

# HispaBrick MispaBrick





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024





# In this issue of HispaBrick Magazine®

- 5 Editorial
- 6 ALIEN: Building a book
- 13 Animation, stopmotion and LEGO®
- 17 Building clocks using LEGO® Technic
- 20 Building trees (X)
- 23 LEGO Retail
- 25 LEGOLAND Discovery Center Osaka
- 27 TopMoc: Medieval Castles
- 31 Modular Integrated Landscaping System (VI)
- 34 Pillars of the community: LUGNET
- 37 Pillars of the community: Hoth Bricks
- 41 Skaerbaek Fan Weekend 2015
- 43 Great creators of the world: Michał Kaźmierczak (migalart)
- 47 Open Roberta Lab, an alternative to EV3-G
- 51 Labeling LEGO® Devices WeDo, 9th Edition
- 54 WeDo theme: The Ostrich
- 56 Review: 10251 Brick Bank
- 60 Review: 21304 Doctor Who (LEGO Ideas)
- 63 Review: 60098 Heavy-Haul Train
- 65 Review: 75055 Star Destroyer
- 68 Review: 75827 Ghostbusters Firehouse Headquarter
- 71 Interview: Kevin Hinkle (LCE Community Manager)
- 76 Interview: Lennart Cort
- 79 HispaBrick Magazine Event 2015
- 82 Mungia 2016 exhibition announcement
- 83 Desmontados
- 84 How to collaborate with us
- 84 Our collaborators on the Internet









Front cover by: The arvo Brothers Back cover by: The arvo Brothers

### **Editorial**

#### By A. Bellón (Legotron)

Welcome dear readers, to a new edition of HispaBrick Magazine.

We hope you have had a good start of the year and that 2016 will come loaded with many new LEGO® sets and parts.

We are late. Our intention was to have the magazine ready for first week of January, but the magazine is something we do in our spare time and family and work sometimes require more attention. This issue has been one of the hardest to get ready. In addition to the fact there are wefer people working on the magazine we have also invested a lot of time in our annual event, and of course there was the necessary break during the Christmas period to be able to spend time with friends and family. But we hope to make up for it with the new edition that runs more than 80 pages!

Since the last issue of the magazine there have been a number of interesting new things, among which the appearance of the 75827 Ghostbusters Firehouse Headquarters, the new modular 10251 Brick Bank, or the 21304 Doctor Who stand out, all of which are reviewed in this issue. We have also seen announcements for new sets and themes in 2016, among which the Nexo Knights stand out, as well as the announcement of a new Angry Birds theme. The Star Wars theme also includes new sets from the latest movie, "Episode VII: The Force Awakens", and the video game Star Wars Battlefront.

In this new issue of the magazine you can also find a fantastic article about the latest book by the Arvo brothers, articles on Stop-Motion and building trees, as well as the usual tutorials, great builders, interviews, events and the comic strip "Desmontados". This issue also sees the start of a new section called "TopMoc", dedicated to showing a selection of MOCs in a specific theme.

Finally, but no less important, we include an article by one of our regular collaborators who helps translate and correct articles in English in an effort to give you an idea of who the people who make this magazine possible are.

Without further ado, we wish you happy reading! #





# **ALIEN: Building a book**

#### By The arvo Brothers

We feel it is almost inevitable to start this new episode retaking the text of our first article, written already 8 years ago in the inaugural issue of this magazine. Reading those lines anew, it is amazing to discover how our creative cycle appears to repeat every 10 years... picking up forgotten dreams and fantasising with reproducing them at a larger scale.

Building them in more detail, more faithful to the original, with better techniques; hanging on to second chances, trying to reach our own ceiling and taking our self-demandingness to new levels.

All of this, which appears to be our sickly fixation - and it is - that is destined to never be fulfilled is favoured and "promoted" by the appearance of new constructions and builders, the appearance of new parts and techniques that offer an infinity of possibilities ... in short, the renovation of our inspiration!

So... Are we guilty of being this way? NO!!!... of course not...

... YOU are!:D:D

The objective of this new article is to show you the process of redesigning and building one of our fetish models, as well as the references, ideas and motivation for taking it up again after all this time. A new episode... with a happy ending!;)

#### ALIEN v2.0

As we were saying, it really drew our attention in this "revision" of Alien - apparently subconsciously - right after having done the same with the Kaneda bike ... following a similar order as 8 years ago... as if those two constructions are in some way connected...

... curious and perturbing :D:D

Any revision is easier to carry out if you start from a reference in which the defects have been clearly exposed by the passing of time, making them easily identifiable to the observer.

That is what in our opinion has happened to our previous model - Alien Sculpture 2007 - and without a



doubt this has been a great help when facing the design of our new build. From the moment we discovered the work of the genius H.R. Giger we haven't stopped enjoying his work. Whether in films or illustrated books, we always discover new elements that end up giving meaning to his work while, at the same time, decomposing it to make way for the next. His work is infinite. As inspiring as frustrating as it is impossible. But it is exactly this combination which impels us to try each time with more desire.

What did we want to improve? Everything. The position, the proportions, the design of some specific parts... the perception. Everything.

Looking back, we realise years go by and even though we have worked professionally as LEGO designers for TT Games, where we were instructed in the "liturgy" of design, our way of facing projects has changed little. However, there has been a substantial change that has little by little marked the difference with regard to our earlier constructions: we design less and less based on intuition.

Is that good or bad? We still don't know, but it turns out to be a lot less complicated. We believe we're taking a less artistic approach, but there's more craft... Is that good or bad? Actually, it matters very little. Armed with some reference images and trying to bring out the best in ourselves we fired up our computers, opened the Cheetos and got to work.

As always, we started with the most characteristic element, the one that would indicate the level of accuracy we would be able to reach. In this case, the **head**.

Our objective at this stage is clear: obtaining a profile that is as accurate as possible; dispensing with some of the sidesteps we were forced to use in our first version, basically because of lack of skill. And because we still didn't understand that a "literal translation" into LEGO® parts is not often achievable.

The definition of the size is imposed by "measure". From the first moment we had the firm desire to capture our adventure in another book of identical characteristics as "the book about the bike", so the size and the number of parts had to be as limited as possible while still allowing for a solid and sophisticated design.

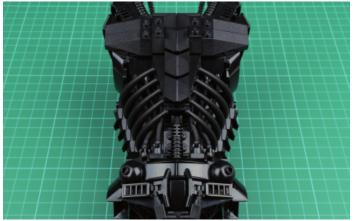


Despite the size we found ways to introduce the main elements; tubes, interior and exterior mandibles, teeth and slimy stuff.

The head opened the way for the rest of the body and once the proportions of the model were determined we used an articulated "skeleton" to build on and complete the figure.

Despite being very careful, it became necessary to choose a posture that was as stable as possible and some "friendly" but firm joints. We did many tests, but finally the Technic/Rotation Joint Socket parts were chosen to solve the critical points.

We wanted to get a "clean" model, with as few "accidents" as possible, putting emphasis on the gesture and general look and presence, but without giving up on the characteristic details of the original design. For the extremities we used textures, but the trunk was where we could really into it - that is where we included the best part of this kind of detailing.



Horns, hoses, curved slopes and minifig accessories make up part of the front of the torso, sharing space with more classical building styles.





It was really tempting to design a disproportionately long tail, curling around the figure in a show of aggressiveness and dynamism. However stability won over aesthetics.

Designing a standing figure required using every possible help to balance and anchor its position. The tail was designed with that idea in mind; as a stabilising element, but without forgetting its purely cosmetic function.



