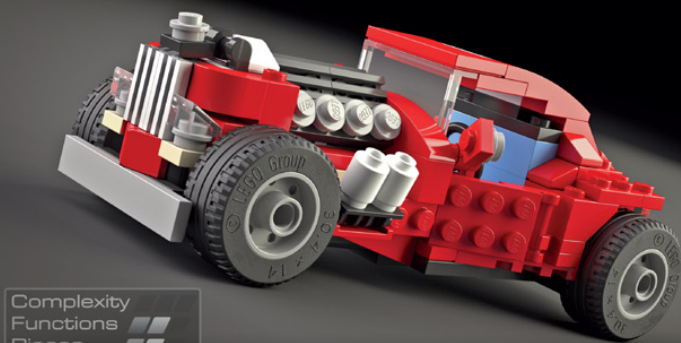
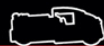


BIG RIG

Design notes: spacious cabin, big mirrors, massive grille, airfoil, fifth wheel, mudguards

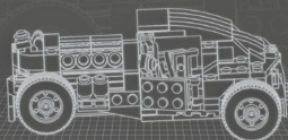
Technical specifications:
Dimensions (l × w × h): 20 × 14 × 14 studs
Wheelbase: 12 studs
Axle width front/rear: 10/10 studs

Features: opening doors, tipping cabin



Complexity
Functions
Pieces

Complexity
Functions
Pieces



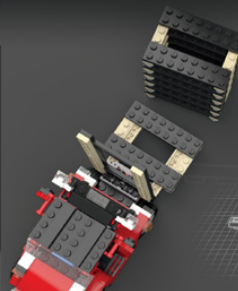
HOT ROD

Design notes: chop top, exposed V8 engine, big exhaust pipes, wide rear axle

Technical specifications:

Dimensions (l × w × h): 18 × 10 × 8 studs
Wheelbase: 13 studs
Axle width front/rear: 8/10 studs

Features: opening doors



FORKLIFT

Design notes: short wheelbase, open cabin, big mirrors, spotlights

Technical specifications:

Dimensions (l × w × h): 22 × 10 × 16 studs
Wheelbase: 9 studs
Axle width front/rear: 8/8 studs

Features: tilting mast, folding fork, pallet

The high quality of the creations that are shown can be seen in the shape and forms of each one of them. The different creations are made with simple techniques, which do not require special skills to use them. Therefore, those techniques are not intended to be used only with these MOCs, so you can use them with your own creations. There are 10 models in the book, my favorite one is the roadster, because it is really cool, and the sport design of the car is perfect. The other one I want to talk about is the Big Rig, because it has countless details and many functional features. It is difficult to believe that these creations could be made with so few pieces.

In short, it is a very interesting book. You can see the different possibilities to build models with a very small part list, very creative. This book is highly recommended for those who begin alternative models and want to improve their skills building their own, or have a very limited part list.

Acknowledgements: No Starch Press for the sample of the book.

#

THE LEGO® BUILD-IT BOOK MORE AMAZING VEHICLES

BUILD 10
LEGO
MODELS!



Nathanaël Kuipers
Mattia Zamboni



Review: Beautiful LEGO®

By Satanspoet

*Images reproduced from Beautiful LEGO, with the permission of No Starch Press.
© 2013 by Mike Doyle.*

Review Beautiful LEGO®

Author: Mike Doyle

Pages: 232

Publisher: No Starch Press

Mike Doyle, well known by our readers, in collaboration with No Starch Press, has published a beautiful book with spectacular pictures of real works of art and constructions from great artists in the LEGO® world.

The cover of the book already attracts a lot of attention; an impressive picture of the city of Odan, created by Mike Doyle with LEGO pieces. The city is 6 feet tall, took some 600 hours to build and contains approximately 200,000 LEGO parts.

Inside the book you will find the work of 77 artists and about 400 of their LEGO models

In addition, you will find opinions from and interviews with some of these builders, like the arvo brothers, Jordan Schwartz, Nathan Sawaya, Mike Nieves, Arthur Gugick, Nannan Zhang, Lino Martins, Iain Heath...names our readers will surely be familiar with.

In its 280 pages you will find creations that range from architecture to portraits and sculptures. There are famous movie characters, all kinds of animals, monsters, aliens and robots, mini scale constructions and fantastic mosaics from our collaborator Katie Walker, as well as spectacular cars, motorbikes and trucks.

The book is an absolute must for if you want to feast your eyes on the marvellous world of artistic LEGO creations and it reminds you of the possibilities LEGO gives when creating.

#



Westie (2012) © Huang Shin-Kai



LEGO Treats (2010) © Eric Constantino



Harley Davidsons (2011) © Dennis Glaasker

BEAUTIFUL LEGO®

MIKE DOYLE



Review: 10234 Sydney Opera House™

By Car_mp

Pictures by LEGO® System A/S



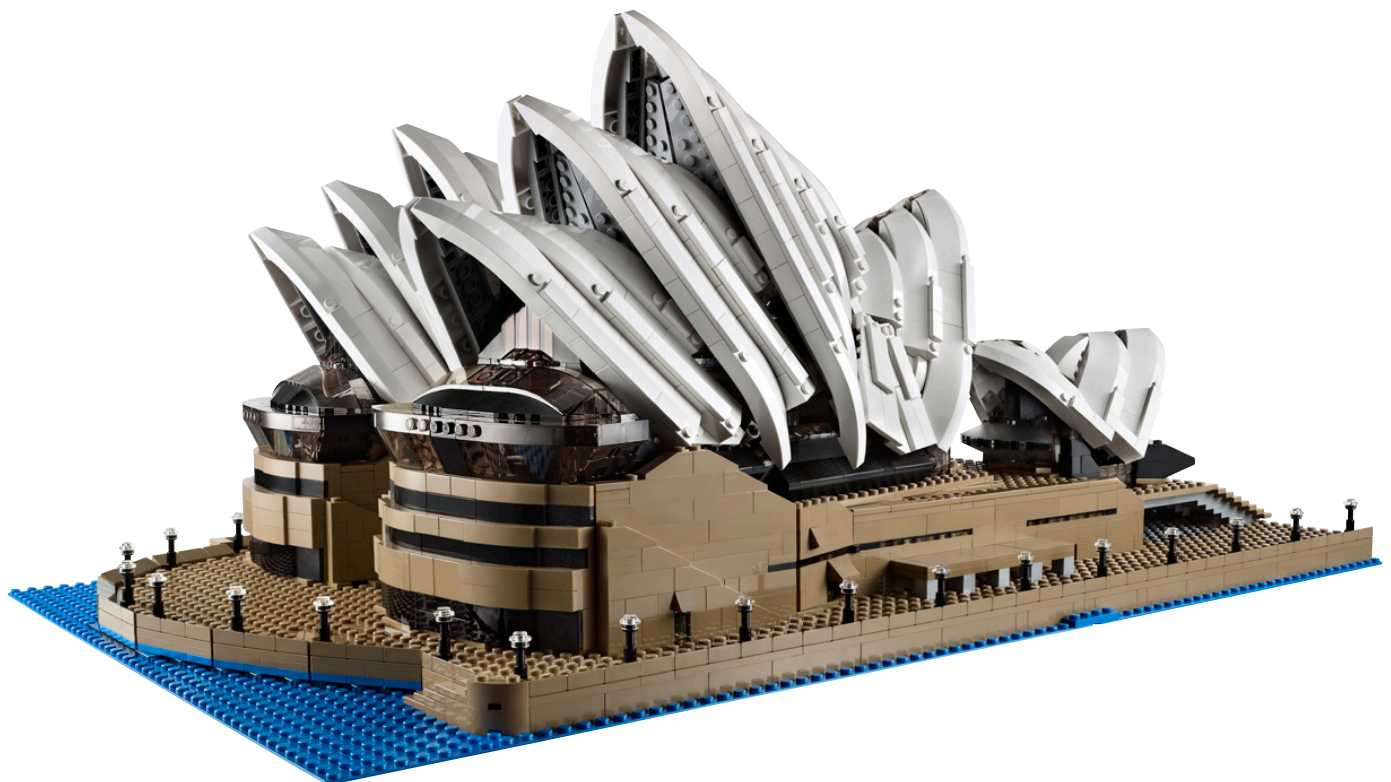
Set: Sydney Opera House
Set number: 10234
Parts: 2989

