HiSPA BRiCK®
magazine

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HiSPA BRiCK magazine

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HiSPA BRICK magazine

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Frontcover by Pawel “Sariel” Kmieć
Backcover by SUR M´ALE GOBROS

In this issue of HispaBrick Magazine®

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Editorial

By Legotron

Here we are with the latest issue of HispaBrick Magazine®! And in the height of summer...

In these months, from the publication of the HBM 019, we have seen many interesting things in the world of LEGO® constructions.

On the one hand, The LEGO® Company has announced a change in the LEGO ambassadors program to be carried out on the next months. It is expected to be more interactive with a new type of relationship between TLC and the LUGs. On the other hand we have seen a new batch of novelties in many themes, from City, Creator or LEGO® Ideas (former Cussoo) to Star Wars. There are several new sets that have been very commented lately: 21108 Ghostbusters Ecto-1, 70816 Benny's Spaceship, Spaceship, SPACESHIP!, 10242 MINI Cooper or 10244 Fairground Mixer.

In this issue of the magazine we review and comment some of the mentioned novelties. We also have the WeDo and MINDSTORMS tutorials, some interviews, an article about the wonderful Fairy Bricks project to aid children in hospitals, many reviews and other articles about the trips and events we have taken part in. And a especial edition of our regular section "Desmontados".

This is the 20th issue of HispaBrick Magazine. A long journey during the last 6 years that would have been impossible without the collaboration of all those AFOLs that contribute to the magazine. A special mention to all the friends who work on the magazine issue after issue. Their work is an essential part of this project. And we cannot forget the thousands of readers who follow HispaBrick Magazine. Your support helps us to continue with the hard work related to this project.

We want to use this opportunity to announce that we are already busy preparing for the celebration of our LEGO event, the HispaBrick Magazine Event 2014, which will be held on the 6th and 7th of December, 2014 in the museum mNACTEC of Terrassa (Barcelona). This will be a new opportunity to gather and show our dioramas and constructions with LEGO bricks to all the visitors who come to the event. In the following weeks all the available information will be published on our website. You are all invited to attend!
#

HUMMER

By Pawel “Sariel” Kmieć

Datasheet:

Completion date: 18/06/2014
Power: electric (Power Functions)
Dimensions: length 63 studs / width 30 studs / height 30 studs
Weight: 3.947 kg
Suspension: full independent
Propulsion: 4 x PF XL motor geared 7:1 (low gear) / 2.5:1 (high gear)
Motors: 4 x PF XL, 1 x PF Servo, 4 x PF M, 1 x micromotor

Ever since the 42021 Snowmobile set came out, with the new steering arms, I wanted to combine them with the LEGO® portal wheel hubs. The result would be a proper, robust portal axle with independent suspension, something I have tried to build using less specialized pieces in my Humvee, but failed. Of course, such an axle would be wide, and there is only one very wide vehicle with portal axles and independent suspension that comes to my mind: the Hummer. I have built two Hummers before, in 2010 and 2011, but seeing as they had their flaws, I decided to give it a third, final try. Which also happens to mark 30th anniversary of introducing the original Humvee, which comes off the same assembly line as the Hummer, into service. Incredibly, after 30 years the Humvee is still being produced, with 10,000 units deployed in Iraq War alone – while the Hummer went out of production in 2006.

2010

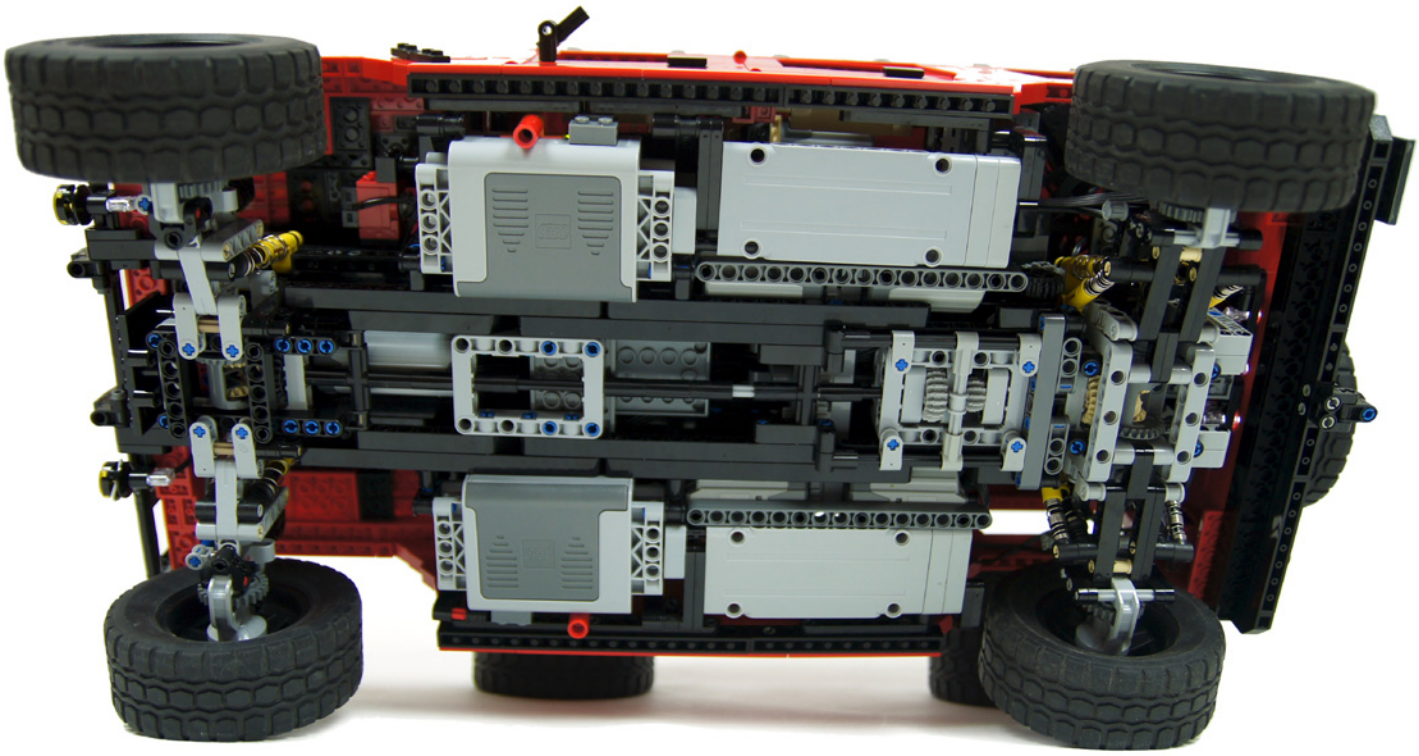
2011

2014

The model was built with two goals in mind: to look better than the two Hummers before it, and to drive better than my last large-scale off-road model, the Dakar Truck. Large scale enabled me to include some details that were missing from earlier models, while using PF system instead of the RC one made sure the model had plenty of torque needed for off-road driving.

Dakar Truck

On the technical side, the model was built around a massive studless chassis, heavily reinforced to prevent bending despite the enormous wheel span. A simple 2-speed gearbox was located in front of the rear axle, shifted by a PF M motor using one small linear actuator. The input and output of the gearbox remain fixed, and it shifted by simply forcing double bevel gear wheels to slide along axles. In front of the gearbox were the four hard-coupled PF XL motors, two of which had their directions inverted by a PF switch to reduce the number of gear wheels required. In front of the cabin, below and between the front seats, were two PF battery boxes, each powering two PF XL motors, and a 8878 PF rechargeable battery powering everything else. Such location of the battery boxes improved the weight distribution, which was impaired by the very rear-heavy Wagon body.



The body itself, while massive in appearance, was actually just a thin shell attached around the studless frame. It was actually quite delicate, full of windows and doors, and it was simply sitting on top of the chassis, not bearing any loads. The entire model was held together by chassis alone, which was robust enough for the model to be picked up while holding just front and rear. The body included four opening doors, hood and a trunk with two doors. The interior was simple, with some tan detail on the doors' inside, and with two tan seats taken straight from my 2010 Dodge Challenger.

The suspension system relied on the steering arms attached to portal hubs in "upside down" position – that is, the upper arm is facing upwards and the lower arm is facing downwards, exactly the opposite of standard design – and being spaced 3 studs apart, which improved stability of wheels, as the hubs were attached to the arms near their topmost and lowermost points. It wasn't easy to balance such a heavy model with a rear-heavy body on an independent suspension. In the end, the front and rear suspension assemblies varied a lot, with the rear suspension being supported by additional four short shock absorbers.

The steering was controlled by PF Servo motor located under the hood, and coupled with a micromotor rotating the steering wheel. The model was so heavy, the PF Servo struggled with the return-to-center function even on flat floor.

Other functions included motorized windshield wipers, automated turn signals and automated reverse lights. The last two functions were controlled by a single PF M motor each, using a number of PF switches, exactly the same way as in my old Tow Truck 2.

The interesting thing about the original Hummer is that it's not as simple as it appears. Upon closer inspection, one discovers that the sides of the body are slightly tapering upwards, that the lower edge of the body sides is slanted near the rear wheels, or that the rear windows reach all the way up to the roof, and are topped with arches whose shape doesn't match any existing LEGO® pieces. These were the details I was forced to omit because of how the body was built and how it was attached to the chassis. Also, there was a studless frame behind the second pair of doors, to which the body was attached, and it forced me to move the rear side windows further away from the doors, and to ignore the Hummer's indented fuel inlet. Modeling the inlet required building "into" the body, and it was not possible with the body being just a thin shell with beams underneath.

The finished model turned out much heavier and slower than I have anticipated. The high gear was intended primarily for driving downhill, and it was impressive that it could be used on flat ground, too. The low gear provided enough torque to tow the 42030 Volvo loader without much effort – however, an attempt to scale a curb damaged gears between the gearbox and the motors. One of the problems with this model was that its sheer size and weight made it difficult to transport it far from my home, which is why I found no ground suitable for downhill driving.

In the end, the model was sluggish, but good-looking and mechanically sound. I was happy that it handled its immense weight without serious problems, and that the suspension, especially the front one, remained stable and functional under such weight, even when negotiating difficult obstacles. However, I consider it an argument against building heavy.
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INCREDIBLE LEGO® TECHNIC

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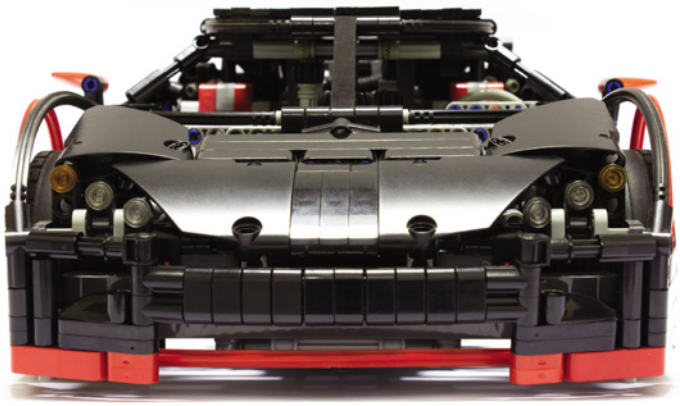

Paweł “Sariel” Kmieć

Incredible LEGO® Technic

Enter a world of machines in Incredible LEGO® Technic, a unique gallery of LEGO models with a technical twist. From tanks to tow trucks, all the models use the LEGO Technic system’s collection of gears, pulleys, pneumatics, and electric motors to really move. You’ll see how expert builders use differentials, suspensions, and complex gearing in their creations. Photos of over 70 LEGO models include design notes and breakaway views of the mechanisms inside. Whether you’re a beginning builder or a long-time LEGO fan, Incredible LEGO Technic offers you a unique look into the artistry and engineering that make LEGO come alive.

About the Author

Paweł “Sariel” Kmieć is a LEGO Technic enthusiast based in Warsaw, Poland. His LEGO creations have been featured in many magazines and on the world’s most popular LEGO blogs. Sariel is a guest blogger for the official LEGO Technic website and is a LEGO Ambassador for Poland. He is YouTube’s most viewed LEGO Technic builder and the author of The Unofficial LEGO Technic Builder’s Guide.

You can find more information about the book at: http://sariel.pl/book2
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Pictures courtesy of No Starch Press.

“Constraction”

By HispaBrick Magazine®
Pictures by the creators

Reviewing these six years of magazine I realized that we have never talked about Bionicle and Hero Factory. It is true that I am not a fan of the line, but I do not believe that this is a lesser line either or that their parts are like a lower breed in LEGO® bricks. We have to recognize that they penetrated within an important market sector for LEGO and they definitely attracted more than one fan to the dark side of the brick. The gameplay of their action figures, and the format in which they were sold, made them a success theme.

To try to fix this undeserved oblivion, I asked the same questions to some of my favorite builders, whose models are a clear example that what matters is not the parts, it’s how you use them.

You will see that their answers are very similar, giving a clear view of the advantages and disadvantages of building with Bionicle and Hero Factory parts.

DViddy (Patrick Biggs)

HBM: Why do you build with Bionicle, Technic and Hero Factory parts vs. more basic parts?

PB: I was already a fan of LEGO when Bionicle began in 2001, but I was captivated by the storyline that came with Bionicle. I became involved in the online Bionicle communities, and even though I own a large number of system parts as well, I use them to supplement my “constraction” (a portmanteau of “construction” and “action figures”) builds. I find the “constraction” elements suit my desire to build models that display character and range better than pure system builds do. And on top of that, I really like action figures, and building my own is exceptionally rewarding.

HBM: How do you plan your creations with that kind of parts that, a priori, are less versatile?

PB: Planning is a rather vague concept for me. I usually have a singular idea, such as: “I will build a character who is blue but also sort of demonic” and I just go from there. I don’t plan which parts will be used where normally, I just build through trial and error. Generally I will start with the head of a MOC and work downward, as I find the head establishes the character and visual flow of the rest of the figure. But from there, it is entirely: “will this piece work here? No. How about this one? Kind of. Okay, but how do I connect it? Let’s figure this out.”

Catwoman by DViddy

Vayland Dragon by DViddy

Horizon Dragon by DViddy

HBM: What are the main problems and advantages you find when building with such parts?

PB: The main problems are really that the overall AFOL community has yet to fully embrace these parts, so buying Hero Factory armour shells in bulk is very difficult. If a “constraction” part didn’t also appear in a system set somewhere, it can be very hard to buy enough to build the MOC I envisioned. As for advantages, I find, again, that these parts are more durable for figures, and create both more organic sculpting than system parts (as seen in my dragon photo), but also lend themselves well to more robotic elements as well. In general, they just lend themselves better to building individual characters, as opposed to the LEGO staples of vehicles, buildings, and landscapes (none of which are as possible with “constraction” parts).

HBM: What were the main challenges you found in these models?

PB: This might sound silly, but I get stuck on legs a lot. Since I tend to build head down, I usually have a complete MOC from the waist up done, and then find myself stumped on legs. The muscular system on humanoids can be hard to interpret on figures made out of these pieces, when coupled with the desire for a large range of motion.

[Rhymes_Shelter] (Vlad Lisin)

HBM: Why do you build with Bionicle, Technic and Hero Factory parts vs. more basic parts?

VL: My first LEGO® sets were from Bionicle series, so I think it's main reason why i'm, still building from that sets, but I love to combine system and bionicle\hf parts, it always helps me when i'm wanted to make very difficult angles in my mocs.

HBM: How do you plan your creations with that kind of parts that, a priori, are less versatile?

VL: If it's not a contest model - it's pure improvisation. I'm always go with the flow, the only thing I can keep in my mind is approximate scale and colors. I always use same parts, because I have very small collection of them.

HBM: What are the main problems and advantages you find when building with such parts?

VL: I can't say about problems, because I think if you have problems with using pieces - you have problems with your imagination and skills. I love such parts because I can do organic creations, from LEGO® system it's really more difficult in same scale. But again, i can't do it without LEGO system.

HBM: What were the main challenges you found in these models?

VL: I always have only 1 challenge - lack of pieces. It's my main and biggest problem. I always have time, aspiration and ideas for mocs. But usually I don't have enough pieces (you can see it on Rafiki).

I always started with head, but in 90% i don't have pieces for body to make it on same lvl as head.

Rafiki by [Rhymes_Shelter]

Annie Leonheart by Arkov

Arkov (Micah B.)

HBM: Why do you build with Bionicle, Technic and Hero Factory parts vs. more basic parts?

MB: Part of it is the availability of parts - since Bionicle and Hero Factory are the awkward member of the LEGO family, it's a lot cheaper to find discount parts and old sets. But more than that, I find that the flexibility of the parts lend themselves much easier to creating pose-able, expressive characters that would be unwieldy and stiff with traditional system bricks at the same scale.

HBM: How do you plan your creations with that kind of parts that, a priori, are less versatile?

MB: A lot of it is trial and error, to be honest. If I find myself trying to replicate an existing character I look for parts that match the general texture or shape of their key features and try to build neutral shapes around those. In general building, it's just a matter of working out the colours, then gathering as many parts as I can and trying them one-by-one until I find something appealing.

HBM: What are the main problems and advantages you find when building with such parts?

MB: A lot of it is trial and error, to be honest. If I find myself trying to replicate an existing character I look for parts that match the general texture or shape of their key features and try to build neutral shapes around those. In general building, it's just a matter of working out the colours, then gathering as many parts as I can and trying them one-by-one until I find something appealing.

HBM: What were the main challenges you found in these models?

MB: For the Gundam, the biggest problems were the shoulders. The shoulders had to be made out of system in order to cover the joint system and I didn't have a lot of white parts to work with. It took three or four different tries to get it right, with quite a bit of help from Patrick (ahava516 on flickr). For Annie, the biggest problems were the arms - brown Bionicle parts haven't come in sets since 2006! I finally had to resort to the system parts to get the right texture I wanted.

CLR-X1105 Enhanced Aerial Strike Gundam Mark IV by Arkov

Retinence (Mike Nieves)

HBM: Why do you build with Bionicle, Technic and Hero Factory parts vs. more basic parts?

MN: I use the broad range of special parts. The only criteria I use is for them to have similar features. Since I make creatures and animals, I prefer to use curvy parts. Bionicle and Hero Factory have an array of curves to choose from. The only downside is their lack of versatility in connecting them. That's where Technic comes in; When combined with certain System parts, Technic can create the strongest, minimalistic skeleton possible. Combining all these features means I can work with details that are impossible for basic parts.

HBM: How do you plan your creations with that kind of parts that, a priori, are less versatile?

MN: Transition parts are always needed to give the special parts some form of versatility. I learn new techniques to connect the transition parts to special ones. When planning, I need to place special parts first, figure out a skeleton to hold them all together, and then find the perfect transition piece.

HBM: What are the main problems and advantages you find when building with such parts?

MN: The problems with special parts are the lack of connection possibilities. The advantages are the shapes and patterns they can create that are impossible with basic parts.

HBM: What were the main challenges you found in these models?

MN: The models I create are meticulously built until everything is as close to perfect as I am capable of. Every part is important. Replacing any part means reworking major sections over again. Many times choices have to be made between the strength of the model and the details in it. However, the end product is always worth the time invested.

Arcanine by Retinence

Tiger by Retinence

Rapidash by Retinence

You can find more about these creators at their galleries:

Dviddy: https://www.flickr.com/photos/12923530@N02/

Rhymes_shelter: https://www.flickr.com/photos/62087062@N07/

Arkov: https://www.flickr.com/photos/36302428@N05/

Retinence: https://www.flickr.com/photos/38246614@N02/with/6558076009/

#

Useful objects made with LEGO®

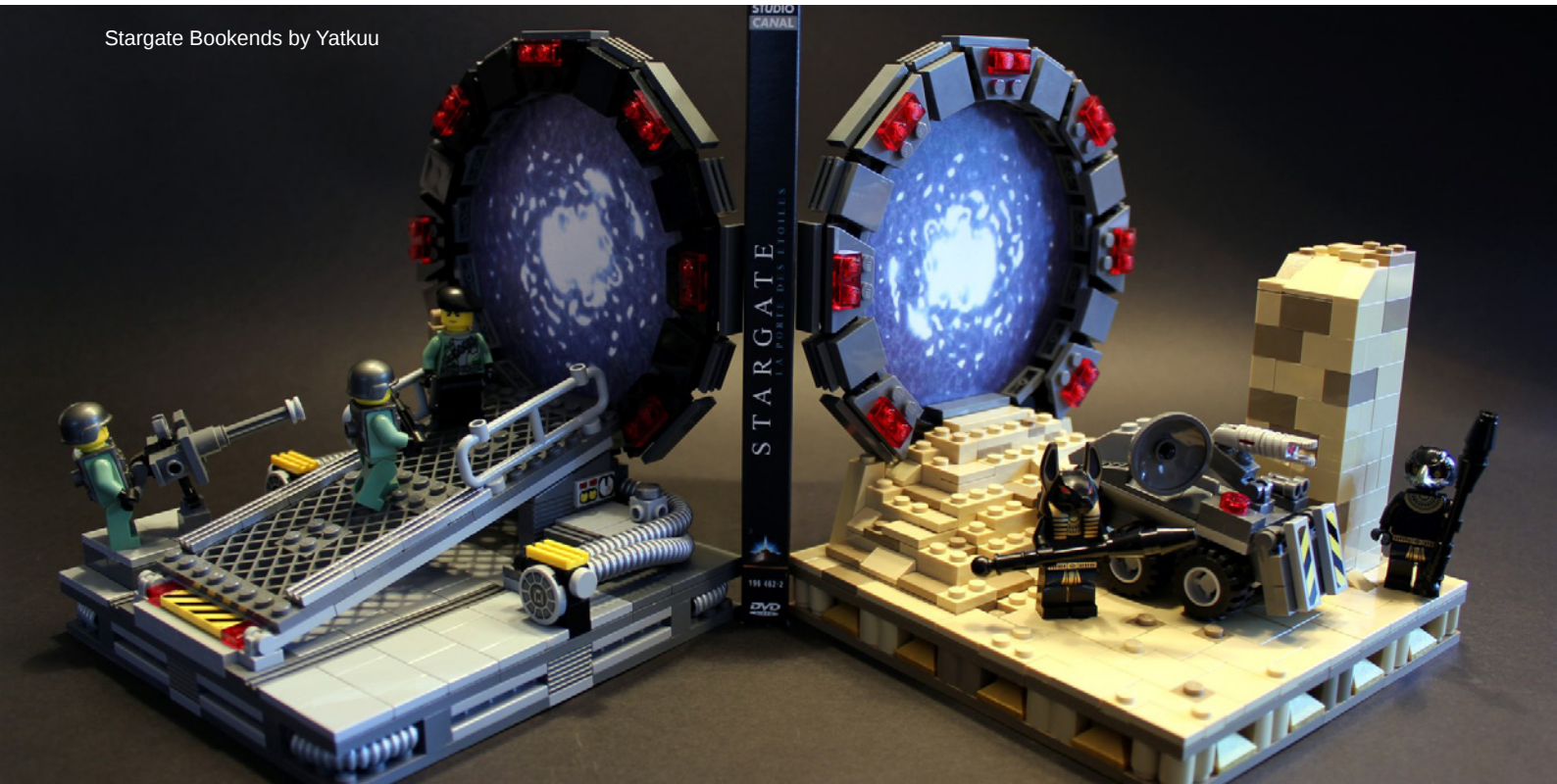
By HispaBrick Magazine®
Pictures by the creators

There are many reasons why an AFOL may decide to build something that is useful in real life with his beloved bricks. For example, showing your family that the pile of plastic that you spend your limited free time with, can be used for something useful. Or build something to your liking without having to stick to what is available in stores. Or, why not, making a useful and, at the same time, fully customized gift. You can choose from these or many other reasons to build useful things. In the end the reason is always the same, build, build, build.

In this issue we will devote ourselves to showing some examples of builds that are beautiful as well as serving another purpose than the purely aesthetic, and in most cases you can replace the original object regardless of the material in which it was made originally. This time we will not look at more or less complex robots that can be built with LEGO® MINDSTORMS and that perform useful tasks for humans. We have from the very famous and award-winning Braille printer designed by Shubham Banerjee to other lesser-known robots that are able to water your plants, separate your white clothes, etc. …

One of the first uses that can come to mind, and also allow great artistic creativity, are bookends. Their structure frees the imagination when decorating, which has given us some great examples of aesthetics.

Bookends by deborah higdon



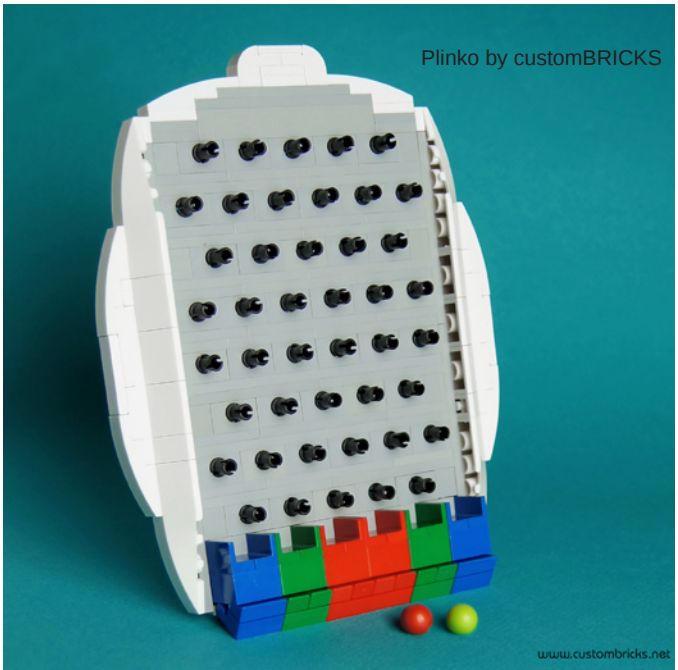
Stargate Bookends by Yatkuu

Another of the most common cases and with great aesthetic charge is to recreate other toys and games with LEGO bricks. Toys made with toys?

The clearest example, and one that even LEGO® has explored, is chess. The freedom to decorate the pieces and the board has given some impressive examples.

Star Wars: The Empire Strikes Back LEGO Chess by icgetaway

But we don´t stop there, other games like Plingo have their equivalence. Although we also can find more technically complex games, like a pinball or a water pistol; they simply leave us with our mouth open.



Pinball LEGO Star Wars by 6kyubi6
Video:https://www.flickr.com/photos/7kyubi7/12132171725/

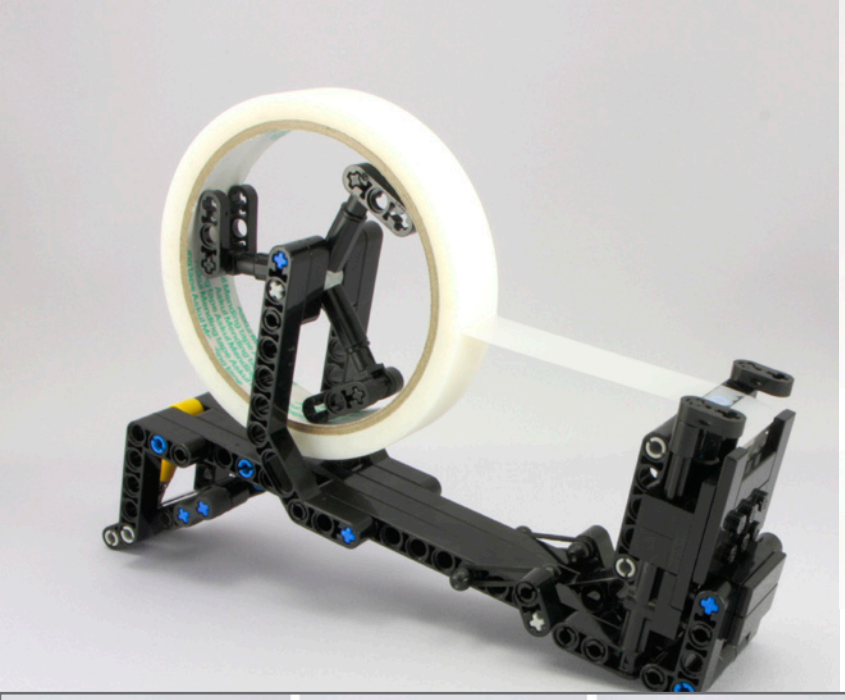
LEGO NERF Soaker by Legohaulic
Video: https://www.flickr.com/photos/legohaulic/14116005202/in/photostream

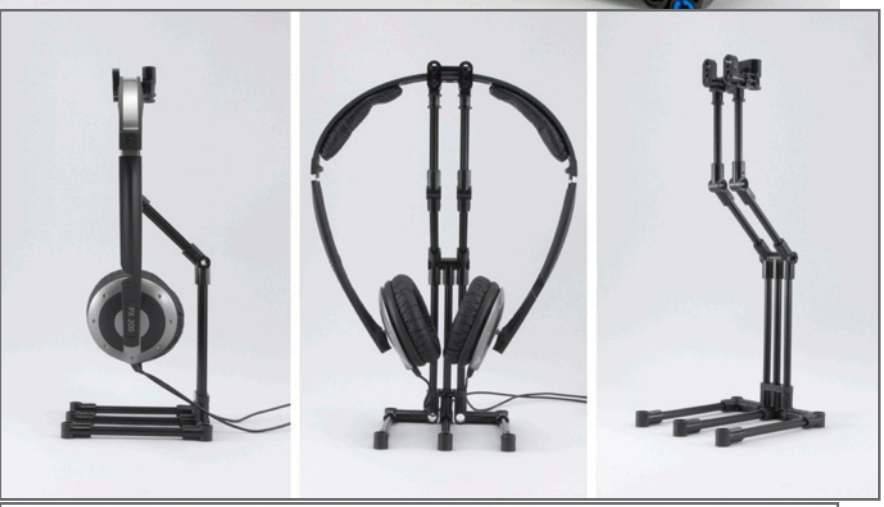
Other applications that also arise easily in our heads belong to the group of useful/decorative items, such as picture frames or boxes to store other objects.

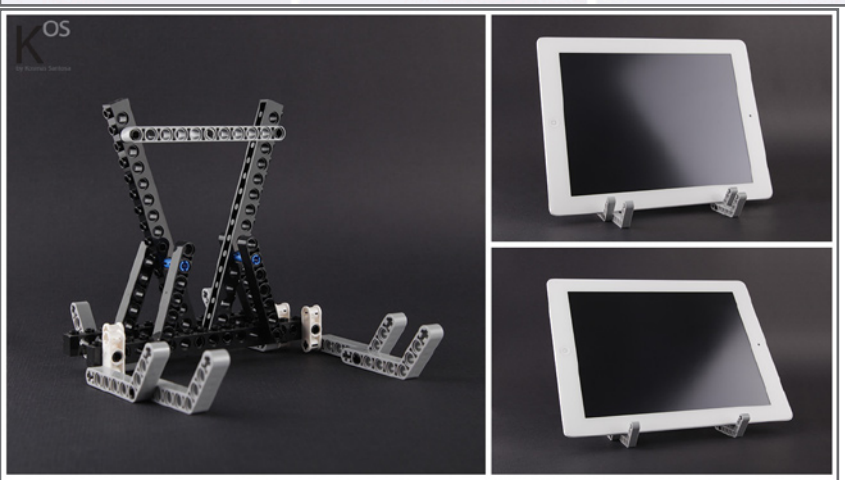
LEGO Picture frame by eilonwy77

Box by car_mp

But sacrificing some aesthetics for functionality, we can find a lot of examples of problems solved with LEGO® structures. And when it comes to troubleshooting structures, that's when Technic comes to the rescue. Without much difficulty we find stands for all kinds of objects, more or less decorated, but with a exemplary structural design, allowing them to perform the function for which they were designed flawlessly. Stands for mobile phones, tablets, headphones, paper, etc. …







iPad Stand and Bedroom Cellphone Dock v2 by Kosmas Santosa

Tape stand, headphones stand, iPad stand, bottles stand and test tubes stand by Master Yoshihito Isogawa

I leave the “hardest” rooms for LEGO® for the end. The kitchen and the bathroom. Even there we can make our mark as builders.