We built the base to fix the position of the feet and give the model a solid and stable support. It was not at all easy to choose a design.

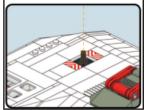
The possibilities were immense, but the idea of somehow rescuing the aesthetics of the NOSTROMO started to take shape as the project advanced. If H.R. Giger dazzles for what dazzles, Ron Cobb does so for what he does. His designs are brilliant, unique, exact, balanced... genius.

We chose a base that reproduced the geometry of the doors that can be seen in the halls, rooms chambers etc. We chose white for obvious reasons. We added some details to underline the mechanical character and allowed two short axles to protrude that would "capture" the figure.



The sole of the foot includes the necessary parts (Technic bricks 2x1) to guarantee a perfect encounter between the figure and the base.





The result is very stable. All the elements - head, trunk and arms - can take different positions and are balanced between them. Unless you cat's name is "Jonesy" they will stay perfectly positioned.

1992 is the total number of parts that are necessary to build the complete model, figure and base. We have tried to adjust this number as much as possible, "lightening" where possible or grouping where space allowed.



#### **BOOK v2.0**

Making a book that details the design and construction process of a model, with graphical outlines, diagrams of colours, text and pictures... is in itself a romantic idea. The desire to reflect the experience, to conserve it and make it available to others is, in itself, also romantic.

In practice it requires a lot of willpower, order, effort and sacrifice that are - at all levels - enormous. Even so, it is worth it!

We have always believed that paper is the ideal carrier for the preservation of an idea, an experience, a feeling. It may seem pretentious and very probably our "adventure" does not merit this treatment... but we needed to do it. It must be our age;);)

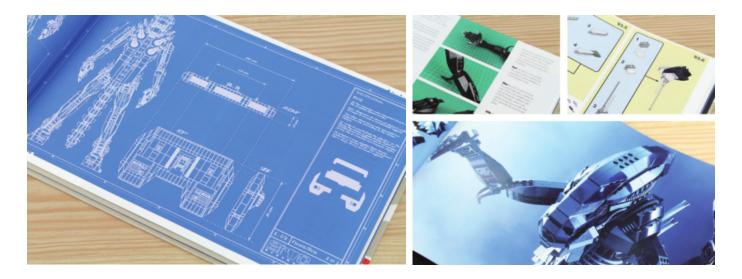




The structure of the book is really simple. The instructions present the central nucleus and they are surrounded by a series of chapters that show, describe, explain and justify some of the most characteristic phases or techniques

From a descriptive point of view the main views of the model are shown - with some annotations that are of interest, both of the figure and the base - and even a diagram of the evolution of the model, as well as an analysis of the parts used, a detailed description of the elements of the model and a picture gallery ... and of course a list of parts.

We believe we have included everything necessary to make the whole process perfectly comprehensible and to allow you to build the model comfortably and without any trouble.



Just like we do when we build, we have cared for every detail of the book. Its format and finishing, the margins on each of its pages, the colour combinations, the distribution and combination of texts and images on a page spread and even the weight - a real headache - are some of the details that have required much attention.

The choice of font or the "motives" that appear on some of the pages was designed to respect, with more or less success, the aesthetics of the universe created by Ron Cobb and the 70s/80s atmosphere that for generational reasons attracts us so much.



The colours we used in some areas of the book recreate the "cold" ambience, spiced with some of the motives of the schematic type that add a certain aseptic character to the "scene".

Although the idea gestated a long time ago, materialising the project has taken us nearly two years. Working on it every day. We could say 70% of the time was taken up by the design/construction model - figure and base - and the remaining 30% putting together the book.



Although we distinguish "plastic" from "cellulose", the phases of design/construction of the model and composition of the book shared space, almost from the very beginning of the project.

After all, a large part of the text comes from the almost annotations that described the incidences that are worth mentioning.

What has required more concentration?... we would know, but the layout phase required a lot of attention. Any change could affect various pages at the same time - more or less consecutive - with the subsequent danger of omissions or mistakes. Something almost inevitable when you manage so much information, even if you test it on a daily basis.

We are really exhausted and the same time very happy to have managed to bring this new project to light. A project that started as a simple conversation without more pretension than to pass the time and that has turned into a project we are really proud of. A small feat that, achieved together with a brother, becomes especially valuable.

Tired but content ... and above all profoundly thankful to all those who cheered us on and supported us on a daily basis. Without their encouragement there is no magic.

For all of you.

#



# **Animation, stopmotion y LEGO®**

#### By Pablo Llorens

Lately we find that in the world of LEGO®, more and more animations and creations are being made by employing the technique of stop motion. To learn a little bit more about this ever growing world, we have interviewed Pablo Llorens, a specialist in the area.

**HispaBrick Magazine:** Tell us a little bit about yourself and stop motion.

Pablo Llorens: I've spent my whole life working with stop motion, a technique that simulates movement and emotions in real life objects. Generally it is done using puppets created specifically for animation, built with various materials, the most popular being our old friend clay. I have carried out all kinds of responsibilities (in 2001 I directed was director of animation for "Los Garcia", ananimation for an information campaign that explained the change from Peseta to Euros with ) and I have created my own short films, some of which have earned me recognition in the Goya awards, like "Caracol ,col col" in 1995 and "El enigma del chico croqueta" in 2005. You can see both of them, as well as most of my other work in my YouTube channel™ "PLASTIANIMATION" to which I have recently uploaded a specific LEGO animation channel for children called "PLASTILEGO" and its English language version LEGO,CLAY AND FUN!

HBM: Why did you decide to use LEGO in your stop motion?

**PL:** During the last few years I have primarily worked for the MEGABLOK company, animating, directing, and producing animated shorts for their products (especially within the Halo line with series like "Assault on squad 45" and "thrill squad") because of that, I discovered and got up to speed on the world of brick films. I accumulated a lot experience and knowledge, specifically with giving life to these small figures. This, together with the me wanting to explore creating my own online content, brought me to want to create my own LEGO channel.

Having such a large variety of LEGO figures, vehicles, and customizable settings at my disposal has given me a certain freedom that would be unimaginable within the traditional world of claymation. Within said world I build everything from scratch, which as you can imagine is a huge consumption of time and effort. All the designing, modeling, sculpting, creation of costumes, scenery, and miniature objects that would normally have to be done can be skipped when using LEGO, something which saves me a lot of time.

Furthermore, the quality and accuracy with which Lego manufactures its products makes them ideal for stop-motion, all of the joints have the necessary friction and all the elements also have perfect stability.

**HBM:** Beyond it being a tool for you to create stop motion videos, have you gotten involved in the world of LEGO building?













**PL:** No, I'm neither a collector nor a builder unless the end result will have a part to play in a video. Even if I play around building quirky characters or vehicles, it's so that they may have a role later on. The less official LEGO they look the better. That's the great thing about LEGO, its pieces are so versatile that you can build things that not even the original designer would have imagined.

I love the world of LEGO as a tool to make videos, but I don't see myself building sets by following the instructions, dedicating time to obtain something that has already been thought up by a designer and that many people will go on to create, which is not original and unique. It doesn't motivate me much, unless they are required for a specific video.

Let's say I use LEGO for my videos because of its characteristics and popularity among fans, but I'm not a purist. In fact my creative philosophy is to mix elements, in the same way that my childhood toys all lived together in the same drawer, coming from the same world (ignoring trademarks), and interacting in games with my brothers (LEGO, Playmobil, Madelman, or any soft toy could be friends without any problem).