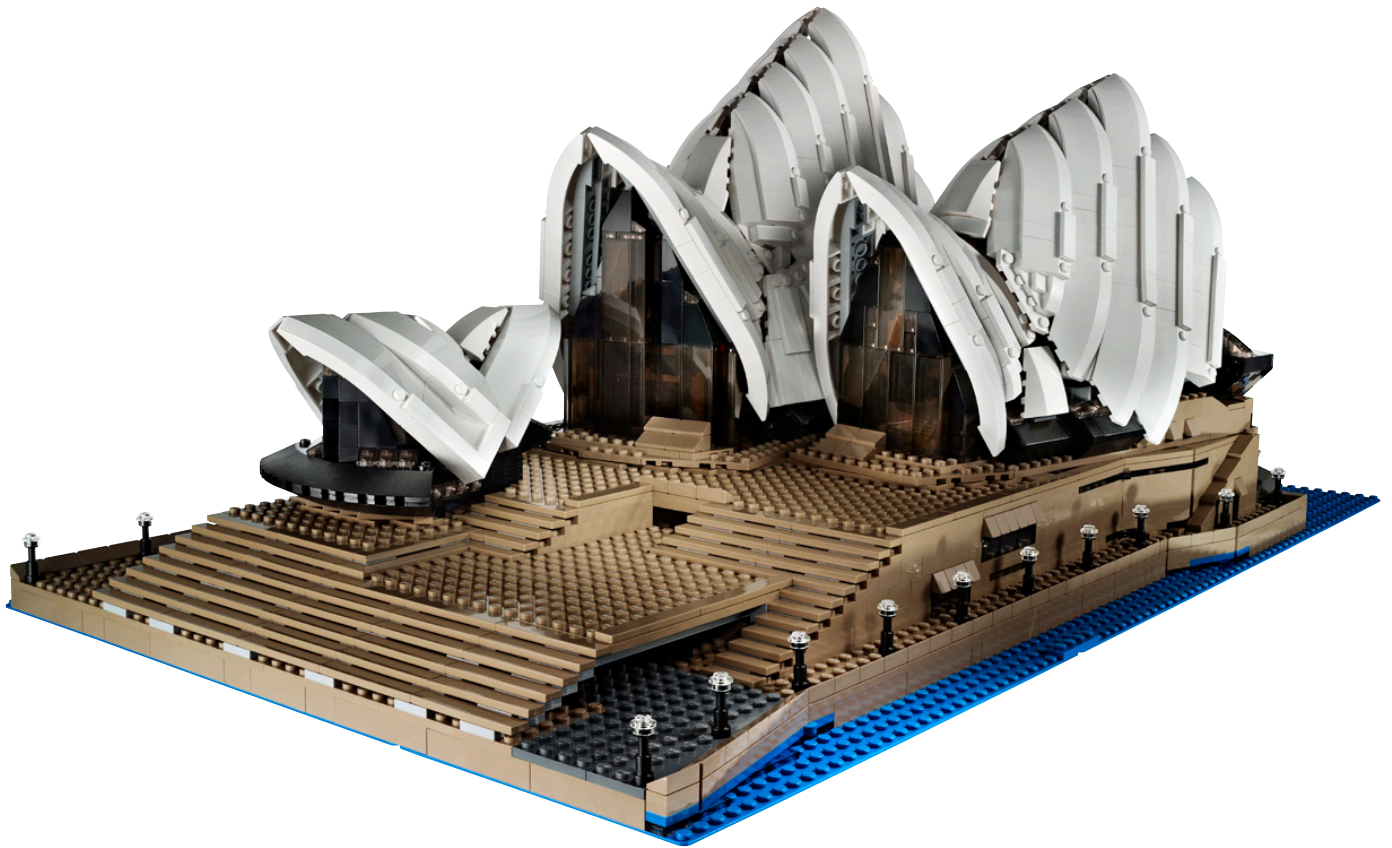
We were all expectant to see the set that would substitute the Taj Mahal in the hearts of the lovers of architecture. Leaving the Architecture theme aside, we were starting to miss a set that would represent a great monument at a scale that allows more level of detail. So the launch of the 10234 Sydney Opera House has arrived to fill that void. And it doesn't matter how big that void was, 10234 is capable of filling it. The set comes with some impressive numbers (2989 pieces, four instruction booklets and a total surface of 80x48 studs) and it represents one of the representative monuments of the 20th century. Its unmistakable silhouette is one of the symbols of the Australian capital, Sydney. Built between 1957 and 1973, it is the work of the Danish (talk about coincidences) architect Jørn Utzon (1918-2008).

But let's have a look at the set itself. As I have already mentioned, it comes with four instruction booklets. The first two describe the building of the base. Here we find the first

curiosity, since it is designed to be separated into two parts so as to be easily transported. In order to make disassembly easy some liftarms are used as guides and the parts are joined with Technic Pins and Technic Bricks. The following two booklets describe the construction of the two main wings of the building.

The construction of the first part is simple but entertaining since there are few repetitive steps; of course the result is simply a Dark Tan base on top of which the main buildings will be placed. The construction of those, on the other hand, is quite a display of design and constructive techniques. Work on the design of the roof of the main buildings must have given more than one headache. As the construction advanced I couldn't help but think the set was designed more like an AFOL would than with the classical LEGO® techniques. There is nothing specific I can give as an example, it's simply a sensation I had when building those fantastic white roofs and combining them on top of the building. For the windows overlooking the sea, more snoot techniques. The buildings are joined to the base by just a few studs, as the irregular shape it has and the angle it is built at don't allow for more connection points. This kind of connection also makes it easy to disassemble the set for transport.





In order to fit the kind of shells the roof is made up of together, articulations are used that are more typical of Bionicle and Exo-Force than LEGO® Creator, but they turn out to be not only simple and effective, but also strong and easy to build.

The building isn't exactly colourful; dark tan and white are the dominating colours, with a touch of Black and Trans Dark. After finishing the set it may look a little minimalist, but as a source of Dark Tan parts is unmatched. Also keep in mind the baseplates are blue. This detail only AFOLs used to keep in mind is something LEGO is starting to highlight in its official announcements when launching sets, mentioning new or rare parts and colours, as if we were going to buy a set for its parts.

To sum up, this is a great set in every aspect. It uses fantastic SNOT techniques, has a very interesting bill of materials and a great resemblance with the original building. This last point is especially good taking into account the difficulty of the original building. The final result may be a little monotonous chromatically speaking, but that is something we have become used to with the white in the Taj Mahal or the grey in the Eiffel Tower. I keep it on display in my room for now, and that is a good sign.

Acknowledgements: To LEGO® SYSTEM A/S and the CEE Team for the set and the official pictures.

#



Review: 70006 Cragger's Command Ship

By car_mp

Pictures by LEGO® System A/S



Set: Cragger's Command Ship

Set number: 70006

Parts: 609

Contains: 6 minifigs.

We might consider this set as the star set of the evil Chima for 2013 which is about to end. Although this line was created to replace Ninjago, the success of the latter in some markets, has kept it alive, and, despite its evolving into stories that would have been hard to imagine seeing the first sets from few years ago, we will have Ninjago in 2014. Since the continuity of Chima is also confirmed, it is clear that the kids will have a hard time choosing which fantastic line to follow and we, the older people, will have a better chance of more rare pieces in even rarer colors.

This set is famous for its assortment of Olive Green parts so appreciated for military constructions. It's true, in the picture you can see a lot of that color, but if we remove the ship's hull and the boats, the density of that color drops dramatically.

Even so, as the olive green is the fashion color in the 2013 season, it may be an interesting purchase for this reason.

Besides recycling it as a source of parts, the set itself has some very interesting things. On the one hand, many and varied minifigs. About the spectacularity of Chima minifigs we have spoken before, so nothing new to add. On the other hand the set includes up to 6 vehicles. The two jet skis from the lions (I thought they did not like water) and the boat of the crocodiles, which itself includes two speed boats and a helicopter that can be released from the main boat. This gives very high playability, although the lions have everything to lose at such a deployment of resources.

Nothing to say about the construction, it is clearly dominated by that huge hull boat on which are placed booths, vehicles and weapons. The mouth and the movable jaws simulating a crocodile are merely anecdotic, since as the mouth is at the top of the hull it is unlikely to catch anything in. The two speedboats are also single hull, which does not give





many possibilities for recycling, although they will be highly appreciated for military dioramas. The helicopter acts as the crocodile tail and, personally, just like I do not see the lions in the water I do not see the crocodiles in the air, everything for the show.

It is a set that brings up different opinions. On the one side it is a large set with many minifigs, varied vehicles and a lot of gameplay. On the other hand the boat hull..., to me that kind of parts is only understandable when looking for a leak that

allows playing with it in the water and I think this is not the case. Personally, and, as the olive green is not my color, I do not think it is a set that I would buy. I do not like it aesthetically and I hate that boat hull (I think I've made that more or less clear), but I recognize that for a kid fan of this line, this set means hours and hours of fun.

Acknowledgements: To LEGO® Iberia S.A., Joachim Schwidtal and Alfonso Torrón for the set and official pictures.
#



Review: 42009 Mobile Crane MK II

By Jetro

Pictures by LEGO® System A/S and Jetro

Set: Mobile Crane MK II
Set number: 42009
Parts: 2606

This year's flagship in the Technic theme is the 42009 Mobile Crane MKII. Mobile cranes have been a favourite subject for Technic sets, both small and large. Not only have there been quite a number of different mobile cranes (starting with the mythical 855/955 Mobile Crane in 1978/9), but the



Pneumatic Mobile Crane from 1995 was such a winner that it was re-released in 2002 and again in 2003. However, things changed in 2005 with the 8421 Mobile Crane XL. Not only was it the biggest LEGO Technic set ever (with 1884 pieces) but it remained so until 2011 when the 8110 Unimog took over the title. Prices for the set on the secondary market have remained high over the years and the set is a fixed reference in Technic circles.

It is no wonder therefore that the announcement of the Mobile Crane MKII sparked a lot of excitement and speculation. The name is a clear reference to the 8421, and it sounded like LEGO® thought it could outdo that hugely successful set.

So did it? Well, let's have a closer look at the set to determine to what extent it has succeeded.

Visual Impact

As the first images of the Mobile Crane MKII became available, it was immediately clear this set was indeed going to be bigger, at least in size: while the 8421 chassis has four tightly packed together axles, the 42009 has 5, the front one of which is placed at some distance from the remaining four. This translates into the fact that the set is 57 cm long and the





extended boom reaches a total height of 75 cm. Other details that stood out where the double LA's for lifting the arm where the 8421 had two opposed Pneumatic cylinders and a clearly visible function selector in the chassis, but more about that later.