As you can see there is no shortage of ideas or solutions, only of parts and spare time.
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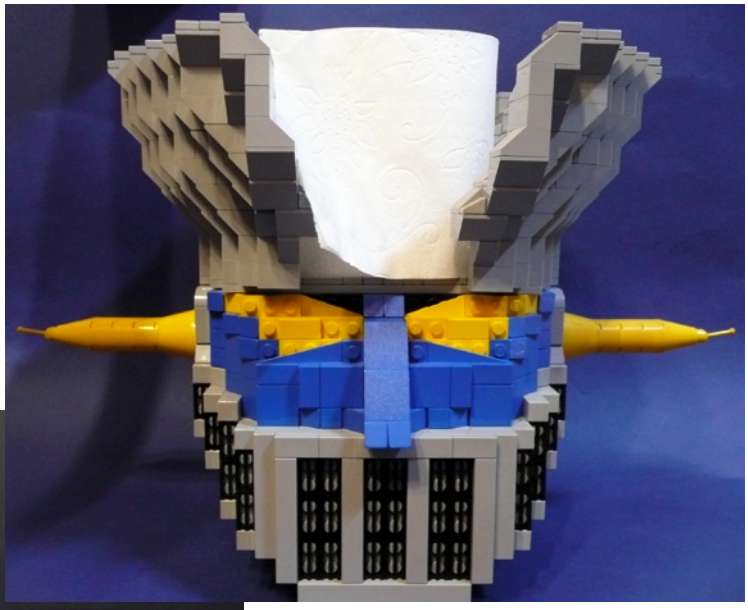
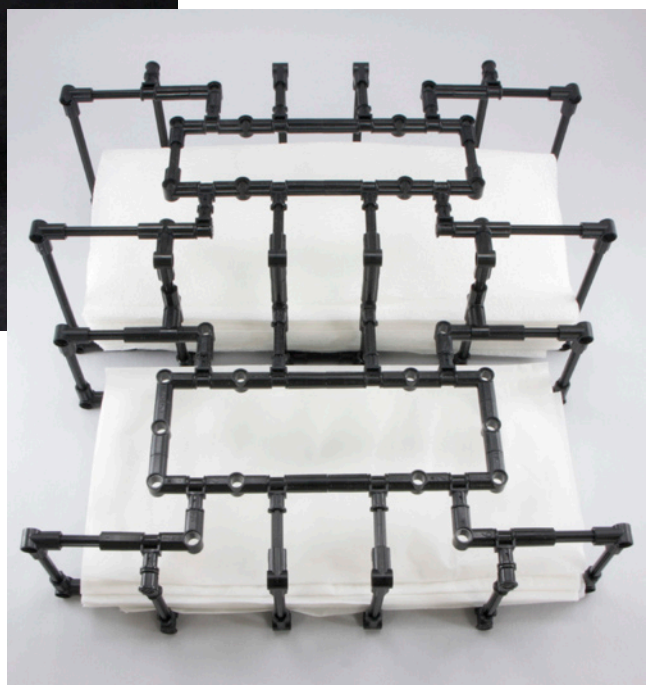


Toilet paper dispenser by car_mp

Salt N Peppa by 6kyubi6

Paper towel dispenser by Master Yoshihito Isogawa



Creators galleries:

6kyubi6: https://www.flickr.com/photos/7kyubi7/
customBRICKS: https://www.flickr.com/photos/custombricks/
deborah higdon: https://www.flickr.com/photos/buildingsblockd/
eilonwy77: https://www.flickr.com/photos/eilonwy77/
icgetaway: https://www.flickr.com/photos/brandongriffith/
Kosmas Santosa: https://www.flickr.com/photos/kosmassantosa/
Legohaulic: https://www.flickr.com/photos/legohaulic/
Yatkuu: https://www.flickr.com/photos/yatkuu/
Yoshihito Isogawa: http://isogawa.asablo.jp/blog/

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The story of Fairy Bricks

By Kev Gascoigne

If you have never heard of Fairy Bricks then quite simply we are a Charity based in the UK that raises money and then use that money to buy and donate new, sealed LEGO® sets to hospitals and hospices around the world to aid children in their recovery from illness and injury.

It has very much been a journey to get to where we are now. It started almost by chance when stood outside the LEGO Store in Sheffield following their Grand Opening Event. I had collected the 3300003 Brand Store set for free as part of the promotion that day but I already owned the set from an opening in Manchester a few weeks earlier. While chatting to Andy Atkinson, better known as the prolific polybag collector Atkinsar on the Brickset Forum. I suggested that as I owned the set already that maybe it would be a good idea to raffle off the set to other AFOL's to raise some money to buy LEGO for children. Andy was enthusiastic and thought lots of people would enter. So before I arrived home I contacted Huw Millington the owner of Brickset to ask his permission to run it on the forum there and he immediately said yes.

The next day I started a new thread with all the details and hoped for the best. There was a limit of 200 tickets and one per person. They suddenly started selling with several people send much more than the £1 required but still being happy with the one entry. Eventually £277 was raised with people buying tickets from all over the world. The set was won by a UK AFOL living in Germany Paul Franklin (Legopants). I rounded the total to £300 and spent it using unique AFOL knowledge to buy sets worth £600. It was a special moment when I delivered the sets to my local hospital in Huddersfield. I was able to share this experience online by posting pictures and everyone involved quite rightly felt proud about what had been achieved in a few short weeks.

That was supposed to be it. A one time event. That was until LEGO released the highly desirable and collectable Mr Gold cmf. He was regularly being sold for £500 and it made me think. If I could find one or buy one then it could be raffled. I was convinced that it could raise lots more money than the Mini Brandstore. I'm terrible at feeling packets so I appealed to the members at Brickset to sell me one at a reasonable price. Unfortunately there wasn't one available but people started stepping forward with other highly valuable prizes, again from all over the world. From the USA to Australia messages were posted offering prizes.

Demand was so high to donate things that I had to make the tough decision to not accept more prizes in an attempt to manage the situation. Once ticket sales started it was announced the hope was to support four hospitals around the world.

Sales were strong but then exploded when Mark Richardson (SirRich69) contacted me to say not only did he have a Mr Gold but that he was willing to donate him to the raffle. People started repeat buying tickets. Lucy Boughton (LostInTranslation) built a LEGO® totalizer so sales could be tracked. There was a minifig of myself that affectionately became known as the Hairy Fairy who kept climbing higher as more money was raised. When the sales closed the final amount raised was £4800. The number of hospitals had increased from four to twelve with children in the UK, USA, France, Spain, Germany, Sweden and Australia all receiving LEGO worth over £10,000. The draw was held live on the forum and despite being a very low tech text based event everyone had a fantastic evening. It took so long it had to be suspended for a second evening. It felt special that a group of people with a common love of LEGO from all over the world had pulled together to produce something special.

After a little break I took a major decision. If things were to continue, if more hospitals were to be helped then something more formal was required. The only way to do that would be to create a new Charity. So that was the catalyst to found Fairy Bricks. I talked to lots of friends and family to gauge their opinion. Would it work? What would it be called? What would the logo be? It took a few months but with lots of people helping we made it happen. Drew Maughan (SilentMode) produced the website and Jo Wood (Coyotelily) helped massively in creating the logo. Martyn Jones (Cheshirecat) and Julie Greig were approached to act with me as Trustees to assist the decision making process.

From there things have gone from strength to strength. The AFOL community have continued to support the cause by donating both money and LEGO. We have expanded beyond the AFOL world with the general public becoming more and more aware of who we are every day. By the end of 2014 we hope to have donated LEGO to 30 hospitals. Another big raffle will happen at Brickset but there have also been appearances already at the Yorkshire Brick Show hosted by Brickshire and The Brickish Association event held at the National Space Centre. We will have a presence at Beyond The Brick, Yorbrix hosted by Northern Brickworks, STEAM and Brick 2014 held in London. All events at which we can raise funds and awareness.

Fairy Bricks is something every AFOL can be proud of and be a part of. We are always looking for volunteers to help with donations and fundraising so if you want to be involved don't hesitate to get in touch. It could be anything from buying a raffle ticket to tackling a physical challenge. I mentioned this has been a journey so far. Well it is far from over!
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SUR M´ALE GOBROS

Por HispaBrick Magazine®

That you can create art with LEGO® is a known fact, but you can also create art based on our favorite brick. A clear example are the creations we bring you today, LEGO sets embodied in the form of graphic art, according to the particular focus of these Polish brothers.

HBM: *Tell us a little about yourselves, your names, where you are from, what you do for a living, …*

M: Hi! My name is Marcin Surma (xulm) and I'm Przemek's brother. I was born in the late 1980s. By education I'm both a programmer and an animation director.

P: And I'm Przemek (Surpiko) and I am Marcin's eleven years older brother. We live in Poland and at the moment we both work as illustrators and comic book authors. I'm a historical preservation engineer by education, also.

HBM: *How did you come up with the idea of giving your own vision of classic LEGO sets in drawings and publishing them on the Internet?*

P: The idea, I believe, came to us when we browsed some LEGO set aggregators together. We got reminded about the toys we played with when we were kids and those we wanted to play with. Transition to illustrations was quite natural -- I guess it's normal for an illustrator to say "what if I drew this". It was supposed to be a short project: A couple of sets from me, a couple from Marcin. It became a little longer project, since quite early we found out that when you start having fun -- it's hard to stop. Same as LEGO.

M: We should add that we had been looking for a thing we could do together for a long time already at the time -- we even briefly thought about a webcomic (around the time I did my own, the Vault 12). When we browsed that LEGO set database it struck me: we both loved LEGO when we were young, yet we have never actually played together -- Since Przemek is way older than me, he had already grown out of LEGO at the time I grew into it. And since we both loved LEGO at different times, it would be cool to see how the other one would draw one's LEGO sets and how we'd respond to our own childhoods.

HBM: *Why LEGO? And why draw instead of build?*

P: Simple. I adored LEGO as a kid -- and now, after all these years I have lots of fun thanks to it again. In my own way, now as an adult illustrator.

LEGO bricks were not only a construction toy for me, but also a way to create adventures and worlds, replaying stories, imagining characters and their relations. I was a director of all those "movies" minifigs played part in. Weren't you?

My illustration work now is in some way a direct descendant of them. And it gives me no less fun than building before. Especially since I can "play" with every single set I want!

M: Funny thing -- I actually made (and even published online) some MOCs about 7 years ago! I had a lot of fun, yet at the time I felt I had to focus on something. And I

focused on illustration and art. Clearly, it still didn't stop me from turning to LEGO® in the end.

HBM: *Why classic sets?*

M: Part of the fun is imagining "What I really saw when I was a kid" -- LEGO sets were always more than the sum of their bricks to me, and I wanted to express this. What better way than to just draw it? Also, revisiting childhood toys is fun!

P: I was a child in 1980s -- when LEGO sets (and those sets are now called "classic sets") were something incredible and the most modern thing in the world. And these sets I am most fond of. I revisit them just like I revisit my old friends.

HBM: *What criteria do you follow to choose the sets you draw?*

M: At one point it was all about those few sets we had. We're way past that point and now we're looking for sets we really longed for back then. Or beautiful sets we didn't even know existed. Or anything from our inspirational "other LEGO beauties" folder

P: Like I said before: At first it was all about sets we had and sets we wanted to have (the list of the latter is much longer)
Sometimes I pick a particular set because I think it may make a cool illustrations. Or think drawing it might be simply enjoyable. Sometimes because it fits our current theme. And sometimes because I know fans want to see this particular set.
The only fixed criterion is "LEGO".

HBM: *Have you considered the possibility of drawing current sets?*

M: We already did! I drew the Cafe Corner, for example.

P: And I illustrated the cute 3177 set.

M: We're probably still going to stick to the old sets, though -- not only because it's our childhood, but also because all the new colors, new bricks and new building techniques already fill a lot space between "what is built from bricks" and "what we really see".

On the other side, those bricks are amazing for MOC modellers! When I look at what can now be done with LEGO bricks I sometimes think about doing MOCs again.

...Or illustrating someone else's MOCs -- that's an idea I've been playing with for a long time already, yet I still haven't gone through with it. Maybe after the "Space Minifig Fashion" series I'm working on right now.

HBM: *How do you share the work? Do you each make your own drawings or does each one participate in every drawing (like one drawing and the other coloring)?*

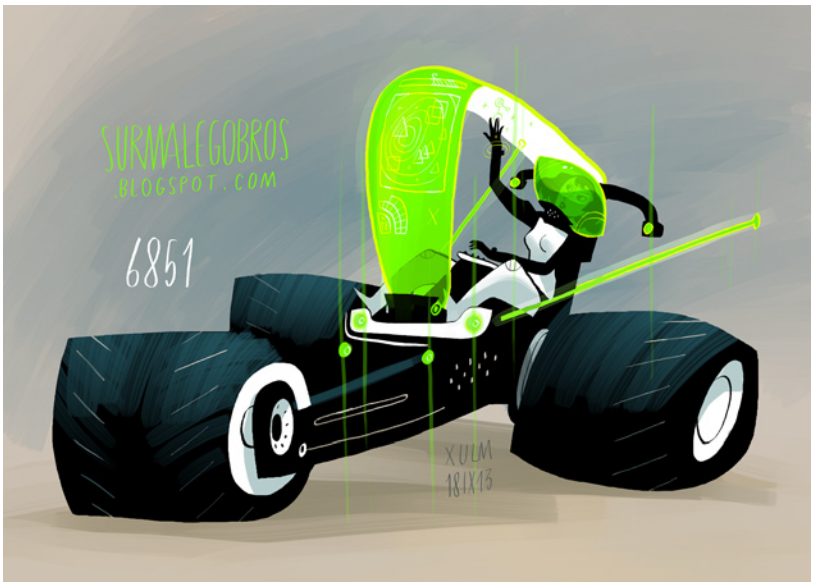
P: We do our illustrations separately. And usually don't discuss them beforehand.

M: ...and see his illustration only after it's been published. Every two weeks we feel like any other fan, just waiting for the illustration to go live without even a clue what set it's going to be.

P: Only one illustration was created by both of us as a gift for a friend. Also, a few were created by our amazing guests!

M: That's true! We keep inviting our friends to do their own illustrations inspired by their favourite LEGO sets (and try to limit it to women -- to show that, contrary to popular belief, girls do also love and have always loved LEGO!)

HBM: *Do you make a lot of designs and sketches before you make the final drawing or do you have a clear idea of what you want to do from the start?*



M: I rarely do sketches -- I usually make a brief composition sketch of what I have in mind and go from there.

P: You could say that all of my surmalegobros illustrations make one big sketchbook. I experiment, improvise and play with all sorts of techniques,.

M: Yeah, me too.

P: And if I had to reply directly to the question: everything usually happens quite fast. Sketches are just brief notes on the idea and composition.
HBM: *Is it difficult to artistically recreate a set in such a way that it is still recognizable to a LEGO® fan?*

P: Not quite. Most of the groundwork was already done by authors and LEGO set designers. I always try to keep the particular set's look-and-feel, wardrobe, vehicles. Sometimes I add an anecdote or two. (Though our biggest discovery might be how many minifigs in spacesuits might actually be female ;))
I always get really happy when viewers recognize the set we illustrated. I love hearing: "I had this set! I knew which one it was in no time. You brought me back to my childhood. Thanks!"

M: It's always easier with space sets -- LEGO Space themes have these instantly recognizable color palettes, and spaceship shapes can (obviously) be quite characteristic.

HBM: *Do you create drawings of other things than LEGO?*

P: Yes. And it's those "other thing" I mostly draw. I illustrate books and textbooks. I'm also a comic book author (currently working on my third book).

Unless you ask if we draw our other toys :) Which we actually don't. I'd love to interpret a few of my "resoraks" [matchbox cars] (especially one particular orange BMW) but I still haven't found the time to do it.

But if I did, we'd have to start calling ourselves "sur m'amatch boxbros" ;)

M: I, just like Przemek (as usual), am an illustrator, comic book author, animated short film artist and (lately) a video game art director, and yeah: all this kind of requires me to draw a lot. Most of the stuff I do besides Sur m'ale Gobros is trackable from my website http://xulm.pl

In similar vein to Sur m'ale Gobros: I myself am a fanart fan -- I make fan illustration of not only LEGO sets and minifigs, but of the comic book/video game characters, vehicles and buildings. I adore the idea of trying to reimagine in my own way a thing that already exists!

HBM: *How much time does it take you on average to make a drawing?*

P: That depends (mostly from the illustration's technique and complexity), but usually it takes quite a few hours (usually after Sunday dinner). There are some illustrations that take way more. Also some that take 30 seconds to sketch and few months to actually start to be drawn.

M: I can do nothing else than to agree with Przemek.

HBM: *Have you ever made different drawing of the same set each?*

P: It happened two or three times, I believe. What's funniest about it is that each time we drew those pictures simultaneously, without even knowing what the other brother was doing right then. And we live 300 km apart.

M: Not only that, I even made a couple of second attempts at illustrating the same set (Blacktron Alienator, for example. Which is a funny story, because just after I published the illustration, the set's original designer sent us an amazing message. And I HAD to made another take after that.)

HBM: *Are you surprised about the notoriety your drawings have gained?*

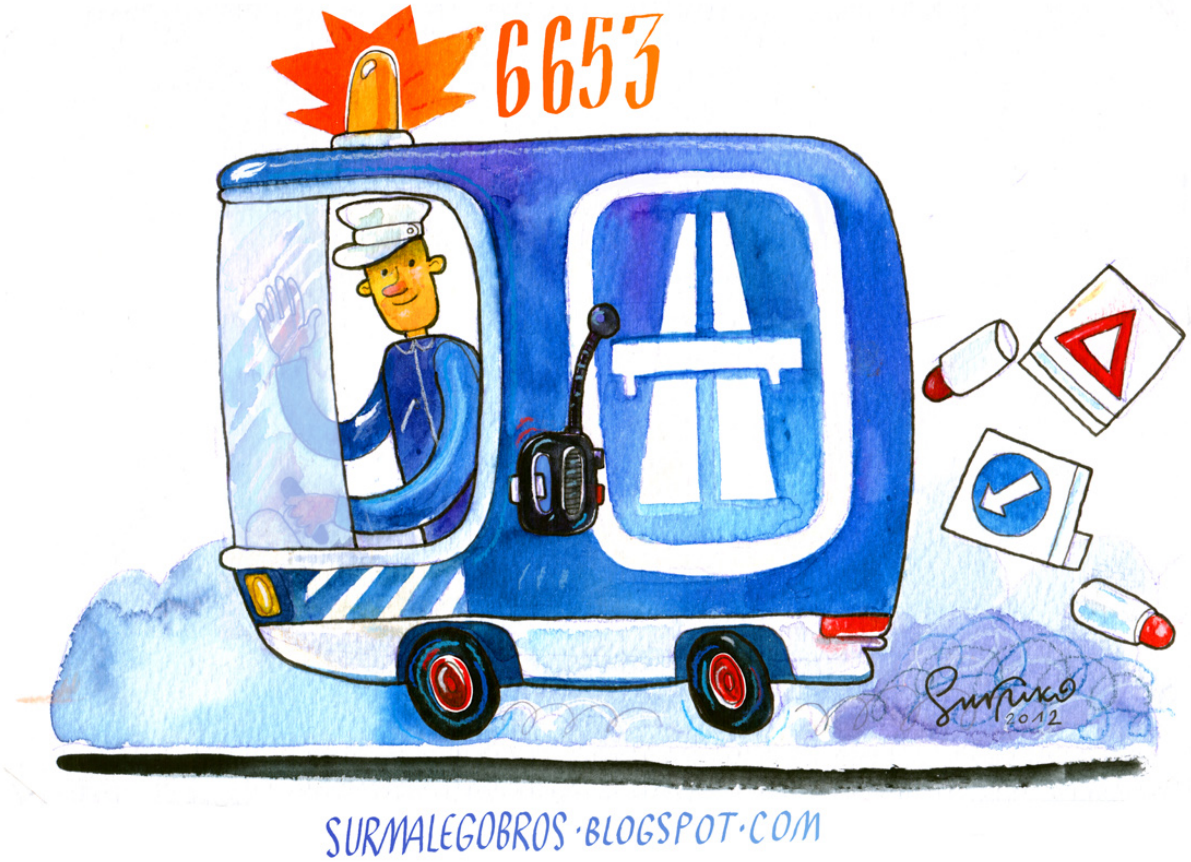
P: That might sound banal, but we didn't expect it at all. And we're very, very, very thankful for such awesome, worldwide response.

M: I guess we wouldn't have that much fun with Sur m'ale Gobros (and that long, for that matter) if not for that amazing feedback!

HBM: *Have you considered commercializing your drawings?*

P: Sometimes...

M: At the moment we can't afford to. We'd love to, though! #



The Land of the Rising Brick (II)

By Iluisgib
Pictures by Iluisgib and Delia Balsells

After the first week in Japan, visiting Kyoto, Osaka and Itadori-Seki, our arrival in Tokyo gave us new opportunities to discover how people live the LEGO® passion in Japan.

LEGOLAND DISCOVERY CENTER TOKYO

We arrived in Tokyo on August 13th afternoon. Again, our journey related to LEGO started. The 14th in the morning (my birthday) we went to visit the Discovery Center of Tokyo. I had contacted Mr. Kojiro Matsuo, responsible for marketing of the LDCT, for a guided tour. He encouraged us to arrive at the opening time to avoid the crowds. When we arrived at the entrance of the venue, there were over 200 people queuing to enter. Since our visit coincided with Obon (Main holiday related to the ancestors), when almost everybody is on holiday in Japan, the crowds were ensured. Kojiro met us and walked quickly, avoiding the “jam”.

We went up the elevator to the floor where the Discovery Center begins. We found, as in other Discovery Center that I visited, some rides and a miniland reproducing Tokyo. Obviously the rides are more for children than for adults, although we tried one of them, where we had to shoot the

“bad guys”, and we had a lot of fun. Obviously we got the typical photo of the ride... Then we went to miniland Tokyo. Fascinating! There were reproduced the most typical elements of the city such as Tokyo Tower, Rainbow Bridge, Asakusa Temple, Shibuya crossing road, the shopping district of Ginza and Tokyo Skytree. Every 5 minutes the atmosphere changes from day to night and vice versa. The Buildings illuminated at night are really attractive.

After miniland we just took a look to the other rides (we decided to not try some of them to not disturb the children) and we also saw an extensive play area with thousands of bricks for kids to unleash their imagination and build. Obviously all the decoration was made with bricks. Surely we missed hundreds of details as our brain could not process them all. Our visit was quick, not to disturb the activities of the center.

We reached the end of the visit to the latest must-stop for any Discovery Center: The LEGO Store. There we took some pictures in a “photo booth” that prints photos with exclusive decoration of the LDC Tokyo. I also got a coin stamped with an engraving of the LDC Tokyo, and some special little goodies of the center.

In our conversation during the visit, I was interested in some aspects of the center. It was opened on June 15, 2012 to be, as Kojiro said, “a daydream place for all fans of LEGO.” Like other LEGOLAND installations, the Discovery Center is geared towards children ages 3-10 and their families. Anyway there is one day every month when they do a building workshop with LEGO for adults. The favorite attraction for children is the Kingdoms Quest (it is the ride we tried). The Discovery Center was very crowded that day. I asked about the number of annual visitors, but LDC policy doesn’t allow them to provide that figure. There are no plans to expand the center.

Leaving the LEGOLAND Discovery Center we walked around the island of Odaiba and its shopping malls, and we found another Clickbrick, bigger than the Osaka one, and with more

variety of shirts and LEGO® sets. Obviously I was interested in things I can not easily get in Spain, so I picked up a couple more shirts, and something that I had long pursued, and had never been able to find in Europe: small Birthday Party Kit gift from the destiny :).

That day in the afternoon we met our friend Maiko, and we dined with her and her husband. A little relaxing until the next day, when we had the meeting with the AFOLs from Tokyo.

AFOL MEETING IN TOKYO

The meeting in Tokyo was coordinated by Yoshihito Isogawa, a famous Japanese builder we interviewed in Hispabrick Magazine® 016. He was so kind to find a place for dinner near our hotel, so as not to risk us getting lost. In this case we went to a small traditional restaurant that was in a basement near JR Shimbashi Station, an easily recognizable place as there is a great steam engine.

In this case there were 8 AFOLs: Yoshihito Isogawa, Shigeru Okawa, Taka Ai, Hac Shac, Tamakoshi Masahiro, Naoki Asakawa and Yoshikazu Saito, the Japanese LEGO Ambassador. Again, after sitting down, all the AFOLs began to put lots of MOCs on the table, and it was a delight. And again I was fascinated by the quality of the models shown there: A symphony orchestra, a hot dog, a beer mug, an accordion, cars, airplanes, wicks, interstellar cruisers... Yoshihito brought a dog that was motorized with remote control. Like in Osaka, I brought the micro scale Sagrada Familia, and offered one to Yoshihito-san and another to Yoshikazu-san as thanks for their kind help. Meanwhile, Yoshihito-san probably confused by the beer, made me sign the issue Hispabrick Magazine in which his interview was published. But, he is the protagonist!!! While understandable, it was a pleasure and an honor to be asked to sign it, and I did it willingly.

With the stomach recovered, compared to the Osaka dinner, we were able to enjoy Japanese cuisine and I must say that everything was delicious. It is true that when testing something new, I was surprised by the taste or texture, but then I found it tasty and ate more. During the dinner, all MOCs went from table to table so we could all watch and chat about building techniques, as well as other issues related to LEGO, or broader issues of culture and likes of each of us. Delia was especially grateful for this fact since she could talk about topics that were not boring for her...

I must say that many of the ideas I got in Osaka about how is the hobby in Japan were corroborated in Tokyo. The hobby is very “personal” and they build more personal MOCs than collaborative displays. They have almost no public events and due to the lack of space in the houses of the fans, they tend to build small MOCs, very detailed and easily removable and storable. Being a “first person” hobby they proudly show all the details of their MOCs and they explain how they built them. When they can not show the MOCs live, they come with albums or tablets to show you the rest of their constructions.

Yoshikazu, LEGO Ambassador in Japan, updated me on what

the Japanese community is like: “ In my opinion, the Japanese AFOL Community unfortunately is not really together as a unit. There are some groups that were put together for projects like Brick Fan Town (BFT) and Brick Fan Castle (BFC) but currently there are not many large groups working together. There are some smaller groups in various parts of Japan, but they have a tendency to group and then disappear. Things have become more difficult since Naoe-san of LEGO® Japan passed away last year.”

Regarding the relationship with LEGO Japan, Yoshikazu said: “My relationship with LEGO Japan started when I competed on the TV show “TV Champion.” It became stronger after I published my books “Let’s Play with Toy Blocks.” I became very friendly with them through Naoe-san and from working as a counselor for the BFT and BFC projects. Further, I help them out through promoting LEGO on Japanese TV Programs, and helping them as a staff member at events.“

After dinner, some of AFOLs had to leave, but before that, we went back to the meeting point and took the indispensable group photo. Those who didn’t go back home went to another place to continue the meeting. In this case we went to a small street, beneath the train tracks of the Yamanote line, where we could enjoy some typical skewers and continue with the talks.

Some fans, like Masahiro Yoshihito are related to education, and we were discussing how children live experiences with bricks, and also about some tricks to keep their attention, or to provoke a smile. For example, on an iPhone case with studs, Masahiro had built a Mario (Nintendo game Super Mario Bros.) to keep children concentrated during explanations.

At the end of this second dinner we went back to the hotel very grateful for all the attention they gave us and the kindness with which they explained their way to live the LEGO hobby.

LEGO JAPAN Ltd.

The last day in Tokyo, after Yoshikazu Saito made the necessary arrangements, we visited the offices of LEGO Japan, and we could talk with Mr. Kazufumi Okazaki, Marketing manager of LEGO Japan.

In our conversation I asked him some questions about LEGO in general, and some peculiarities of the Japanese market. The first question, was to know the difference, in his opinion, between LEGO and other toys - “LEGO can be anything. From a small piece you can build an entire model, only with imagination. That’s what differentiates LEGO from other toys. “LEGO began in Japan in 1962 and the typical consumer is a 4-5 years old child, receiving toys from parents or grandparents, in many cases DUPLO, and 5-8 years old child that continues with the toy and starts asking for LEGO sets they most like. Also some children continue with the hobby as they grow, and are inspired by models of the brand to create their own models. Mr. Okazaki recognizes that there isn’t still a big LEGO community in Japan, but they are trying to grow in this area.

Currently, LEGO toys are the third in number of sales in Japan. Mr. Okazaki recognizes they can not compete with brands like Bandai. Although Japan has been immersed in an economic crisis for more than two decades, it seems that this does not particularly affect the sales.

Curiously NanoBlocks is not a direct competitor of LEGO. “NanoBlocks is a toy for young girls. It’s a toy and market very different of the LEGO market, so we do not compete with them.“

The children’s favorite subjects are CHIMA, NINJAGO, CREATOR and CITY. There aren’t special products, except some buckets made especially for Japan, both for LEGO and DUPLO.

After the “formal” talk, we could see a presentation with some of the events organized by LEGO for children. The one that struck me was one that encouraged children to build railcars in Kyoto Station. They got over 2000 children assembling their car, and put them all together in a very long table, which had a remarkable visual impact. Also noteworthy was that they did some events after the earthquake of March 11, 2011 to recover the illusion of the affected children.

Finally he showed me some pictures of the exhibition “Piece of Peace”, which is an exhibition of unique pieces representing monuments and other characteristic elements worldwide. Is a traveling exhibition for Asia, and Mr. Okazaki offered me the official guide to have a better idea of the contents of the exhibition.

Before we left, we took a photo in the logo made with LEGO® minifigs placed in the entrance hall of LEGO Japan.

Finally, I would like to do a tribute to someone who, unfortunately, did not get a chance to meet, and who passed away a few months before our visit. This is Naoe-san, the most known Japanese builder who was supposed to have attended the meet with fans in Tokyo, as well as the visit to LEGO Japan. I asked three people who knew him well to explain who he was and why he was so special.

According to Nathan Bryan, “Naoe-san was loved by everyone and is deeply missed. He really was a pillar of the LEGO community. An incredible builder and a bridge between the LEGO fans and LEGO Japan. A kind, outgoing, and helping person that always tried to do as much as he could for others.“

To Kazufumi Okazaki, loss of Naoe-san was “a tragedy. He was too young to die. He had worked a lot with us. He loved the students and we have to honour him in the future and continue what he started, especially as far as events are concerned, which helped many fans, and also many children, which were inspired by him here in Japan. But for me the saddest thing is that I can not see him anymore.“

Finally Yoshikazu Saito talks about his experience with Naoe-san: “It is hard to think about Naoe-san in just a few words. He was a big person, with big dreams. Without his support neither BFT or BFC would have been possible. Because of him Japanese AFOLs were able to create wonderful models to show to the rest of the Japanese people. It really can be said that he did not build for himself, but he build from a new point of view to make the people who saw his models happy. Personally he suggested that I become a LEGO Ambassador and also provided me with lots of chances to help out. I think of him as a teacher, a benefactor and as a very good friend. One of my fondest memories was of riding the roller coaster at LEGOLAND with him. Due to the combined weight of the two of us, the coaster almost flew off the rails!“

Rest in peace.
#

The Martillófono (hammerphonium)

By Unai Requejo

The so called Martillófono is a musical instrument built with LEGO® parts and a toy xylophone (a glockenspiel in fact). When presented in exhibitions, the visitors can make music with it, and it also has some minifigure-spectators, bringing the dimensions and scale of a kind of factory in miniature to the machine.

In terms of technique and finish, it doesn't reach the standards that are usually seen in this magazine, but I hope it brings up the chance to comment and discuss interesting issues on the making-process and what we have learnt along its way. It has been shown in interactive and sound-art exhibitions in Bilbao, Madrid and Jaén. Last April, I took part in a LEGO® fan event for the first time, with the people of HispaBrick Magazine® in Mungia.

The aim of the project wasn't initially to make something with LEGO® bricks, what I wanted was to make a musical instrument and I also knew the kind of sound I was looking for: a xylophone sound with some hammers that rattle and preferably with the ability for adjusting the speed of the tremolo; that was the idea.

It took me a lot of attempts: I tried doorbells and also mechanic and electronic solutions that implied 8 motors, but I'm not so skilled in those fields. At that stage I made two prototypes of mechanisms to convert the rotary movement of the motors in a linear, percussive one; these prototypes were made with LEGO® Technic, but I still didn't know how to materialize it.