I basically give life to Minifigures and clay elements, plus whatever else I can think of, looking to differentiate myself from other styles already used in Brickfilms. Given that YouTube is full of animations faithful to the plot and assembly of each LEGO reference, especially franchise based (LOTR<sup>TM</sup>, Star Wars<sup>TM</sup>, Marvel<sup>TM</sup>, etc..), I try to set myself apart from all that and offer something original. I find it more fun to transform and personalize the LEGO product, adapting it to the story I want to tell, in a free and creative way.

And so far my work has been well received among several brickfilmers, including: Fancy Pants, Brotherhood Workshop, and Titan Pictures.

**HBM:** What differences are there between working with LEGO and working with clay?

**PL:** One of the main differences is that clay is soft and delicate, easy to get dirty, can crack, but at the same time is alive and tremendously expressive. LEGO, on the other hand, is clean, stable, reliable, but not as organic...something that makes it a challenge when trying to bring it to life using animation and sound.













However, as a shortcut to making movies without spending hours or having a large budget, LEGO is a perfect tool. The limitation of the minifigures' articulation is evident, as they have no joints in their knees, elbows, or waist, but it is these limitations which allow you to animate easily and quickly; not to mention the size, which lets you create your studio shoot on a small table, and its weight as well, which tremendously facilitates actions such as flying or jumping.









**HBM:** In the process of shooting, what are some of the biggest challenges you face?

**PL:** Honestly for me, coming from the complex world of clay, most issues I face are easy.

But if there's one particularly difficult area, it's facial expression. It's very common to see brickfilms where the characters are either angry or scared, but they still have a smile on their face. Although there are many reversible heads available, there is not enough of a variety to apply to the particular desired facial expression.

There is always the option to animate the faces in post production using video digital tools, but for me it's too much work. I won't rule out the potential collaboration with a digital artist, but for now I choose to fix it via my artesian solution, this involves drawing on my own expression using a fine point pen, fighting to make it so the original expression can't be seen. I believe you can get blank LEGO® heads, but I've yet to find them at a cheaper price in the quantity that I need.

**HBM:** What advice would you give to someone who wanted to get started in making their own LEGO stopmotion?

**PL:** First, that they should have clear that animation, as easy as it may be or seem, requires that you be disciplined, calm, concentrated, and dedicated. You are going to spend a lot of time enclosed with your minifigures.

You should also have a stable work area that you can call your own, somewhere children, mother, and pets are not allowed.

There are few necessities, a small table where you won't be bothered, un par de flexos, a camera (phone, lpad, Nintendo DS), and a computer with capture software. The software can range from the free ones available online to the more professional and more expensive ones like Dragon Frame or Stopmotion Pro.

Later, you have to study. On youtube there are many tutorials and a lot of information to get you started. In fact the majority of LEGO animators include their own tutorial on their channel. There has even been a book published on the topic by Sarah Herman called BRICK FILMS which is ideal for those getting started (book is only available in English).

In addition, I feel it is a great system to practice audiovisual skills: narrating, edition, photography, sounds, voices... in an inexpensive and accessible way that allows you get an education in the the world of audiovisuals.

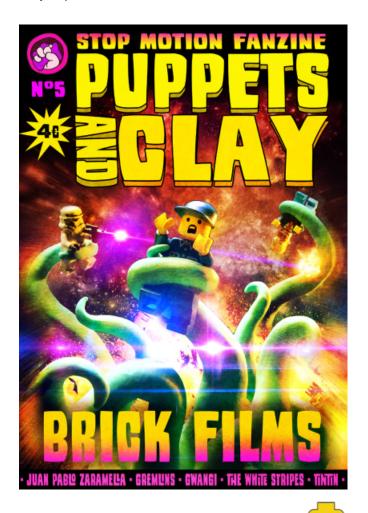
**HBM:** What do you make of all the LEGO movies on YouTube?

**PL:** YouTube has become a perfect place for Brickfilmers to show off their latest work, so much so that you can almost consider Brickfilms a genre in and of itself, similar to gamers and vloggers.

On Youtube videos are premiered, tutorials shared, festivals are celebrated, it's a very active community with superstars like "MICHAELHICKOXFilms" who makes ingenious videos for kids, set in a pizza restaurants or mini golf courses, or "forrestfire101" who represents the ultimate superspectacle for teenagers, full of super heroes, special effects and, occasionally, a lot of blood. In Spain the police videos "HarryAndBillyBrick" are a good example; perfectly narrated, photographed and animated, with an elegant adult feel.

There are also many Facebook groups and online communities like "Bricks in Motion" that upload their work and provide feedback to each other:)

I've been studying the brickfilm world for some time, and recently I've written an extensive article about its history and technique, collaborating in the specialised Stop Motion fanzine "Puppets & Clay" published by Adrian Encinas. You could say I'm an expert on the subject:)



**HBM:** Around what age do you think the majority of brick film viewers are?

**PL:** Well, that's an unsolved mystery. The majority of videos that populate YouTube are aimed at teens, but there are a few cases of videos aimed at a younger audience that equally have great success. Ever since I became familiar with your publication I have realized that there is a sector of adult fans that look at LEGO® from an almost scientific or artistic point of view, so it is clear there are different sensitivities regarding LEGO.

**HBM:** What would a fan be able to find on your YouTube channels?

PL: On PLASTILEGO or LEGO, CLAY AND FUN! everything revolves around Melvyn, a blue minifig (I believe he was a postman) that was forgotten in my box of memories. With him I try to put myself into the heads of young children and see how they think when playing and developing stories, stories where logic and consistency don't matter so long as the result is funny and hilarious. For example, in the episode MONSTER, Melvyn and his girlfriend Priscilla find themselves with a ball of green clay, which is friendly at first, but it becomes a monstrous evil Cyclops and finally after pursuing them, it is crushed with a giant hammer and the plastic debris becomes ... a kitten!

My intention is that every video is surprising and unexpected so some are recorded in studio on a neutral background with Lego elements like a "LEGO tree" or "LEGO Monster", some on the floor of a room like "LEGO PLASTI SKATE" or even others outdoors like "LEGO JUNGLE ADVENTURE".

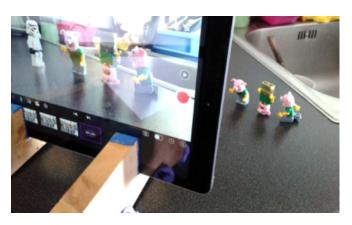
In addition to LEGO videos for kids, I'm also interested in making LEGO videos for teens and adults. Already on my adult channel (PLASTIANIMATION) there is a short called "PSYCHO TROOPER". In it we learn about an evil Stormtrooper who is dedicated to indiscriminately massacring various characters, mixing different licenses in a "tarantino like" environment, a style I like and one with which I have big plans for.

**HBM:** What kind of equipment do you use?

**PL:** PSYCHO TROOPER was shot using an iPhone with the "Stop Motion Studio" application. That is what I usually use when I shoot in,let's say "hostile" environments, or those outside of the controlled studio environment.

In the studio I use a Canon camera connected to a laptop equipped with a capture software, as well as professional lighting.

Using the iPad, I'm given the opportunity to shoot in any place and situation, so if I'm on vacation, I can take advantage of the places I go by creating a new improvised animation, giving it a very unusual setting. Because of that, I always I carry a few minifigures and a piece of clay in my suitcase pocket, ready to act.



**HBM:** How many people work on your animations?

**PL:** As of right now it's an experiment, getting the feel of what can be done in this environment, so I'm basically doing this solo. Occasionally I collaborate for an episode's digital postproduction, when my knowledge can be a little lacking.

**HBM:** What plans do you have for the future of your channels?

**PL:** Well, that is something that will depend on the time I have left after my professional animation, but my idea is to create new videos for both children and adults, study which has a greater public acceptance and go from there adapting to this acceptance, and testing different styles.