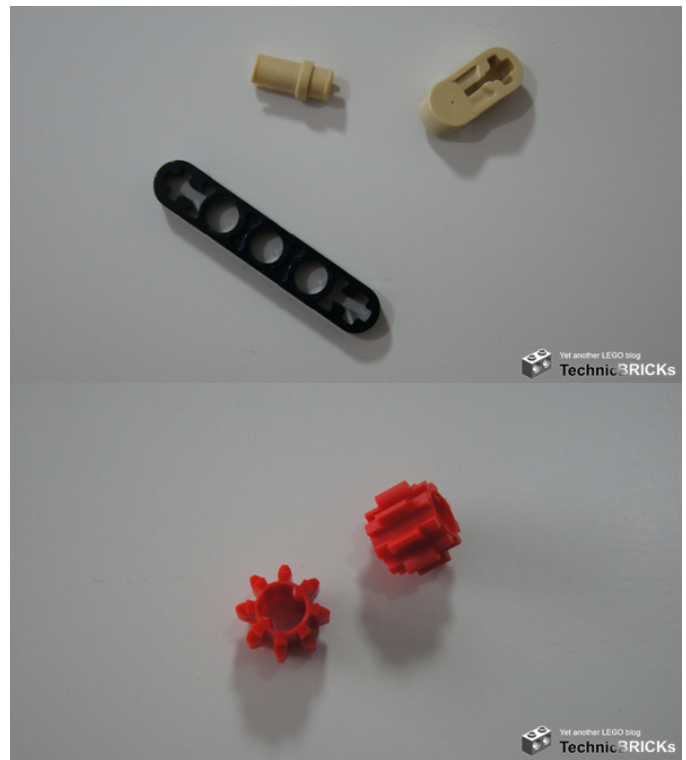
Packaging

Before going into the more technical aspects of the set, let's take a step back and have a look at the box and its contents. In true Technic style, the cardboard of the box feels almost too weak for the size and weight of it. The front indicates the set is motorized with the still rare PF L-Motor that came out last year, the four functions that can be accessed from the function selector on the side of the top structure and the overall dimensions of the set with the arm fully extended. The front also features a flap that can be lifted up to see more of the technical specifications of the finished model. LEGO® has done a great job of giving this set a more Technic look by including such information as the turning angles of the four steering axles, the maximum angle of the arm, and the fact that one of the four functions mentioned on the front splits up in two separate functions for the outriggers.

The rear of the box illustrates the secondary model for this set. Whereas the secondary model for the 8421 consisted of a different superstructure for the crane (a scissor arm with a platform), the secondary model for the 42009 is a real alternative: a container stacker with an extending arm, a truck and a container.

The box is quite heavy – over 4kg – and even though the instruction booklets for the main model weigh about 600gr, that is a considerable amount of LEGO. The box is really quite full and this adds to the sensation that you get a really big LEGO set. So how big is it? With 2606 parts it is almost 40% bigger than its predecessor the 8421 and a whopping 27% bigger than the previous champion, the Unimog!

As usual in these large sets, the 6 instruction manuals come in a sealed package with cardboard backing, together



with stickers and string. The parts come in more than 20 bags (except a few of the larger ones), although these are only numbered 1-3 and correspond to the chassis, the superstructure and the arm.

So what's inside? Come and take a look!

The parts

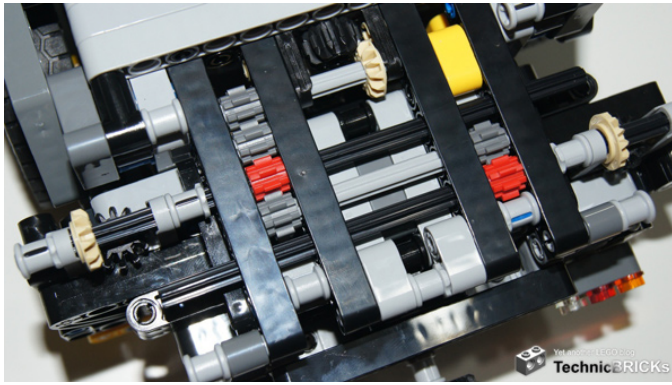
The 42009 Mobile Crane MKII comes with very few really new parts or exclusives. Some of the other sets this year already included the new 1x5 thin liftarm with axle holes in the ends and the new colour (tan) for the Pin $\frac{3}{4}$ and the Crankshaft Center, and this set is the first to include the existing 16L axle and the Axle and Pin Connector Perpendicular Triple (63869) in Black as well as the new 11x3 Technic panel in yellow, which was first introduced in the LEGO MINDSTORMS EV3 Education Expansion kit in black.

The new arrival and an element that has sparked quite some interesting discussions is the new version of the 8t gear. Not only does it have wider teeth like the new generation of 8t gears that make it easier to keep it from sliding out of place, it is also capable of the complete opposite: instead of four ridges in its interior it only has two, allowing it to easily slide over an axle, while still driving it.

Let's see how this interesting new piece is used.

The Main Model

Building the Mobile Crane MKII is a lengthy process that requires attention: exactly what an adult LEGO fan loves. While there are still many occasions where 2 or more steps could have been combined into one, there are also a number of steps where casual building or taking the building process in strides can get you into serious trouble. As mentioned before, the model features 4 motorized functions, the last of which is broken down into two stages. The outriggers first extend sideways and after changing the selector in the chassis the mini LAs will extend down. This double mechanism is



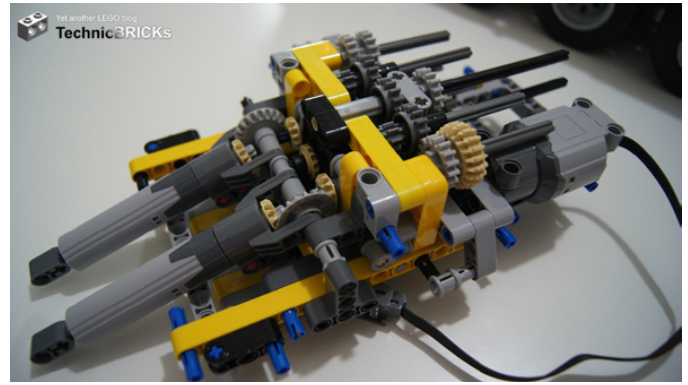
made possible with the help of the new sliding 8t gear. The mechanism didn't appear to be working in my case until I went over the construction step by step and found I had placed the bevel gears on the second set of mini Las the wrong was round.

Due to the large number of gears in the transmission it is also vital to make sure that each gear is carefully placed to avoid any unnecessary build-up of friction. After doing so, all the mechanism can be turned perfectly by hand and the powerful L-motor of course has no trouble making them work either. The new design of the standard 8t gears (as well as the sliding 8t gear) turns out to be crucial here. In each of the outrigger sections there is a sequence of 4+2 such gears. The new design helps to better align the gears, although you still need to make sure they are well centred to avoid unnecessary friction

The construction of the upper structure reminded me a lot of that of the 8043 Motorized Excavator: rather than building a shape you spend some considerable time stacking up gears and it takes a determined effort to figure out what is connected to what and how each function is accessed. All the more fun! A 'new element' I haven't mentioned in the corresponding subheading is the string. The string used in the 8421 was quite thin and tended to get stuck/not unroll as expected. Part of the problem was the string itself; part was the fact that even though the model had a metal hook, this hook still was not heavy enough to ensure the proper functioning of the mechanism. LEGO® appears to have discontinued the use of this metal hook; it was substituted by a hook made up of small LEGO parts in the 8053 Mobile Crane and the 42009 Mobile Crane MKII has a similar hook. The string used in this crane is a lot thicker, and instead of coming in the traditional little carton box, it is packaged with the instruction manuals and stickers. The quality of the string is a lot better and it doesn't stick quite as much as the standard string. Unfortunately the weight of the hook is very low to keep the string tense and so it occasionally needs some additional help to function properly.

The three-stage extendible boom works perfectly, and although it doesn't extend quite as much as you might expect from the individual stages (quite a bit of each subsequent stage stays inside the previous one to ensure stability) it extends and retracts very smoothly. The battery box – which doubles as a counter weight for the top structure – is easily accessible and can be detached from the model as a complete module so putting in fresh batteries is a breeze.

Overall the model has all the mechanisms you might expect and the playability it needs to securely take over as the best LEGO Mobile Crane ever.



The secondary model

Rather than making a single secondary model, with this set LEGO offers a combination of two vehicles (a container stacker and a truck) and a container as an alternate for this set. The container stacker has a two-stage extending arm as well as a realistic mechanism for grabbing and placing containers that includes the use of the turntable for placing them at the right angle. The truck that receives the container appears to be a relatively simple construction at first sight. However, it features steering front and rear axles and a mechanism to lock containers in place. The combination results in a great play set and makes for an interesting alternative to a spectacular main model. Instructions for this combined model are available for download on the LEGO website.



The verdict/Final thoughts

It seems clear LEGO accomplished what it set out to do: it has created a great flagship for 2013, shattering previous records for highest piece count. A relatively smaller box (no wasted space), special string (better flow), a complex but perfectly working mechanical design, a very creative secondary model... The 42009 Mobile Crane MKII is a worthy successor to the 8421 and a new milestone in official LEGO Technic creations.

Acknowledgements: To LEGO® SYSTEM A/S and the CEE Team for the set, and the official pictures.

#

Review: 42023 Construction Crew

By Manticore

Pictures by LEGO® System A/S



My veteran Technic hands have received this set very recently; and for all our readers I am writing this review of it. Even before knowing anything about the set, except for the typical rumours, the name already had me curious. First the obvious: "Construction". I don't even dare repeat how much I like Technic excavators and cranes, above all else. The combination of yellow and black of those vehicles has fascinated me since I was a boy. But on top of that "Crew" implies this is not one single machine. And so it is, upon opening the parcel and contemplating the box, a loud "Oh" of surprise and admiration was heard even in Billund.