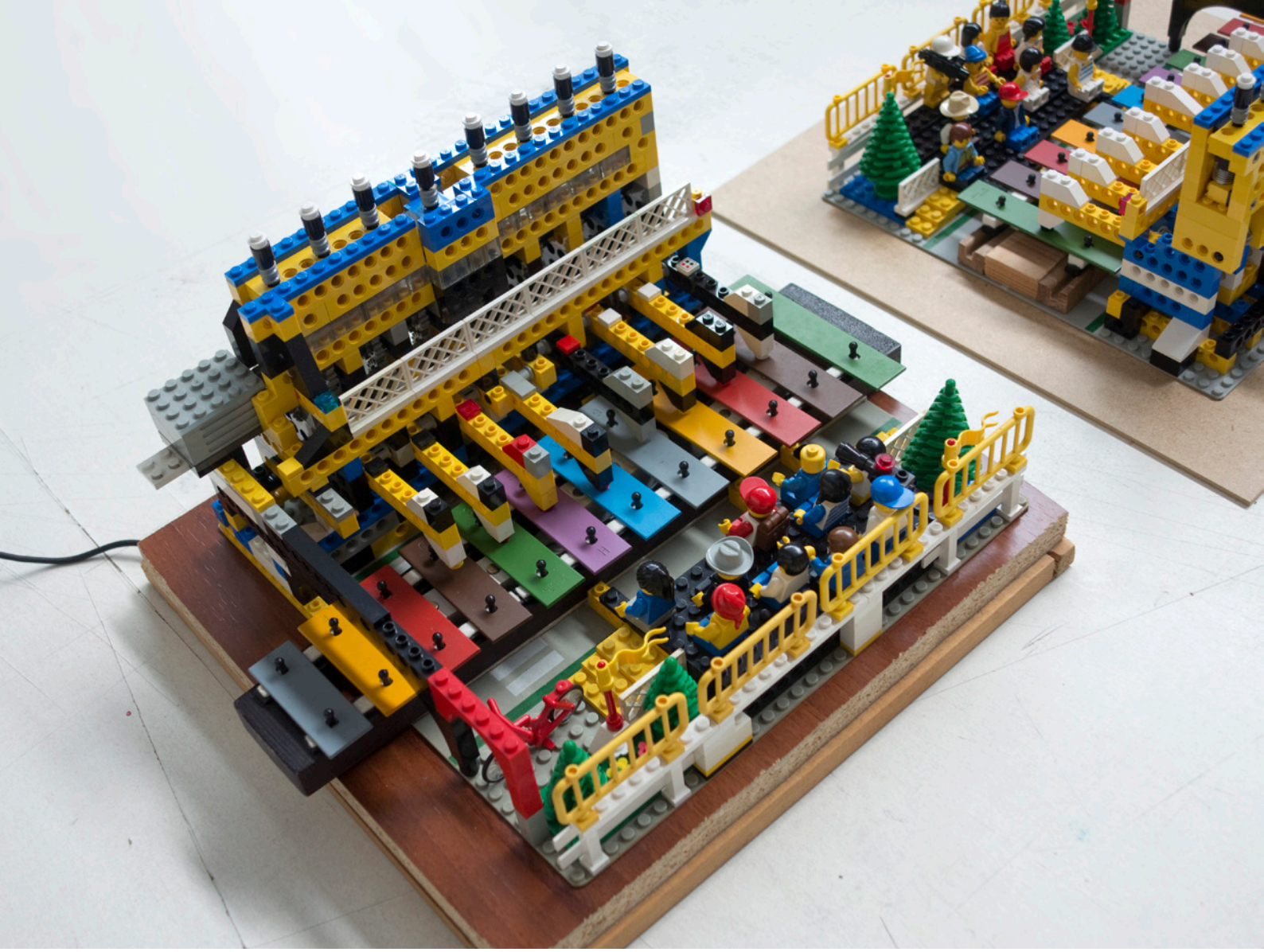
Then, I thought, why don't I make the whole thing with these parts?

Besides that, it was a medium that was familiar for me, as I played a lot with LEGO® as a kid. With this project I went back to the hobby and, as I had a nice amount of pieces, I started playing around with them.

The way of building the Martillófono has been very playful, even if I was guided by a purpose, I didn't know yet what kind of shape the model was going to take, and the ideas weren't clear. Everything happened on the go, letting it flow, without planning much in advance, coming back to fix details when needed.

The LEGO® system, being a toy, is an easy material to build with, it's true that the techniques can be extremely complex but it also has some advantages: The parts are ready to be joint in multiple combinations, and without using any glue or cutting, so there is no risk in making mistakes; you can always change and fix it. This absence of risk is very related to the concept of "play", providing the creative freedom that is necessary; if we build with materials that are not toys, and we are going to saw, let's say an expensive wood piece, we know that once we cut it there is no way back and we will overthink, we cannot be playful then.

Building with LEGO® is fast and it's possible to think with the materials themselves, specially if you are familiarised with each



of the systems. (I'm not so acquainted with the new Technic system, the liftarm, and it doesn't allow me to improvise). The concept "easy material" was suggested by Alexander Calder, the sculptor, and he applied it related to wire, which he used for building, for example, the characters of his little circus.
It's easy to think with the material itself, to build and disassemble, and this feature derives in constructions that are somehow alive, they tend not to be finished, static. Whenever you want, you can make small changes to them. Instead of being scale models that we observe in a passive way, they are still full of possibility to continue playing.

As usual, you have to deal with the limit of the parts you own, making substitutions among them. This limitation is something that I enjoy, not only it is a fun challenge but also it leads you to shapes that you wouldn't have come up with otherwise. At that moment I wasn't much worried about using colors in a consistent way and that's why the Martillófono looks the way it does. Its appearance and shape is quite chaotic, and it doesn't remind you at all of a commercial set.

Initially, I thought I would use a road baseplate. The xylophone would go on top of it and it would be the base for all the construction as well. At some point, this base, beyond its role as functional element, drew the attention for being in fact a road, and in this way the bleachers arise with the minifigure spectators and a bit of decoration around them.

The way it works is simple; while you press each key, the corresponding hammer stays hitting the xylophone. And if you push two or more keys, several hammers will play arpeggios with random rhythms. You can also vary the frequency of the hits, using the Train speed regulator.

Without knowing what I was really doing, the Martillófono ended up giving me the idea for the subject and key points for a research paper, focused on playing and art; the PhD thesis I'm developing in the Fine Arts school at the University of the Basque Country. Maybe it doesn't help for summarising it, even for structuring it, but definitely it condenses some of its elements: toy, scale model, audience, interactivity, music and the playful creation process that I have mentioned in this article.

On the occasion of an art exhibition where this piece was shown, I edited the graphic building instructions, so the visitors to the show could pick up a printed copy. Recently I was asked to make a replica, so we looked for the parts and, following these instructions step by step, we rebuild it. The experience was fun and a completely different process.

Now I put at your disposal the building instructions booklet in PDF, along with a video to see it in motion (http://www.unairequejo.com/moc/). If you would like to build your own I will be more than happy!
#

Minifig: A Cult Object (II)

By Iluisgib
Minifigs: Iluisgib and LEGO® CEE Team

In the last HispaBrick Magazine® we took a look at the special minifigures coming from commercial actions made by LEGO® or other companies. In this second part we are going to see the most exclusive, rare and difficult to get minifigures, the nightmares of all collectors.

Exclusive Minifigs from fairs and conventions

This is where the level of difficulty becomes higher. Mainly in the USA, there are several Comic conventions, like the Comic Con in San Diego or in New York where everything related to Super Heroes, Star Wars, Star Trek and any other geek theme is present. Another place to promote LEGO is on the International Toy Fairs, like the ones in Nürnberg (Germany), London (UK) or New York (USA).

In 2005, at the Nürnberg Toy Fair, LEGO offered its customers a Darth Vader minifig with a lightsaber that actually lights up, a novelty that year. On the polybag you could read “56 International Toy Fair Nürnberg 2005”. The minifig itself is the same one that appeared in the Tie Fighter set (7263). The value of the minifig is in that it is still in the well closed bag. Is the MISB madness promoted directly by LEGO? Who knows...?

In 2005 at the New York Toy Fair there was a special invitation for a few VIPs. (around 100) for a special event called “LEGO Star Wars VIP Gala”: I have no idea what happened at that special event, but the invitation, instead of paper was a Star Wars minifig on a pedestal made of pieces and a commemorative plaque glued to the pedestal.

In 2008 the promotion was repeated with a curious box which was internally divided in two, and it contained the two main characters played by Harrison Ford: Han Solo from Star Wars and Indiana Jones. Each character had its own setting. Again there were 100 made.
In 2009, to commemorate the 10th anniversary of LEGO Star Wars, the invitation was a Chrome Darth Vader in a plastic box, specially made for the event. This box featured a large “09”, the logo of the 10th Anniversary and the slogan “10 Years of ruling the toy”. Again, 100 units were made.

After this the Cubedudes were in fashion for a couple of years, and in 2012 the minifigs returned to New York in different formats: a polybag of Shirtless Darth Maul (5000062) and an accreditation with 2 minifigs, Captain America and Iron Man with a printed mask on his face. The circulation of Darth Maul was considerable, but of the accreditation with two minifigs there were only 125.

In 2013 the exclusive minifig was a funny Yoda with a t-shirt saying “NY I Love”. This minifig was launched because of the release of the “Yoda Chronicles”.

Another source of rare and exclusive minifigs are the Comic Cons in San Diego and New York.

In 2008, at Comic Con San Diego an exclusive pack of two minifigs was given out with Batman and the Joker. It appears that, because the minifigs are normal with an exclusive packaging, the rarity isn't enough to make the price and desirability of this pack soar.

In 2009 there was alteration in the force. LEGO® offered 6 displays with 3 Star Wars minifigs each. % had a production run of 300 and each convention day a different one was given out. The sixth had a larger run (1500) and it is my understanding these were handed out during all the days of the convention, but I have no confirmation of this fact. Like the year before, since the minifigs are standard, the value on the collectors market is "contained".

In 2011 madness broke out again for two reasons: LEGO announced an unprecedented agreement with the two main publishers of Comics (CD and Marvel) and at the Comic Cons preliminary minifigs were handed out, which also gave access to a contest related to these minifigs. The minifigs for Comic Con San Diego were Batman and Green Lantern (his only appearance in LEGO so far). At Comic Con New York Superman was added to the two from San Diego.
These minifigs came on a card that announced the appearance of Superhero sets and the rules of the contest as well as the logo of Comic Con.

In 2012 the promotion was repeated with more minifigs like Bizarro, Venom, Phoenix Jean Grey and Shazam Captain Marvel in San Diego and a special minifig of The Ninja Turtles and Shadow Leonard in New York.

Exclusive Minifigs from LEGO Events

In 2005 there was a new "type" of minifig, which was related to an event organised by LEGO fans. The Dutch LUG De Bouwsteen, organiser of the Fan Zone at LEGOWorld Zwolle, made a limited edition of 1000 minifigs with its logo on the front and the LEGO logo on the back. Each of these minifigs came with a certificate of authenticity and a serial number.

In 2008 another similar action was undertaken. In this case it was a "standard" minifig (if you count a minifig with flesh hands and a yellow head "standard"). Again the LEGO logo was on the back, but in this case the LOGO of De Bousteen and of LEGOWorld were on a blue skateboard that came with the minifig. The official series was 750 numbered minifigs, although at LEGOWorld 2008 they could be bought without the serial number for a few Euros.

The next minifig of an "official" event I know of is of the Fan Weekend that is celebrated in Skærbæk (DK) each year at the end of September. I started going to this event in 2009 and got the first 3 commemorative minifigs of that event. These minifigs were made by a printer, with the permission of LEGO, and were only given to exhibitors at the event. The second was given in 2010 and the third in 2011. The minifigs included the LEGO logo and the year of the event, in addition to other logos.

Also in 2009 LEGOWorld Copenhagen was started. From the very first year a commemorative minifig for the event was made. The exclusive part is actually a torso with a reference t the even and the year on the front and the LEGO logo on the back. Each year this has been the same and so far there are 6 different torsos (from 2009 to 2014).
Although it can only be obtained at this event, the "exclusiveness" of this minifig is relative, as thousands of torsos are distributed at the event. In other boxes there are different types of legs, heads and hair pieces to complete the minifig so there is no standard model.

Other events that are less well known in Europe also have minifigs, like "The Big E" in the USA. I don't know the details of this fair, but it must be important and it has its own special minifig.

Internal Minifigs from LEGO

This is the holy grail of rare and exclusive minifigs. These are the minifigs that are not available through any of the more

or less regular distribution channels. Collectors dream about these models and they would do anything to get their hands on at least one.

The best known of these minifigs are the ones used as business cards. Some LEGO® employees have a minifig that has the LEGO logo and their name on the front, and their phone number and email address on the back. The head and face are chosen to be as similar as possible to the employee. I suppose the one that is most sought after must be of the owner of the LEGO company, Mr. Kjeld Kirk Kristiansen, followed by the CEO, Mr. Jørgen Vig Knudstorp, and the rest of employees. It is curious to see how when you have a certain access to these employees, they are absolutely delighted to give you their minifig. Who wouldn't? Sometime I think one of the many reasons why I would like to be a LEGO employee is having my own minifig / business card.
Some websites have highlighted these "cards", even defining them as "the most original business cards in the world".

In addition to these minifigs there are some internal (or exclusive) events that have their own minifig. For example, the LEGO Inside Tour, a 3-day visit to the company for the extremely reasonable price of €1800... The "Havremarken" moulding shop and the "Idea House", the private LEGO museum in Billund, also have their own minifigs. All these minifigs are of limited production runs, hard to get, and extremely expensive on the collectors market.

Custom Minifigs

The fans couldn't escape this fever and over the years personalised minifigs for events, webs or clubs have been made by fans. Obviously these minifigs are not official and do not have the LEGO logo, but that doesn't make them less interesting and they are equally desirable.
The personalizations started with stickers. Although this is the "home-made" method, it made it possible to have commemorative minifigs for events. Little by little these custom minifigs were perfected and more or less automated methods were used. The first of these I learned about was a minifig our editor Carlos brought me from BrickWorld 2008. It was a blue minifigs and the logo of BrickWorld and the year were engraved. Shortly after that the method for printing the torsos was found, which allowed the designs to become more and more spectacular. Many clubs and fans made their own minifigs and the exchange of these minifigs helped strengthen the ties between AFOLs and clubs.
#

Interview: Bright Bricks

By HispaBrick Magazine®
Pictures by Bright Bricks

Duncan Titmarsh (LCP in the UK) and Ed Diment are the directors of Bright Bricks. This company jumped hard on the international scene with the replica of a Rolls Royce turbine that appeared in many media. Now you can find more about the company and discover more of their works.

HBM: How did the idea of Bright Bricks come up?

BB: Bright Bricks was a good name for my part time company. I set it up to formalise my LEGO® building.

HBM: Has the way your business has evolved met your initial expectations?

BB: It has grown faster and bigger than I had imagined.

HBM: What kind of product is the most demanded, custom promotional sets or large sculptures

BB: Large models for shows and events.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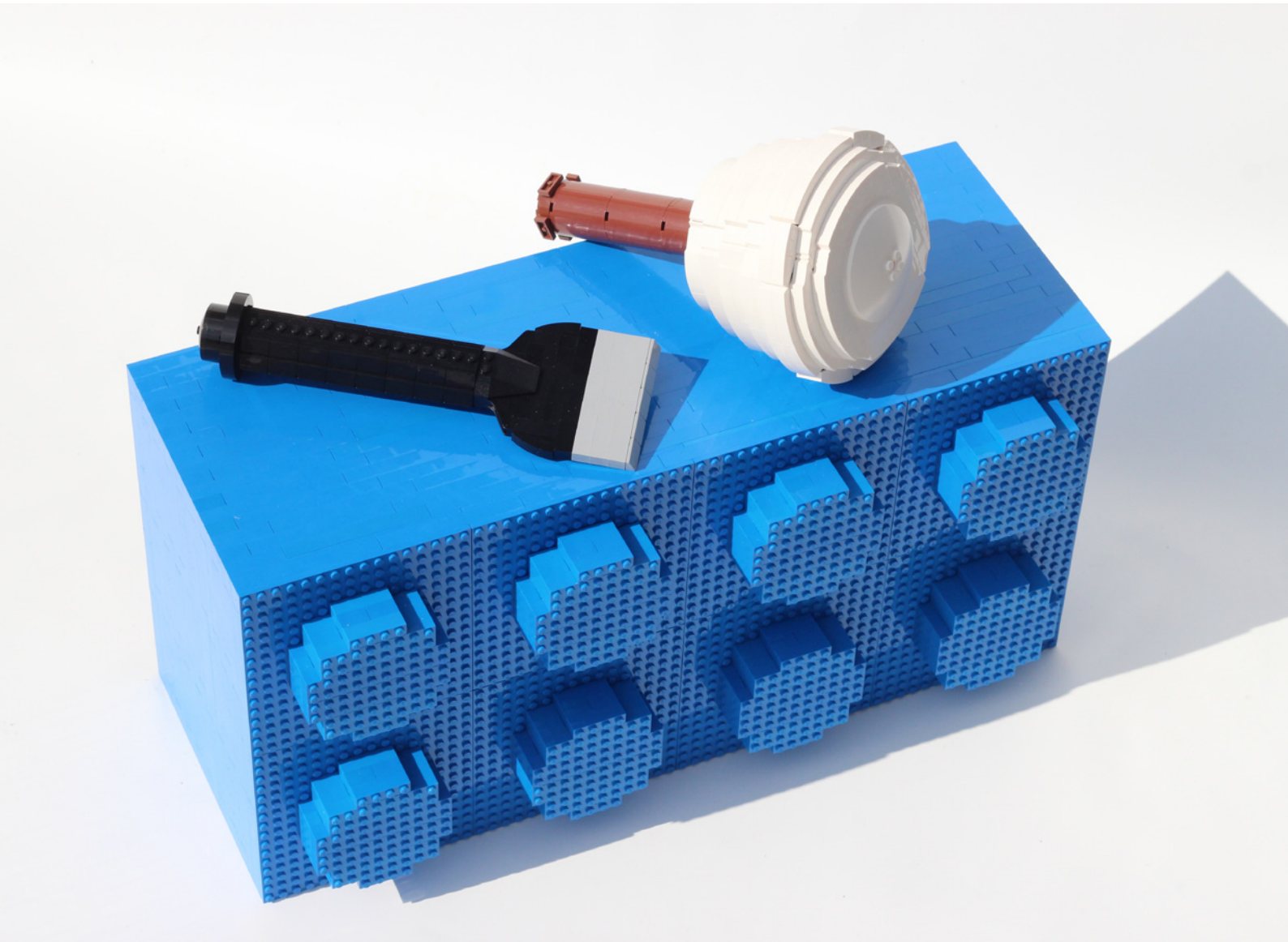


HBM: When a client comes to you, are they surprised by the cost of designing and building the model they want?

BB: Depends on the client some are surprised about the cost but most understand that LEGO® is a really good product.

HBM: Can you explain any interesting anecdotes related to Bright Bricks?

BB: When ordering parts for our large Christmas tree I made a typo in the quantity so instead of ordering 8000 1x10 brown plates I ordered 80,000 we still have some now and that was 3 years ago.

HBM: What is the most difficult project you have done and why?

BB: The Rolls-Royce aircraft engine because of its size and complexity of making it turn.

HBM: Out of curiosity , what is the part you have used most over the years?

BB: The standard 2x4 brick.

HBM: Tell us something of your immediate projects.

BB: We have just completed a full size bus shelter and stop sign outside Hamleys in London.
#

LUGs of the world: Chile LUG

By HispaBrick Magazine®
Pictures courtesy of Christian Breinbauer

Every time we publish a new issue of the magazine we like to track the impact and downloads related to that specific issue. As our readers know, HispaBrick Magazine® is written in two different languages, we have a Spanish version and an English version. The Spanish version was downloaded almost exclusively from Spain, but in the last issues we have seen a gradual increase of the downloads from other countries, mainly from South America, where Spanish is the predominant language. We wanted to know something about those countries and the way they organize their AFOL communities. So, we contacted Christian Breinbauer, LEGO® ambassador for Chile LUG (http://chilelug.cl/), who kindly agreed to tell us something about the history of Chile LUG and his impressions about how they see the LEGO hobby in Chile, a country located in the southwest of South America.

HispaBrick Magazine: How did Chile LUG get started?

Christian Breinbauer: Our LUG was born due to a desire to find people with the same likes for the constructions with LEGO® bricks, this is just the same all over the world. I talked to a friend, Lucas “Legorio” Peña, that it was necessary to form a group of LEGO fans in order to gather more and more fans, so that we could make some events here in Chile, like the ones we saw in other parts of the world, mainly in the United States and Europe. Finally, when we met for the first time, there were 4 people: Lucas, Sergio Rojas, Miguel Saavedra and me. And then more people came to the group.

HBM: How many members does Chile LUG have? Which is your level of activity?

CB: We have about 500 members in our LUG, those who join in our Facebook account. But there are only 30 AFOLs who take part and prepare all the exhibitions, events and other activities of our LUG. We are mainly adults (AFOLs), but we allow minors to be part of our LUG, if they are very interested and involved in this hobby, because we have to stimulate the builders of tomorrow!

HBM: What are your main means of contact: forums, meetings, workshops ...?

CB: We have a Facebook group, that is our main way to contact other members. Facebook has been a very useful tool to know each other no matter if we don’t meet in person. And, thanks to this tool, we have created a very friendly group. We also hold a monthly gathering.

HBM: Do you organize events or exhibitions?

CB: Yes, we have attended some events. Throughout the year we are able to attend some events related to Sci-Fi or Fantasy encounters, or local Comic Con, or X-fan events. Furthermore, we have organized our BrickFest, in March. The last edition was the second, and we had a very good audience.

HBM: Are there any other LUGs in your country? Do you have contact with them? And, do you have any contact with LUGs of other countries?

CB: We are the only known LUG here, in Chile. Some people in other cities of the country are beginning to organize local gatherings and events, because they can't travel to Santiago (the main city of Chile) to attend the official meetings of the LUG.
I'm in contact with the LEGO® ambassador program representatives of BrasilLUG and LUG Peru. I share our experiences with them, and they have the same circumstances and problems as we have in Chile.

HBM: Do you have contact with TLC (The LEGO Company)?

CB: We are in contact with TLC by means of the Community Managers of the Ambassadors program. Here, in Chile, there is no official TLC representation, so we have to contact SILFA, who act as authorized representative of TLC. And that is our way to let them know that we are interested in organizing or collaborate in events.

HBM: Which is your role in Chile LUG?

CB: I'm one of the founding members of Chile LUG. And now, as Chile LUG LEGO ambassador, I'm in charge of managing the events we take part in. I'm also responsible for the communication between the LUG and The LEGO Company, through the LEGO® ambassadors forum.

HBM: Chile is very far from the main distribution channels of LEGO® sets, is it difficult to get a complete catalog there?

CB: Yes, we are geographically far. However, Chile is the Latin American country with the highest per capita consumption of LEGO® sets, so we have a complete catalogue with almost all lines. But we don't have special promotions, like exclusive minifigs or other special items. The main problem is not the availability of certain sets but the price of them, in many cases the same set can be twice or three times the price that it is sold for in other countries like United States.

HBM: According to the standard of living in Chile, do you think that LEGO® sets are expensive?

CB: Yes, as I said before, LEGO® sets are very expensive here, in many they are priced twice or three times more expensive than in the United States. That's a shame because LEGO® is considered an elitist toy, and many children cannot afford it. There is no denying that playing with a high quality toy like LEGO® is exceptionally beneficial for children. But many parents prefer to buy a video game instead of a LEGO® set because they think it is better to spend the same money for a game that needs a lot of hours to finish than a LEGO® set that can be built once in a very short time. Don't get me wrong, I love videogames, but people are not aware of the "Replay value" of the LEGO sets, so they prefer to buy other toys. Chile is a country with high rates of attentional deficit disorder diagnosis (30% contrary to the 10% worldwide rates), so there is a great use of methylphenidate for the treatment of

this disease. In many cases this is necessary, but I believe that a great percentage of children could be stimulated with specific toys instead of being treated with medication. I think that LEGO® would be very useful to have an alternative way to solve this problem. On the other hand, the high price of the LEGO sets helps the proliferation of many clone and pirate brands, which undoubtedly are lower quality toys, but cheaper than LEGO® products.

HBM: Which are the most successful LEGO themes in Chile? And, your favourite ones?

CB: The City and Star Wars themes are the best sold. Friends is being very well received on our market, furthermore other themes like Ninjago and Super Heroes are selling very well too. My favourite ones are Star Wars and Architecture. But now I'm starting to build modular Cities. I like to do City or Star Wars displays, because I can include many small stories in them.

HBM: What would you like to build individually or with other AFOLs? Why?

CB: I always have many projects in mind, but everything is limited by the availability of parts. This year we were able to take part in LUGBULK for the first time, so I hope we will be able to build things in a larger scale: dioramas, buildings and sculptures.
#

Collaboration Encourages Participation

By Bryan Bonahoom

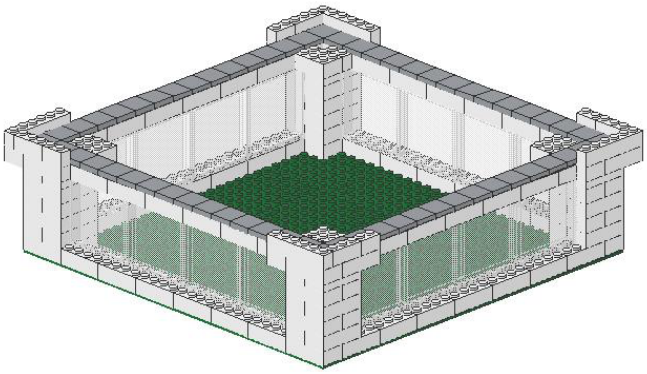
Collaborative builds are one of the easiest ways for enthusiasts to be a part of a large creation. There are several collaborative build standards that have lived within the community for many years. Themes such as Classic Castle and Moon Base are a couple of the more well-known collaborations. At Brickworld, collaborations are celebrated.

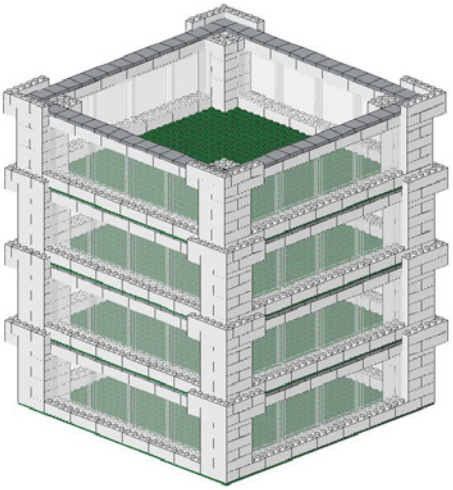
Of course, everyone loves tall displays. But, for an individual, these are expensive to build and difficult to transport. So, this year at Brickworld, we debuted a new collaboration. It has the ability to be very tall. It is a collaboration. And, as display space is busier than ever with incredible MOCs, it has a small footprint on the tables. This is how the collaborative sky scraper was born.

The idea of the collaborative sky scraper is to allow someone without a lot of space in their luggage or a lot of money to spend on parts to create something, almost anything, encase it in the defined building perimeter design and put it in the stack of modules to be part of something bigger.

Some people will criticize the design for its simplistic exterior design and for the fact that it does not include a stairwell or elevator. The design of the basic module was very intentional to allow maximum visibility and to allow the builders to focus on the intricate interior details instead of spending money on the exterior design parts.

Our belief is that it is more engaging and more fun to have to look into the building for the details, instead of just seeing something neat from across the room. A seek and find could easily be added for any collaboration of this nature to engage people even further.

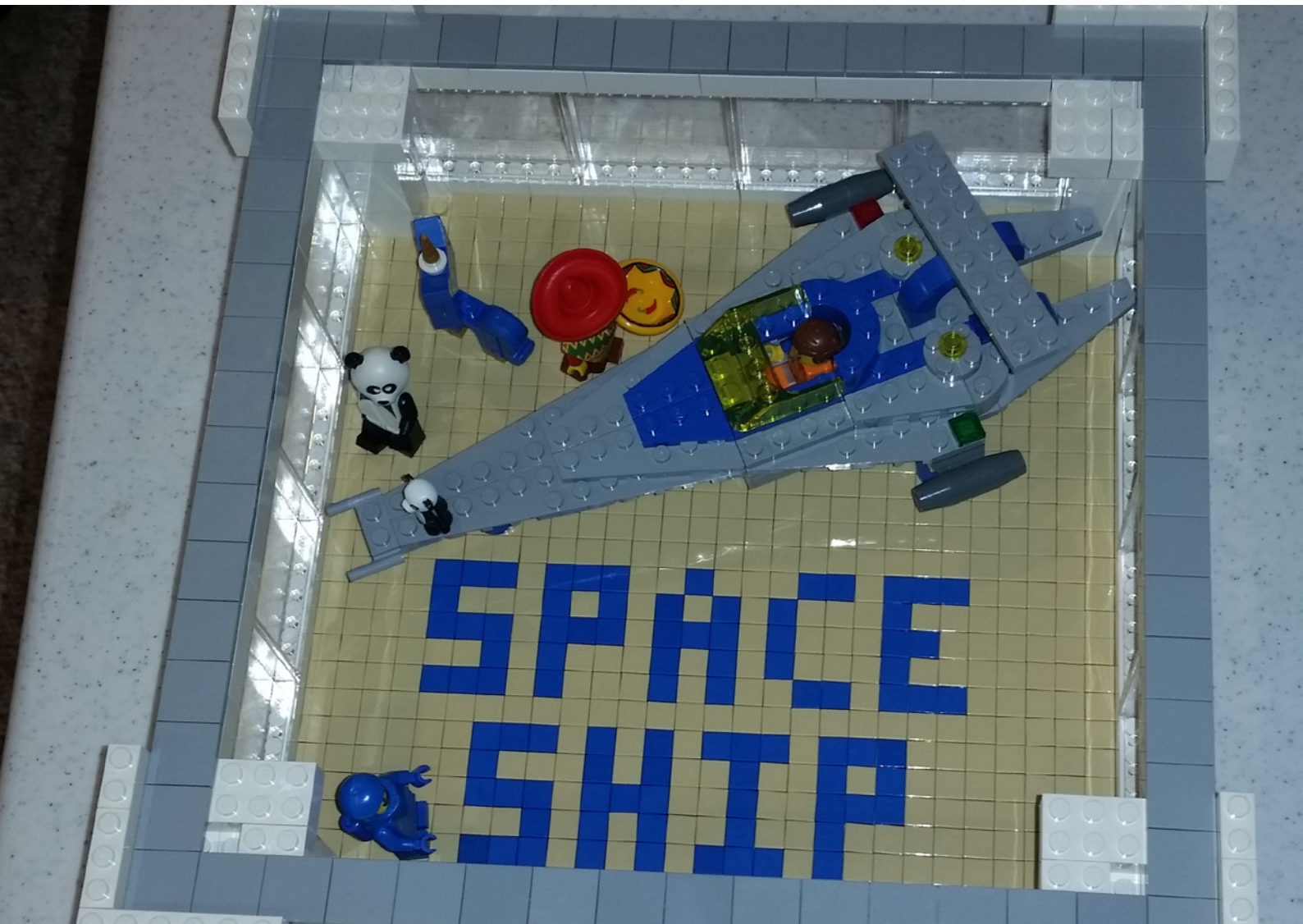




At Brickworld this year, there were a total of 25 modules for the debut of the sky scraper. As you can see in the picture, a couple of modules deviated from the basic exterior design to allow for a taller interior space. We considered the 2 and 3 high modules acceptable deviations that added some character to the exterior while not violating the basic premise of the collaboration (a stackable building).

One of the Brickworld attendees made provisions in his city layout for two towers to be stacked, thus making the sky scraper collaboration part of something even bigger. Another attendee made his module a motorized window washer with the total height of window washer movement controlled by a MINDSTORMS NXT. Then, we added a wireless camera to the window washer platform facing into the building so that a video feed to a nearby monitor would show the interior designs. Finally, on site at Brickworld, once we had the start of two towers, a walking bridge was added between the towers.