I have lots of ideas for both PLASTILEGO horror themes or adult humor for Plastianimation that I hope to carry out soon.

#



PLASTILEGO:

# **Building clocks using LEGO® Technic**

By Oton Ribic (ribic.oton@gmail.com, www.kockice.hr)

It may seem almost impossible at first glance, but building working clocks and even calendars using Technic parts is not too difficult. It is well within reach of most builders that have a couple of Technic sets and are ready to perhaps buy a few additional parts. If you are interested, in this article we will provide some useful hints for becoming a LEGO® clockmaker.

Most important and critical three components of a clock are the timing mechanism which provides initial rotation, the mechanism which converts rotation speeds as necessary, and the hand mechanism which rotates the hands. Let us focus on them one by one. (Actually, the hand mechanism may even be ignored if you are content to build a clock with multiple faces).

#### **Initial timing**

The initial timing mechanism is actually the most difficult to implement, because our clock — and actually, any mechanical clock in general — relies on it providing a very accurate and stable rotation speed. While rotation poses no problem, stability and accuracy does. Although seemingly always rotating at the same speed, standard Power Functions and other LEGO motors actually noticeably vary their speed. Not only are there slight differences between identical models due to manufacturing tolerances, but also the individual motor speed changes unpredictably as its internal gearbox wears down and increases friction in the long term, while the electric parts heat up and the batteries' power drops in the short term.

You should therefore be aware that a clock relying on standard LEGO motors will probably not be perfectly accurate, nor consistent in its offset. However, if used for demonstration, even adjusting it very roughly (e.g., if its "minute" lasts at least between 50 and 70 seconds, which is easily done) should suffice for a nice effect for the audience.

However, there is still a pure solution for a perfectly accurate clock, indeed useful for measuring real time: Mindstorms™. Regardless of the version you are using, it is fairly simple to make its motor turn a given angle every specific number of seconds. It is far more expensive than just improvising with a standard motor, but it guarantees an accurate clock.

Somewhat pricey, but the only option if you intend to build a really accurate LEGO® clock is to employ some generation of Mindstorms.



#### Gearing down

El In the next stage, then, it is required to convert the known input rotation speed to speeds needed in a clock: the hand indicating seconds turns once every minute, the minute hand once an hour, and the hour hand once every 12 hours. Fortunately, this can be easily done using standard, easily accessible gears. The best approach is to use the second-indicating hand as a reference, and gear it down further by required ratios.

To reduce the rotation speed sixtyfold, which is needed to obtain the speed of the minute hand, two pairs of gears are needed. In one, a reduction of one third is needed which can be done by meshing 8T and 12T, or 16T and 24T, or 24T and 36T gears. In the other, another forty times are reduced by driving a 40T gear with a worm gear. Combining these gear pairs, i.e. multiplying forty by two thirds, yields the required gearing down sixtyfold. Gearing down further from the minute hand to the hour hand is easier: a worm gear can directly drive a 12T gear, or a 24T gear if you prefer to build a full 24-hour clock.

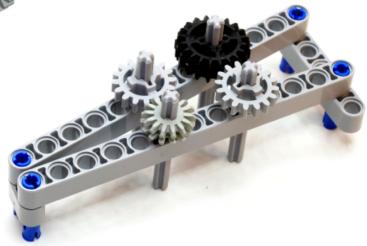
If you want to go a step further and build a calendar as well, it is doable though it requires a rarer gear. To convert hour hand into the hand indicating days of the week, a fourteenfold reduction is required (or sevenfold if using a 24-hour clock). This asks for a slightly older 14T gear (part no.4143), discontinued in 2002 but still easily available through BrickLink, which needs to be meshed with a worm gear, and combined with additional double reduction if needed, which is rather simple (8T-16T, or 12T-24T, or 20T-40T gears). A sixtyfold reduction, needed to indicate the day of the month, relies on the gears used to convert a second hand speed to the minute hand (and halved if required).

If you are familiar with gearboxes, you have certainly noticed that the mentioned gear pairs are mostly not directly meshable using the standard stud-wide lengths and beams. There are multiple methods to mesh them anyway, and this is where some ingenuity is called for. You do not need to over-engineer these mechanisms, because they handle almost negligible torques and forces.



An example of gearing down: using a standard new PF Medium motor, this gearing makes the final 40T gear make approximately one turn per minute, i.e. it serves as a second-indicating clock hand.

Using triangular and skewed structures allows meshing gears that are not possible to mesh directly when connected to a single beam.



Of course, if you are not using a Mindstorms motor adjusted to turn once every minute, there is one more speed reduction to do: from the motor axis down to the second-indicating hand, making a full circle every sixty seconds. As said before, you may need to measure the speed of your specific motor and develop its custom gearbox, though the following table, calculated for the rotation speeds of most common motors, may be a useful starting point:

Motor type	Typical rotation speed	Combination of gear pairs yielding one turn every minute
PF Medium	405 RPM	16T-36T > 8T-36T > Worm-40T
PF Large	390 RPM	14T-16T > 12T-16T > Worm-16T > Worm-16T (Actually 1:390.1)
PF XL	220 RPM	14T-12T > 8T-20T > 14T-36T > Worm-40T (Actually 1:220.4)
2838	4100 RPM	Worm-16T > Worm-16T > Worm-16T (Actually 1:4096)

As you can see, be prepared to build lots of bulky gearboxes, but it is worth the effort!

#### **Coaxial hand movement**

The third important stage of a clock is the mechanism allowing the second, minute and hour hands to turn along a common axis, just like on any typical clock. Since there are not too many options, most LEGO clocks employ the idea of an axle, inside a gear changer ring connected to the gearbox gears on both sides, all inside a turntable, or something very similar. This setup allows turning each hand individually via the mechanisms behind, yet all from the same central axis.

Keep in mind that the turntable's outer gear has 56 teeth, and if you intend to drive it with an 8T gear, you will actually need to gear down the minute hand by 7/12 (12 hours x 56 teeth / 8 teeth), which can be obtained by meshing a 14T gear with a 24T gear.

The axle and the turntable are easy to attach the hands to, but the gear changer in the middle may be a little tricky. It is best to connect it to 16T gear (part 6542) and let it rotate a thin plate with toothed ends (part 4262 or similar), or an old-style axle connector (part 4273).

Visual design of the clock and its housing is, of course, another matter — and depends only on your taste. As you see, lots of engineering and diligence is required for a good LEGO clock, but on the other hand, it is a very interesting mechanism to build, and just as fascinating to watch.

Combining a turntable, a gearbox dogring with toothed gears and a standard axle, it is possible to build three coaxial clock hands, all controlled independently from behind.

# **Building trees (X)**

#### By A. Bellón (Legotron)

#### More trees, please...

Over the years I have built many different trees. The designs could be roughly split up in two categories: those I use for pictures and those I use for exhibitions.

The first kind tend to be unique constructions, of a higher complexity and generally of a larger size. The second type are made to be built in large numbers, are simpler, more resilient and above all designed to withstand the conditions of the trips to exhibitions.

After the last issue I received a lot of requests for information about one of the trees that appeared on the same page as the editorial so I decided to write this short tutorial on how to build that particular tree.

This design belongs to the second category of trees I mentioned earlier. It has a very simple backstory. I needed a tree that was larger than the ones used to bring along for displays, so that it would not appear too small when placed next to constructions like houses or castles. In addition I needed it to be strong enough to be able to transport it without suffering too much damage on the trips, as it takes quite some time to repair the trees each time.