A Technic set with several vehicles at the same time! I don't pretend to give an overview of every set since the marvellous 70s, but I don't remember a single one that allowed you to build two vehicles at the same time, except the 8286 (a

car with trailer and a helicopter) and the 8539 (two bases with remote control that could be combined into one larger B-model). We have had from the typical "B" model, to universal sets similar to the current CREATOR sets, allowing you to build various models. But not at the same time, and that isn't even what's special about this set. Any child that wants to get started with Technic will find this set is a way to learn a lot with simple constructions, and afterwards it will provide a lot of playability. Well, I said "child", but ever since I built the set my son is tired of having his father play with the three vehicles.

Let's get started with the review itself. In the first place, the box. Medium sized and with quite some empty space - practically half. Since the vehicles cannot be stored inside I understand the only reason for the size is to highlight the fact that this is a special set in this theme.





The instruction manuals are included without the cardboard protection the larger sets have. That meant that one of them was not exactly in perfect shape. A simple sticker sheet completes the printed section of the set.

Three vehicles, three instruction booklets and ... six bags with parts. Well, actually there are three pairs of bags, one large and one small. It's curious though that of the small ones only one is numbered. Fortunately the colouring of each of the vehicles is very different, which makes identifying the bags easy. I don't know if this is an error or if it is simply meant to be this way.

Following the numbering of the bags, I started building vehicle #1: the excavator. Very similar to its larger siblings, the 8294 (especially because it is red) and the (currently) insurmountable 8043. Of course this is quite a different league. The dimensions of the vehicles in this set are small, and they can't and shouldn't be compared to more complex sets. Nevertheless, in a small size all the basic functions of an excavator have been included. A mini LA controls the main arm, and another mechanism controls the slewing of the upper structure. The treads give it quite a realistic look. The secondary arm and the bucket are controlled manually, but it is nothing a child can complain about.

Following the order it is time to build the truck. It is blue and grey and has a tremendously compact front. It includes a HOG (Hand of God) and a tipper that is raised and lowered with another mini LA. A little marvel, incredibly realistic for its size.

Finally there is the third vehicle of the set: a front loader. If the excavator reminded me of other larger sets, in this case there are also similarities with larger sized sets (8265 for example). The steering is controlled in exactly the same way. It isn't the wheels that turn, but the front part of the vehicle makes it change direction. In this case there is no mini LA to raise and lower the bucket. The movement is done with a worm gear (3L long, one of the four new parts in this set). A curious piece, but it hardly adds anything to what is already available.

Just like the excavator from this set, you can only raise the main part of the arm, controlled with a gear at the back of the vehicle. The second stage of the arm and the bucket are controlled manually.

There are other parts to highlight in this set. One is a long Technic pin, but with an axle at one of the ends. Something like the typical Technic Axle Pin with Friction Ridges Lengthwise, but 3L long. There are also the tyres of the front loader and, the most special one to me, a Technic beam with an elongated H shape which expands the possibilities of building structures.

To sum up, the set is very recommendable for those who want to get started with Technic, and it is very complete and playable. The three vehicles are small, but realistic in their scale.

Acknowledgements: To LEGO® SYSTEM A/S and the CEE Team for the set, and LEGO Iberia for the official pictures.
#



Review: 42024 Container Truck

By Jetro

Pictures by LEGO® System A/S



After clearing several containers of debris out of the flat I am renovating I was looking forward to finding some time to build a LEGO® Technic version of the truck that has come to pick them up. But LEGO has beaten me to it, and the 2014 line-up includes the 42024 Container Truck: a compact model with all the right functions.

The 42024 Container Truck is the second largest model in the Technic series for the first half of 2014. It isn't the first time LEGO presents a truck that is approximately this size, nor one with this name. Both the 2008 Cherry Picker (8292) and

the 2010 Container Truck (8052) appear to be in the same approximate size range although the number of parts for those two models is significantly lower – 726 and 686 respectively while the 42024 Container Truck has 947 pieces. The set is however quite novel, for several reasons.

For starters, the type of container this truck carried and the loading/unloading mechanism with double “hydraulics” has never before been reproduced in an official LEGO Technic set. Additionally, while all three trucks are roughly the same length, the difference in piece count translates into a wider wheelbase



(from 13 to 15 studs), made possible in part by one of the new elements included in this set: the new 49.5x20 tyres. These new tyres are a lot more realistic in the relationship between the diameter of the hub and the thickness of the tyre. As a consequence, the wheel arch under the cabin is raised by 1 brick while the rear tyres give the truck a much more robust look.

The truck is however, roughly in the same price range as the two I mentioned earlier – allowing for inflation over the years. So how is that possible? One key factor is that both the Cherry Picker and the 2010 Container Truck included a PF M-motor and the inevitable battery pack. While the 42024 Container Truck can be very easily motorised (instructions are included in the second booklet) the set doesn't include the necessary PF elements, allowing for more "standard" pieces at the same price point. The mechanisms are built in such a way that they can be comfortably used manually. Some earlier Technic sets that could be motorized were hard to use without the motor (e.g. the 8265 Front Loader – a great set, but difficult to operate without motorizing it first). In this case however, the functions have been geared in such a way that manually turning them isn't too much work, including a motor is a matter of a snap and a click and the speed of the motorised function is roughly the same as the manual speed.

The new tyres are not the only novelty in this set. After the appearance of the 8L and 4L axles with stop it is now time for the 5L axle with stop (a flat stop at the end of the axle) which is produced in a convenient Dark Tan (to match the 3L axle with stud). This axle configuration is turning out to be very convenient for separating functions on the same plane and avoiding axles from moving out of their designated areas. Another intriguing part in this set are the chain elements used to lift the container. My first thought was that these must be new pieces, but some further research told me they were first introduced in 2006 (!) in a Bionicle set (!! – BL part number 53551 – thanks Fernando!). The chain links work very well and are kept in place laterally by $\frac{3}{4}$ pins (colour coded Tan). So what does this set "do"? – isn't that what Technic sets are all about? Well, yes and no. Technic is about functions, but the nice colour scheme – yellow cabin, red bed and blue container – is part of the appeal of the model too... There are no real surprises in this set, but the functions have been nicely



executed, which again, speaks for the aesthetics of the set. Of course there is the HOG for steering the model and the doors of the cabin open. But the best part of this set is in the back of the model.

Deep inside the model there is a Driving Ring to select one of the two functions. Rather than having direct access to the Changeover Catch, this is connected to a system of levers that end under the space reserved for the battery box on the left side of the model. At the exact same place on the other side of the truck there is a knob to manually move the functions. This symmetry is very nice touch that enhances the overall look of the model.

The gearbox allows access to two functions: one is the arm that lifts (and lowers) the container. This function is powered by two Linear Actuators, mimicking the real life function of this truck. The second function lowers (or raises) the stabilizers – with the aid of a mini LA – which are placed at the back of the model. Together with the stabilizers a catch is raised or lowered. This means that with the stabilizers lowered, the arm can place the container behind the truck. But with the stabilizers (and the catch) raised, the container will tip over to spill its contents behind the truck.

As usual the set comes with instructions for a secondary model which is displayed on the back of the box: a road grader, which uses the chains to control the angle of the blade, the Linear Actuators to control its height and the mini LA for the ripper at the back. At the time of writing this review the instructions have not been made available yet, but while the general look of the model is less clean due to the variety of colours used, the fact that it is a completely different vehicle which uses all the main element from the A model is a definite plus.

Acknowledgements: To LEGO® SYSTEM A/S and the CEE Team for the set, and LEGO Iberia for the official pictures.

#



Review: 10243 Parisian Restaurant

By Manticore

Pictures by LEGO® System A/S

Set: Parisian Restaurant

Set number: 10243

Parts: 2469

Contains: 5 minifigs

2014 brings the tenth modular building within the CITY theme, the elite of their designs. Of course, back in 2007, when the first modular building was released, I was charmed by its design and its many details. However, given my love for anything that smells like "the 80s", I decided not to be tempted despite its beauty. Yes, it is true, the houses that we could see in those catalogs of the 80s have nothing to do with these modular buildings. Maybe it's just because that, those nice houses of my 80s minifigs are still too present in my memory to betray them with these great buildings. Logically it is a personal opinion that it should not take a shred of interest in these buildings. Also influenced by other factors such as the purely economic and space factors. When you live surrounded by LEGO® from age 6 (and that is now quite some time ago), you have to prioritize the themes to follow and the essential sets. Anyway, in my memories I will write that I gave the first modular to my wife for her birthday in a desperate attempt to get her to like this toy and thereby better understand my hobby. After building it and the usual question of "Now what do we do with this thing in the middle of the living room?" she quickly struck back giving me a purse for Christmas. Finally, I exchanged the Coffee Corner for a 4511 train and a few 9V tracks. And here is my story with modular buildings. But let's make history...

It all began in 2007 with the Coffee Corner (10182). In the same year, as a product of the Factory theme (designs by AFOLs), the Market Street (10190) was released, designed by Eric Brok (AFOL sadly deceased). Starting with these two sets, each year we had the same mystery: which modular set will LEGO release this time? The announcement of a new modular is suspense to the AFOL community. Another house?, A museum?, A movie theater?, A department store? Chronologically, and since 2008 until today, we have the Green Grocer (10195), in 2009 the Fire Brigade (10197), which some perverse minds associate with the movie "Ghostbusters"... (me too). In 2010 the Grand Emporium (10211), in 2011 the Pet Shop (10218), in 2012 the Town Hall (10224), and in 2013 the Palace Cinema (10232).

What is it going to be next year? After a coffee shop, a fire station, a town hall, a pet store and a department store, LEGO goes to the adventure of designing a Parisian restaurant, the height of elegance and glamour. And given my elegant personality, I volunteered for the review of this beautiful set.