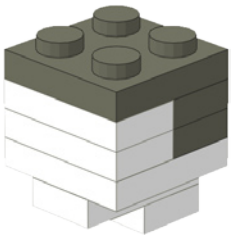
Overall, this was a very fun collaboration with a great initial turnout. Who knows, maybe next year we will have sky scraper city!! Meanwhile, build a few modules for your events and have fun with it.
#



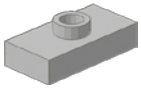
Miniland Building: MINILAND Character Build

Extended GuideLines
Part III - The Head

By Didier Enjary

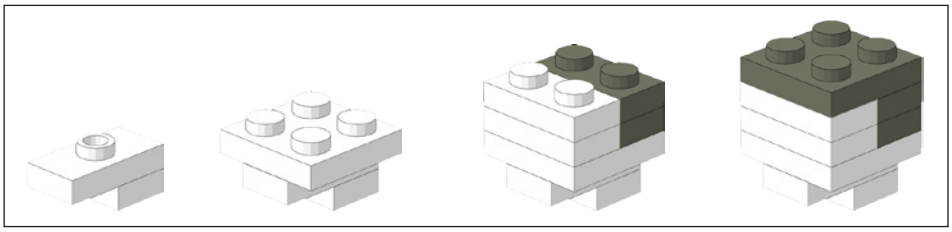


The representation of the head of MINILAND characters, despite the limited volume reserved for it - a cube of about 10/16 inch - is subject to a wide variety of design: variety in the color (hair, skin), diversity of hairstyles (from complete baldness to the wildest hair) and headgear (hats and caps). But let us begin the construction of this prototype. The base of the head, i.e. the neck, is represented by a simple plate 1x1. You may prefer a 1x1 round plate. The chin is drawn with a jumper plate (1 single centered stud on a 1x2 plate) which centers a 2x2 plate. The use of 1x2 plates in different colors differentiates the face from the hair. Finally, the last 2x2 plate forms the top of the skull.



The Jumper plate

The resulting geometry is very angular, a geometric effect hardly softened by the presence of the studs on the top - one reason you may prefer conventional plates against the smooth plates (tiles). As we will see later, some characters' faces may look more «organic» using round or curved parts or using offset techniques.



Basic Head Building

White people
(color tan)

Black people
(color brown)

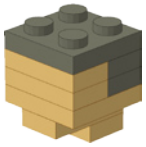
Colors

We have first to say a word about the colors to use. For items that represent the skin as the face but also hands, which must be flesh-colored, the best effect is obtained with the brown (for black people) and tan color (for white people). You can also use respectively black or gray and white or yellow, but with less convincing results.

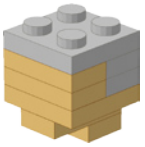
Nonetheless you can use other colors to represent specific characters' makeup (clowns, mimes,...), sick people (a seasick boat passenger will have a blue-green face) or masks (Batman, Spiderman ...).

For the hair, the choice of color is even wider, and it is possible to achieve shades from blond to black and shades of gray for the elderly. Some common colors are illustrated here but you can use any color as long as parts are available (sand and dark red, medium orange...).

Black hair



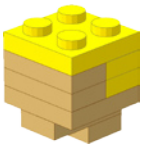
Gray hair (Dark gray)



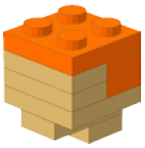
Gray hear (Light gray)

White hair

Brown hair



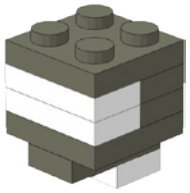
Blond hair (Yellow)

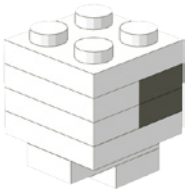


Red hair (Orange)

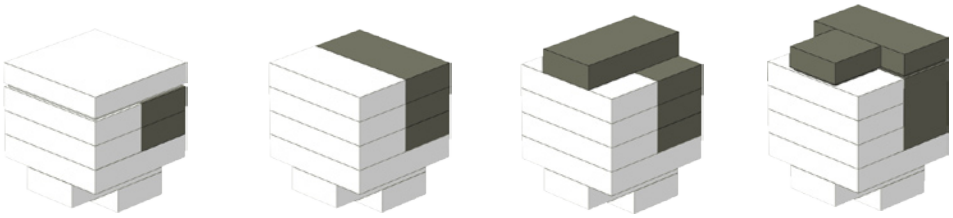
Beards and Hairstyles

From the basic design of the head, you can create bearded or bald heads by changing the colour of a few parts. For the beard, you have to change the chin color from flesh to hair color. To get a bald head, we swap the hair color of the top of the head to flesh color. None of the parts are modified, only the colors are chosen differently. How would you make a character at the same time bald and bearded?



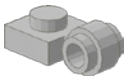


It is possible to enhance the design, for instance in making use of tiles and jumper plates. As demonstrated below, you can represent at least 4 different stages in the process of losing hair.

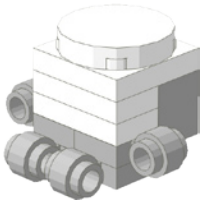


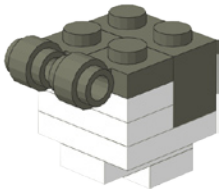
Different stages of male baldness

You can also notice how much the use of rounded parts or parts with clips or rings, featuring curved geometries, makes the whole design less blocky and smoother. The plate 1x1 modified with clip (ring) is a part which is heavily used to recreate hairstyle effects, for instance a rockabilly fringe.



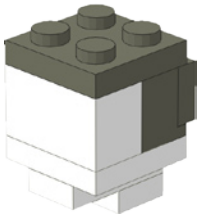
1x1 plate modified with ring

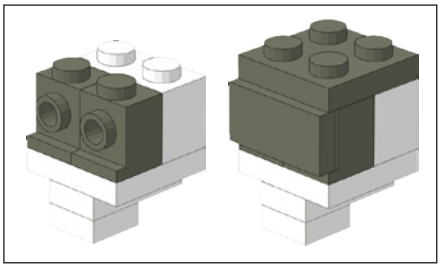




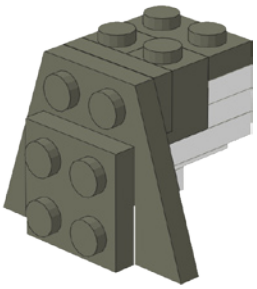
An unusual build makes the back of the head bigger and less blocky. This effect is made possible thanks to the Erling brick. This brick, named after the LEGO® Designer who created it but also named headlight brick, makes it possible to build perpendicularly (studs not on top but on side : SNOT).

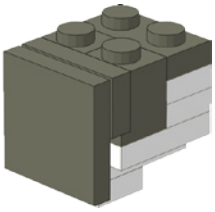
Erling Brick

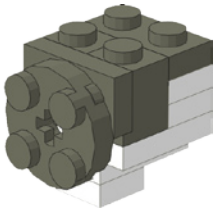


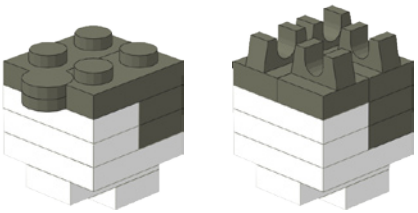


This is the source for a serie of new long hair hairstyles, some examples being illustrated here.



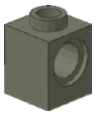




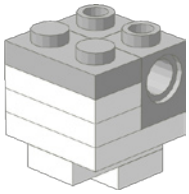


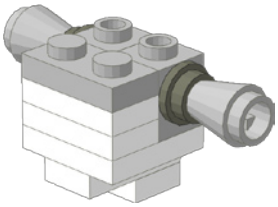
Other short hair styles

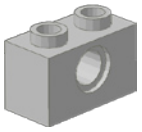
Other builds make this kind of arrangement possible. The first makes use of Technic bricks. Those bricks have a hole on the side and the size is compatible with studs. It is a stud-to-hole build which is inverted (it makes apparent the underside of the parts) compared to the classic stud-to-tube build. We make use here of the smallest Technic bricks (1x1 and 1x2) that you find not only in Technic sets but also in various LEGO sets. In the following examples, a 1x1 round plate creates a necessary shift to avoid overlap side effects while featuring hair ties.



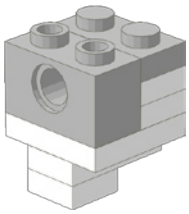
1x1 Technic Brick

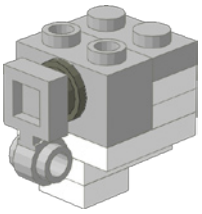


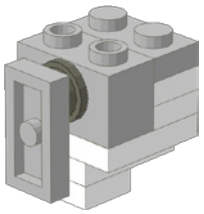


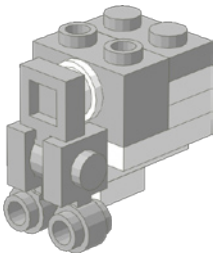


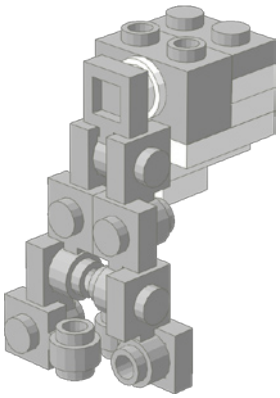
1x2 Technic Brick



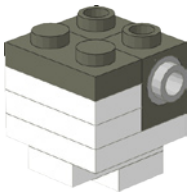


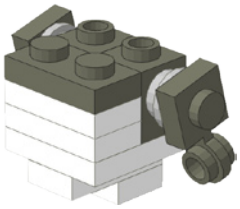




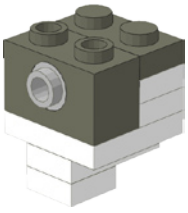


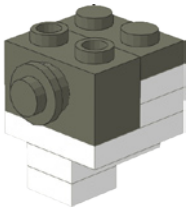
The second SNOT build makes use of the Technic half pin in combination with Technic bricks. Unlike the previously described Erling build, this one does not feature undesired shift. This way you can create pigtails, buns of various sizes and ponytails.

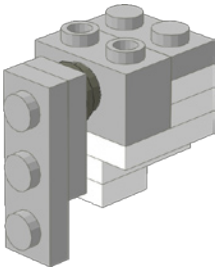


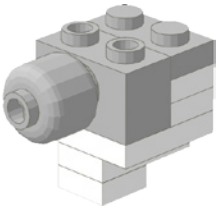


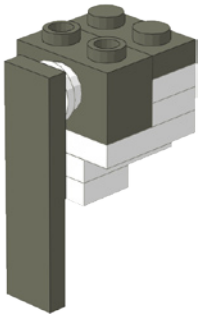
Technic half pin



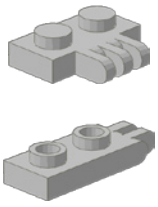








Without any advanced building technique, the massive use of modified plates, such the plate with clip, the plate with offset and hinge plates are sources for original designs: short or long curly hair, braided ponytails…



Hinge plates

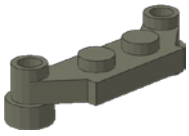
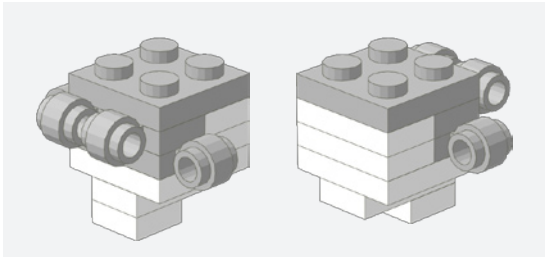
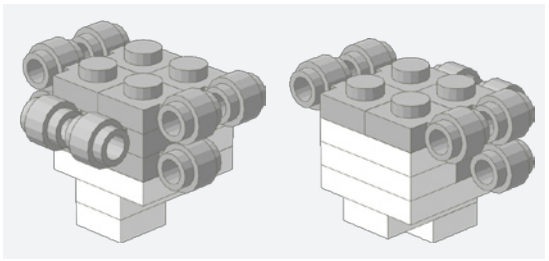
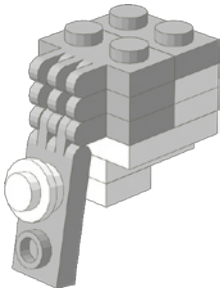
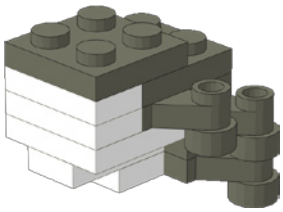


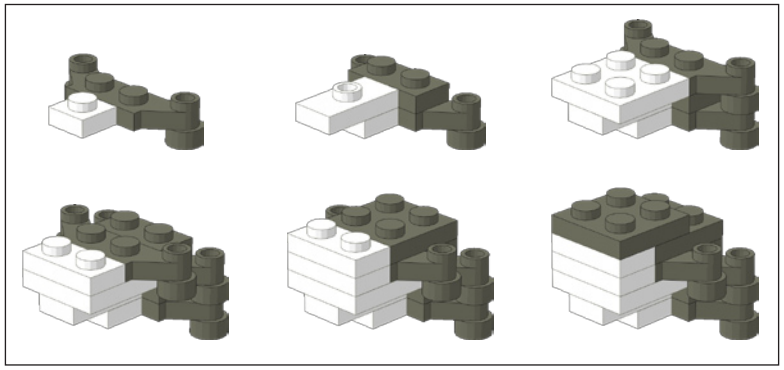
Plate 1x4 offset





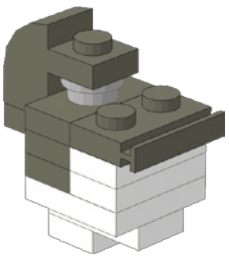


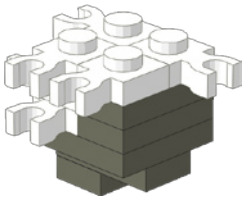


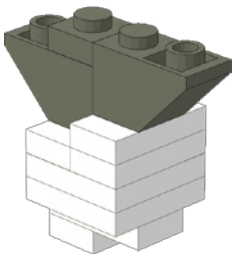


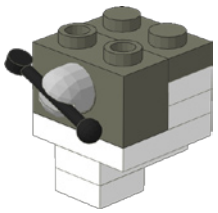
Build for long curly hair

To conclude on hairstyles, and to underline that possibilities are practically limitless, the following are four different hairstyle designs using previously unused LEGO® parts.



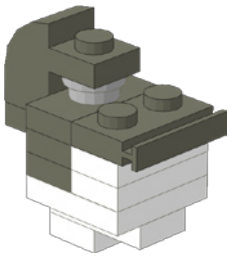




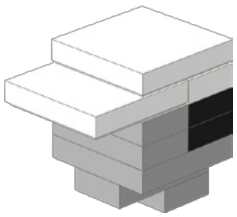


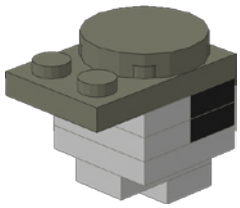
Caps and hats

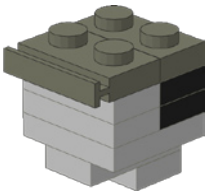
The MINILAND characters sometimes need to cover their heads. The most common today is the cap. The key element of the cap is the visor. The simplest solution is to use a 2x3 plate and a round 2x2 plate to simulate the indentation of the head. You can also use tiles or even shorten the visor with a 1x2 plate with rail. This solution also allows, with a wise choice of color to simulate a fringe instead of a visor cap (see the girl with a ponytail).



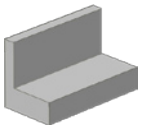
It is important to contrast the color of the hat to the hair (and preferably to flesh color). Later we will see other examples demonstrating the importance of contrasting the colors of elements representing different body parts.



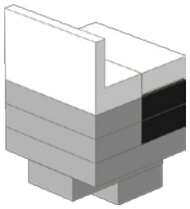




If you need to represent a child, you may prefer a version of a cap with the visor raised using a 1x2 panel. More simply, young people and bad boys will wear a reverse cap like in real life.



Panel 1x2



One part is particularly well suited to recreate a cap with the visor: the plate 3x2 with a hole. Indeed, in addition to its dimensions, it has a rounded edge. It provides a wide range of solutions.

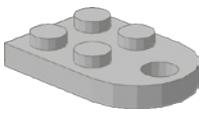
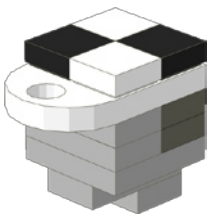
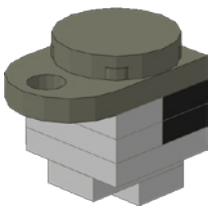
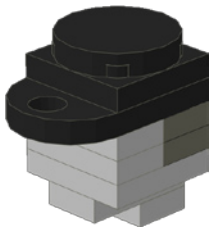


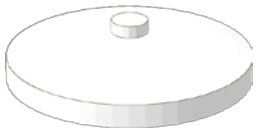
Plate 3x2 with hole



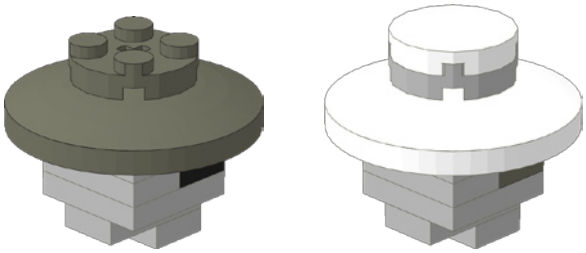




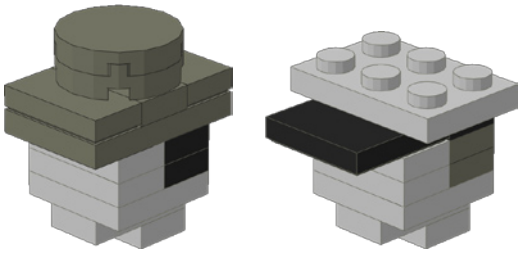
The elegant ladies will make use of the 4x4 dish inverted as wide brim hats in combination with smaller round parts.



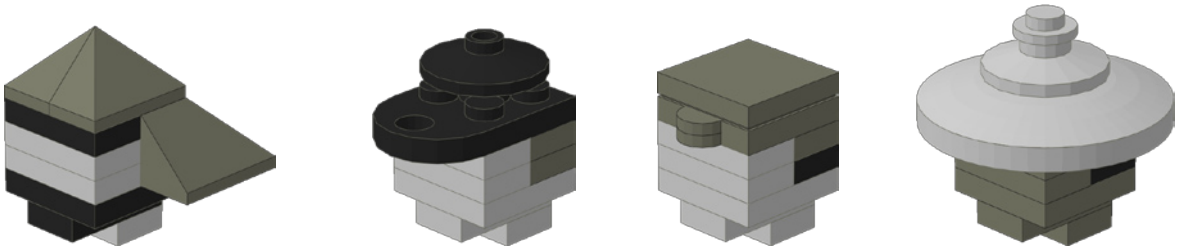
4x4 dish inverted



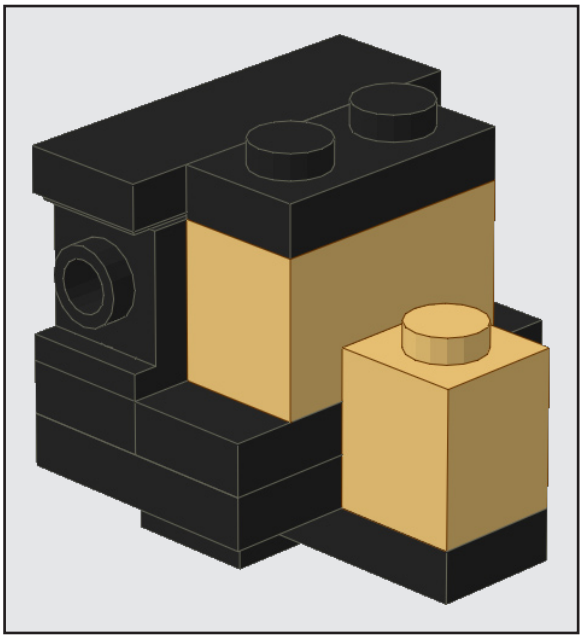
Other types of hats can be recreated using the possibilities offered by the half-stud shift of the jumper plate.

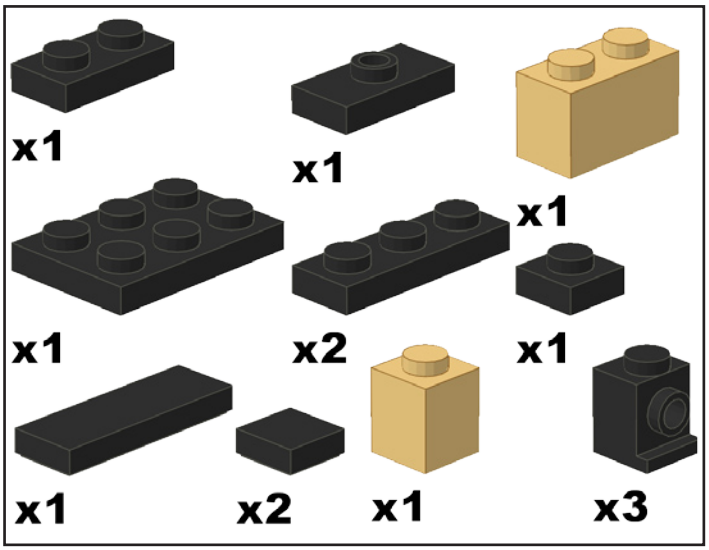


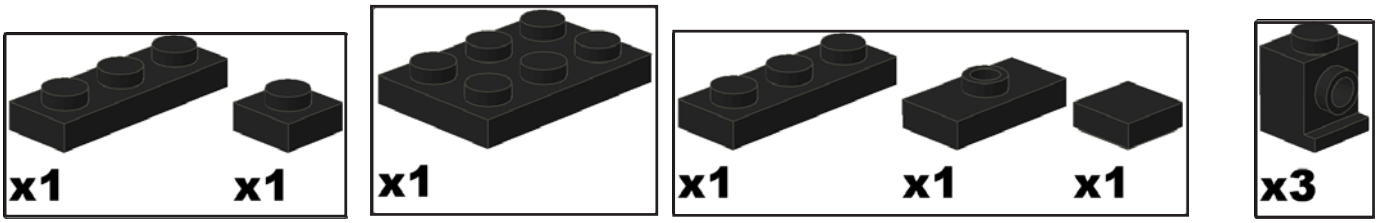
These last designs are only a small sample of the various headgears used in the MINILAND.

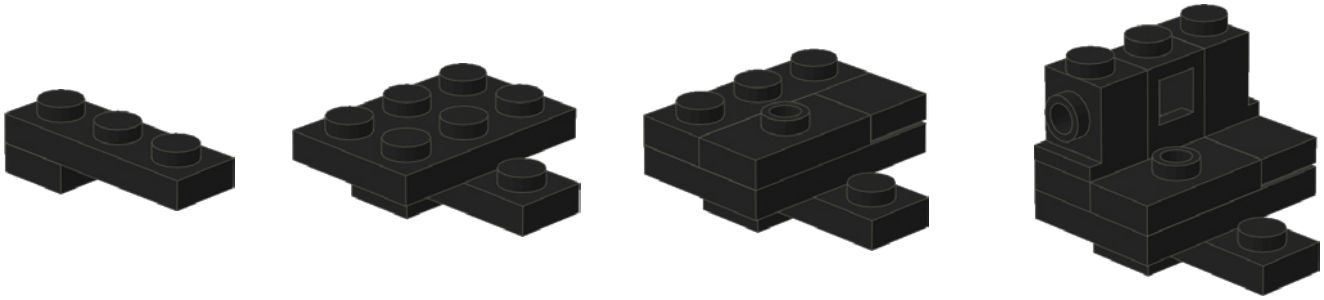


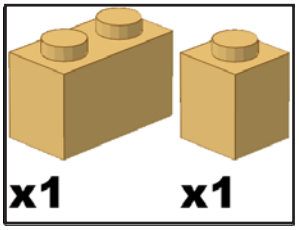
As usual, to conclude this chapter, we propose you build a MINILAND character related to the subject, here an ape's head with prominent nose (snout). This design is inspired by an original build by Iain Heath previously featured at www.thelivingbrick.com.
#

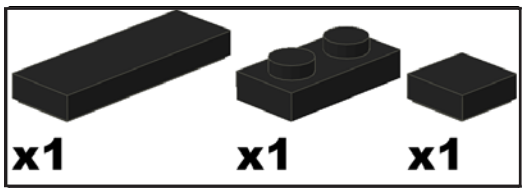


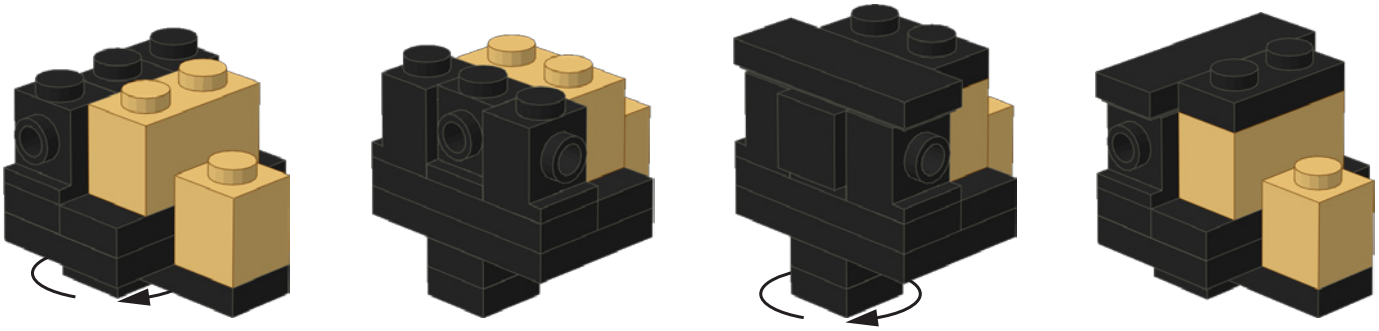

x1
x1
x1
x1
x2
x1
x1
x2
x1
x3

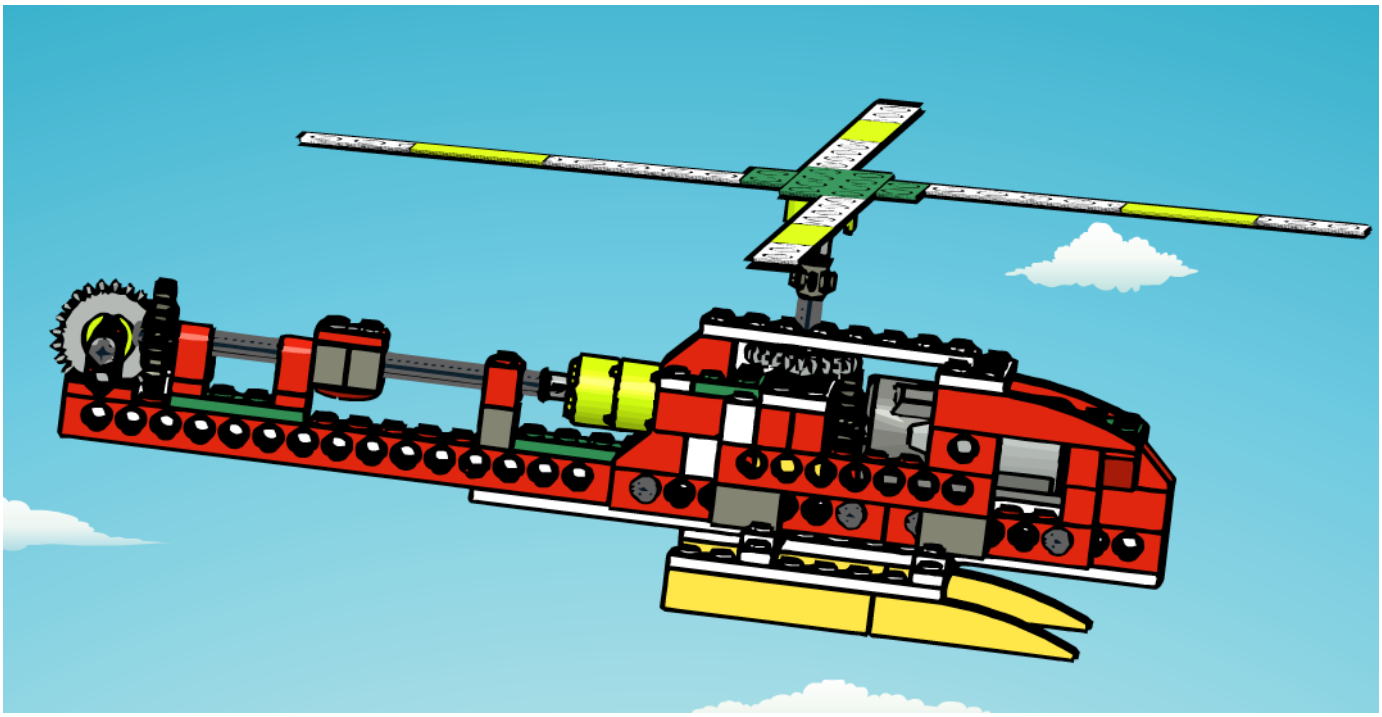

x1
x1
x1
x1
x1
x1
x3




x1
x1


x1
x1
x1





Robotics with LEGO® WeDo (V)

An introduction to robotics for the young with LEGO® WeDo

By Diego Gálvez

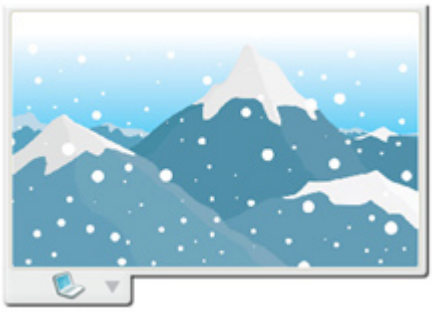
In this part we will have a closer look at the Start on Key Press and the Display Background blocks.

Display Background Block

With this block you can display a background on the screen choosing from among the 20 backgrounds available in the WeDo software.

Let's make the following program, adding the number of the background you wish to see.

Upon executing the program you should see the following image:



Now, let's show background 1, 2 and 3. We'll use the following program:

But upon executing it you will notice the changes are very fast and you can't really see any of the backgrounds. We need to make the time between background changes longer to be able to see them. To this end we'll use a Wait block.

And what if we want to see all 20 backgrounds? Easy: we simply add more Wait and Display Background blocks, but that will make the program very long.

Can we do this more efficiently? Yes. All we need is a Display Input block.

Display Block

With this block we can use the number that is shown on the screen to make more complex programs.

Our first example will simplify the program that shows the 20 backgrounds.

The corresponding program is as follows:

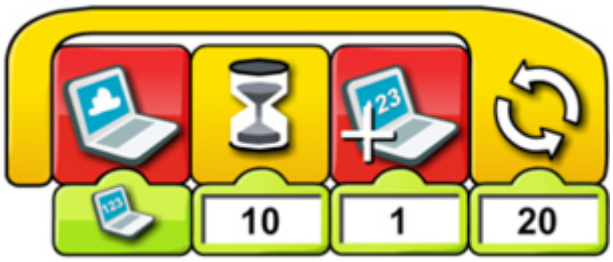
To understand the program we will analyse each action step by step.

The program is divided into two parts. The first is executed only once and the second part is everything inside the Repeat block.

Part 1

The number 1 will appear on the screen. This serves to indicate at what background number we will start.

Part 2



You will observe there is a Display Background block connected to the Display Input block. This means that the background displayed on the screen will correspond to the number shown.

The background will be shown for one second before changing to the next one.

The number 1 is added to the value shown on the screen, so if we start with 1, now the number is 2 and the sequence is started again.

Now that the number is 2, the second background image is shown during 1 second and again the number is incremented. This is repeated 20 times, until all 20 backgrounds available in the WeDo software have been shown.

Start on Key Press Block

Until now, in order to start a program we always clicked on the start block. Well, now we can also start a program using a keyboard key, thanks to the **Start on Key Press block**.

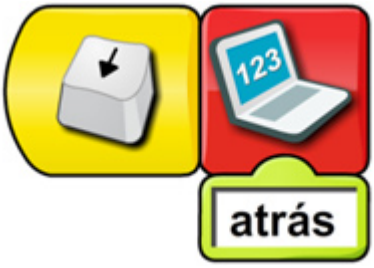
If you want to change the key that appears in the block all you need to do is place the cursor over the block until it turns into a T:

Don’t click, but the moment you see the T simply hit the key you wish to use, e.g. Arrow Up. You will see how the image changes to reflect the chosen key.