Experience has shown that the biggest issues with trees are the fragility of the trunk and leaves falling off. The issue with the trunks is easily solved using a Rigid 3mm D Hose. inside the trunk, but the issue with the leaves is harder to solve. Since these are flexible parts, the connection with other pieces is less strong than is the case with rigid pieces, and building such leafy trees tended to yield unstable structures. Some solutions meant inserting the leaves in the tree trunk (connected to the bricks or even the rigid 3mm D hose.), but this limited the construction and the number of leaves I could use. However, in 2012 an interesting new element appeared, the Plate Round 2x2 with Pin Hole and 4 Arms Up, which opened up an opportunity to build better trees.

However, in 2012 an interesting new element appeared, the Plate Round 2x2 with Pin Hole and 4



Arms Up, which opened up an opportunity to build better trees.



Plate Round 2 x 2 with Pin Hole and 4 Arms Up.

This element provides 4 connection points that can firmly sustain the leaves, allowing you to connect up to two leaves on each arm without them coming off easily. This means up to 8 leaves per part can be connected. In addition the part allows a Hose Rigid 3mm D. to pass through its centre so the trunk doesn't lose any of its stability. Combining this piece with a brick round 2x2 and a plate round 2x2 provides the perfect starting point for a tree trunk section with leaves attached at intervals that don't make it look too empty.



Parts combination to make the trunk.

This simple combination can be used to build trees of different heights, adding more or less combinations of these three pieces, depending on the height you wish to obtain.

One of the most important rules to avoid leaves falling when you use rows of multiple leaves connected to the

same arm is to connect consecutive leaves to two points. The visual effect of using more trees is better than making them more leafy.

Since the arms of the new piece allow you to strongly fit the leaves, I have attached Plant Leaves 6x5 and Plant Leaves 4x3 together at each level, creating different lengths of leaves, and I have connected them with Plant Leaves 4x3, which are always connected by two points, giving them more stability.

Since the arms on the Plate Round 2x2 with Pin Hole and 4 Arms Up allow you to turn the leaves easily it is always possible to find a way to connect the leaves. In this way, each segment of the tree has 4 leaves connected to the trunk and a variable number of leaves that interconnect the first 4 leaves by two connection points each. Adding more leaves with a double connection on or under the first 4 allows you to make the tree look more leafy.

The height of the trees can vary, depending on the length of the Hose Rigid 3mm D used. You only need to add brick round 2x2 for the bottom of the tree trunk and the number of combinations of a Plate Round 2x2 with Pin Hole and 4 Arms Up, a brick round 2x2 and a plate round 2x2 that you need to get the desired height.

At the top of the tree the leaves can be connected directly to the Hose together with a brick round 1x1 or cone 1x1, to give it a narrower look at the end

Finally there is the base which in my case also serves to put a marker on the tree to identify the owner so they can be used together with other builder's trees and still easily separated out afterwards.

#### Pieces used

The list of necessary elements is quite simple and can be varied in many ways, so this is a mere approximation of the parts you will use for your own trees. As in previous articles, names are based on those used on the Bricklink website[1]:

#### For the trunk:

- A Hose rigid de longitud mayor a 16L de cualquier color.
- A variable number of brick round 2x2 reddish brown for the bottom part.
- A variable number of combinations of Plate Round 2x2 with Pin Hole and 4 Arms Up, brick round 2x2 and plate round 2x2 reddish brown.
- 1 brick round 1x1 reddish brown and 1 cone 1x1 green for the top.

#### For the base:

- 1 plate 6x6 green and 1 plate round or cheese slope with the identifying colour.

#### For the leaves:

- A variable number of Plant Leaves 6x5 and Plant Leaves 4x3 of the colours you choose.

#

[1] Bricklink: http://www.bricklink.com



### **LEGO®** Retail

#### **By Cody Rodrigues**



Almost every child that has played with LEGO® bricks at one point or another has said that he or she wants to work for the company. Probably not with those exact words, but usually they want to work in the form of a master builder or set designer. I was one of those children.

Although I played with other toys, there was something about building with LEGO bricks that set itself apart from the other toys in my collection. My addiction (for lack of a better word) really took off around ten years old when I inherited my two older brothers' collections. From that point on everyone in my family knew me as the LEGO guy and knew exactly what to get me for my birthday and Christmas. Usually kids put away their LEGO sets around 12 or 13 years old (the dark

ages), but I'm fortunate enough to say I never experienced one. I kept right on building through high school, and although I wasn't part of the AFOL community at the time, I knew of its existence which made building at the age of 15 or 16 a little easier.

Around 16 years old, maybe a little earlier, I fell into and was diagnosed with depression. It was a really tough time in my life and I remember not having the motivation to do anything. The worst of it lasted for maybe 3 years but during that time I remember I still had the desire to build with LEGO bricks.

By that time my collection was large enough to build my own city and that's what I did. As silly as it sounds, my enormous quantity of LEGO bricks presented me with the opportunity to build a world that was better than the one I found myself in at the time. It was and continues to be a form of therapy for me and really helped me to get through the roughest years of the depression.

It's for that reason combined with the company's values and culture that I decided shortly upon entering college that I wanted to work for the company. I used to say it as a kid, but we all did. As a kid saying that, it holds little weight, but when I decided, both my family and I knew that I was serious about it. I ended up majoring in Spanish and business management with the hopes of working with either HR or in some capacity in a Spanish or Portuguese speaking country.

I currently have one year left in college and can admit that I am extremely nervous about what is to come. Most people when deciding on their major decide on a particular career, I however am deciding on a particular company which makes it all the more nerve wracking. Despite those nerves from time to time, I still have faith and work hard so that I one day find myself working for The LEGO® Group.

With that all said, I got to thinking early on in college what I could do to better my chances with working for the LEGO® Group. I'm fortunate to have been born and raised in Connecticut given that it is here where the LEGO® Group's North American headquarters is

located. I figured one of the best things I could do was do work in a LEGO® store, but upon entering college (2013) there weren't any LEGO stores in the state. However in March of 2014 a LEGO store opened up in the Danbury fair mall. Danbury is a quick twenty minute drive from my house, but it's an hour drive from my school so that wouldn't work. I got lucky a few months later when they opened the LEGO store at Westfarms Mall located in West Hartford.

While it's a 40 min drive from my house, it's only 5 minutes from school. I applied during the last quarter of 2014 and got the job.



Being an AFOL certainly wasn't the reason I got the job, but it helped that I was already knowledgeable about the company's history and product.

Coming on around the holiday time was good because it got me quickly acclimated to the job responsibilities and working retail in general. I'll say this though, it took me a little while to come down from the initial excitement and awe of working in a LEGO store.

Don't get me wrong it is still amazing, but it was hard to believe that this is where I worked for the first few weeks. It goes without saying, but, within those first few weeks and in all honesty ever since getting the job, my LEGO collection has grown quite a bit.

The responsibilities of the job are similar to any other retail job: Provide an enjoyable retail experience for the guests, assist the guests, restock, etc. Although it may seem like a normal retail position, it's more than that for me because I get to go to work after classes and be somewhere where I really care about the company and product, and I hope that shows.

The best part of my job is getting to meet people who are fans like myself. It's one thing to meet other AFOLS like myself but to meet kids and teenagers who are just as passionate about the LEGO brand as I was is the best because you see a little part of yourself in them.

Of course my thoughts on the company have changed since starting to work there. I can only speak for myself here but as an AFOL I was aware of the company, its values, and it's reasoning behind certain things but I didn't put too much thought in it beyond that. Now that I'm both an AFOL and an employee I see things differently.