Let's start at the beginning. The box is large, without reaching



the size of the Star Wars™ UCS or large Technic sets, boxes like that ensure lots of fun building.

As always, on the rear, along with scenes from inside the set, the combination of this set with other modular buildings is shown, in this case the last two, the Palace Cinema and the Town Hall. Watching this I start to question if my unconditional love for 80s sets can resist this hard test of fidelity.

The box is quite full. The many bags fill much of the interior space, and the three instruction books are very well protected by the typical cardboard included in the big LEGO sets since the legendary 8043 excavator.

The bags are numbered 1 to 4. The first two (book 1) serve to build the ground floor of the building and the terrace. Bags "3" are for the first floor (book 2), and those numbered with the "4" build the attic (book 3).

Construction begins defining the 32x32 studs baseplate with the terrace and the interior areas. Some white and dark blue



1x1 tiles show where the very detailed restaurant kitchen is located.

Emphasizing the romantic scene between two lovers ... He asks her to marry him giving the ring to the beautiful minifig, who accepts eagerly cup of wine in hand. Given this picture, I have to remind you that sentence... "One Ring to rule them all, One Ring to find them, One Ring to bring them all and in the darkness bind them." Creepy...

Talking about the ring, it appears that there was an error at the presentation of this set, as it was stated that the set included a seagull. That item was eliminated in the subsequent versions of the set and replaced by a ring identical to the one from the LOTR sets. No one should buy the set for the seagull ... or for the ring.

Returning to the set, the terrace is decorated so exquisitely with those two pots and planters. And the Vespa scooter is just gorgeous. About the details of kitchen we will talk when completed.

We open the bags numbered "2" to continue with the ground floor of the building and fill the building with details. The whole structure of the lower floor is completed by adding real fancy stuff to the set. The bar cabinet in the main room of the restaurant is wonderful, as well as the entire kitchen in general. The fridge even has a milk carton, and our chef can choose from three different knives or use the rolling pin to make a good pizza. As if this were not enough, he is ready to cut a huge turkey. The detail of the blue curtains gives the restaurant a more noble appearance.





The rear of the building is the weakest in terms of details. But it is logical. We have the trash can and even the container. At least the back entrance to the kitchen it is decorated with a canopy so it does not clash so much with the front of the building.

Building the first floor is what I liked the most. We open the bags "3" and start the second book. The inside of the first floor is less elegant. This is an apartment with all comforts. Eat-in kitchen, fireplace, swivel chair and a folding bed to have more space during the day.

The best part of the first floor is the outside. Two windows with a balcony, and in each window a colorful flower box. Speaking of colors, the choice of the olive green with white is frankly good. I love it as much as the white with dark blue from the roof and attic. Speaking about the attic... we open the numbered "4" bags and the third and final instruction book. I almost feel sorry it's over, but the grand finale is going to be great. The inside of the attic can be seen opening part of the roof. This is the painting studio of an artist, certainly belonging to the Avant-garde style (vanguard and innovative) of the twentieth century.

The detail of the door of the stove-oven is great as well as the color palette and brush. Even better if possible is the finishing of the building. The main façade is impressive. From the terrace of the ground floor, to the attic's architectural details (shells included).

The side of the first floor is a charming terrace decorated with two pots. It seems something from the Friends theme. And the outer part of the fireplace using the 1x2 bricks with molding is extremely realistic.

Once the entire construction is finished, the back of the building looks a lot different. Aside from the terrace, the stairs, the flowers and the entrance to the attic and to the first floor housing give a more consistent look with the beauty that is presupposed to a modular. Especially a Parisian one.

Summarizing ... I don't know how to summarize the description of this set without anyone being offended by omitting some detail. Indeed the word "detail" is the one I have repeated most, because it is impossible to describe this set without praising again and again the multitude of details it has. The kitchen, the outdoor terrace on the ground floor, the restaurant (that bottle rack is more than realistic), the main façade is what catches the attention the most, but I could not stay just with a single zone or part of the building. The interior is more than a success, perfectly matched with the beautiful and elegant exterior.

I could not evaluate this set against the other nine modular, but certainly it will fit like a ring with the other sets... Did I say ring?

Acknowledgements: To LEGO® SYSTEM A/S and the CEE Team for the set, and the official pictures.

#





Great creators of the world: Thorsten Bonsch

By HispaBrick Magazine®

Pictures by Thorsten Bonchs

When you mix imagination together with creativity, constructive techniques and add high-quality photography, the result rarely disappoints. Our guest in this issue never disappoints.

HispaBrick Magazine: Name?

TB: Thorsten Bonsch aka.Xenomurphy

HBM: Age?

TB: I prefer to lie about it, but since this is an interview, I don't want to lie. My answer is, I'm not 30 anymore.

HBM: Nationality?

TB: German

HBM: What do you do normally?

TB: I'm working as a digital media designer and sometimes in the area of audio-visual design.

HBM: When did you first start building with LEGO®?

TB: My brother is seven years older than I am and he used to play with LEGO when I was born. Since he loved to romp





around outside the house, the old wooden drawer full of gnawed bricks were mine most of the time. I started building as soon as I could reach the drawer, maybe when I was two or three years old. I remember I never had any interest in swallowing the precious small parts – take that, overcautious society.

HBM: When did you start posting your models online?

TB: Coming back from my dark ages was a slow process. Before they began, the internet as we know it didn't even exist, so there was no chance to post anything online. My dark ages were never completely dark and although other things became more interesting between 1985 and 2005 – like new and old

friends, men and hobbies like film-making, painting, writing etc. – I bought a small set from time to time. In December of 2005, I started recreating LEGO® parts in a 3D software in default of lots of bricks, but realized that it was not the same as building with the real stuff.

It took me over four more years to get enough bricks and courage to post my first MOC in March, 2010.

HBM: What is the last set you have purchased?

TB: The CLS-89 Eradicator Mech from the Galaxy Squad series, but only because I needed some parts for my latest MOC. The last set that I purchased, because I liked the set itself, was the Haunted House from the Monster Fighters series.

HBM: What is your favorite commercial LEGO building theme?

TB: I'll always be a fan of the classic space series, that one left an indelible mark during my childhood. Talking about more recent themes, I'm also a fan of the Monster Fighters series and the licensed themes Harry Potter™ and Lord of the Rings™/The Hobbit™.

HBM: What is your favorite theme for building?

TB: Architecture, often in combination with superheroes or horror, whereas I like both, architecture and interior architecture. Then again, I can get excited about everything, as long as I need it to build something from my non-LEGO-interests, like Doctor Who or H. P. Lovecraft.





HBM: What is your favorite LEGO® element and why?

TB: Any brick with at least one stud at its side. Building in different directions – not just from bottom to top – allows me more creative freedom.

HBM: Which part would you like LEGO to produce?

TB: Oh, that is easy: A single stud that is twice as high as a regular stud. They could be used to connect plates, tiles etc. in opposite directions. And a higher version for bricks.

HBM: How many hours do you spend building with LEGO?

TB: Of course that depends on if I'm working on a project or not. But once I got bitten by the bug, I spend easily 3 hours a day during the week (3 to 4 days) and 8 to 10 hours a day during the complete weekend. It is an obsession, as long as the idea behind a new MOC is good enough.

HBM: What do your family/friends think about this hobby?

TB: Surprisingly, they really love it. My father is very proud of me, though every time he visits me, he says: "Amazing work, son, but don't you think you have enough bricks now?" He doesn't know that you can never have enough bricks. When friends come over to my place, they always want to have a look at what is going on in my LEGO lair. After I showed my coworkers some of my MOCs online, even they stopped thinking that I'm a nutcase.

HBM: Do you draw or pre-designs before you start building?

TB: That depends on the size and complexity of the project.

I'm a very visual person and can imagine a final MOC before I even put two bricks together, but if I'm not familiar with a theme or if it is too complicated, I draw scribbles, sometimes dozens of them.

HBM: If you had to choose one among all your creations, which one would you choose and why?

TB: In case you mean which MOC I'd take along to a deserted island, I must say my Arkham Asylum MOC, because it contains the most parts, hahaha. But my most favorite MOC at the moment is Lovecraft's Study, because of all its interesting little details and, more important, because I tried to capture a certain atmosphere and I think I managed to do it. It is a horror MOC of some kind, but I wanted to avoid the classic gothic feeling, you know, dark castle, shadows, thunderstorm etc. Instead I tried to come up with the typical 80s horror movies mood – bright, warm summer days outside and a certain unpleasant silence inside the sun-drenched room.