You can also change it to a letter or a number.

> After changing the value of the Start on Key Press block, click on an empty part of the work area so the block isn’t modified accidentally.

As an example we will create a program that will show the word “Forward” whenever the arrow up key is pressed and the word “Backward” each time the arrow down key is pressed.



If you press the arrow up key you will see “Forward” on the screen.

If you press the arrow down key you will see “backward” on the screen.

In the following part we will have a look at the use of the Message Blocks in order to change the linearity of the program.

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 (IV)

Programming in Scratch

By Edwar Romero
Images by Osvaldo Romero

One step closer to world domination, one brick at a time! Today we will be introducing the basics of programming using the LEGO® WeDo designs but with Scratch explanations. In the previous issues we described how the WeDo software works and the basics operations with the open source Scratch software, the free platform.

Since we only exposed the tip of the iceberg with Scratch last time, we will explain how to program the Amazing Mechanism robots included with the WeDo software and how to do it in Scratch. This will cover the first three out of twelve designs: Dancing Birds, the Smart Spinner and the Drumming Monkey robots (the first three on the image below).

Let's start with the Dancing Birds. The basic program consists just of turning on the motor. Although simple enough, there are

a number of experiments that can be done with this design. Once built and programmed, the birds can rotate in different ways and music can be programmed for dancing as well.

Users will discover by playing what happens when the pulleys and rubber band are changed. They will learn experimenting while changing pieces and observing the effect; how fast or into what direction it rotates.
They will explore what happens if the pulleys are of different sizes or if the belt is placed in a different way. Who would think that playing with LEGO® bricks could arouse enough motivation to study engineering? Pretty clever, isn't it?

A simple program keeps students focused on what happens when you change the pulleys or place the yellow rubber band in a different position. This is the combination used in the WeDo software

In Scratch, similar code will look like

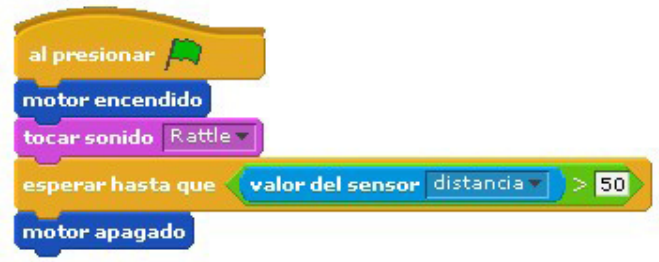
The second design to investigate is the Smart Spinner. This is a spinning top to be programmed with several clever options. The main objective of this model is to observe the spinning behavior when using different sizes of gears.

For the programming, the level of complexity increases for this one. We could use the previous code since we just need to activate the motor, but we need to turn it off as well. What about adding a sound to let us know it is moving? What about using a sensor to stop the motor?

In WeDo software, in addition to the start and the motor block we need blocks for sound, wait time, for the sensor and to stop the motor. So the idea is that after the motor starts moving, it will play a sound and wait until we lift the handle to turn off the motor. The last part is done with the proximity sensor. The proximity sensor is used to detect when handle is far from the surface.

The Scratch code differs slightly. A "play sound" block is required (I used the rattle sound). This is found under the Sound menu. On the working area choose the Sounds tab to import a new sound. You have to navigate to the folder named Effects to find the Rattle sound, but you are free to choose from the huge variety. You need a "wait until" block from the Control menu and the "motor off" block.

To program the sensor to stop the motor is a bit tricky: you need a "_>_" block (greater than) found under the Operators menu and a "sensor value" block under the Sensing menu. You need to choose distance from the drop down menu for the "sensor value" block. Later you need to place it on the left side of the "_>_" block and type 50 on the right side. The code is shown below



The Drumming Monkey basic programming is quite simple; it is fairly similar to the first one. This creation uses the monkey arms as levers to hit the drums. You need to get creative for a nice set of drums. Usually a couple of paper or plastic cups produce the best sound. You need to play with the cams (the grey ovals) positions to get a rhythmic percussion. The basic program also consists of turning on the motor. The experiments are related to the change of positions of the cams. The code for the WeDo software is presented below.

In Scratch, similar code will look like this

Stay tuned for the advanced programming of these creations.

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
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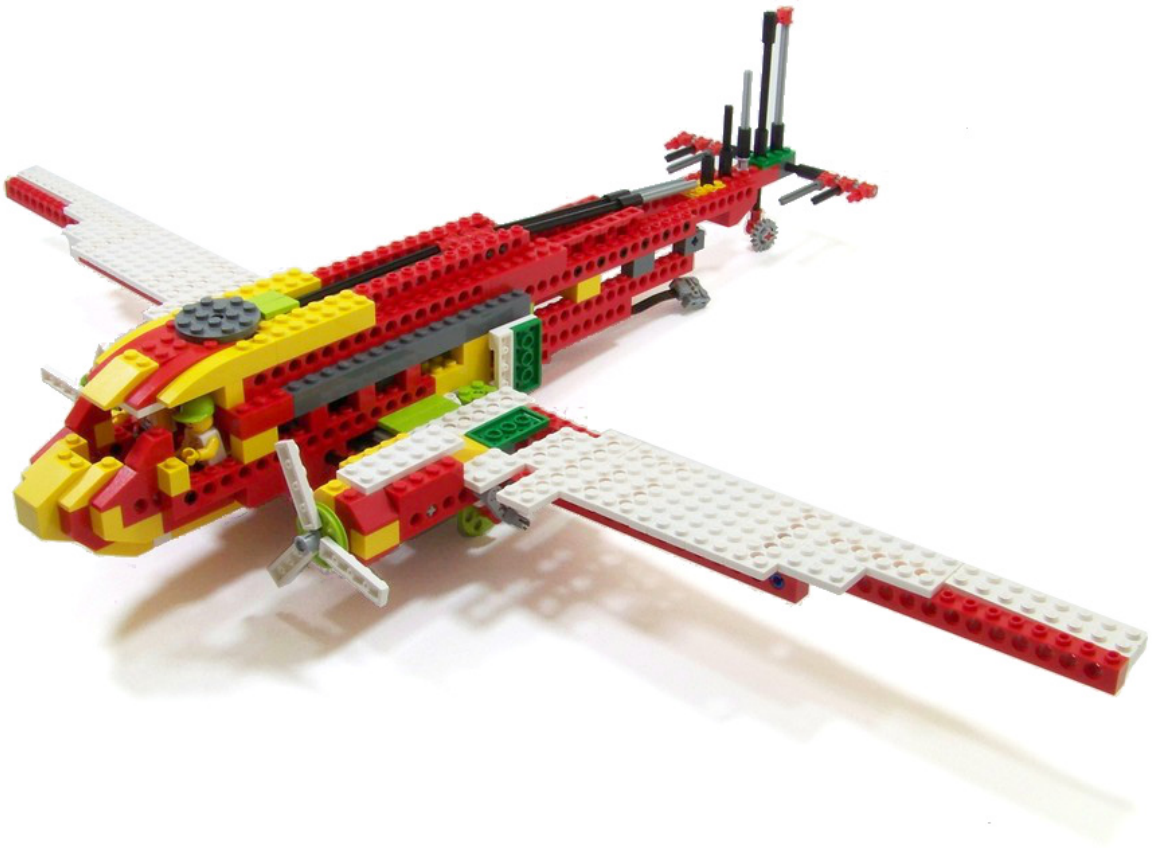


Multiple functions with one motor

By Oton Ribic

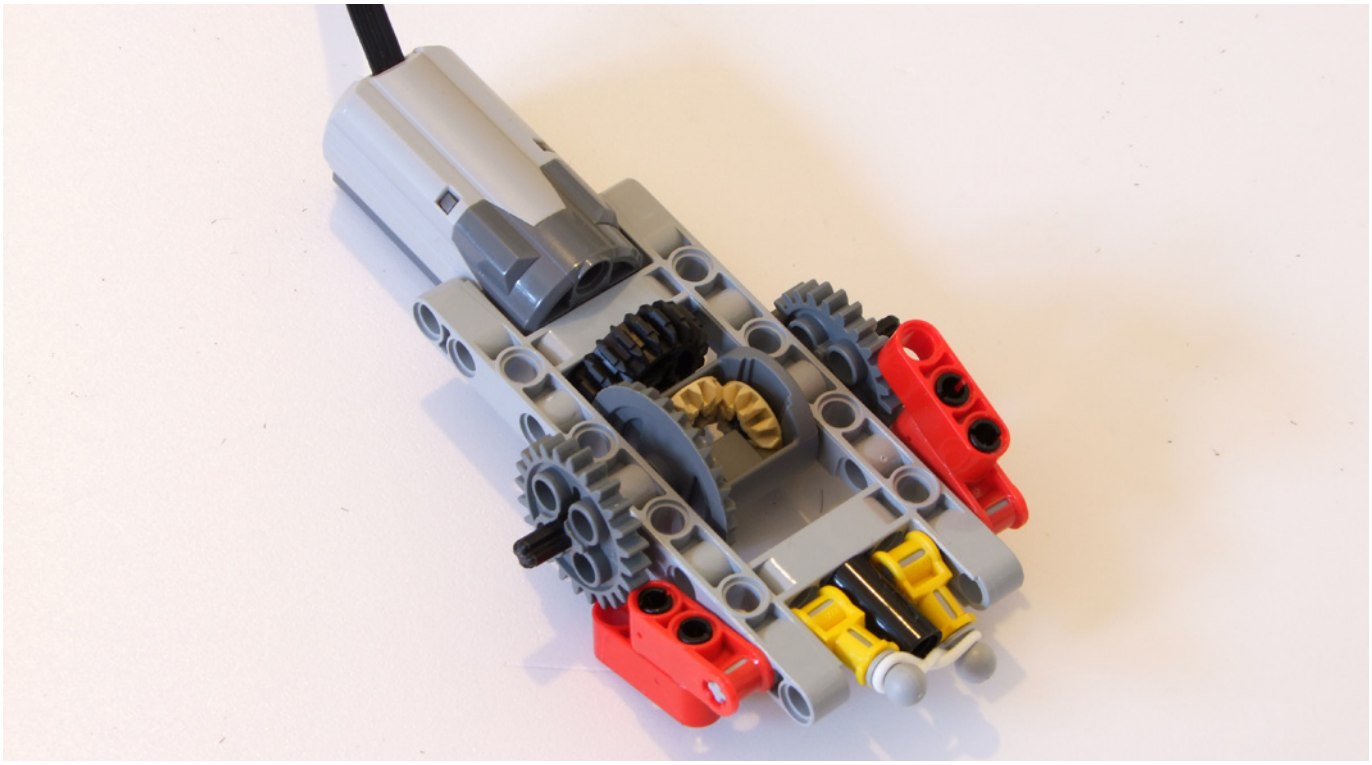
Official LEGO® Technic sets often provide great examples of using manual gearboxes to distribute rotation to various parts of the model, thus allowing many functions to be run by only one motor. Cranes, service trucks and construction vehicles in general show how efficiently one can control many movements using a single motor. On the other hand, many advanced Technic MOC's nowadays have a separate motor for almost each of their functions, often resulting in ten or even more motors and dozens of wires in a single model.

Both approaches have some disadvantages; using gearboxes is clever and efficient, but usually requires direct manual control of the gear levers, making a model impossible to fully control remotely. This does not pose a problem when using a separate motor and an independent remote channel for each function, but that is also complex, large, heavy, and often requires a lot of parts that may not be the cheapest. There is, however, a middle ground — a way to use a single remotely controlled motor for multiple functions, which we will explore in this article.

Going separate ways

The underlying idea of this method is to split the movements of the motor on two separate axles. One is used to deliver the drive (rotation which eventually does the desired work), whereas the other switches the drive among multiple outputs. It is possible to simply split rotational directions with LEGO Technic using a twin ratchet and a standard differential, as shown on the picture. The motor drives a differential master gear, while the differential outputs are equipped with ratchets, each in opposite direction to the other. This simple system is reliable, relatively small, easy to build with standard parts and able to withstand significant loads. If having two separate outputs for two functions is all you need, this little mechanism will do just fine.

However, things become more advanced if there are three or more outputs to choose from — this requires an additional distribution system, i.e. a gearbox that can redirect the input axle to a number of output axles, and lets it be controlled via another axle.



These twin ratchets split the motor motion to two separate axles, one for each direction.

One driver, many followers

There are many designs for such distribution gearboxes. Many of them are based around the idea of an axle sliding lengthwise and meshing with different gears placed around it as it moves, and this is the very approach shown in the example in the photo. Of course, it can be easily expanded to include any number of outputs.

However, for this or any other distribution gearbox design to be suitable for our purpose, it needs to be controlled using just one axle, which will in practice rotate in only one direction. The way around this limitation is to attach it to a crank which is free to rotate a full 360° and is connected off-center to another beam which controls the distribution and passes through all the desired positions as the crank rotates. This may require some fine adjustments, but thanks to the many beam lengths and cranks available today, it is usually no problem.

For example, if a distribution gearbox has four outputs, the control crank will, as it rotates, shift the outputs continuously in the order 1-2-3-4-3-2-1. Obviously, it takes correct timing to set the gearbox to a desired output, but if there is sufficient gearing down (worm gears are especially useful for this purpose), it is relatively easy to do so. Almost any kind of gearbox or transmission which can be controlled with a linear or rotational motion can be adapted to switch outputs through an axle rotating in one direction only.

How far can one go?

Such mechanisms are very useful for controlling peripheral components that don't need to be engaged very often (moveable spoilers on race cars, construction vehicle outriggers, etc.), they are not too large nor do they require particularly rare parts. However, there are some limitations one needs to be aware of before committing to using one in a model.
Obviously, it is impossible to use more than one output function at once. Furthermore, since only one direction is being used for the mechanical work, the receiving components need to be adapted — either to have pullback mechanisms or to be controlled with some kind of a camshaft or crank that normally rotates through full 360°, as mentioned earlier. Take into account, however, that a reverser may be already built into a distribution gearbox as an additional "gear", if there are no other alternatives.

One more thing worth keeping in mind is that, when an output axle is disengaged, most distribution gearboxes will not lock it, and possibly let the component they are controlling move freely. This can be solved by using worm gears that lock a receiver gear regardless, at the expense of speed of operation. Altogether, it may not seem very simple from the text, but in reality, these mechanisms are not any more "sophisticated" than those most Technic builders get acquainted with anyway. So, whether you intend to save weight, reduce the number of large electric components or don't have all the motors you need, give these systems a try.

See the pictured systems in action at www.youtube.com/watch?v=NepNIJpkG7A!
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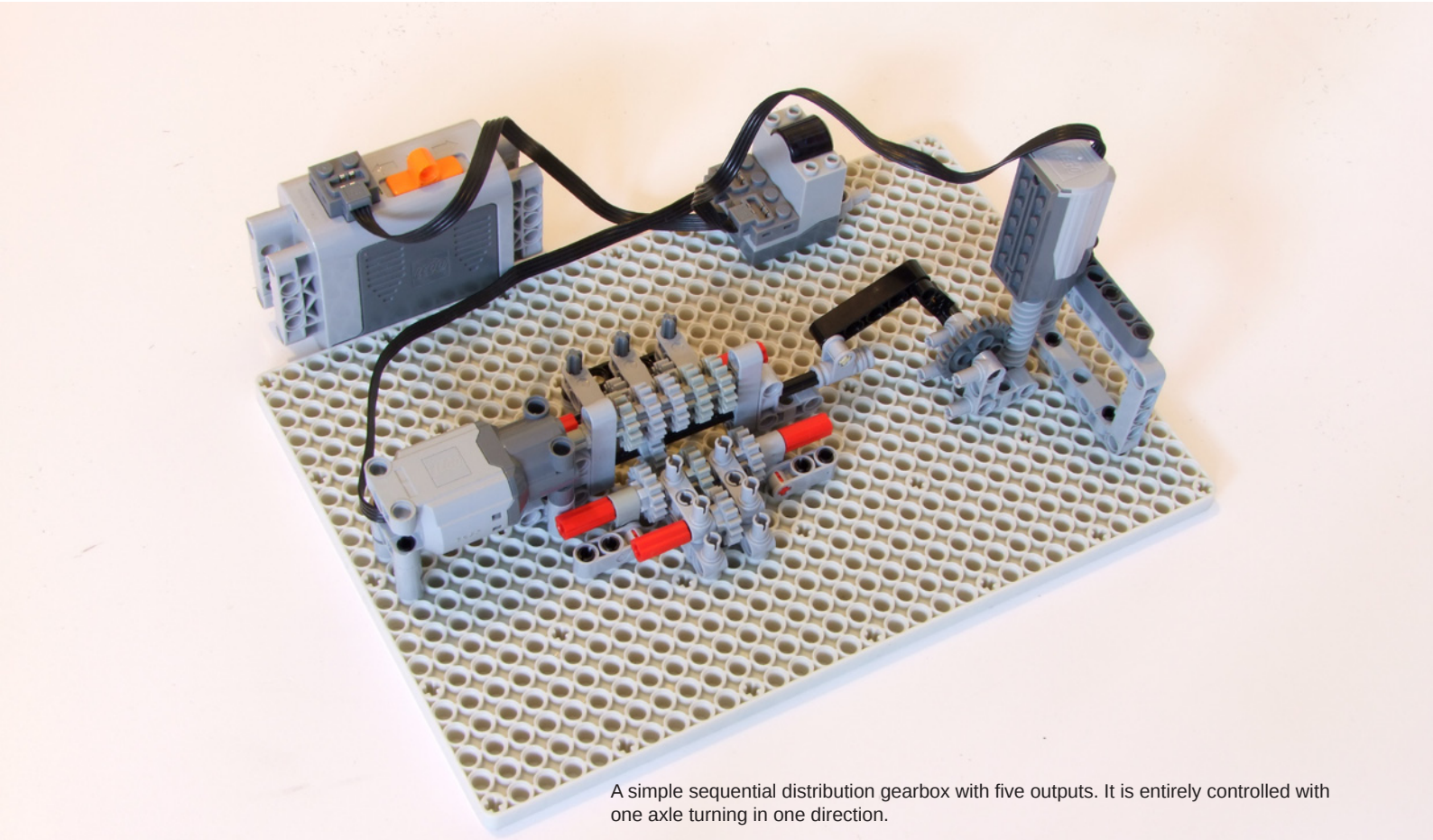
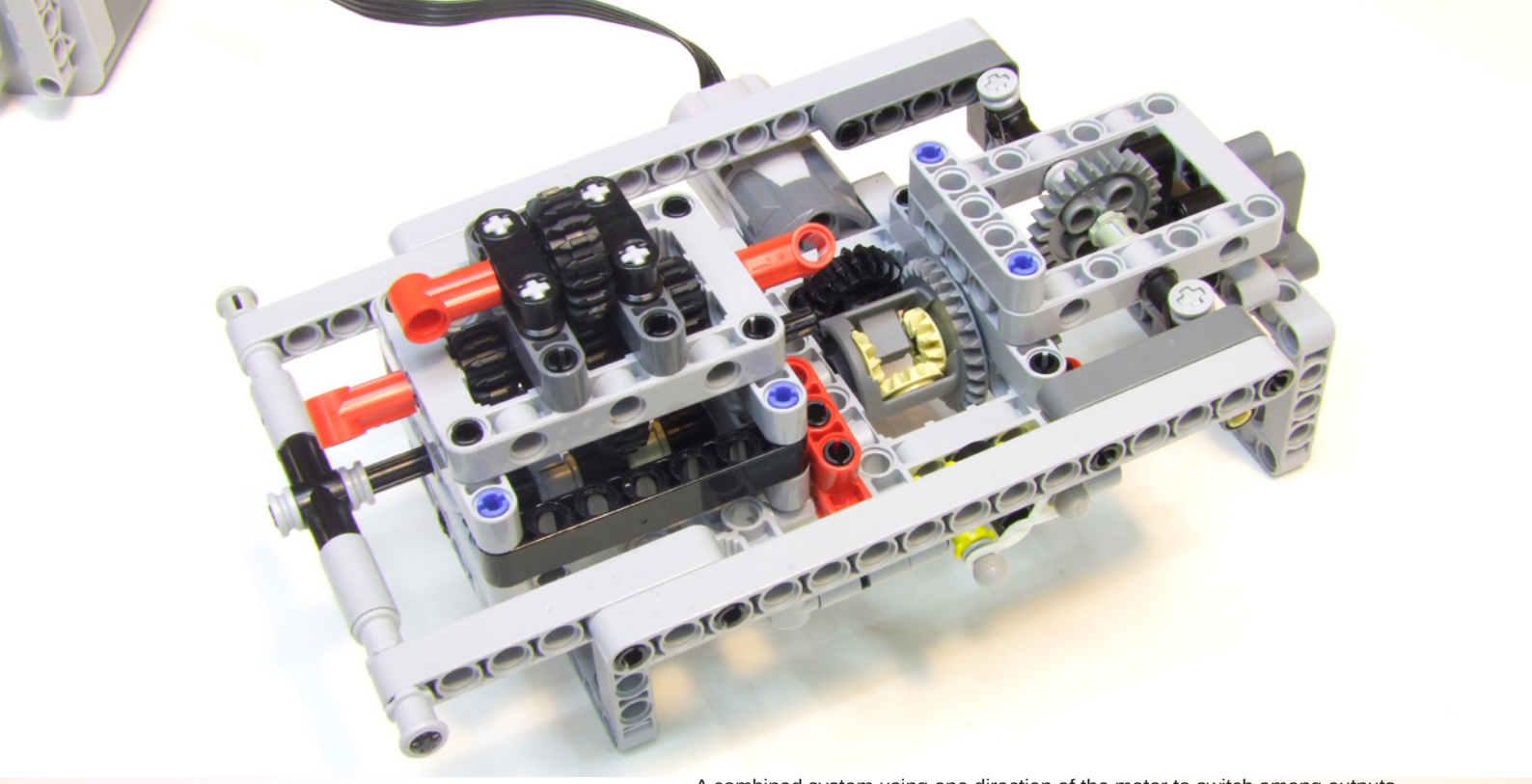
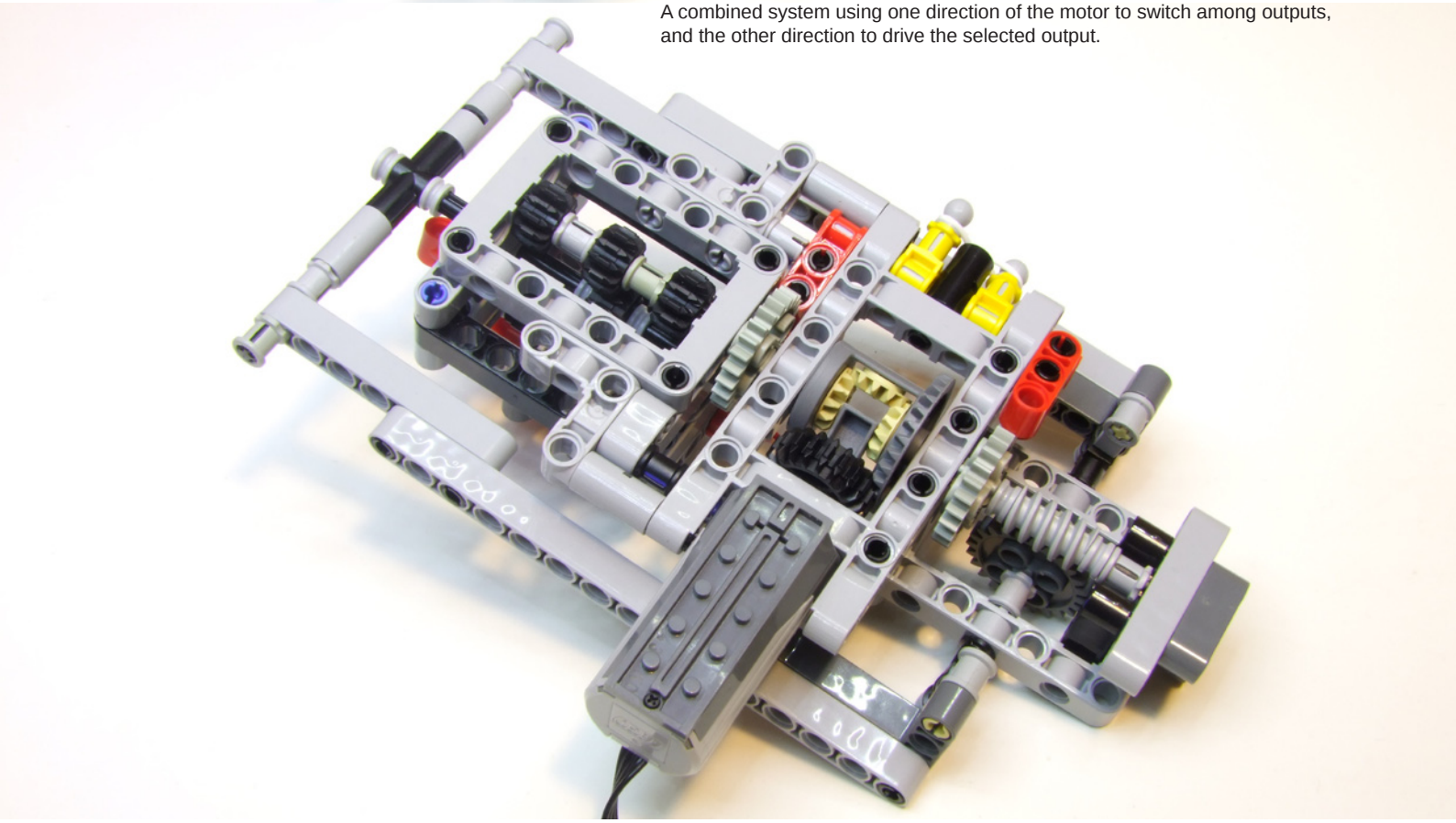


A simple sequential distribution gearbox with five outputs. It is entirely controlled with one axle turning in one direction.



A combined system using one direction of the motor to switch among outputs, and the other direction to drive the selected output.



Controlling multiple functions in a nutshell

- The basic idea is to split the directions of motor rotation to two separate axles, using twin ratchets and a differential, and use one axle to choose the output, the other one to provide drive for the chosen output.
- If only two distinct outputs are needed, a distribution gearbox which lets you choose the output is not required.
- A distribution gearbox and the components connected to its outputs need to be designed in a way that allows controlling them by rotating their input axle in one direction only. This can be done using cranks that rotate full 360° and move an off-center connected beam through all desired positions.
- Locking the outputs that are not currently in use can be done using worm gears; otherwise they will, in most distribution gearbox designs, remain free to rotate.
- Only one output can be engaged at once, and not while the gearbox output is being switched.

An introduction to Robotics with LEGO® MINDSTORMS (XVII)

FLL Open European Championship 2014

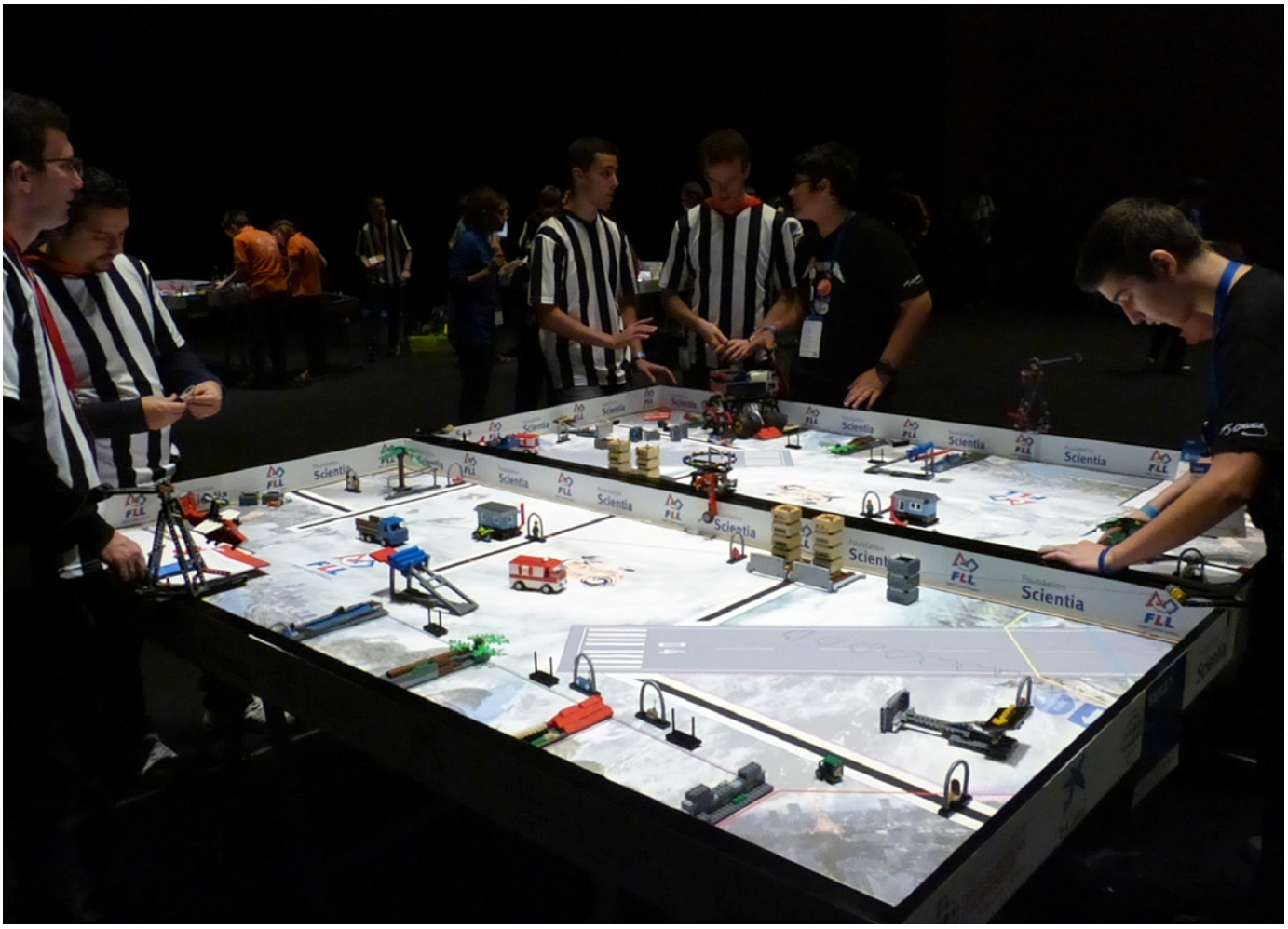
By Koldo Olaskoaga

In 2006 FLL came to Spain through Fundación Scientia and in May of this year the Open Europeo has been held in Spain for the first time, in Pamplona. Having it so close to home I didn't want to lose out on the opportunity to be there and enjoy three days that promised to be interesting, fun and a unique occasion to share in the FLL experience, with teams and volunteers who are passionate about science, technology and innovation.
In this edition 95 teams from 42 different countries from the five continents with a total of over 825 boys and girls from very different social and cultural backgrounds, in addition to more than 130 volunteers from 15 countries.

On this occasion I participated as technical judge, which has given me the opportunity to know the teams a little better than when I am referee, talking with them and appreciating the passion and creativity their projects reflect. Anyone who hasn't been wouldn't imagine that in the team of technical judges, like among the rest of volunteers, there were people from such different backgrounds as Lebanon, Brazil, Italy and Spain. After the information session on Thursday and during Friday and Saturday, the teams showed us their robots, explained the strategies they use on the competition table and told us about how they developed the creative process. The desire and effort to make the boys and girls enjoy this unforgettable experience helped people who had only just met to work together as a team as if they had been doing so for a long time already.

The Robotics Competition

The most spectacular part of the FLL is the robotics competition in which the teams face a series of challenges in which the robot needs to complete a number of missions autonomously in order to score. This year the central theme of the FLL was focused on the negative consequences that different natural phenomena can generate for people and things. This was reflected in the 17 missions on the table, each of which is associated with different natural phenomena like tsunamis, floods and storms.



The FLL has the same challenges as investigative and industrial robotics: it is impossible to build a robot that is capable of solving every single mission, so teams need to design a robot with a series of interchangeable accessories that are adapted to the different needs. In this area the solutions are very different and interesting. The number of complements varies, but on average each team more than three.

On the other hand, few teams are capable of solving all the missions in the two and a half minutes they get, so with the aim to score the highest amount of points they need to combine robot design, programming and strategy. The 95 teams proposed many different solutions, both in hardware and in programming. I have selected a few of them for this article, conscious of the fact that there were many more that would have deserved a mention.