I'm obviously invested in it more in the sense that it's my job, but on another level I'm more invested in the company because I want to see its continued success.

Working there has helped me to gain a deeper appreciation for the company in a way I might not have as just an AFOL.

One of the reasons is that now I'm exposed to the things that we do on a daily basis and I see that we give a lot back, and it really makes me proud to work for the LEGO® brand.

Another area that has changed is as a fan I might have been quick to jump on the bandwagon and criticize the LEGO® company for certain things, for example: Selling out of product, limited quantities on a certain product, and other consumer (or shopper)-related concerns, etc... But now as an employee I see things in a different way because I've been better shown all the different operations that go into making the product and getting it to the customer.

Overall the change in how I look at the company is positive, there are obviously things that I think we can do better on all levels, but that's part of the growing success, constantly pushing to improve while staying true to our beliefs and really proving that only the best is good enough.

This past November I celebrated my 1 year anniversary working for the company and I'm looking forward to many more.

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# **LEGOLAND® Discovery Center Osaka**

#### By Iluisgib Pictures by Delia Balsells

The opening of a new LEGOLAND® Discovery Center is always an excellent opportunity to see new displays related to the city in which it is built. Given that the LEGOLAND® Discovery Center Osaka had opened just a few months ago, I decided to pay a visit (with permission of Delia). As per usual, adults are not allowed to visit a LDC without a child present, so I sent a press request to visit the center in August.

When we arrived to LDC Osaka, we met with Kae Mori who had been waiting for us. After the introductions, we quickly started the visit. Kae explained to us that LEGOLAND Discovery Center Osaka opened on April, 23rd, 2015 to "make children have a special experience with LEGO attractions and bricks". Kae went on to explain that visitors will find "lots of bricks, exciting attractions and LEGO models of landmarks from Osaka".



We began with an interactive display that showed how LEGO® bricks are produced, of course, it was presented in Japanese. Although I didn't understand, I tried my hand at playing some of the suggested games (with terrible results might I add). After this brief introduction, we were given a LEGOLAND® Discovery Center commemorative DUPLO brick and entered into the main hall.

This LDC is slightly smaller in size than the Tokyo one. It has only one main ride (LDC Tokyo has two), a 4D cinema, and playgrounds each with a different theme. There is also a room for workshops and a design room for the Master Builder. In the middle of the main room, there is a restaurant with some meals and drinks. Finally, at the exit, there is a LEGO shop with LEGOLAND® exclusive items as well as two photo booths with exclusive patterns of LDC Osaka.



The ride is quite funny. You go into a car and, following a history set in Castle theme, you have to defeat all the bad guys, and you get points for doing so. The person in the car with the most points win. In this case, Delia won... I can't kill minifigures, even if they are bad guys: D. We also saw in the Cinema 4D a Chima film. It too was quite funny and we left the cinema wet, after rain and wind.

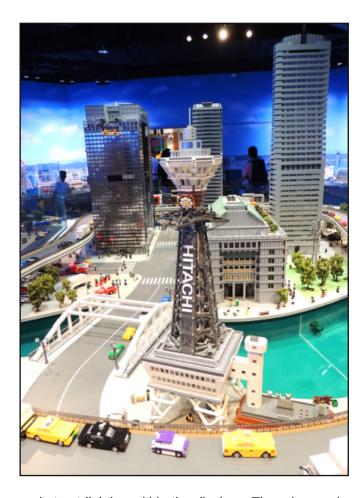
The most interesting part from an AFOL point of view is the MINILAND displays. It reproduces in LEGO form some of the beautiful landmarks that the city of Osaka has to offer. Every five minutes the diorama changes from day to night, allowing guests to see the interior











and street lighting within the displays. There is a main showcase in the center of the room, and some smaller ones on the sides, creating a corridor for guests to follow. The main buildings reproduced are Dotombori street, Tsutenkaku tower, Osaka Castle, Sumo dome, Umeda building, Kansai airport, and much more!

We also had the opportunity to meet again with Kanna Uno Nakayama. I met her 2 years ago during my first visit to Japan, and she currently works at the LDC Osaka as a Master Builder. She also conducts workshops there, but sadly, we didn't have enough time to attend one of them. Something to look forward to on our next visit:).

For child safety we were not allowed to take pictures inside the playgrounds. We were, however, allowed to take pictures of the MINILAND displays.
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Special thanks to: Kae Mori from LEGOLAND® Discovery Center for her kindness in planning and conducting our visit.

LEGOLAND® Discovery Center osaka: https://www.legolanddiscoverycenter.jp/osaka/en/



#### **Medieval Castles**

#### By HispaBrick Magazine®

In this issue we start a new section named **TopMoc**, in which we want to showcase some of the models we like best in a certain theme. The idea is to chose a different theme for each issue, scour the Internet for a small selection of constructions related to this theme that draw our attention, and publish them in our magazine.

It is not our intention to turn this section into any kind of ranking, nor to show the best builds that can be found on the Internet. We simply want to show a number of builds that we like especially. We will contact the authors to ask for their permission, and if they grant it we will publish a short text with their MOC and data. In addition to the fact that the construction must draw our attention we look for pictures that clearly show the complete construction.

That doesn't mean there won't be more complex or spectacular builds. During the brief period in which we have compiled this issue's **TopMoc** section, we have listed a good number of MOCS from which we have selected those we liked best and from that selection we have published those whose authors gave us permission and provided the necessary data. We have only been able to include the first responses as there is an obvious limitation in space, but note, we could fill a whole issue with all the great MOCs we have seen.

Each subsequent issue will contain a selection of a different theme that will only be announced that same issue.

In this first selection of TopMoc we have looked for a

theme we like, not just because of how spectacular and awesome some builds are, but also because of the size and setting the authors achieve. So **medieval** castles it is.

We have looked for pictures of complete castles, with walls, towers etc. We have not included constructions that represent partial elements or castles that are not medieval so our focus has been centred solely on complete medieval castles with some historical value, excluding those that include less realistic elements like flying castles, steam engines, magical elements or structures that would have been impossible in medieval times.

What has drawn our attention most in the chosen castles is the landscape surrounding the castle. In every case the author has not only done a splendid job with the details of the castle itself, in many cases large constructions. In addition they have taken care to include a beautiful landscape that highlights the beauty of the castle. It is also curious to see the different ways in which the walls and battlements have been built; while many are quite similar, the techniques used to build them in LEGO® are very diverse.

Another detail to look for is the work done on some of the castles to get shapes that are rounded or without straight angles, a detail that makes the construction a lot more complicated, but adds some extra realism and enhances the construction.

Without further ado, this is the selection of castles that was chosen by the HispaBrick Magazine team:

# Nordana Castle



https://www.flickr.com/photos/jonas\_wide/



https://www.flickr.com/photos/deviet/

# Belynia Village



https://www.flickr.com/photos/buurli\_burri/





https://www.flickr.com/photos/kris\_kelvin/

# Ebbegard Castle



https://flic.kr/s/aHsjPuM5Ax



https://www.flickr.com/photos/lukaszwiktorowicz/

# **Modular Integrated Landscaping System (VI)**

#### By A. Bellón (Legotron)

It has been a few years since we published the first article on MILS. Now that we have built several hundred modules that cover an area of over 10m2, it is time to add certain complements that make it look even better.



#### **Decorative trim**

One of the main problems when setting up displays is the variety of colours that can be seen on the sides of the MILS modules - on the one hand the identifiers and on the other hand the colours of the pieces used for the sides.

The visual effect is that of a veritable rainbow of colours that contrasts with the harmony of the terrain and the scenes of the display and, quite honestly, don't look very good, so we decided to build some elements to improve the overall look of the displays we build.