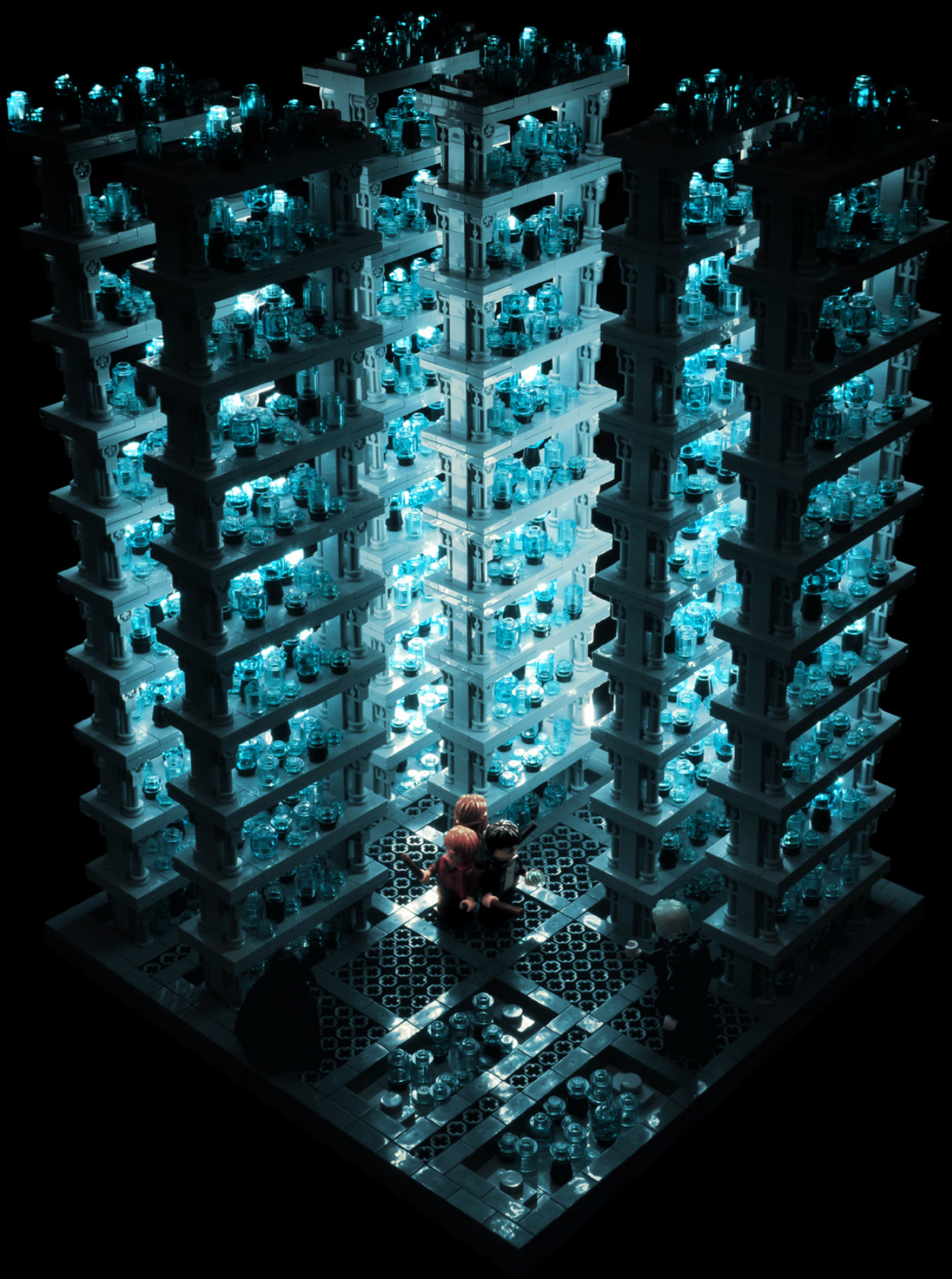
HBM: What do you think about the use of non-official parts (stickers, modified parts, non-LEGO elements ...)?

TB: Calin (_Tiler, www.flickr.com/photos/55943031@N02), a friend of mine, once called me a purist customizer and I think he is right. I like to customize minifigs if it suits the whole creation, but apart from self-made decals, I'm only using official LEGO and third party products, when they are good. Look at my version of the Green Goblin for example. I used an original wizard's hat and Yoda's head to get what I wanted. As long as the result looks professional, I don't have a problem with it. Other than minifigs and their accessoires, I try to avoid non-official or customized parts. Of course there is always an exception of the rule: I once varnished a complete MOC in dark blue: The TARDIS from Doctor Who. I'm still glad I did it, because it looks perfect in my opinion.

HBM: Setting and lighting are a fundamental part of your creations, together with the magnificent quality of the pictures. Is the story your MOCs tell more important to you than the MOCs themselves?

TB: No, I think both are equally important, because one doesn't really work without the other. Brilliant photos of, let's say, a clone on a plate might be nice for a catalog, but are boring as hell. On the other hand, blurred and grainy photos of a fantastic MOC are also a pain in the gluteus maximus to look at. Especially as a judge in LEGO contests it is hard to ignore bad picture quality and to judge only the creation.





HARRY POTTER AND THE ORDER OF THE PHOENIX
CHAPTER 34 - THE DEPARTMENT OF MYSTERIES



For me, a MOC that doesn't tell a story is missing something. In order to tell a story, you need to capture the right mood and you do this by setting the right lighting. It is really hard, but it pays off.

Millie (Leda Kat, www.flickr.com/photos/82815892@N07) another good friend of mine, once said this: "Photography is just another medium to express your art. Remember how much effort and time and technique you put into creating your MOCs and apply that dedication to photographing them. The only way the greater world can view your MOCs is by a photograph of it."

She is absolutely right and I have nothing to add to this.

HBM: You are working on a book about your Arkham MOC in which you will give information about the making of with sketches, designs and ideas that were discarded, detailed pictures, etc. What has led you to take the extra step of sharing not only your creation, but also the creative process?

TB: The strong feeling that everybody likes what I like, hahaha. No, really, I've always been a huge fan of movie making-of material and behind-the-scenes stuff, at least before CGI became a standard. Real handicraft and special effects always impressed me, sometimes more than the finished movie. As a creative person, I think you can learn much more from watching the artistic process than watching the final result. Taking pictures of my work in progress and discarded designs also is like writing a diary. When building larger MOCs, it's

good for your motivation to see the steps of your progress and the mistakes you made.

And when I started posting the first few behind-the-scene shots, people liked it and asked for more. Or they just want to read my diary, hahaha.

#



Exhibition: “Toys of all times”

HispaBrick Magazine® Event 2013

By A. Bellón (Legotron)

This year we were asked to collaborate with an exhibition dedicated to classic toys on the dates we normally have our event, so we decided to move our event, the HBME 2013, to the exhibition assembly, that will take place on December 14th and 15th in the city of Bilbao (Vizcaya).

As LEGO® event it will have the usual activities like contests, dinner, speeches and especially the pleasant company of all the fans attending. As a climax to the Hispabrick Magazine Event 2013 an exhibition of dioramas and themed collections will be assembled, in which members from Hispabrick Magazine participate alongside HispaLUG members in a joint exhibition named “TOYS OF ALL TIMES” with toys from other brands, which will be open for 4 weeks.

The exhibition “TOYS OF ALL TIMES” will take place in the 1200m2 from the Exhibition Hall at the Euskalduna Palace, located in the village of Bilbao. (Euskalduna Palace Web: <http://www.euskalduna.net/>)

The following toy Brands will be represented at this exhibition: LEGO®, MECCANO®, MARKLIN® LGB, TRANSFORMERS, EXIN CASTILLOS® and BARBIE®, that are going to have 480m2 of dioramas and theme collections.

The exhibition is going to have the amount of 1.500.000 parts, 1.150 models, 15 dioramas, and 4 exhibition areas. Material contributed by the following collectors associations: HispaBrick Magazine, ACEAM (Spanish Cultural Association Meccano Enthusiasts, in Spanish), LUTJENS, ACAT (Transformers Fans and Collectors Association, in Spanish), Exin Castillos & West, Exin Castillos and Exinwest Spanish Association and Barbie Doll And Dolls. This exhibition is focussed on the general public and families, with a more generic view of some of the toys that have been present in our homes over the last decades.

The exhibition will be open from December 16th 2013 till January 10th 2014.
Ticket sales at the Euskalduna Palace ticket desks [1], during the running exhibition.

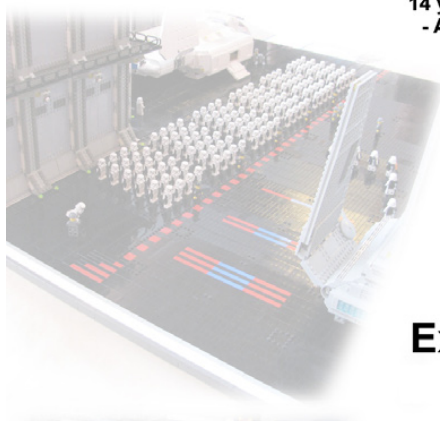
Visiting hours:

- Days December 16th, 17th, 18th, 19th, 20th, 25th 2013 and January 1st & 6th 2014: from 05:00pm to 09:00pm.
- School Vacation Days: from 11:00am to 02:30pm & from 04:30pm to 09:00pm.
- Days December 24th & 31st 2013 and January 5th 2014: from 11:00am to 05:00pm.

[1] For more information, check the Euskalduna Palace calendar at: <http://www.euskalduna.net/agenda.asp>

HISPABRICK MAGAZINE EVENT 2013

14 y 15 de diciembre 2013 (Bilbao)
- Actividades para expositores -



Exhibición pública

Pillars of the Community:



By HispaBrick Magazine®

Pictures by Joe Meno

If you ask an AFOL for a publication on the LEGO® world, unfortunately for us Hispabrick Magazine® will probably not be their first choice. BrickJournal is the reference. It had its beginnings in the online world, that announced it globally, made the leap to the printed word and then to the official LEGO distribution channels. It came to cover a space that had so far been empty, and has been the inspiration for the written medium about the LEGO world. From the first moment, Joe Meno, the man behind the project, has been watching us smiling from behind a frame in his editorial.

HBM: How did the idea of Brickjournal come up and what was its original purpose?

JM: BrickJournal began as an effort to document the LEGO fan community, but changed its mission not only to document but also provide an introduction of the AFOL community to the general public.

HBM: To what degree has that goal been fulfilled ?

JM: It's an ongoing effort.

HBM: How many people are working on the journal?

JM: There is a handful of people who work on the magazine, with a regular set of constant articles from Jared Burks (minifigure customization), Christopher Deck (miniscale model) Greg Hyland (AFOLs cartoon) and now Tommy Williamson (pop culture model) After that, there are correspondents around the world that bring in content.