Accessories and programming

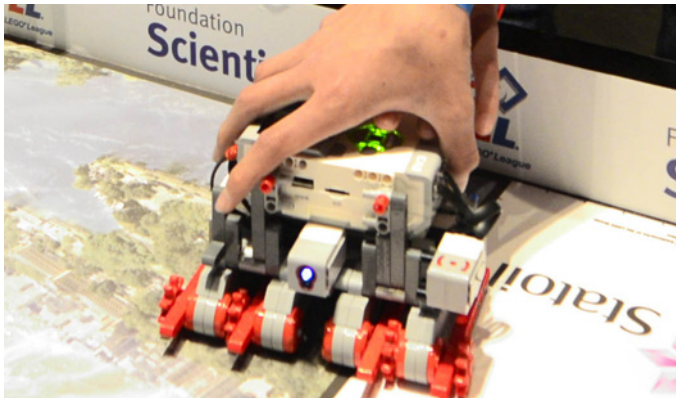
During the two and a half minutes of the competition, the robot faces missions it needs to complete autonomously and the team members can only touch and manipulate it (change accessories, making small repairs, starting programs…) in a rectangular area located in one of the corners of the table, called the base. If they touch the robot outside they are penalised.

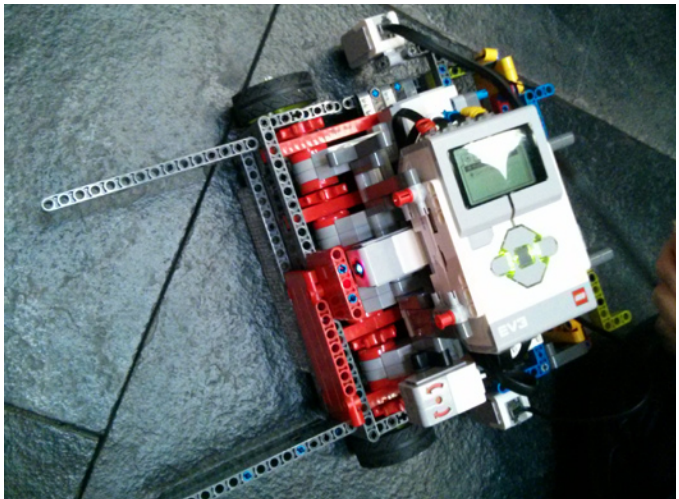
The teams try to find solutions so the time during which the robot is in the base is as short as possible, which can be achieved with accessories that are easy to attach and remove and by reducing the time needed to change the program.

In general, when a robot comes back to base, it stops and a new program is started. Some teams do this in such a way that it only takes the push of a button on the controller to start the next program, although this also has drawbacks if you want to retry a mission or modify your strategy due to some circumstantial factor.

The mechanical design is evaluated on three points: solidity of the robot, effective use of parts and ease of repair and modification, and the balance between speed, force and precision. Team Toyminators (USA) came third in this ranking and it developed a number of solutions I will mention below.

Most teams develop a base with wheels or treads that allows the robot to maneuver the table and a set of accessories, and most, if not all, feature differential drive. Team Toyminators chose a different solution: the EV3 controller was attached to 4 motors and 2 sensors (colour and gyroscope) that was incapable of completing any mission on its own. For the missions the robot had different interchangeable bases with their corresponding wheels or tracks.



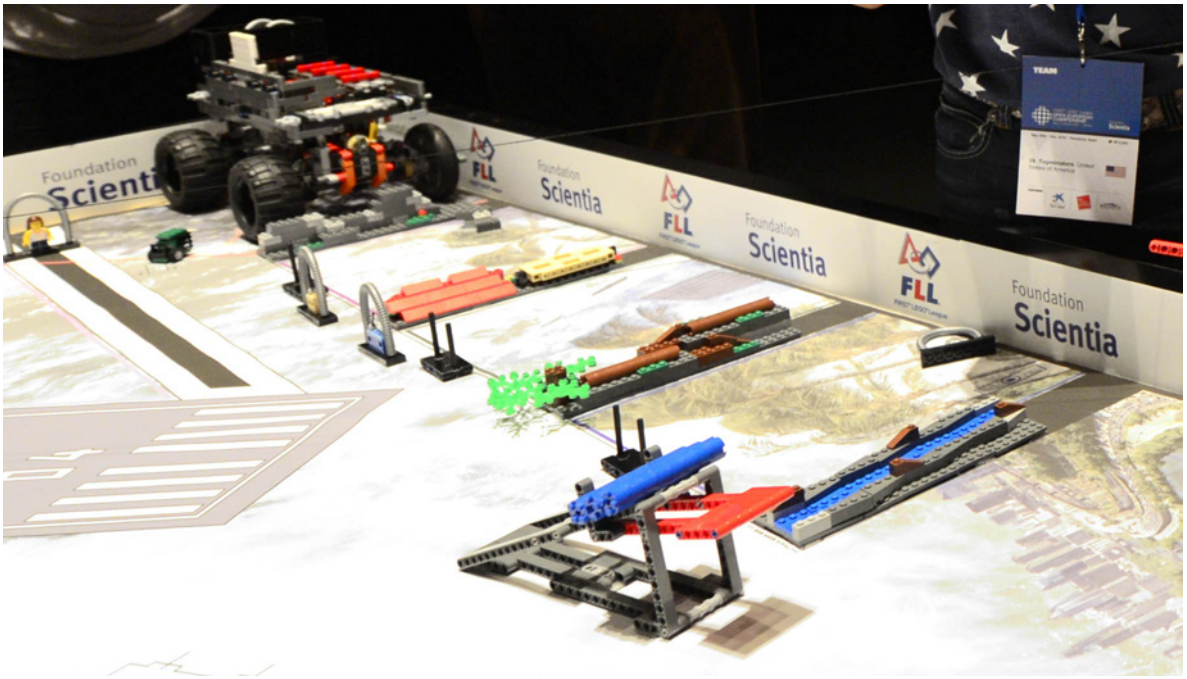


In addition, they used colour coding with the colour sensor so the robot knew what accessory was attached at each time. The parts were fixed using gravity and each accessory had a part that went in front of the colour sensor. The main program read the colour and showed the name of the corresponding accessory on the screen, so at the push of the button the right program was started (which was a MyBlock). This meant there was a single program with a context menu that changed depending on the accessory (or rather the base) that was attached. In this way they could execute the missions in any order and repeat them if necessary and

reduce the time and stress when in the base aera. The following image shows the robot with one of its bases, in this case with a red panel in front of the colour sensor.

Overcoming obstacles

A challenge in which the most diverse solutions could be seen was the obstacle challenge. The robot had to move over the table, overcoming obstacles that represented rivers, vegetation and rubble to get to the safe zone (the location of the robot in the next image).



Solutions included robots with treads, with 4 wheels (all the same or different sizes), with two or even one wheel. On the right side there was an area that was free of obstacles which, for example, allowed team Bideluze LS from FLL Spain to complete the challenge with a robot using a single motor connected to a wheel and the controller in vertical position, crossing the corridor quickly to the safe zone. Conventional rigid robots with four wheels had a lot of problems overcoming the obstacles, so different ideas needed to be developed.

A robot normally needs at least three points of support, with it centre of gravity within the area described by those three points.After trying different solutions, the German team sAPG-Tigers decided that, if you need to traverse a narrow corridor in which you can lose your balance, one way to make sure you stay balanced is by hanging on to the wall, so they built a robot with a mechanism that deploys when it reaches the obstacles, providing an additional support for the robot. Deploying the mechanism changes the position of a valve so a pneumatic cylinder adjust the support to the width of the wall. In order to better understand the idea it is worth to watch the video of the mission (see the playlist mentioned at the end of this article).

The Champion: Mechatronics Ants

Those who were in the main hall of Baluarte during the third round could witness two and a half minutes of magic on the competition table: the robot of the Mechatronics Ants from Navarra (Spain) made a round scoring 600 points, something they had achieved in their private tests, but not during a competition. There were those who asked themselves how it was possible to obtain such a result at this level, and I think I am not wrong when I say that this was the result of the passion, dedication and knowledge accumulated over the years. Not only did they win the competition on the table, they were the overall winners of the championship, something that can only be achieved with an excellent robot design, scientific project and demonstration of the values associated with the FLL.

The new challenge

The new challenge will be made public shortly, on the 26th of August, but we already know the theme it will centre around: FLL World Class, the future of learning. The participants will have the opportunity to tell the adults how they need and want to learn. A very interesting challenge for those of us who are passionate about learning.

Links

The final reports, pictures, videos, etc. of the championship are available on the Spanish FLL at http://goo.gl/xZfZrI. The playlist http://goo.gl/7hU4pP shows 4 videos, among which is the 600 point run by the Mechatronics Ants. Finally, a last image I'm sure you will all like, the programming for February-May for Baluarte with a LEGO® look.

Note: All images in this article except image 6 are property of FLL Open European Championship 2014 and used by kind permission of Fundación Scientia.
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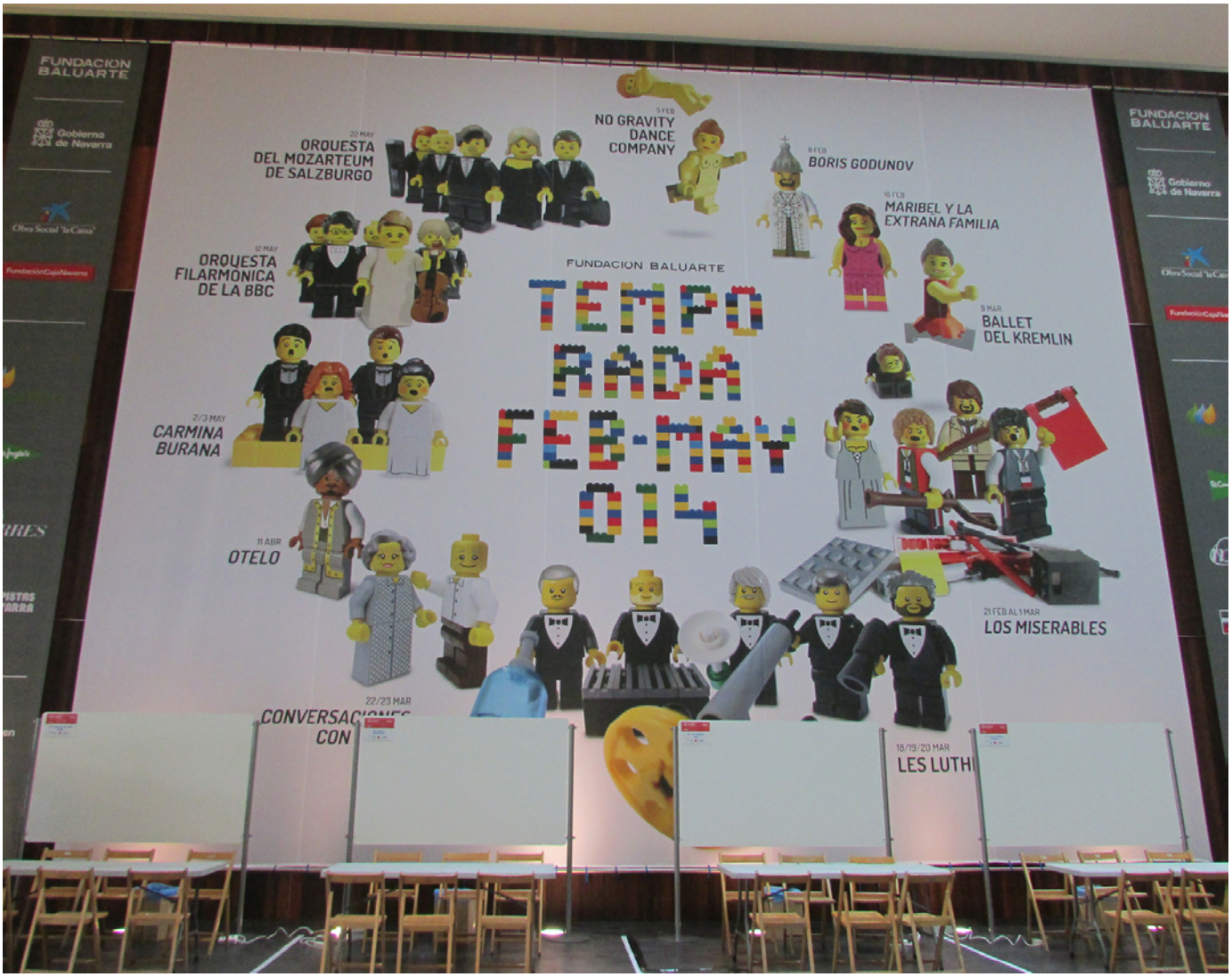

Exhibition of LEGO® constructions at the XII Memorabilia Fair of Mungia, Spain

By A. Bellón (Legotron)

The Collectors Fair of Mungia was held on April, 26th and 27th. This year was the twelfth edition, organized by the Bitxikiak association (www.bitxikiak.org), in collaboration with the local municipality. Like past years there was a LEGO® event at the Fair which was coordinated by HispaBrick Magazine®, in which several AFOLs of different LUGs were involved.

This year we had less attendees than in previous editions, so we couldn't do all the activities and contests we planned. Instead we focused all our efforts on the exhibition of constructions and dioramas made with LEGO® bricks. Thanks to the work of the participants, many of whom were veterans of previous editions,Our dioramas and displays are bigger and more detailed every year, there were less sets and more MOCs, and there was no room for anything else. We gathered a nice quantity of dioramas and constructions, to occupy all the available space. Several thousand visitors were able to see the exhibition, and once again we got a lot of compliments, as they were able to see the evolution both in quality and quantity of the constructions shown over the years.

This was the last edition to be held in this facility, because the building we were located at is going to be demolished in order to build a new one. The future is unknown, but if we have a hall to put all our constructions we will work hard to prepare a new edition, with more participants and more LEGO® elements. From 2005 to this last edition there has always been a LEGO exhibition in the Mungia Collectors Fair, and we hope this will continue in the future.

We want to thank the organization, Bitxikiak Association, for the outstanding treatment we were given. It was a pleasure to meet them again, and also a big thanks to all the participants who made this year's edition possible.
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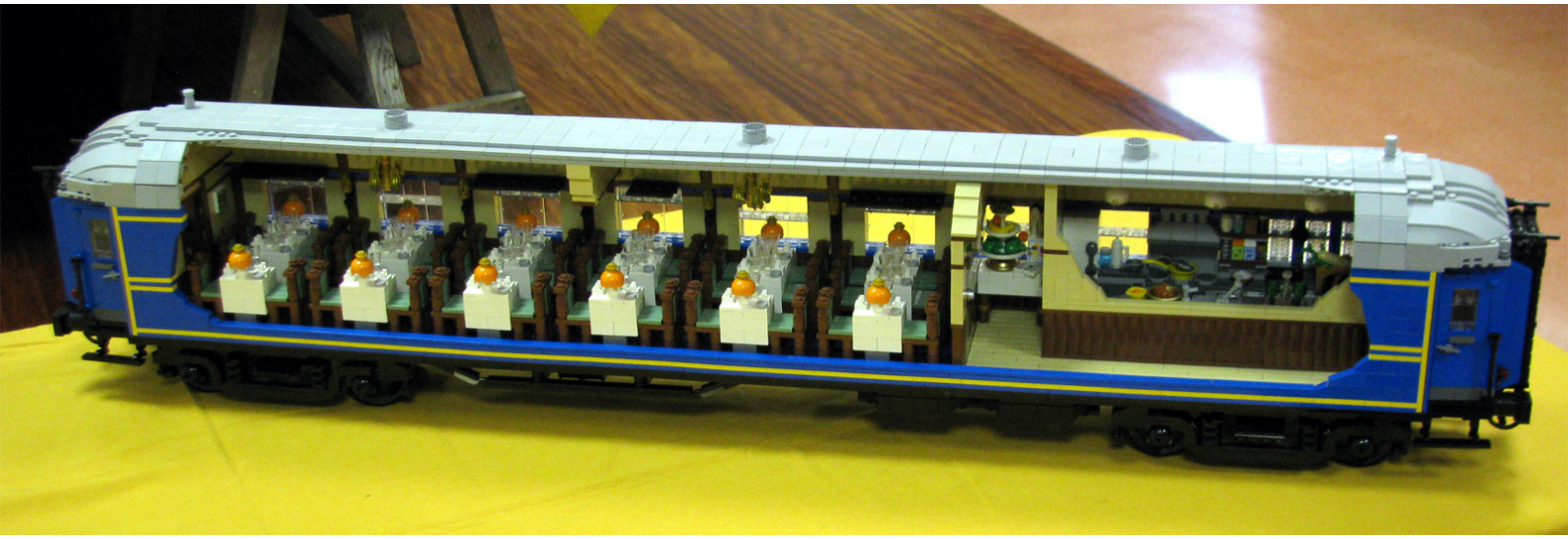

Review: The Art of LEGO® Design

By car_mp

Pictures courtesy of No Starch Press

The Art of LEGO® Design
by Jordan Schwartz
Pages: 267
Editorial: No Starch Press

This time No Starch Press has sent us a book with a novel approach within the variety of books on LEGO that are now commercially available. Jordan Schwartz, the author, is known for being one of TLG´s youngest designers, and in this book, with the help of other geniuses of creation with LEGO, he shows us the creative process that accompanies the construction of a MOC.

In the first part, as an introduction, he talks about inspiration and gives us tips on textures, colors, scales, ... and a quick introduction to some elements of the LEGO palette that he considers essential for its features. In the second part, he talks about some of the most recurrent themes in building MOCs. Some geniuses with parts (many have already been featured in this magazine) help Jordan explain his creative process in the areas that have given them greater fame, like Katie Walker, Iain Heath and Tyler Clites, to give some examples.

Veterans in building will find a different way to see their hobby, as they will see it through the eyes of other creators. And seeing something we know from other angles is always positive. New techniques, new ideas, new inspiration. Keep in mind that in no case this is an in depth guide for each theme, as an entire book could be written about most of them.

The newcomers to this world will find it a good source of tips, tricks and models to find inspiration in.

The Art of LEGO® Design

Creative Ways to Build Amazing Models

Jordan Schwartz

no starch press

This is, without a doubt, an original book in its theme, fun and with lots of useful information. Definitely a great book for inspiration at all levels.

Now a brief interview with the author, Jordan Schwartz on his book.

HBM: How did the idea for the book come about?

JS: I had the idea for this book when I realized that there are few "how-to" LEGO® books on the market that are not instruction books. The fact that these other books give instructions for specific models is not a flaw; on the contrary, learning techniques by physically performing them is a great way to develop building skills. (In fact, this book offers some instructional information too!)

But there are people who don't learn best by following instructions. That's why my book focuses on methodology – that is, I explain not only "how" but also "why" builders create models as they do. I had the opportunity to interview some of the most talented builders from all over the globe, and their thoughts on their individual model building processes really hammer home the book's philosophy. There are infinite ways to build any one thing, and you should build what you want to build, how you want to build it, not just how instructions may say you should!

HBM: In your opinion, which is the main difference between this book and other idea books?

JS: As opposed to pretty much every other LEGO book on the market, my book focuses on models that often don't look like they're built from LEGO. The best examples of this are the chapters that discuss how to build with textile and rubber LEGO elements; that's a first for a LEGO book!

What's more, the book does not discuss how to build a dinosaur, but rather how to build a dinosaur that looks real, organic, and ready to get up and stomp away. It's not enough to simply build a dinosaur – the book aims to help people build the best dinosaur possible!

The book also ends by discussing a few of the most important facets of the online LEGO community, including how to photograph your models, the best places to post them online, and where to buy elements in the aftermarket. This information isn't common in other books, and I hope that it will help less-initiated AFOLs get more involved in this terrifically fun community of ours!

HBM: Can a beginner take full advantage of the book or is a certain level as a builder needed?

JS: Absolutely! This was a question the folks at No Starch Press and I mulled over when we first started discussing the possibilities for this book over two years ago. We were very careful not to make a textbook!

I think the book is a nice balance between simple ideas and advanced ones. The Art of LEGO Design also appeals to kids because it's loaded with great, full-color photographs of fantastical and inspiring models. A child[JG1] might not want to build, let's say, a LEGO octopus from rubber tires, but he or she might still appreciate the model itself and be inspired to make an octopus in a different way.

HBM: What do you think of the many books on the LEGO world that are emerging in recent years?

JS: I love the diversity of LEGO books that have been coming out over the past few years. "LEGO" seems to be becoming its own genre! Someday, perhaps…

But the quantity and quality of the most recent LEGO books (No Starch is responsible for a great many of these!) is a great thing for the community. Not only do they provide important, helpful, and entertaining content to AFOLs, they're also, at the very least, helping non-AFOLs understand just what the LEGO community is and what it's all about. (And at the most, they're helping bring non-AFOLs into the community!)

HBM: Are you considering the possibility of a continuation to this book?

JS: It is a possibility, though it's not something I'm working on presently. The book will be translated into German and Korean though, so we'll see how the book is received in those languages and in English. If there's a demand for more, then I'm certainly open to the possibility!

Thanks to No Starch Press and Jordan Schwartz for the book and graphic material.
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Review: The LEGO® MINDSTORMS EV3 Discovery Book

By Jetro

Pictures courtesy of No Starch Press

The LEGO® MINDSTORMS EV3 Discovery Book
by Laurens Valk
Editorial: No Starch Press

It is almost a year ago that the latest iteration of the MINDSTORMS platform, the EV3 (31313), was launched. Some LEGO sets aren't available that long - although a majority lasts a bit longer - but in the case of the EV3 it feels as if the set is only just starting to gain momentum. Very shortly after the set was launched the first books about the set surfaced, but on the whole they were of relatively little interest. Writing a good book that is well edited simply takes time. In the previous edition of HBM (019) I reviewed Daniele Benedettelli's EV3 book, The LEGO MINDSTORMS EV3 Laboratory, and in this issue I will have a closer look at Laurens Valk's latest offering, the LEGO MINDSTORMS EV3 Discovery Book.

Anyone who has been in touch with the MINDSTORMS community for some time will recognise the name. As a matter of fact there was a small bio on Laurens in HispaBrick Magazine® 008, together with a review of his earlier book, The LEGO MINDSTORMS NXT Discovery Book. So is this just a rehash and update of the existing book?

Well, first of all, bear in mind that The LEGO MINDSTORMS NXT Discovery Book very quickly became the de facto standard text on the NXT set, the place to go after completing the official models, or, according to some, the place to start. That book was well written and easy to use and included instructions for such successful robots as the Snatcher, which we were proud to adapt for the 2012 World Mobile Congress in Barcelona (as described in HBM013).

This great starting point has proven valuable, but not the sole reason why this new book is once again a solid starting point for anyone who wants to make the most of his EV3 set. While the structure of the book is largely the same as its predecessor, Laurens has rewritten most of the contents and developed a number of new models that can be built with the EV3 31313 inventory.The sections explaining mechanical functions and programming have not only been adapted to the new technology, but improved and expanded. Additionally, the book is presented in full colour, with high quality images and building instructions, making it so much easier on the eyes and a delight to read.

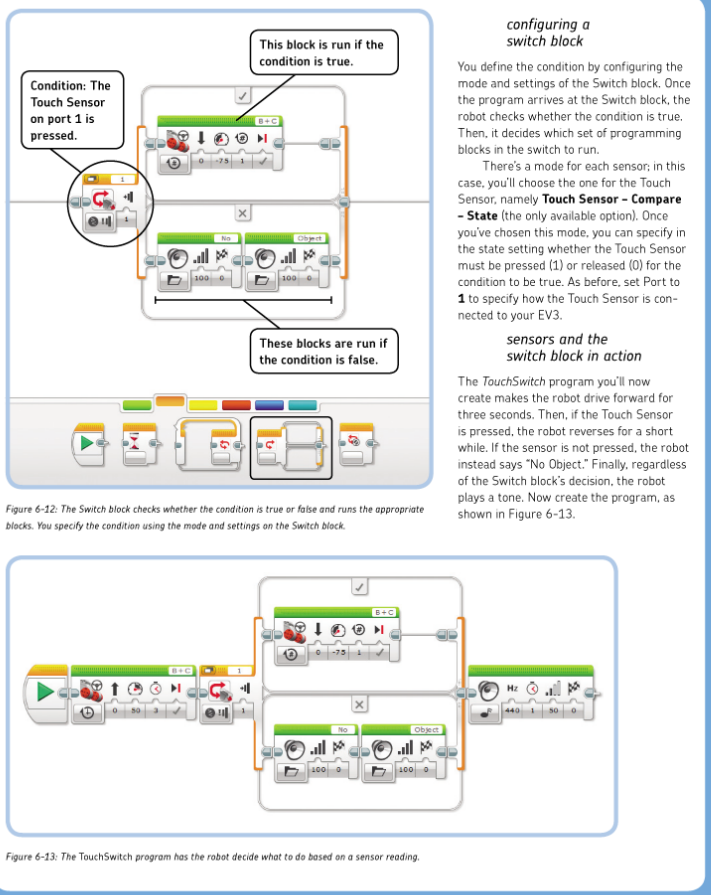


Figure 6-12: The Switch block checks whether the condition is true or false and runs the appropriate blocks. You specify the condition using the mode and settings on the Switch block.

configuring a switch block

You define the condition by configuring the mode and settings of the Switch block. Once the program arrives at the Switch block, the robot checks whether the condition is true. Then, it decides which set of programming blocks in the switch to run.

There's a mode for each sensor; in this case, you'll choose the one for the Touch Sensor, namely **Touch Sensor – Compare – State** (the only available option). Once you've chosen this mode, you can specify in the state setting whether the Touch Sensor must be pressed (1) or released (0) for the condition to be true. As before, set Port to **1** to specify how the Touch Sensor is connected to your EV3.

sensors and the switch block in action

The *TouchSwitch* program you'll now create makes the robot drive forward for three seconds. Then, if the Touch Sensor is pressed, the robot reverses for a short while. If the sensor is not pressed, the robot instead says "No Object." Finally, regardless of the Switch block's decision, the robot plays a tone. Now create the program, as shown in Figure 6-13.

Figure 6-13: The TouchSwitch program has the robot decide what to do based on a sensor reading.

Try running this program a few times, and determine when you need to press the Touch Sensor to make the robot go backward. Your experiments should show that the robot takes a measurement when the Switch block runs and that it uses this single measurement to determine whether the condition is true. In this program, the sensor measurement is taken just after the robot finishes going forward. When either the reverse action or the "no object" action is complete, the tone plays.

adding blocks to a switch block

There's no limit to the number of blocks you can place inside a Switch block. If one part of a switch has multiple blocks, they're simply run one by one. You can also leave one of the two parts of a Switch block empty, as shown in Figure 6-14.

Run this modified program to see what happens. If the condition is true (the bumper is pressed), the robot should say "Object" and move backward, and the program should continue by playing the tone. If the condition is false (the sensor is not pressed), the program will find no blocks in the lower part of the switch and instantly move on to the Sound block after the switch.

DISCOVERY #27: STAY OR MOVE?

Difficulty: **Time:**

Make the robot stand still for three seconds. Then, if the Touch Sensor is released, the robot should turn around and drive forward for five wheel rotations. But if the sensor is pressed, the robot should do nothing, and the program should end immediately.

DISCOVERY #28: DIFFICULT DECISIONS!

Difficulty: **Time:**

Let's practice with the Switch block! Create a program to implement the decision tree shown in Figure 6-15. How do you configure the Switch block, and why do you have to put a Wait block at the end of the program?

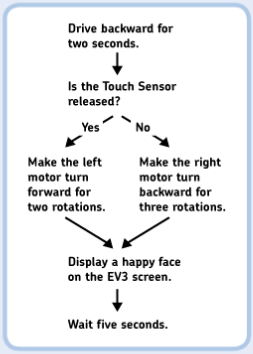


Figure 6-15: The program flow for Discovery #28

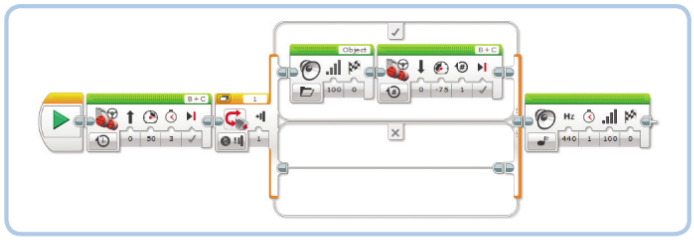


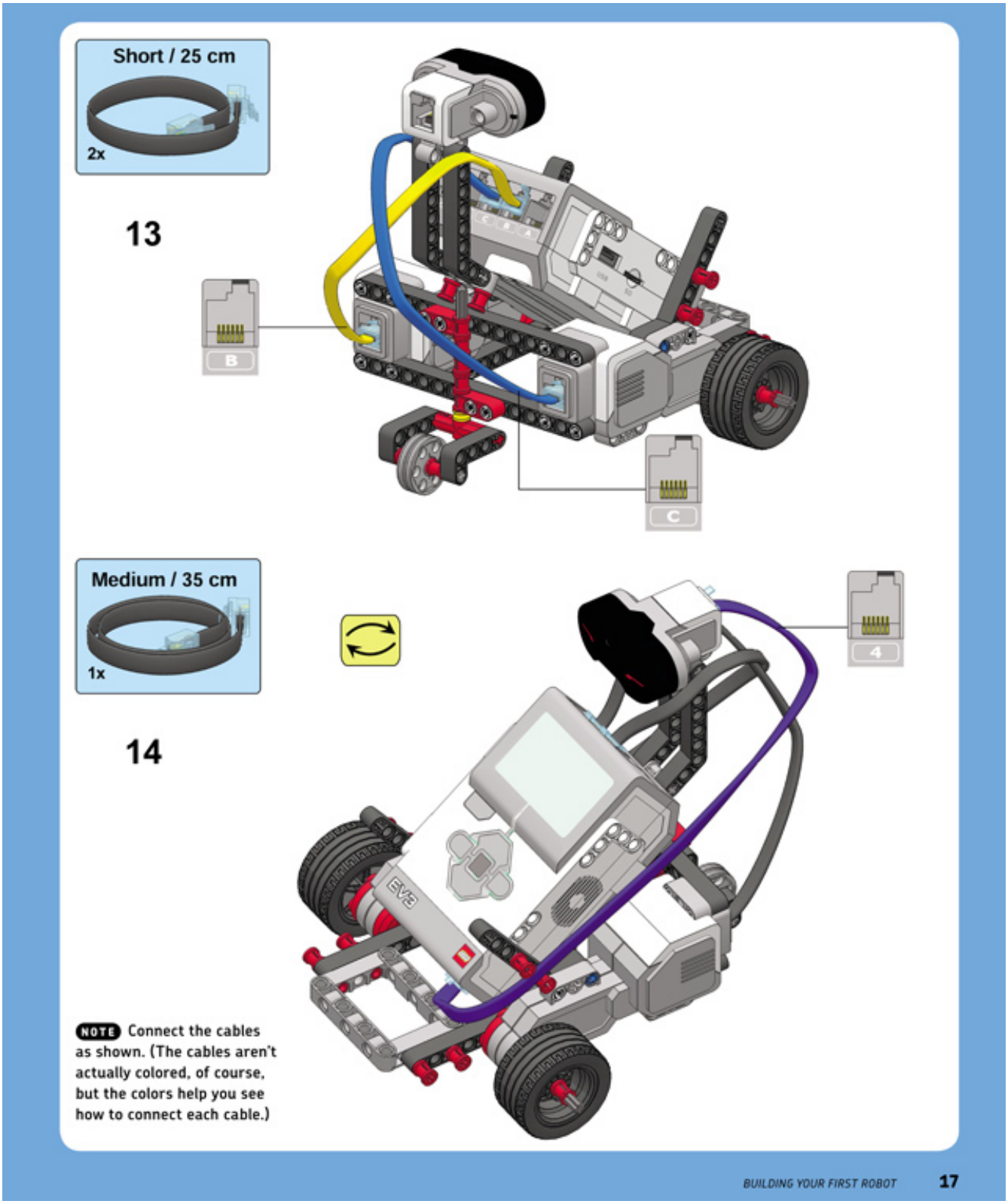
Figure 6-14: A modified version of the TouchSwitch program. The switch does not have any blocks to run if the condition is false, so the program immediately plays a tone after moving forward if the sensor is not pressed.