Since there are many different ways these frontal elements can be built and creating a standard would be tedious and complex, we simply decided on a common model we all could build to get a homogeneous look. So rather than setting a standard we will show you the model we have decided on for our displays and we hope it may serve as a guide for those who are building their displays with the MILS system.

The idea was to take a colour that stands out, but can be used for any kind of display, be it sand, grass or snow. So we decided on black. Each section is 16 studs long and high enough to cover the base of the modules. The sections need to connect to each other in a simple way and are placed in front of the modules without any kind of connection to the latter.

We chose the design you can see in image 1 and we have replicated it until we obtained the necessary number to cover the front of the displays. We have also built a special section that allows us to include the title of the display, but still follows the design of the other sections.

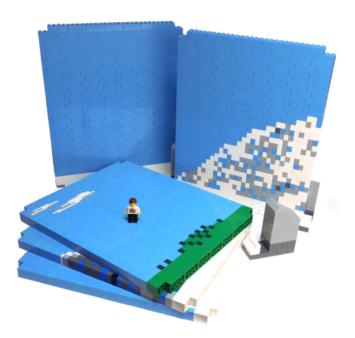


#### **Background panels**

Another complement we have built to improve our displays are background panels.

During the many exhibitions we have done with the MILS system, one of the recurring suggestions we received from visitors was that of creating some kind of background, which would also especially improve the quality of the pictures taken of those displays. In general, unless the display was placed against a wall, the backdrop of the scenes used to be us sitting or standing behind them, which did not particularly enhance the pictures taken ;-)

Although originally the idea was to make panels from cardboard or some similar material, in the end we decided to try to make a modular panel system, built with LEGO bricks, that would allow us to grow as the size of the displays increase. It would be interchangeable so it could be set up with a different configuration each time we set up a display.



Our starting point were 32 stud wide panels in which we used mosaic techniques to included some landscape details in such a way as to maintain modularity. Since 32 studs is also the width of a standard MILS module it would fit perfectly with any layout and in smaller layouts we could choose what background design to use. Making them 1 stud thick resulted in very fragile panels, especially towards the top. The panels were not heavy enough to stay up in the supports, so we decided to go for 2 stud thick panels.

The next issue was deciding their height. The first panels we built were 48 bricks tall, but they required a lot of material. An even more important consideration was the fact that it was hard to make the panels align at the top since often the tables on which the displays are built are not perfectly horizontal. Add to this the "sail effect" - panels swaying because of drafts - and it became clear the modules needed to be lower. We tried 40, 30, 32 bricks tall... after much trial and error, the height we were most satisfied with was 34, leaving the lower 3 as the limit for the horizon. Why 34 bricks high? Well, that was a perfect fit with the boxes we use for transporting them. An important consideration! And since they are LEGO elements the height can easily be adapted later on.

By carefully planning the mosaic details in each panel so they don't affect the panels next to it, panels become completely interchangeable and can even be placed facing either forwards or backwards, so you can create a different landscape for each exhibition without any effort. A dozen panels could result in many different combinations of landscapes.



Panels supports. Each panel is held by two suppoerts, one in each extreme. And each support is used by two adjacent panels.

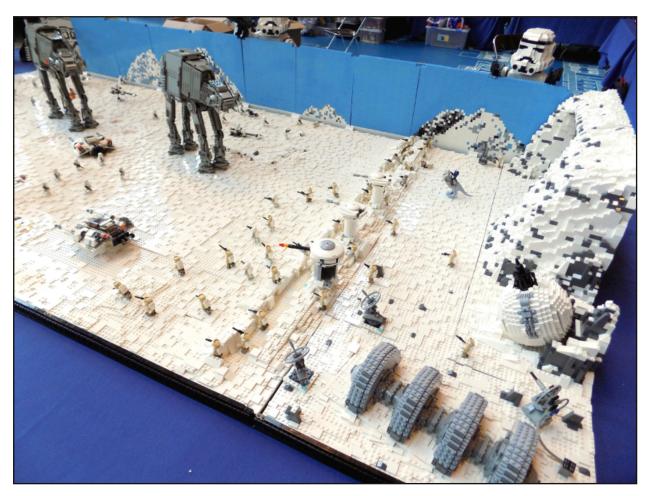
We chose the Hoth display to test our panels at the HispaBrick Magazine Event 2015 and the result was very good. Although the tables were very irregular, the panels stayed upright during the whole events.

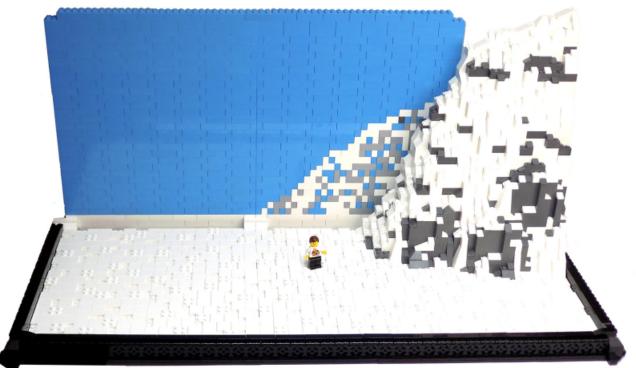
At the last minute we incorporated an additional row of modules in the display and so we were 1 panel short for the background. We simply took off the top two

rows of bricks from the existing modules and quickly built an additional panel. As soon as we get more blue bricks the panels will regain their original height of 34 bricks!

The result was satisfactory, and in time we hope to add more similar panels to the rest of our displays.

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# **Pillars of the community: LUGNET**

By HispaBrick Magazine®

In the beginning ... there was LUGNET. The AFOL world changes at an incredible place, but for the "oldies" (or the early arrivals), LUGNET was THE reference for all things LEGO®. So where did LUGNET come from, how did it change, and where is it now? HispaBrick Magazine talked to Todd Lehman and Suzanne Eaton, the founding parents of LUGNET to find out.



**HispaBrick Magazine:** What was the original goal of LUGNET and to what degree has that goal been fulfilled?

Todd & Suzanne: Quite a bit of the original goal was fulfilled, although not always as originally imagined. The original design plan for LUGNET was very wide in scope. As laid out in the project plan (November, 1997), the goal was to create and collect together a central repository of LEGO® information on the Web, to foster discussion among LEGO enthusiasts worldwide through theme-based, topic-base, and location-based discussion groups, and to promote and encourage the exchange of LEGO items in the physical world through barter and sale, using an integrated marketplace, and to nurture the formation of LEGO User Groups (LUGs) worldwide.

#### http://www.lugnet.com/admin/plan/

All of the above were fulfilled, to varying degrees: (1) The discussion group system was the biggest success, with thousands of active participants daily and an

overall sense that there is a center of the LEGO community where everyone is welcome. This was the case from 1998 through 2006 or so, and gradually trailed off after that. Peak activity on average was about 500 to 600 new postings per day, totaling half a million postings over the years. (2) The central repository of information (set database and related data) developed quickly, but did not keep pace with demands of the community, and consequently the LEGO® set database and parts databases fell behind. (3) The marketplace was achieved to a much lesser degree by way of discussion groups (sort of the oldfashioned 1990s way of buying and selling) rather than an automated agent-based system. BrickLink has done an amazing job of filling that gap. (4) Finally, the huge proliferation of LUGs was another success story we are proud to have been a part of. Many people we talk to today tell stories of their LUG being formed after finding people in their area through LUGNET.