HBM: How do you distribute the work?

JM: The writing and photos are done by correspondents. From there, everything is sent to me where I set up the pages, make digital models as needed, and layout the magazine.

HBM: What was the reason for the transition from a free magazine to a paid one?

JM: BrickJournal was planned to become a printed magazine from its start, so the online edition was an initial proof of concept of a LEGO® fan mag and its online run was proof that there was a constant amount of content to publish.

In order to become a printed magazine, services and supplies need to be purchased, such as the printing, paper and shipping. Advertising isn't a viable way to finance the magazine, so it became a paid magazine.

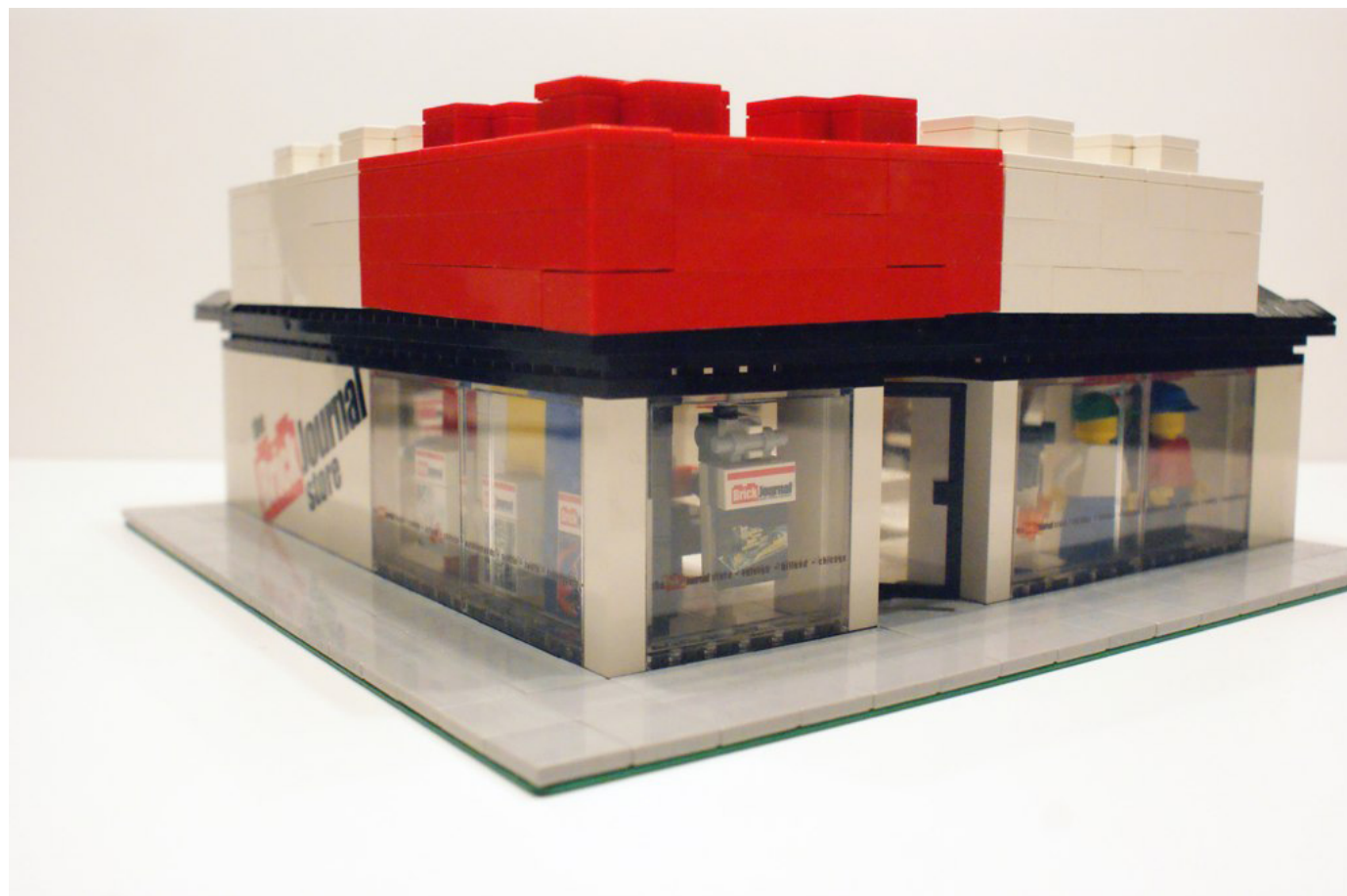
HBM: How has the availability of the magazine through LEGO sales channels affected the magazine?

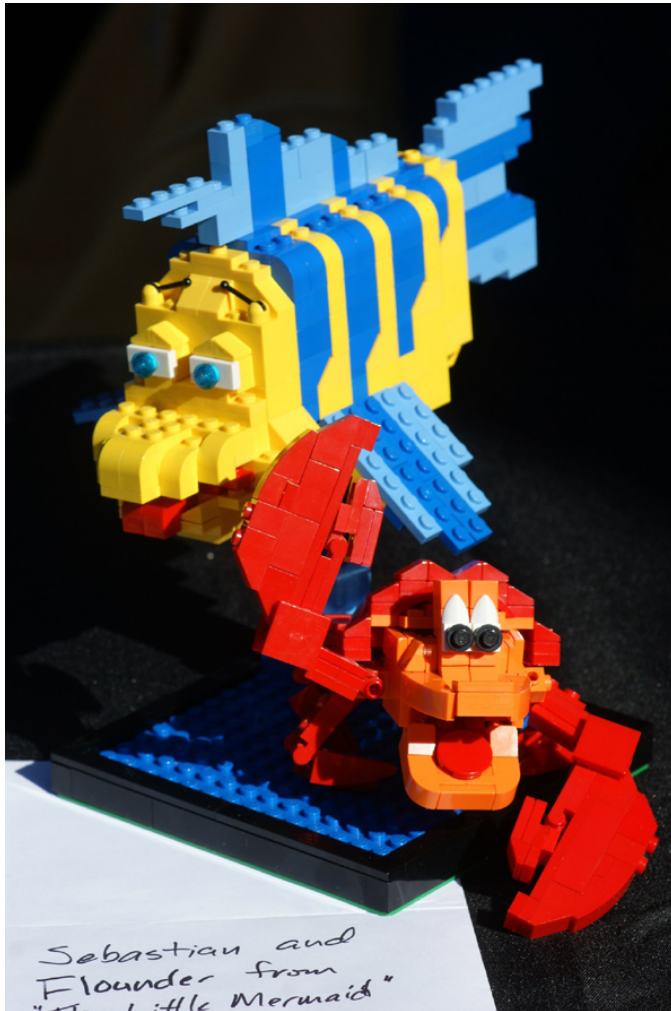
JM: BrickJournal, thanks to its presence in the LEGO stores and LEGOLAND parks, can be seen by the people most likely to read the magazine, so it's increased sales tremendously.

HBM: With the backing of LEGO for distribution, do you still have the same freedom to choose content as before?

JM: We generally have to adhere to LEGO's Fair Play rules, so there are some things that we will not put on the covers. However, we do have a pretty good amount of freedom in content.

HBM: During these years of daily following the LEGO





community, which do you think are the main changes that have occurred in the AFOL community?

JM: The community that I started in split into a bunch of communities. This has created fragmentation that has become more and more of an issue in terms of working with the LEGO® Group. Instead of having one or a few large voices, there are a multitude of small voices. Because of that, the power of the AFOL community is smaller than it could be.

An example of that could be seen in the LEGO CUUSOO website. The ideas that have been selected came from properties that had large audiences outside the fan community - the Minecraft set made 10,000 votes in a week! The AFOL community has yet to get a fraction of that in terms of votes for a project.

HBM: Have you done any activities in “real life”? Can you explain them?

JM: Before the magazine started I was pretty active in the fan community in the US, as a member of the North Carolina LEGO Users Group. I coordinated BrickFest (a LEGO fan event in Washington, DC) in 2006 and was one of the event coordinators for BrickMagic (a LEGO fan event in Raleigh, NC) from 2010 to 2013.

I have done presentations about the LEGO community and the magazine at San Diego Comic-Con and North Carolina Comicon. For the LEGO Group, I have been involved with a few projects, including LEGO Factory (assisting in the original release online and also designing part of the Cool Car Garage set), and LEGO MINDSTORMS.

My current activities involve volunteer activities with a school assisting their FIRST LEGO League teams and upcoming displays in North Carolina.

HBM: Can you explain any interesting anecdotes related to Brickjournal?

JM: It's pretty funny to me. I have been recognized at the oddest places by readers, including San Diego Comic-Con. Besides that, what has been astonishing for me has been what opportunities BrickJournal has given me in visiting people and places I wouldn't have been before, like meeting futurist Syd Mead at his studio or visiting Walt Disney Animation Studios.

The funniest thing that happened to me was when I did the first Comic-Con BrickJournal panel with Bryce McGlone, Brandon Griffith, and Jessi Pastor. We gathered at the door to the room where we were speaking, which had about 400 seats and entered to set up. Inside, the room was filled, and we thought we barged in early - but the room was filled for us!

HBM: In your opinion, which is the key point for Brickjournal having become a reference journal in the AFOL Community?

JM: I think the main point of the magazine is a reference for both the community and the public to the LEGO hobby. The voice of the magazine is meant for those that are in the community and those wanting to enter the community.