THE LEGO® MINDSTORMS® EV3 DISCOVERY BOOK

a beginner's guide to building and programming robots

laurens **valk**

no starch press



So which book should you get? Well, taking into account that this is a Review of The LEGO MINDSTORMS EV3 Discovery Book, the obvious answer is "this one". However, both this book and Daniele Benedettelli's offering are published by NoStarch and while there is some competition between the two, they are also very clearly different. The LMS EV3 Laboratory is a story that teaches you to build and program. The LMS EV3 Discovery book is a technical manual that … does the same thing, but with a different approach. When I received this book, I couldn't resist the urge to place it next to Sariel's The Unofficial LEGO Technic Builders Guide (reviewed in HBM013). There are strong parallels between the two books, as they both use a very similar approach and have strong technical foundations. In the end it is a question of style (and maybe colour). Personally, I'm very happy to have a copy of all three books, and maybe your best option is to get your own copies and compare. I'm sure you won't regret it!

Thanks to No Starch Press for the book and graphic material.
#

Review: 42030 Remote-Controlled VOLVO L350F Wheel Loader

Text: Jetro
Pictures: LEGO® System A/S courtesy of TechnicBRICKs

Review: 42030 – Remote Controlled Volvo

This year's technic Flagship brings another licensed collaboration, this time with Volvo. There are opinions in favour and against licensed sets – the licence adds to the cost, but also allows the representation of certain themes that many love and collect. And there is no lack of licensed themes in LEGO®. But what about a licence for technic set? If there is one word that describes what many Technic fans want it is "authenticity" – mechanisms that are as close as possible to their real-life counterpart. Take that one step further and you are looking for vehicles (and machinery) that are as close to their originals as possible. In this sense the Volvo license is an intelligent step for both companies and a good way of providing the much sought after authenticity to the fans.

A licensed set cannot be "just " a cool vehicle. It has to look just right, imitating shapes and mimicking functions as faithfully as possible. Add to that the fact that there is a stronger and stronger demand for fully motorised and remote controllable models. Enter the Remote Controlled Volvo.

Volvo what? I have left the second part of the name out on purpose, because that is where this set goes the extra mile. The 42030 isn't "just" a licensed set, representing an existing vehicle. A technic set is supposed to come with a B-model, an alternative that can be built with the same parts. This set actually represents two authentic vehicles that can be built with the same inventory: the L350F Wheel Loader and the A25F Articulated Hauler.

L350F Wheel Loader

The main model is the L350F Wheel Loader. While this is not the first time LEGO® markets a wheel loader this one is by far the largest to date, and fully motorised to boot. Authenticity is a complicated concept: steering a vehicle like this with a remote control requires a steering system that will auto centre, something that can only be achieved with a servo motor, while the traditional way of steering these vehicles is by means of a hydraulic system. Authenticity has its limits. It needs to be balanced with playability and so the servo solution is an acceptable one. A curious fact about this set is that it includes four motors, one of each of the current Power Functions line-up (excepting the e-motor which has only been used in an Eduction set), M, L, XL and Servo, which are connected to two IR-Receivers (V1 if anyone is wondering) and controlled with two remote controls.

But authenticity can be ensured in different ways. The general line of the model is so close to its big brother that when you place one next to the other (in the appropriate scale, as shown in the back of the single(!) instruction booklet) they really look alike. Another way to make a set authentic is by including special parts or colours. The 42030 uses only pre-existing parts, but the engine blocks come in green, making the engine stand out inside the model. The IR-Receivers have been placed very skilfully and go virtually unnoticed, despite the colour coding used to identify which motor needs to be connected to which port.

A model of this size is hard to describe in only words and pictures and it isn't until you have it in your hands and play with it for a while that you fully appreciate every little detail. Even so, I hope the pictures in this review will whet your appetite.

A25F Articulated Hauler

While the Wheel Loader is a great model by itself, we are only half done. There is still a second model that can be made with the same parts. Rather than using the same chassis with a different upper structure or with a new add-on, this time the B-model is a completely different vehicle that needs to be built starting from scratch.

Building instructions need to be downloaded from LEGO.com (in three parts) and I keep wondering why the quality of these downloadable instructions is so poor. They were never meant to be available as print copies and still all the warnings and information on pages 2 and 3 is completely illegible and the rendering quality of the building steps poor (though workable).

The model features a number of similarities with the main model – something that can only be expected as some of the important elements (like the portal axles and tyres) and techniques (servo motor) are common to both models. The Articulated Hauler is a "B" model though, since it "only" uses 3 of the four available motors (Driving, Steering and Dumping the load), in accordance with the type of vehicle it represents. Some outstanding details include the placement of the battery box in the front of the vehicle, under the engine and the XL drive motor. Overall, calling the model simply "satisfactory" would not give it the credit it deserves. If it wasn't for the price-tag, I would seriously consider getting a second copy of the set to let the two models work together – because that is how they were conceived.

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

Review: 21109 EXO SUIT

Back to the Space

By car_mp

For the Classic Space fans, 2014 has been the best in recent years, correction, the only of recent years, which we have smiled again. If until now our devotion to the gray, blue and trans yellow survived on old dusty sets and Neo-Classic Space MOCs, this year we have had not one but two joys.

Thanks to The LEGO Movie, we were able to get Benny´s Spaceship. Although it includes new parts and techniques, it can not deny its origins. But if this was not enough, a Classic Space project has managed to cover all the necessary stages in LEGO Ideas to become a set. It´s Peter Reid´s Exo Suit.

We all knew the famous original design from the Classic Space genius Peter Reid, and we wondered what would remain after LEGO “adapted” the model for marketing. It was clear that some of the techniques of Peter, that are considered “illegal” by TLC, would force some cosmetic changes to the model.

When I received the set I have to say that even my wife noticed it was a special one. And the fact that I began to build it without even taking off my shoes, made her think she’d better not bother me until I had finished.

The Exo Suit has suffered many cosmetic changes, but the essence, in my opinion, is still intact. Everything regarding the set (box, manual, etc) is similar to other LEGO Ideas models, although it is noted that the media campaign that has surrounded it has been greater than before, including promotional photos and videos of fantastic quality.

The instructions book includes the beginning of a story based on the set, which made many of us have hope in a new Classic Space theme. The presence of the wonderful green minifigs also fed those expectations.

The construction is quite fast and is a great introduction to “grebble”. The final model is very, very good with a very high playability and an awesome aesthetic design. The turtle robot and the minifigs (in the new green color) are the best complement to the Exo Suit.

Unfortunately the only conclusion I could draw on this set is that the only thing better than having one is to have two ... or more. Dark times are coming for my budget.

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

#

Review: 10244 Fairground Mixer

Text: lluisgib
Images: LEGO® System A/S

Set: 10244 Fairground Mixer
Number of parts: 1746
Minifigs: 12

We've had to wait 5 years since the Grand Carrousel until we have got an extension of our amusement park. But... What a great expansion! If we have to wait another 5 years for a third ride of the same quality, tell me where to sign.

Earlier this year a list of LEGO® Direct sets for this year was leaked and among them was the Fairground Mixer. Speculation grew fast, trying to imagine how this new ride could be. When finally we could see it, the praise was widespread, and that was because behind this new set, is none other than our favorite designer Jamie Berard.

The model is really complete as it has a main attraction and several accessory ones, featuring a whole exhibition area as well as vehicles to transport all them from one place to another. Another highlight is the amount of minifigures that come with the model: 12, including the first dizzy one in the history of the LEGO minifig.

Model building

The building process is divided into 3 steps, each with its instruction booklet. There is also a sticker sheet. Without it the model would be rather poor. In the first step I built the small truck and the small attractions. In the second, the big truck and trailer, which will house the main attraction, which is built in the third step.

To start, I assembled 11 of the 12 minifigures. A promising start. As expected, the variety of minifigures is notable: children, parents, workers of the fair, a long-legged man ... Also the colors are very bright and give us clues about how striking the model will be.

Next, the construction of the truck transporting small attractions begins. We can define the truck as "big" wheels, like a "Unimog". The truck is 6 studs wide and 20 long. With the Unimog type wheels, it is quite high compared to the minifig scale trucks we are used to. The cabin is quite elaborate, but I miss the mirrors. In the back there is a great platform where you place the attractions that are built next .

The first is the high striker attraction. The one where you have to hit it with a hammer to make the bell ring. The attraction is quite high and it really works! The piece that goes up to try to touch the bell is a Technic Pin Connector Round moving through a rigid Hose. The mechanism works through a small cam. The fun of this part are the hammers. One large size compared to a minifig, but it really is the small one. The other is a giant hammer. It seems the typical hammer from the cartoons. With the largest one you can get to the bell ... :)

The next attraction is the water tank. It is a tank with a seat and a target. If the ball hits the target, the minifigure placed in the seat falls into the water tank and the player wins. The color scheme is lime, blue and trans-clear blue. Using a small number of Technic parts to build a cam, the mechanism works fine. On the rear side, two doors allow the minifig (It is a girl with wetsuit) to leave the tank and come back again to sit on the seat. The attraction also has a table to store the balls.

The last element to be built in this first phase is the box office where tickets for the attractions are sold. It is red and white. At the front there is a sticker with the price of a ride and a sign with blue and yellow lights to attract potential customers. Inside the box office there is a cash register and a drawer for tickets and money. The neon sign can be folded and leave the locker closed.

After building the first phase, you can try to put all attractions on the truck. At this point I begin to understand why the truck is so high. Inside the chassis you can introduce the high striker. It is very high and you can not bend it, so the designers have managed to find a unique place to put it. The water tank and the box office are placed on the platform of the truck, and all the other accessories are stored inside the tank or the box office. Brilliant!

The truck and trailer are the next things to build. Before this, the last of the minifigures takes action, the truck driver. I was pleasantly surprised that an entire instruction booklet is dedicated to the truck, without the attraction. The truck tractor is, without doubt, the best I've seen at minifig scale. It is 8 studs wide and has a bed, TV, doors made with bricks, mirrors, windshield wipers, air conditioning, lots of lights and bulbs ... A plethora of elements that satisfies the needs of any LEGO® fan.

On the roof of the car 2 stickers show the name of the attraction: MIXER . The tailpipes are made of parts and I could not miss the spotlights and speakers on the roof of the cabin to greet the other trucks.

The trailer is another fairly detailed element, which is the basis of attraction. The most important part of its structure are the gears that allow the attraction and its seats to turn around. At the front there are stairs that allow access to the attraction and are bendable when they travel from one city to another.

Finally something necessary that lets you enjoy the set. A box with a crank, gears and a shaft to connect to the attraction and rotate it.

To finish the set I should build the MIXER. The fences that protect the attraction when it works, are the prelude to the party. It is a long fence made in 2 symmetrical elements and Glow-in-the-dark parts. They are also foldable and as we'll see later , they can be transported together with the attraction.

And finally I start the MIXER. At this stage there are many interesting construction techniques which will help to have ideas for future attractions any AFOL wants to design. At the beginning the model is fragile. There are many elements to be combined: the hinges to fold the attraction, the mechanisms that allow the attraction to turn, decoration ... When the building process progresses all those fragile parts become stronger. In my opinion the complexity of the model is to combine size and function at the same time. I am fascinated by how the designers have managed to square the circle: compact and functional.

Although the instruction booklet is thick, there are many repetitive steps in different colors (blue, yellow and red). With a little observation, you can skip 3 equal steps and make them directly in 3 colors. The attraction has 3 rows of 4 seats that rotate. Each seat has its protection bar for the minifig, to avoid throwing anyone off when it works. The seats are built to also be folded when transporting the attraction, it is as compact as possible.

The decoration of the attraction is at the same level of detail as the other elements. Each of the arms has lights according to its color, and, to give it a festive touch, there are some Round Tile 1 x 1 Glow-in-the-dark. At the top there are decorative arms forming a small dome when folded. They also have lights and pieces Glow-in-the-dark.

Once finished, the attraction connects to the trailer by linking the axle and the crank case ... "Et voilà!" The MIXER starts rotating and stuns its users.

There is one last step to take: you have to build the cages that allow the transportation of the fences. When transporting the attraction, the fences are placed in the rear of the trailer. When the rides are mounted, the cages are kept above the small truck.

Conclusions

We have the funfair built and the main attraction is running. It is very beautiful and attractive to the eyes. But there is a problem ... you have to turn the handle to operate the MIXER. Even that was taken into account by the designers. The instructions booklet explains how to motorize the MIXER with a PF-M motor and a battery box. The engine is hidden under the trailer, and the battery box is placed behind the cab when the attraction is transported (as is the case with the handle). What else could you ask for?

The building process is very entertaining and it has interesting construction techniques. The great challenge of this set is that all the attractions can be transported on two trucks, and our friends from LEGO® have racked their brains to make everything fit :)

There are many details, a feature of the CREATOR EXPERT sets. I would like to highlight the large number and variety of

minifigs, the Glow-in-the-dark elements and the functionality of all the elements of the set.

The trucks are not simple accessories for transport. They are at the same level of the rest of the set and they are as fun and interesting to build as the attractions are.
Since it was decided that the stickers could not be placed in 2 or more parts, I have become more tolerant with them and I do not care so much about not applying them, taking also into account that we need them to highlight the model.

Do not miss the opportunity: The fair is in town!

Acknowledgements: To LEGO® SYSTEM A/S for this set.
#

Review: 76022 X-Men vs. The Sentinel

By car_mp

As a follow-up of the X-Men's comics and cartoons, the possibility of having a small Wolverine minifig is too strong a temptation. So when this set was released, I immediately set my sights on it. The set has three main elements: the Blackbird, the Sentinel and the minifigs.

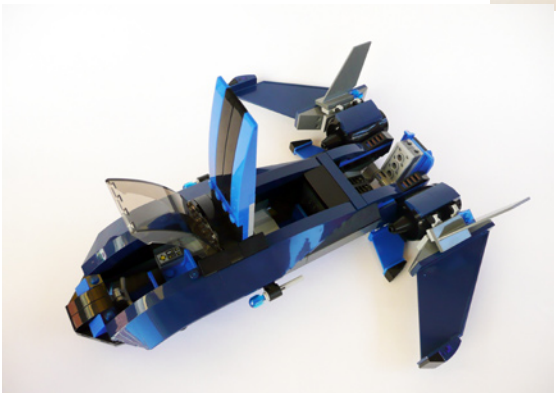
The first thing you build is the Sentinel. Maybe a larger size would be more in keeping with the Sentinel of the comics, but still its design is successful and allows great playability. It doesn't have stickers and includes the new joints that are causing a stir among the builders.

Practically the same can be said about the Blackbird jet. Its design is attractive and it is also very playable. You can place four minifigs inside and it includes a box with tools. Anyway, I would like it to be a little larger in size. Storm has a special cape that is more suited to the character than the LEGO® standard one.

The minifigs are built along the Sentinel and Blackbird jet. The character selection is very good. Besides Wolverine, we have Storm, Cyclops and Magneto. Magneto comes equipped with helmet and hair and Wolverine also has hair and a hood.

The combination of all these elements makes this set a "must have" for any fan of this theme. A fantastic assortment of minifigs, the Sentinel, and the Blackbird jet, promise hours and hours of play. And if you are only interested in the parts and minifigs, the set includes interesting parts in unusual colors. A "must have" set in every aspect.

Acknowledgements: To LEGO® Iberia for this set.



Review: 75054 AT-AT

Fighting against the enemies of the Empire over the planet Hoth frozen lands

By Legotron

Set: AT-AT
Set number: 75054
Parts: 1137
Contains: 5 minifigs.

This summer 2014, there will be a new series of Star Wars sets, many of them of the original trilogy. One of these sets is the 75054 AT-AT, that includes the mighty Imperial war machine used by the Empire to crush the rebel forces on the planet Hoth. It is a classic within star Wars™ LEGO® sets. It is a big set with more than 1100 pieces, and as a big Star Wars fan I really wanted to have this set.

I don't own the previous versions of the AT-AT, so I don't have any references to compare which model is better. So, I can focus all my attention to the 75054 AT-AT. The appearance of the box is very interesting with awesome box art. The box includes a poster with all the Star Wars minifigs of this summer on one side and a scene of the battle of Hoth on the other side. The building process was very interesting. The set comes with many technic parts that are used to build the framework of the AT-AT body, and the connections with the rest of the parts of the AT-AT: legs, head and armour plates. I don't like to play with technic bricks and tons of pins, but this case was different. Everything was placed for some reason, and there were no problems to attach and fix all the elements. It was very interesting to see how all the parts of the framework worked and the way they were placed in the framework. It was like a modular design. This is a great advantage, as you can build every part of the body separately, so it is a much easier task

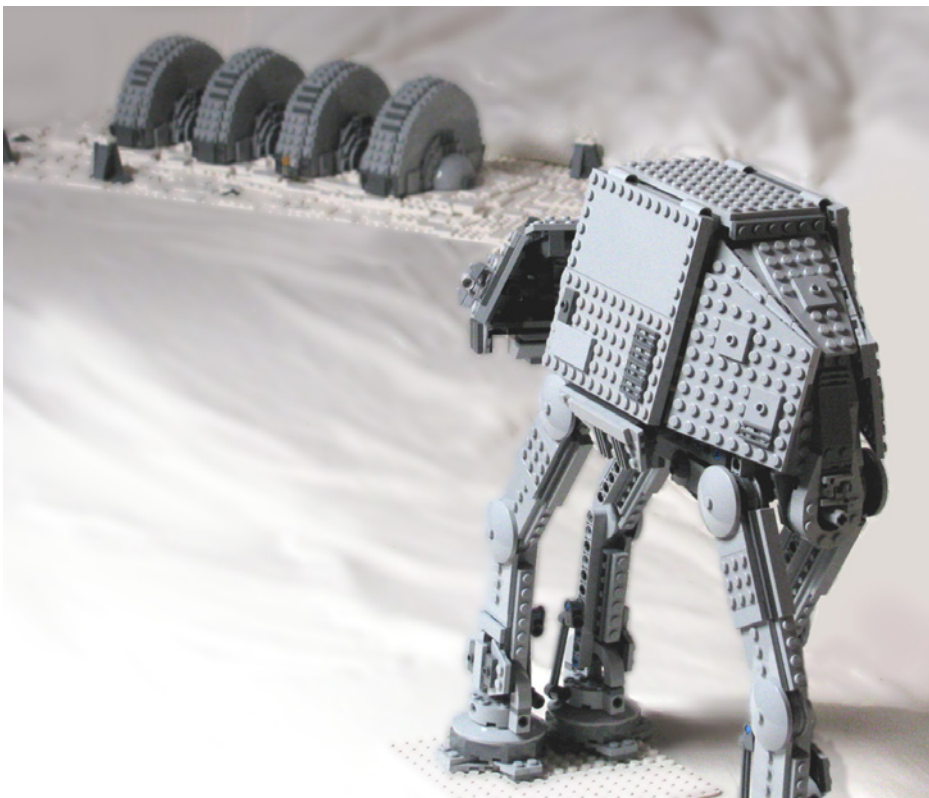
to rectify any error or make future modifications. There is a trapdoor in the lower part of the body to download the troops, and that is the only feature in the framework. The rest is full of attachment points to add the legs and the armour plates. Most of the technic pieces are used to build this part. The next step was to build the 4 legs, a very simple task. The model is very high, but it is very important that those legs make the model very stable. The legs are articulated in several points, so you can place de AT-AT in many poses. The system works very well and I didn't have any problem to build the rest of the model with the legs connected to the body. I liked this, because at first I was not sure if the unfinished model could withstand the entire building process without falling apart. The next step was to build and place the armour plates covering the framework. The two sides of the body can be opened, so you can access to the interior and play with the minifigures in the interior. The body has some nice details, but there are some chromatic issues, as blue and tan parts can be seen from the outside. The final step was to build the head. The head is built with a lot of small parts with many elements to attach the sides, but very little room inside. It was a big head with small interior area, so there is no room for controls or other elements, just a simple panel and tiles to sit the minifigs on. The building process is fun and the final result is worth the effort. In this set there are no stickers, as all the decorated bricks are printed.

Once the model is finished, you can see there is a strange detail on the model. The body seems too small for the size of the head and legs. I realized that a bigger size would need more parts, and that would increase the cost, but a few more parts to make the body larger would make this model close to perfect. The size problem is more visible in the front and rear of the body, that seems to be very narrow. Anyway, the model is really nice, with many features and very friendly to add modifications. Perhaps the worst part of the model is the head, it has a good size but I think the design for the head is too complicate for the outcome, with many attachment points to get that unnecessary angles for the sides of the head. A more simple construction would allow more room inside the head, in order to sit 2 minifigs in a row, instead of one behind the other. But the structural design is very good, with two connecting points in the neck. This fact allows you to turn the neck and the head with a very sturdy connection. The spring shooter bricks under the head work very well, so you have to be carefully not to lose the arrow bars.

Let's talk about the minifigs. This set comes with five new minifigs. One of them is a General Veers minifig, with new printings. The most remarkable feature is the new print of his rank insignia. There is a new AT-AT driver minifig, with different colors and printings. The new snowtrooper commander comes with rank insignia, and a new mold for the helmet, which is not fixed to the backpack. The backpack is built with LEGO® parts, and there is a white cloth element for the snowtrooper skirt. The box comes also with two snowtroopers minifigs, both of them with new features like the snowtrooper commander: new helmet and backpack. Both backpacks come with a new printed tile. All the minifigs of this set are great, and a perfect addition to man the AT-AT.

In short, the 75054 AT-AT is a great LEGO set. The design of the model is really nice, perfect to equip your imperial forces in order to defeat the rebel forces across the Galaxy. The AT-AT is very stable and sturdy, the building process is very funny and instructive. There is a little flaw in the design with the proportions of the different parts of the body, I think the body seems too little when compared with the legs and the head, but the final model as a whole is beautiful. Moreover, there is a very interesting feature that adds extra value to this set: you can modify it very easily. The modular attachment of the different parts of the AT-AT allows the builder to take each part and to build more details or new features without compromising the whole structure, and that can be many additional hours of fun. You can also add many details to the interior, which is ready to get new seats or facilities for the crew.

Acknowledgements: LEGO® SYSTEM A/S for this set.



Review: 75031 Tie Interceptor & 75033 Star Destroyer

Two sets of the new Star Wars™ Microfighters series

By Legotron

Set: TIE Interceptor
Set number: 75031
Parts: 88
Contains: 1 minifig.

Set: Star Destroyer
Set number: 75033
Parts: 93
Contains: 1 minifig.

This year 2014 there is a new theme related to Star Wars. It is called Microfighters and it consists of a bunch of small space ships built in a smaller scale than system, but bigger than the ones in the Mini or Planet series. Each one of the sets contains an iconic vehicle or starship of the Star Wars saga. Regardless of their real size in the movies, all of the sets built with LEGO® pieces have a very similar size. They have more less 90 parts and include one minifig, that can be sat on the vehicle as a pilot.

I am fan of the Star Wars Empire, so I cannot lose this opportunity to have the two starships related to the Empire in my personal collection. These two sets are the 75031 TIE Interceptor and the 75033 Star Destroyer. The first one is a very well done incarnation of the starfighter, the construction is easy, and despite its small size it is designed with a lot of detail. The minifig is placed over the cabin, and the whole thing looks very nice. The minifig is, obviously, a TIE pilot. The other one, the star destroyer, has been downscaled proportionally to have the same size as the TIE Interceptor. So it is less detailed, but the final aspect is very close to the real model. The minifig has been placed over the main deck, in the middle of the ship, like a Formula 1 cockpit. This time the chosen minifig is an imperial crewman in black disguise.

These sets can be seen as very simple constructions, but in my opinion the idea is very good, with outstanding designs. The Microfighters theme is awesome. They are very cheap, and very easy to handle because their small size. They are perfect to play with everywhere. They can be put in many places, at home, at work place, etc. As a Star Wars fan, I cannot resist the idea to have such starships on my desk, and many people like them. They are a must have for collectors as well. I think that they could add small identifying tiles or panels to these sets, like the ones included in Planet Series. They would be perfect for collectors.

In short, I love them! Both sets are really nice, and very fun to build and play with, furthermore you can download a mobile application to play mini-battles with the ships of this theme. I hope this theme will continue with more ships like the TIE Figther, Y-Wing, TIE Bomber or the B-Wing.

Acknowledgements: LEGO® SYSTEM A/S for these two sets.
#

Great creators of the world: Evan Bordessa

By HispaBrick Magazine®

Pictures by Evan Bordessa

Today we introduce a young artist who has drawn our attention because of his versatility when choosing the themes of his MOCs and for the variety of techniques he applies.

HispaBrick Magazine: Name?

Evan Bordessa

HBM: Age?

EB: Eighteen

HBM: Nationality?

EB: American

HBM: What do you do normally?

EB: In addition to being employed by a local coffee shop, I'm an avid photographer, a huge fan of any type of film, and I've just recently started trying to improve my digital art skills.

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

EB: I honestly can't remember a time when there wasn't LEGO within close reach. I don't have much Duplo in my current collection, and as the majority of the parts I have now are from when I first started building, I'd have to assume that I got into building with LEGO at five or six years old, just missing the Duplo phase.

HBM: When did you start posting your models online?

EB: I started posting my (admittedly) terrible models online in 2010. I didn't really get into the community side of things until about a year later, after establishing myself with a core group of then TFOLs (now all AFOLS) known as Team Jigsaw.

HBM: What is the last set you have purchased?

EB: It's been a really long time since I've bought an actual set. I always tend to save my money for the ginormous garage sale lots that appear on weekends, but if memory recalls, the last set I bought was 6912 Super Soarer. It was on deep clearance, and I bought seven of them, since they're wonderful parts packs.

HBM: What is your favorite commercial LEGO building theme?

EB: I'm really partial to the new Chima line. My eight year old side thinks it's totally rad to have vehicles that looks like animals, piloted by animals warriors.

HBM: What is your favorite theme for building?

EB: I try to stay away from any set themes actually, which in the long run has made me a better builder, I feel. Letting myself get stuck in a certain style and theme is just not something I want to do. I've just always enjoyed building, whatever theme it may be doesn't really matter!


AP 35T


6950
LEGOLAND
LEGO

HBM: Which part would you like LEGO® to produce?

EB: Not a doubt in my mind. Corner cheese slope.

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

EB: When I first joined the community, and for a couple of years after, I spent an obscene amount of time building, up to five hours a day, more on weekends. But due to life catching up, getting a job, classes at my local college, and many other commitments, I'm lucky if I can get an hour of building in a day.

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

EB: My family thinks I'm a huge nerd, but they've resigned themselves to the fact, and fully support my ABS addiction. My friends think I'm a huge nerd, and avoid talking about my hobby, but I'm not too bothered by that. It IS a weird hobby, and I'm proud to be a part of it!

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

EB: Not as much as I should, strangely, I'm absolutely terrible at anything resembling drawing or art besides LEGO. I'm trying to change that, and I've been sketching digitally for about two months now, but I'm still nowhere near where I want to be.

HBM: You build models at different scales, which is the more difficult for you to create at?

EB: Minifigure scale for sure. I've never been able to pull off minifigure scale cars, so I usually stick to Model Team scale if and when I'm going to be building a model of a car. In other themes though, I like to think that I'm reasonably decent at any scale I try my hand at.

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

EB: I'd have to choose my model of GlaDos from the Portal game series. She was part of a Cuusoo project called Thinking With Portals that Team Jigsaw put together. The team consists of four members, Arkov, Five X Five, Brickthing, and myself. The project ultimately didn't get turned into a set, but the journey to 10k supporters that I shared with my teammates is one that I wouldn't give up for anything.

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

EB: I'm a fan! I've recently gotten into the GARC fad, which requires builders to essentially kitbash a microscale model of a spaceship with official LEGO stickers. Much cutting is involved. As for third party parts, I'm always game to add something to my MOC if it makes it look better. In my time in the community, I've become good friends with Victor Fernandez, owner of EclipseGrafx Customs. His products are amazingly well made, and I've used his custom printed pieces in many of my MOCs! #

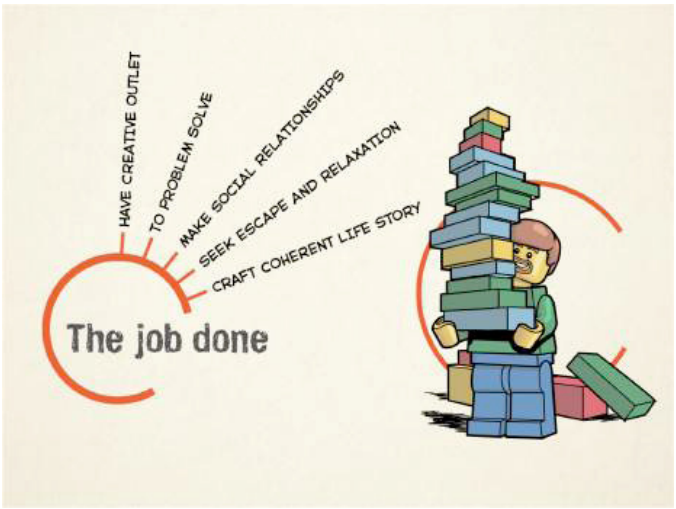
The LEGO® ecosystem project

By HispaBrick Magazine®
Images by Yun Mi Antorini

The HBM Ambassador had the opportunity to participate in a CEE Team project that aroused great curiosity. To study how our great AFOL community is organized, how the different parts are related, what we give and what we seek; it may seem trivial, until you stop to think about it. There are other communities of fans of toys, games, sports, ... but I don't know any other with such strong ties between all its constituent parts. You just have to look at the number of websites, forums, communities, events, applications, programs, photographs, etc., related to LEGO® around us. All this display of relationships has also drawn the attention of LEGO and mainly of the CEE Team. There is no doubt that other studies, conclusions and even business decisions will arise from the study that they have conducted, but for now they are beyond our reach. What seems clear is that we form an ecosystem, with all that entails, both good and bad. We spoke with Yun Mi Antorini, the head of the study by the CEE Team.

HBM: Can you explain in the simplest way possible what an ecosystem is in the businessworld

YMA: First of all, thank you so much, Carlos, for initiating this discussion. The term ecosystem has made its appearance in "management speak" during the recent years. Just as in biology, "ecosystem" conveys the idea of a self-reinforcing whole whose components create value for each other through the various relationships that hold them together. When we speak of the LEGO ecosystem, we use the term "ecosystem" to emphasize that the LEGO brand, the LEGO employees, customers, suppliers, users and many other groups, have become much more interdependent and that their roles have become increasingly interconnected. Take the LEGO Exo Suit product, for example. Peter Reid initially proposed it on LEGO Ideas. But the project became a reality through the support and engagement of the many who voted for the project and who featured the project on blogs and other forms of social media. The Exo Suit project is an example of a "co-created" product that was made possible through the support and commitment of the LEGO ecosystem. We initiated the LEGO Ecosystem Project to document and better understand the ecosystem actors, the dynamics and relationships.



Overview of the jobs AFOLS "Hire" LEGO products to do.

HBM: How did the idea that the set of relations that exist around the LEGO brick make up an ecosystem come about?

YMA: The idea came partly from the business ecosystem academic literature, partly from the biological conceptualization of an ecosystem, partly from many years of observing and interacting with the AFOL community. Through observing and interacting AFOLs, we learned that the sites and tools they have created to be more creative with LEGO products and to manage their LEGO hobby ties AFOLs together in what can be described as an ecosystem. Unlike a real biological ecosystem the AFOL ecosystem transcends time and space. Since many of the sites and tools AFOLs have created exist in a digital space, the ecosystem is always "on". One may have an individualistic or solitary approach to the LEGO hobby, but the fact that one uses sites like for example Brickset or The Brothers Brick, forums like Eurobricks, and magazines like the BrickJournal or HispaBrick inherently connects one with other AFOLs. You feel part of a community of other adult LEGO builders. We use the ecosystem metaphor to emphasize that the social relations and the sites and tools AFOLs have created compares to a living entity within which different LEGO related interests co-exist and specialize.

HBM: Why is it important to study this ecosystem? What kind of information can it provide?

YMA: When you think of people who consume a specific product as merely consumers, you easily lose sight of the fact that consumers are also value creators. When one reduces people to merely "consumers", then one tends to elevate the company who produce the products to the one solely responsible for the value creation. This might have been true in the past. But with the global social networks, the new and improved information technologies, the fact that people have become better educated etc., reducing users to "consumers" no longer offer a meaningful framework. Instead, what we see is massive value creation going on among users. As the ecosystem study revealed, users create value for one another by sharing user created content. The content inspires other builders. They support one another with businesses and services that allows users to get even more out of their LEGO hobby. Etc. Studying the way users interact and create value for one another is important since it provides a much richer and elaborate understanding of the way LEGO products and experiences come alive among users.

HBM: How long has the study taken? What have been the most important stages?

YMA: The study took app. 4 months. The most important stages involved engaging the LEGO® community Ambassadors in the research, analyzing the data they shared with us and trying to map all the various ways in which value creation happens.

HBM: What are the main conclusions you have reached based on this study?

YMA: That adult LEGO users have created a network of activities that are centered on their shared joy of the LEGO hobby and that enables users around the world to access and share authentic and very exciting new experiences and functionalities of importance to the hobby. Another main finding is that this network is fairly stable which means that you, as a user can rely on it. This offer a tremendous value since you don't have to constantly search for sites where you can meet with other AFOLs, where you can view the latest MOCs and such.

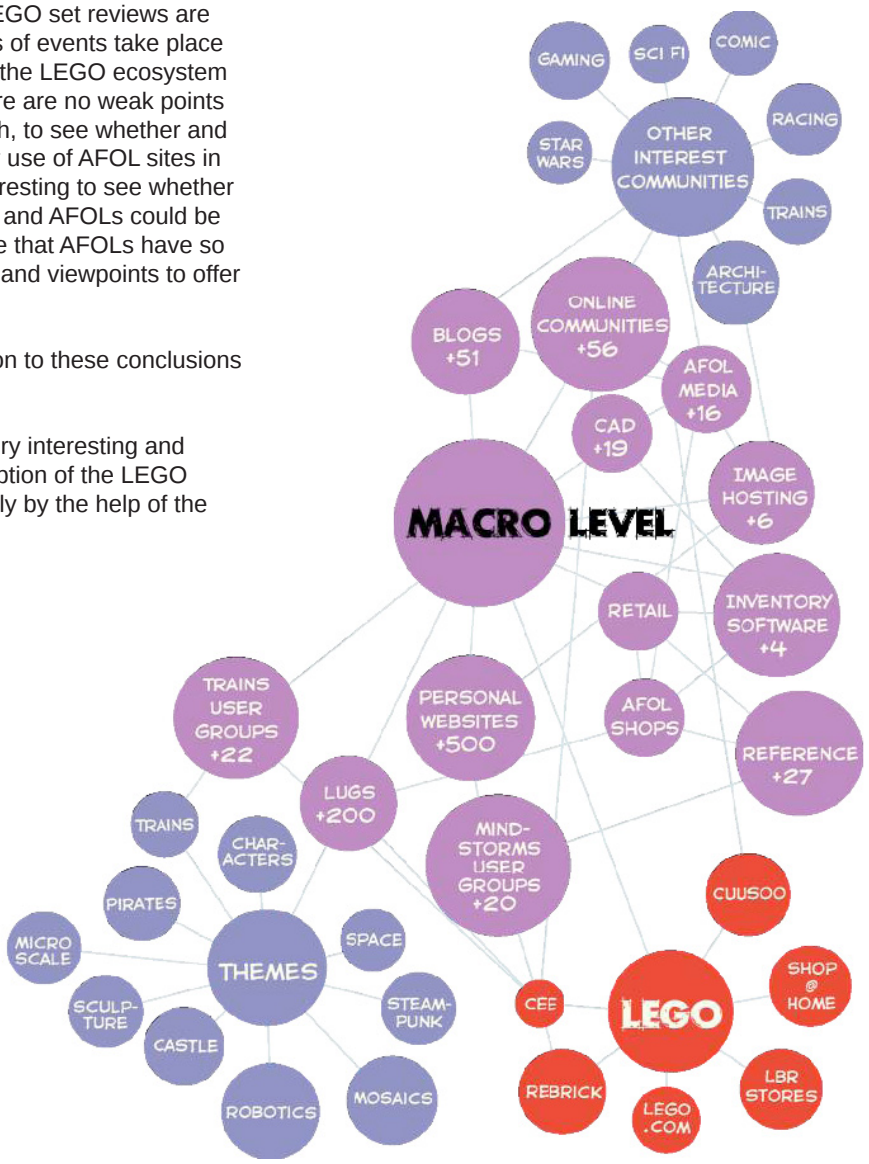
HBM: What are the strong points and the weak point of the LEGO ecosystem?

YMA: The strong points are the many great sites, functionalities and such that AFOLs have created. The strong points are also that the AFOL community is so active. For example, photos of new MOCs and LEGO set reviews are shared around the clock and hundreds of events take place each year. All of these activities make the LEGO ecosystem extremely vibrant and interesting. There are no weak points as such! It would be interesting, though, to see whether and how "non-AFOLs" would make greater use of AFOL sites in the time to come. It would be very interesting to see whether stronger bonds between "non-AFOLs" and AFOLs could be formed. I am saying this since I believe that AFOLs have so many interesting LEGO related things and viewpoints to offer "non-AFOLs"

HBM: What has the company's reaction to these conclusions been?

YMA: The company finds the study very interesting and are impressed by the elaborate description of the LEGO ecosystem that was made possible only by the help of the LEGO Community Ambassadors.
#

Typical AFOL activities and a few of the channels, Software Programs and Services that AFOLs meke use of



Overview of the LEGO ecosystem

The new LEGO® Ambassador Network

By HispaBrick Magazine®
Picture by Keith David Severson

From left to tirght: Jan, Kim, Kevin and Keith from the CEE Team

In June we had the opportunity to speak with Keith David Severson, Senior Manager of the CEE Team, on the new ambassador program that has just been announced and will be launched this coming September. If you've been watching the evolution of the ambassador program, surely you've noticed that in recent years it had become blurred within the community. No wonder that LEGO® would see the dilemma of closing or renewing it. It is a relief to see that in the end, the relevance that this program has had throughout its existence has been more important that the grayer recent times. So it seems that LEGO wants to revive the program and has invested much time and effort in developing a new program with new roles and responsibilities. Clearly the fact that the AFOL Community is growing large and visible has forced the CEE Team to take measures to adapt to this new environment.

HBM: There have been changes in the organization of the community support team lately. Can you tell us what the main changes have been and why they were made?

KDS: Yes we did go through a change in our organization at the beginning of the year. We created a clearer split between Kim Thomsen's and Jan Beyer's roles. Jan now is the community manager for eastern Europe, Russia, Asia and Pacific regions. Kim's role covers North, South, Central, and Western Europe. Also Kim is responsible for all of our online communities. These changes were made to help strengthen clear roles and responsibilities within our team. Also, in the past 10 years Jan has demonstrated a strong ability to grow communities in regions where there may not be some. This skill is especially needed in our Asian markets.

At this point we deviate a little from the topic to discuss the presence of team members in the growing number of events and AFOL meetings worldwide. Keith tells us that they have worked hard to try to reconcile the private life of each member with their presence at events, and they are trying to make a distribution of their travels to go to major events and new events that are under expansion. He also said that the presence of other members of TLG at these events depends not only on them, but the different departments are the ones who show interest in attending certain events. "We are always encouraging members of other departments to come and experience what these events are".

HBM: The main contact point between the CEE Team and AFOLs is the Ambassador Program which will be fundamentally transformed this year. What are the main reasons that have led to these changes? What are the most important changes that will be made and what is their objective?

KDS: Before I answer this question it is important to highlight what the community support team has been doing in 2014. We have dedicated a full year to rebuilding many of our operations and creating a much more lean and optimized business. The reason for this is that over the past 10 years we have built a community business which has been highly successful. However due to the amazing growth in the AFOL community our business is not capable of growing at the same level. Thus everything we have been focused on this year has been to refine and rebuild our business which has a sustainable and scalable growth which can meet the needs of the AFOL community of tomorrow.

The Ambassador program is transforming to the LEGO Ambassador Network (LAN), and yes, it is a fundamental shift for the Community support team and will have ripple effect throughout our entire business. The LAN is going to be our focus area for all communication with the AFOL community. What I mean is that currently we email and have contact with 2,3, or even 4 people within a single LUG. With over 250 LUG and continuing to rapidly grow, these multiple points of contact are unsustainable. So with the LAN each LUG ambassador will be the single point of contact to this LUG for everything. There is some opportunity to have the LUG ambassador delegate responsibility (i.e. LUGBULK order) to another LUG member. We do not want to create too much of a burden on just one person.

Keith tells us about cases where the contact for LUGBULK has suddenly stopped responding to communications.They don't want this to happen again, so delegating some activities to other members of the LUG will be allowed, but the Ambassador should always have a copy of all the mails, to resume responsibility in this activity if necessary.

The next very essential and most exciting point to the LAN is the importance we (The LEGO® Group) will put on it. We will migrate to a new forums platform and within this platform there will be workgroups. Workgroups will be a space for Lug Ambassadors to focus their conversation and create a consolidated and powerful message for TLG to consider. For example if 50 LUG ambassadors bring 50 different ideas to TLG then we are unable to understand what is the most important issue or idea to review. But if 50 LUG ambassadors bring a single and powerful message then it will be clearly valuable for TLG to understand. We also envision than in some cases the ideas coming from Ambassador will be so well done that we will send some of those ambassadors to a TLG location to meet with leaders and talk about their idea in person.

A couple other essential points to the LAN is it is the only way a LUG can receive support from TLG in the future. A LUG must register with us (starting on September 1st) and they will be required to have a LUG Ambassador.

Another change which is important to mention is the Name change. The title “LEGO Ambassador” no longer exists. The new title is “LUG Ambassador”. The change emphasises that an ambassador does not in any way represent TLG but very specifically represents their LUG.

HBM: One of the main problems, from the point of view of the ambassadors, is that there is little activity from both sides, both ambassadors and LEGO. Are there new initiatives to activate this participation?

KDS: The community support team took the decision that if we move forward with the LAN we must put a full and long lasting effort into the program. This means that the community support is adjusting our work habits and spends less time talking with all the different contact points out in the ecosystem and primarily focuses on ambassadors and topics within the LAN.

Also for the LUG ambassador, each ambassador will need to be active. Moving forward we will only distribute communication (i.e. LUGBULK, event support, and other documents) through the LAN. A LUG needs to have their Ambassador distribute this, otherwise the LUG will lose out of opportunities with TLG. Also it will be the ambassador who will be the primary person submitting event support application and other documentation to the community support team, we will not accept it from other people. So in summary the LUG ambassador will play an essential role in managing the LUG relationship with TLG.

HBM: Another problem is the sensation that sometimes the questions that are asked on the forum are not officially answered by LEGO for a long time. What changes are being made to improve this?

KDS: We are not going to answer every question on the forum, especially ones which have been answered already. An example is product pricing differences, or specific quality issues, these have been answered and we will not spend time re-writing the answer. Instead, as the LEGO Ambassador Network implies, other ambassador can step up and answer questions. There is an expectation that ambassadors use this network to get answers and share ideas among other ambassadors without the explicit need of TLG. We are also looking into have a FAQ built into the forum which should have the commonly asked questions.

Keith tells us that he is very excited about the new platform, as he expects that in future developments, many of the negotiations between the CEE Team and LUGs that now are done by email, will be carried out through this platform and that this would simplify these processes.

HBM: How do you think the ambassador program is seen from within the company?

KDS: The current Ambassador Program has a lot a lot of importance in the company, that is why we needed to do a full reset and create something that creates value to both the AFOL community and TLG.

HBM: What has the reaction inside the company to the changes in the program been?

KDS: Curiosity and excitement! TLG want to continue to have a strong relationship with the AFOL community and with the LAN we can significantly strengthen the relationship and create value adding discussions both within the company and out in the community

HBM: What has the reaction of the current ambassadors been?

KDS: There have been plenty of questions in regards to the difference to a physical and online LUG, or what support programs are guaranteed as a registered LUG. From some of these questions we will be working on creating an additional FAQ and other documents which can help with the clarity.

HBM: One of the main novelties in this new program is that the ambassador is the sole contact person between the LUG he or she represents and the CEE Team. What has been the main reason for this decision?

KDS: Simplicity and scalability! The community team does not grow at the same rate as the LUG’s. This means that we need to find new processes to be able to talk to all the LUG’s and provide a high quality Service.

HBM: This change means that any LUG that wishes to receive any support from LEGO for its activities needs to have an ambassador. What are the main support programs that are available to LUGs in this new program?

KDS: We will have some additional documentation to come out in August on this subject but the main support programs are…. LUGBULK, LUG support, event support, LCBP

HBM: Now that the rules for the new ambassador program have been published, have you been able to implement all the changes you originally designed when you started working on remodeling the existing program?

KDS: Almost! I am very happy that we were able to find what I consider a great compromise. From the start of the project to re-design the LAN we (community support) had a number of issues to resolve, and the ambassadors who participated in the development had issues too. Through a number of revisions, conference calls and discussions we were able to build a strong framework.

HBM: In what direction do you think the ambassador program should evolve?

KDS: My goal with the LAN is to make it one of the key and essential programs for TLG to turn to for AFOL input. We want the ambassadors to work together to help better each other and also to help us understand the pulse of the AFOL ecosystem. It will require discipline and commitment from the community team as well as the new ambassadors, but I strongly believe there is a very bright future filled with invaluable insights, best practice sharing, and a lot of fun!
#

Disassembling “Desmontados”

by Arqu medes

When you publicly ask for help for a project, you find yourself receiving collaboration offers from people you hardly know, least of all from their professional side. The moment then arrives to entrust a virtual stranger with your dream, hoping that the person behind a forum nickname will put as much inspiration into your idea as yourself. Sometimes you fail or rather they fail you. Other times, the result exceeds your most optimistic expectations.

I have tried to find among my emails the first contact I had with Jesus, to try and refresh my memory on how it happened. Did I write to him? Did he offer help himself? I haven’t been able to find it, it’s lost on the net. It doesn’t worry me, whichever the start was, this relationship between Jesus and the magazine is one of the most fortunate times that we have lived. His stories have been, since the first issue, my favorite part of the magazine. His creativity and professionalism have given light and color to stories that are funny, ironic, bittersweet... always caught up with the news and trends of our LEGO® world. Truely creative people are shy, so it has issues to be able to find out a bit more about hin ay he works.

HBM: How long have you being a LEGO fan? And what about a comics fan?

J: Ever since I was a little, there’s always been LEGO around the house (and Tente, I’m that old), with which my brothers and I would never stop playing. And the same thing happens with comics; as far as I can remember in my house we’ve always read superhero comics, Asterix, Metal Hurlant, etc. It’s true that, like many in our generation, I went through a period of being a lot less interested in LEGO, but I never lost interest in drawing. So much so that, while I was studying Biology, I saw that what it was that I should really do for a living.

HBM: What’s the most difficult thing, or what you find the hardest in each Desmontados?

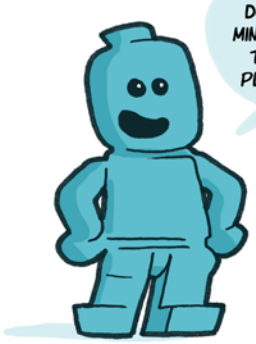
J: Well, to be honest, what I find the most difficult, issue after issue... is the translation! ^_^ I feel like E.T. the extraterrestrial probably has a better English level than I do. Luckily, one of my brothers regularly helps me with those translations (or rather, he practically does them for me). But talking about the creative side, the most difficult part is probably to find the idea, the subject that each issue is going to deal with. Finding something that makes you reflect a bit upon the direction this hobby of ours is headed in and something that at the same time can w a smile on your face. Or something that will simply make ugh at those problems that only AFOLs would understand.

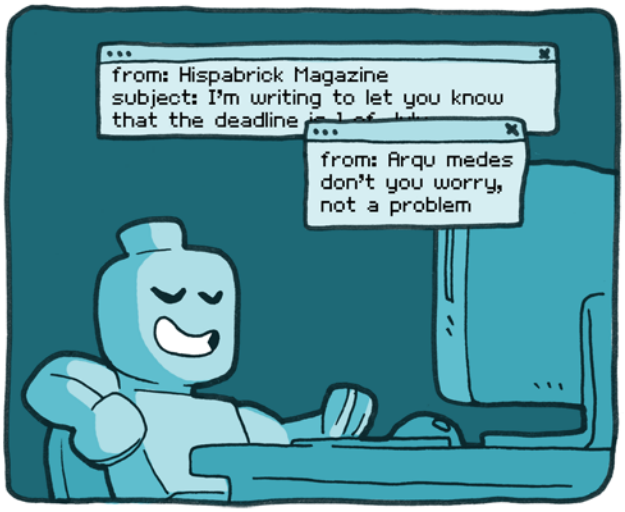
you remember how the idea of doing Desmontados ?

I was very active around the forums back e odd drawing for a Viking BrickWars o see the light of day. After seeing rt suggested I should do the poster eunion, which was happening ride (and satisfaction!). But ave needed a bit more skill, my opinion, awfully one thought like me, (Carlos), HM omic strip for say to test

PREPARATION

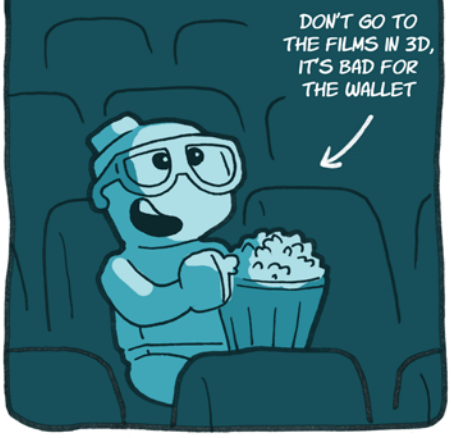
3 MONTHS FOR DEADLINE





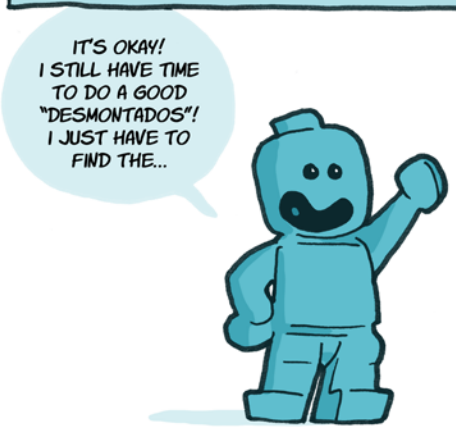
2 MONTHS FOR DEADLINE

1 MONTH AND A HALF

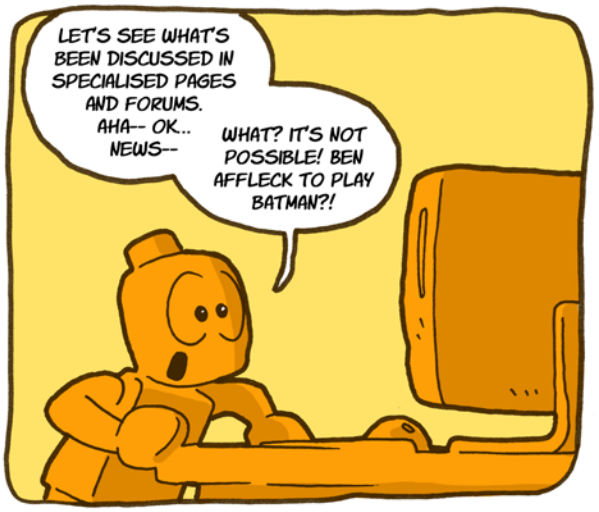


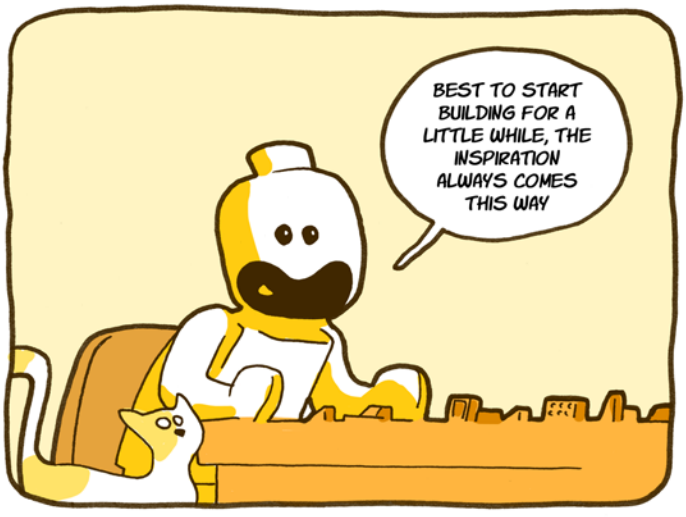
1 MONTH

2 WEEKS FOR DEADLINE

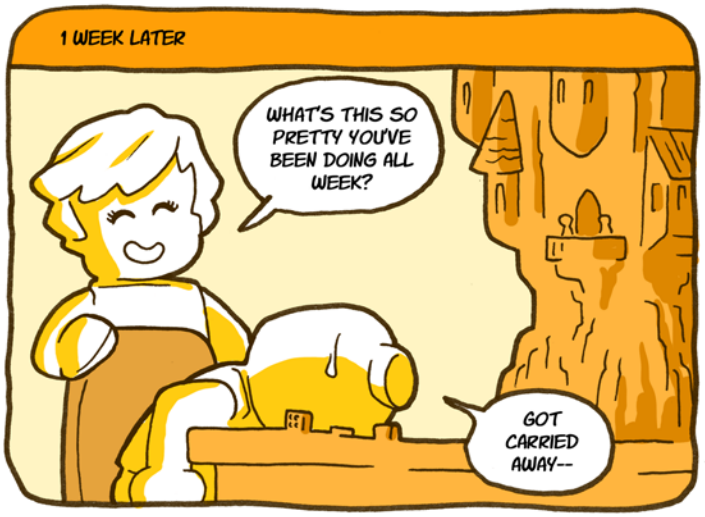


IDEA





1 WEEK LATER



5 DAYS TO DEADLINE

ENOUGH, I MUST NOT WASTE ONE MORE MINUTE! I'LL GET ON IT RIGHT AWAY!

DIE, YOU DAMN SKELETON!

I KNOW! I'LL GO SEE MY BROTHER, HE ALWAYS HELPS ME POLISHING IDEAS!

HIT HIM, DO IT!! AND MIND THE SKELETON!

L-1, L-1!!

--THE ADAPTATION OF "CRIME AND PUNISHMENT" SUMMED-UP IN A ONE-PAGE VERSION THAT I'VE ALWAYS WANTED TO DO! I SHALL BUILD THE BACKGROUNDS TO BE ABLE TO DRAW THEM ALL REALISTICALLY UP UNTIL THE TINIEST DETAIL. EVERYTHING THAT I FEATURE WILL BE MOCS! NO SIMPLIFYING ANYTHING! AND EXTRAS, LOTS OF EXTRAS! I'M DRAWING EVEN THE LAST MINIFIG, BUT WITH TORSOS, HAIR AND ORIGINAL ACCESSORIES ALL OF THEM, I'M NOT MAKING UP ANY OF THEM THIS TIME. AND IT ALL WILL BE WRAPPED UP IN A STORY WITH SOCIAL CONNOTATIONS, GREAT CHARACTER ARCS AND TONS OF COMEDY. I EVEN HAVE AN IDEA TO INCLUDE THE LATEST SPACE NEWS THAT CAME OUT LAST WEEK!

WHAT DO YOU THINK?

GOOD LUCK--

AND WHY DON'T YOU DO ONE OF THOSE IDEAS YOU HAVE IN YOUR NOTEBOOK?

TO BE HONEST--

THIS MIGHT BE THE WORLD'S MOST USELESS NOTEBOOK. HERE I PUT ANY IDEA I THINK OF, AND WHEN I LOOK AT THEM AFTER SOME TIME HAS PASSED, I DON'T LIKE ANY OF THEM.

3 DAYS TO DEADLINE

-- I may have to deliver it one day late. I'm having a few little problems and--

DRAWING

FOR EACH ISSUE, I TRY TO DO SOMETHING DIFFERENT--

I FEEL INSPIRED TODAY, I SHALL GIVE THE LIGHTS A ALTERNATE TREATMENT AND A RADICALLY DIFFERENT STYLE, MORE ARTISTIC

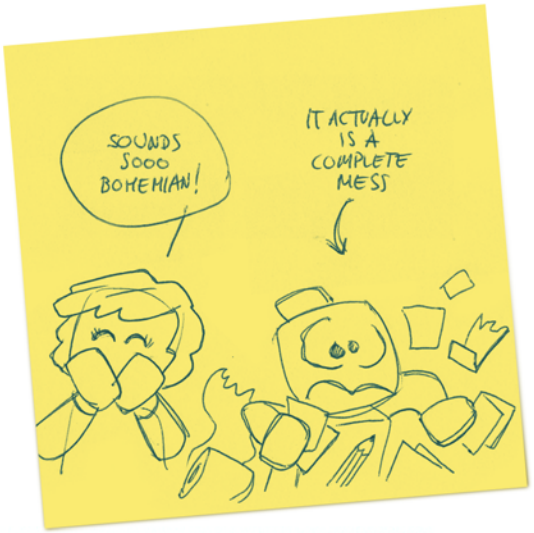
I WENT TO A MUSEUM YESTERDAY, BUT I'LL BE OVER IT TOMORROW

-- ALTHOUGH IT'S NOT ALWAYS POSSIBLE

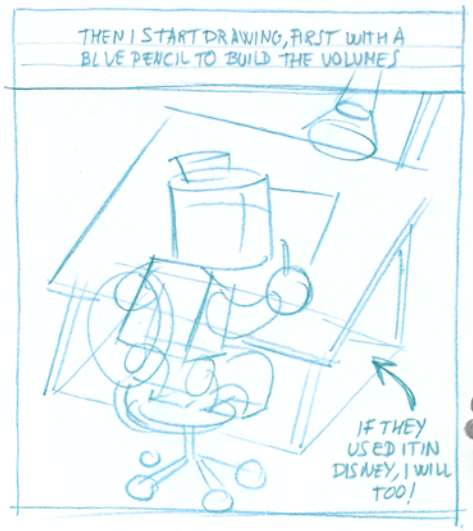
AAARGH, I HAVE NO TIME NOW!! I'LL HAVE TO DO IT LIKE I ALWAYS DO!

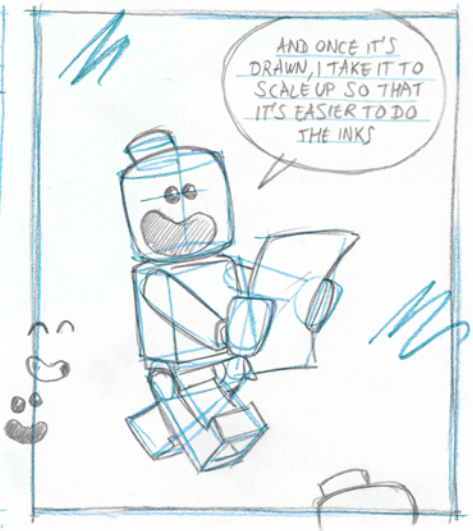
STILL SHOTS WITH WHITE BACKGROUND

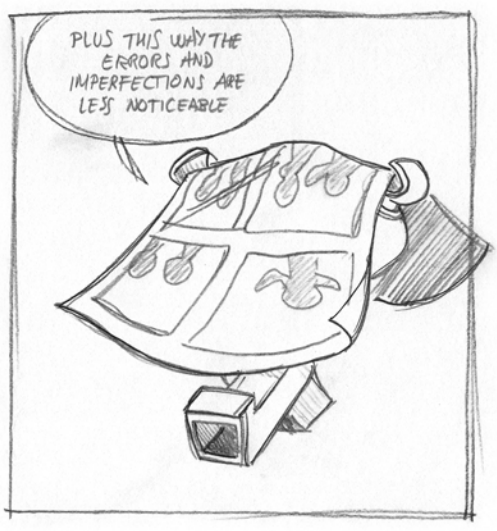
THE FIRST THING I DO WHEN I HAVE THE IDEA DOWN IS TRYING TO GIVE IT GRAPHIC SHAPE, IN THE UNDERGROUND OR IN A CAFE: PAPERS SHEETS, NOTEBOOKS, PAPER NAPKINS, POST-ITS... ANYTHING GOES!

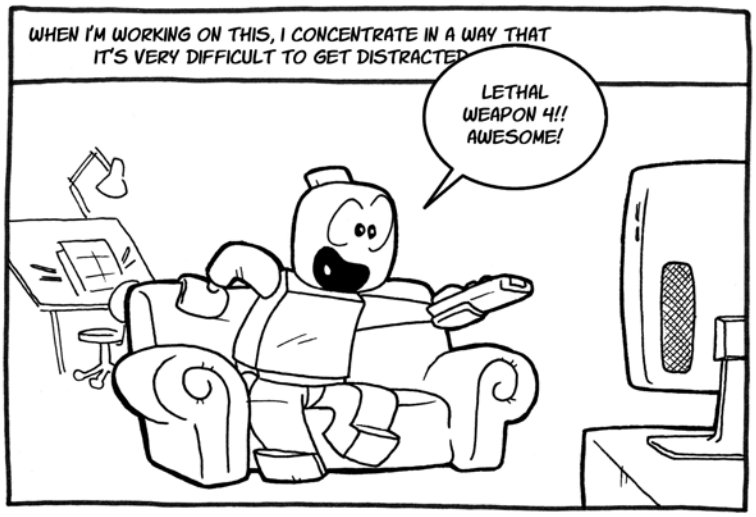


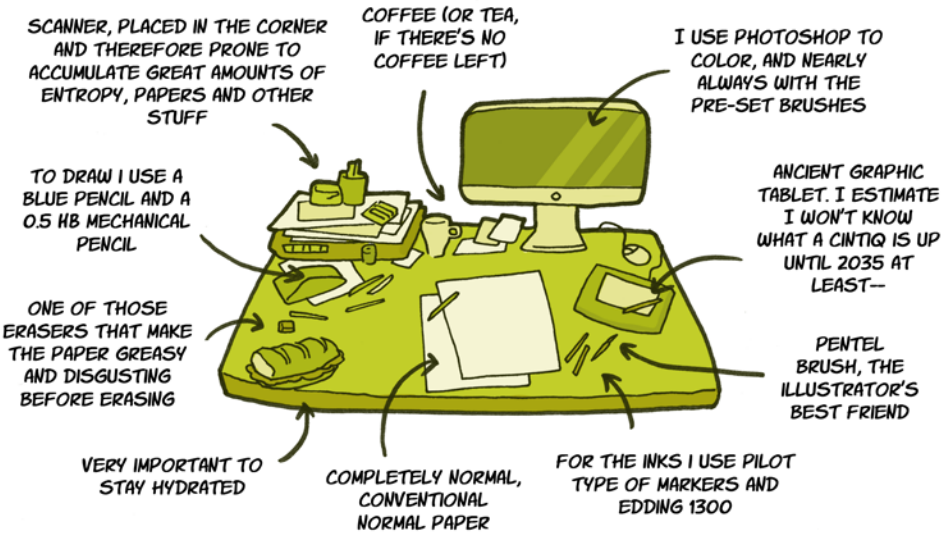
AND WHEN I FINALLY PUT ALL THIS IN ORDER, I TRANSFER IT TO A OUTRAGEOUSLY SMALL AND NOT VERY USEFUL STORYBOARD











I BET NO ONE HAS EVER ASKED YOU THOUGH--

SHH--

THE DAY OF THE DEADLINE

--in time, but don't worry, in just a couple of days at the latest--

ONCE INKED, SCALE IT BACK DOWN--

--TO BE ABLE TO SCAN IT

AND STILL NEEDS A BIT MORE WORK TO GO FROM THIS--

--TO THIS

AND SO WE ARRIVE AT THE LAST STEP--

* DRAMATISED SCENE

COLOR

I DO THE COLOR IN TWO PARTS. FIRST I GIVE A BASE COLOR TO ALL THE ELEMENTS IN THE PAGE

HAND ALWAYS READY TO CTRL+Z

SECOND: APPLY LIGHTS, SHADES AND COMPOSE THE TEXT BALOONS

ZZZZZZ

5 DAYS AFTER THE DEADLINE, AND AFTER DEALING WITH THE USUAL SETBACKS--

Connection fail

try again later

won't go in a million years

404 error

-- I ONLY NEED TO SEND THE FINISHED PAGE

--sorry I'm late. but don't worry, the next one will be ready in time, because--

CLICK

THIS TIME I WON'T DO IT ALL LAST MINUTE!

Jesus

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