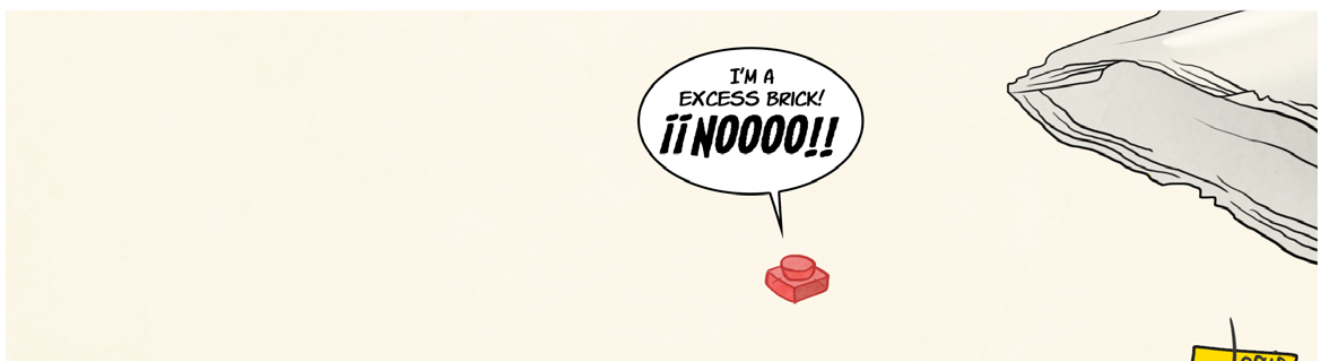
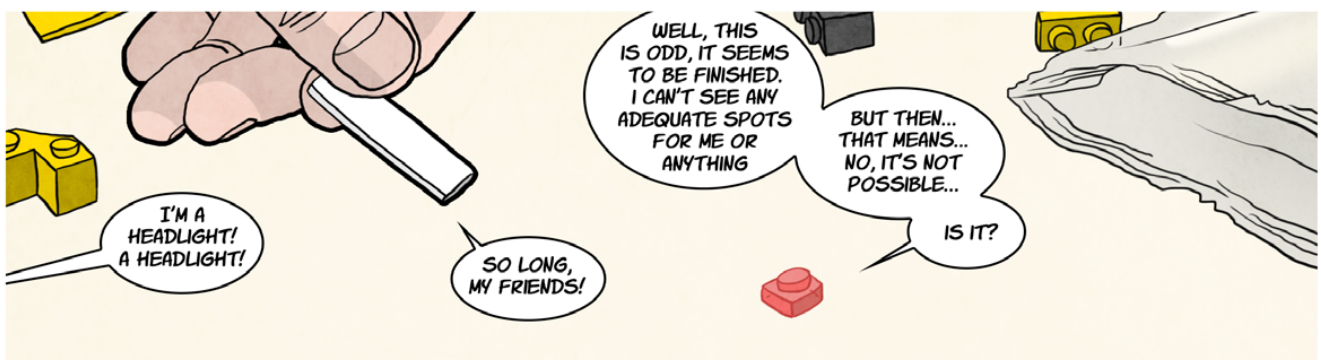
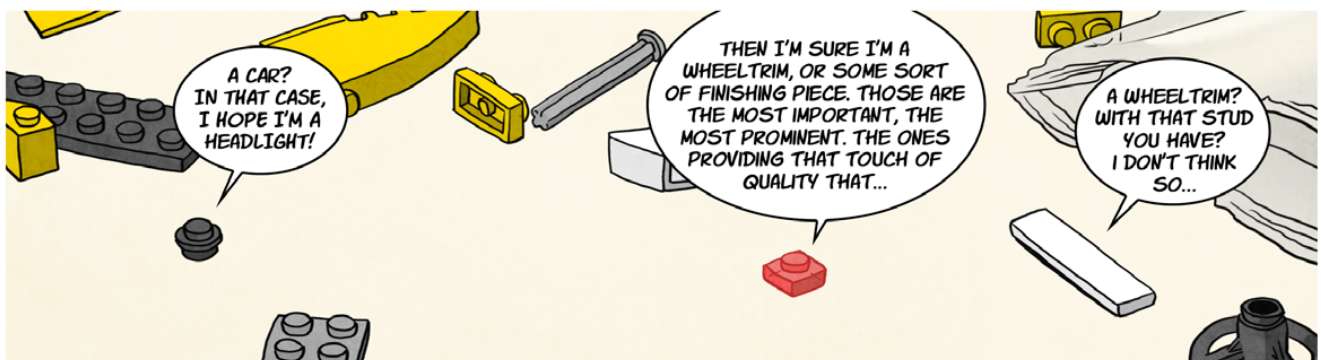
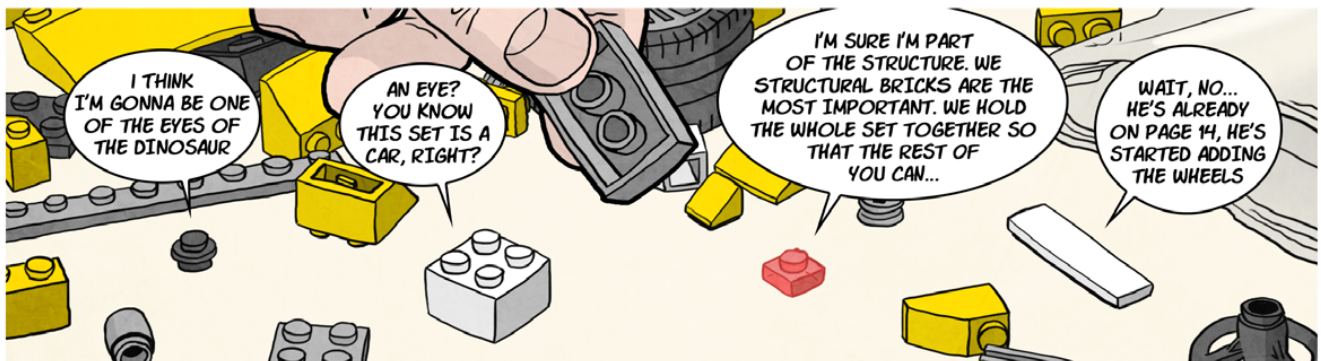
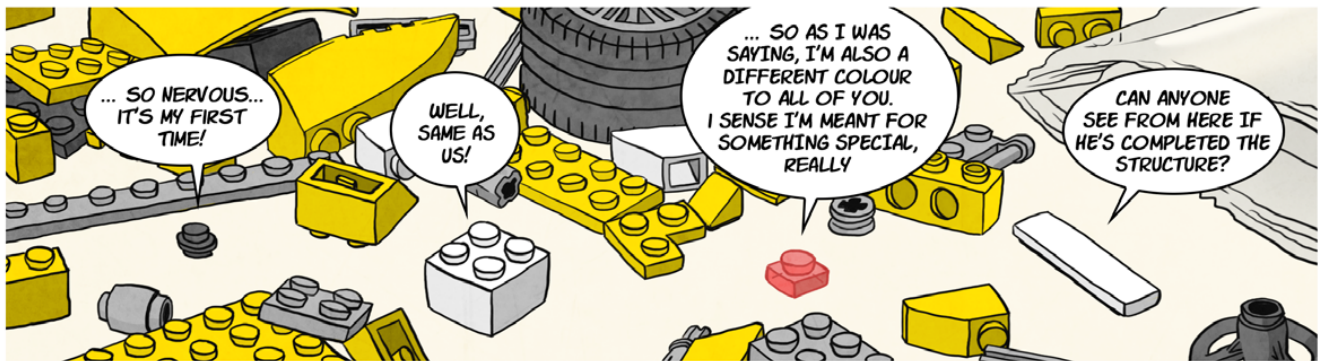
HBM: How much time do you spend to keep Brickjournal running?

JM: This is my job, so it's always not too far away from mind. I spend time daily online getting material and production of the magazine usually takes two weeks.

HBM: How do you see the future of Brickjournal?

JM: I see the magazine becoming a digital publication eventually, with video and model renderings that can be manipulated on the screen. Outside of the magazine, I see BrickJournal providing resources to LEGO-related community projects, such as FIRST LEGO League.

#



How to collaborate with us

Collaborating with HispaBrick Magazine® is very easy, just send an email with your ideas to info@hispabrickmagazine.com and we will help you to “build” your article.

If your native language is not Spanish or English, don't worry, we will find a solution. Contact us now!

You can also find us at Facebook: <http://www.facebook.com/hispabrickmagazine> and Twitter: [@H_B_Magazine](https://twitter.com/H_B_Magazine)
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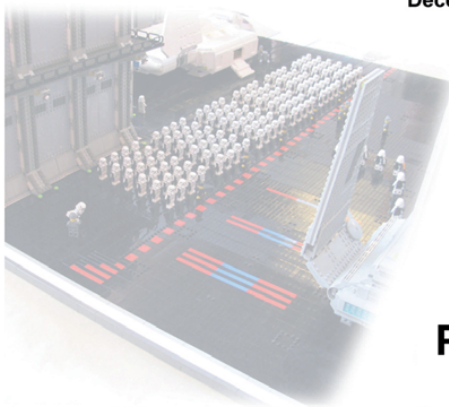
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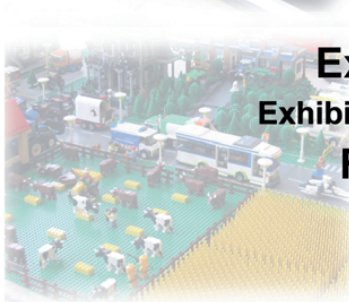


HISPABRICK MAGAZINE EVENT 2013

December 14th & 15th 2013 (Bilbao)
- Activities for attendees -



Public Exhibition



Exhibition "LIFETIME TOYS"
Exhibition Hall of the Euskalduna Congress Palace
From December 16th 2013
To January 10th 2014



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