**HBM:** How has LUGNET evolved over time?

T&S: LUGNET began life as a highly active website, a place where pretty much everyone congregated, sort of like a town hall or a park, or a town with many buildings and parks. Over time, as more specialized websites arose (1000Steine.de, ClassicSpace.com, FBTB, etc.) and other information and trading sources popped up (BrickLink.com, BrickSet.com, Peeron.com, and so forth) to fill more gaps, LUGNET remained active, but became more of a central meeting place rather than \_the\_ meeting place. Nowadays, LUGNET is sort of the old grandparent oracle who knows everything about the past but isn't much hip to the present. You can still post new messages there, and read old posts, and update your profile page and everything as before, but people don't much do that anymore.

**HBM:** How many people are working on the site and how did you meet? (You can do a presentation of the team here if you like).

T&S: We (Todd & Suzanne) met in 1996 via our LEGO webpages, and got to talking one day about how cool it would be if it were easier to find LEGO information online all in one easy-to-use spot, and so we decided to form LUGNET. Todd & Suzanne developed and ran the website from 1997 to 2008, with help from dozens of online contributors (database and discussion group curators) and occasionally with some system administration help from friends locally. Currently, no one is "working on" the website. It is up and running and alive and healthy --- but no one is doing any new development. Todd moved on to pursue other things around 2003, and Suzanne sometime around 2008. The site is now running on servers in Germany, kindly hosted by René Hoffmeister and Gereon Stein.



**HBM:** How do you distribute the work?

**T&S:** We just each did whatever was necessary and what came naturally best to each of us. It was a very full-time job in the early years.

**HBM:** How is LUGNET funded?

**T&S:** It has always been funded by financial contributions from members.

**HBM:** What is your relationship with TLG?

**T&S:** In the early days, we met often with LEGO® attorneys in Enfield and occasionally with LEGO Direct in New York. The relationship was cordial and The Lego Group was always respectful.

**HBM:** During these years of daily following the LEGO

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

**T&S:** There are so many more LUGs and events these days --- it's amazing and heartwarming. And people are sharing in so many new ways --- writing books, making documentaries, sharing gorgeous building instructions, giving technical talks at events, hanging out in real life. These things were rare in the 1990s and even in the early 2000s. Now they're happening all the time, everywhere. It's awesome.

**HBM:** Have there been any "real-life" LUGNET activities / gatherings?

**T&S:** Not of LUGNET per se, although that would be fun thing maybe for old-timers. Interestingly, it just so happens that we created a "LUGNET Reunion" private group on Facebook in October, for old-timers to keep in touch and catch up. It's quieted down a lot there now, but initially it was hard keeping up with all the posting activity. This was on the heels of BrickCon (Seattle), where many people had mentioned how much they miss the old days where you could just go to one site for everything LEGO discussion-wise. If we could magically teleport everyone from the old days into a convention hall and have a real-life gathering, we imagine it would be pretty cool! So many people have known one another online for 15, sometimes 20 years, yet never have met.

**HBM:** How do you see the future of LUGNET?

**T&S:** We see it as a repository of historical information and as an important part of the community's heritage.

For the future, we are exploring ideas involving real-world items bearing the LUGNET logo and related original artwork. In the early 2000s, there were LUGNET-branded coffee cups (with variations on a theme), mousepads, and of course t-shirts, which were popular and actually still in demand today.

**HBM:** Do you have any anecdotes related to LUGNET, how it functioned or what the community was like back then?

T&S: The LEGO enthusiast community was always

very vocal and energetic, and still is... But back in the old days, when people were first finding the Internet, it tended to be more nerdy types of people -- engineers, scientists, people with generally strong computer backgrounds -- and accordingly, most people were accustomed to living with a higher amount of complexity and were willing to go through more work to share their ideas than maybe they are today. (Sharing on the Internet nowadays is easier than it ever has been before!).

From our point of view, the community always seemed to have a sense of cohesion, but at the same time, it tended self-organized around themes into groups and sub-groups and sub-sub-groups, sort of like a fractal.

Accordingly, we encouraged separation of discussions by theme, so that topics could be explored as deeply and as focused as possible without overwhelming everyone with everything. That is, a long discussion thread about the new Shell promotional soccer polybags isn't necessarily of interest to someone wanting to get into a deep discussion about the latest Technic Supercar, or the new Insectoids sets, or who would win in a fight between Pirates and Ninjas, or whether or not the new gray is the eighth sign of the apocalypse. These general division lines (often blurred, but largely respected) helped reduce congestion and helped contribute to a generally very friendly and welcoming atmosphere. LUGNET was sometimes referred to as "The friendliest place on the Internet." But we also encouraged the discussion of general topics and location-specific topics.

One thing that was particularly surprising in the first or second year is that the location-based discussion groups (forums, as they're called nowadays) started being used for things we never had imagined. We'd fully expected (and encouraged) the location groups to be used for people to find others in their areas so they could form local clubs... but it was a very pleasant surprise when someone posted a message in a group saying they were going to be in town for the weekend and asked if anyone there could recommend food, lodging, and so forth, and instead they were offered a place to stay, and they ended up making new friends.

**HBM:** How did people register for the site (I have seen LUGNET membership cards etc.)

**T&S:** There are two types of registration: (1) Registration for posting to the newsgroups (forums), and (2) registration as a member. For posting, the only requirement is filling out a webpage form with name and e-mail address. For membership, the process is more in-depth: The enrollment form has about 20 questions -- things like where you're located, what clubs you belong to, your favorite themes, things you'd like to build, how you got started with LEGO, your favorite movies, music, etc., and other fun things that you might want to say about yourself. These answers become part of your membership page that others can see. In modern terms this would be called your public profile. Then after filling out the enrollment form, you send payment, which is a one-time fee for a lifetime membership, and you set the amount yourself (with a US\$10 minimum).

**HBM:** What was there before LUGNET (i.e. where did LUGNET come from)?

**T&S:** Before LUGNET, there was a Usenet newsgroup called rec.toys.lego (affectionately known as "RTL" or "rtl"), which began in 1994. It was one newsgroup for a few thousand people, and there were no subgroups. Before RTL, there was alt.toys.lego, which began in 1993(?). These were basically the same thing, except rec.toys.lego was carried by more NNTP news servers than alt.toys.lego. Once people began using RTL, people pretty much stopped using ATL.

A couple other things of note that preceded LUGNET: Sometime in 1994 or 1995, there was a long-running thread called the "RTL Roll Call". In this thread, people introduced themselves and talked about what themes they liked, their collections, what they were busy building, and so forth. This was sort of a "census" for RTL, and there were several hundred responses. Also, sometime around 1995, Paul Gyugyi announced that he was going to start a thing called "LEGO Net", which was going to be a way for LEGO enthusiasts online to register themselves and find one another. He received at least 500 applications. Alas, LEGO Net never got off the ground. But looking back, it was definitely an inspiration for LUGNET.

#

## **Pillars of the community: Hoth Bricks**

#### By HispaBrick Magazine®

Hoth Brick has become one of the prefered sites for the LEGO® community to get fresh news about their favourite hobby. We interviewed William Bonhomme to find out more about Hoth Bricks. He has been the person behind the blog since 2010, and has been responsible for updating it with fresh news these last 5 years.



**HispaBrick Magazine:** How did the idea of Hoth Bricks come about and what was its original purpose?

William Bonhomme: Like every LEGO® fan, when I came back to the hobby, I was checking online if I could find others like me. I quickly figured out that most of the content available was in english. Not that I cannot read and understand english, but I was disappointed to see that there was a very few french blogs available.

In the same time, I was boring my wife with my LEGO stories. She is not into the hobby, and frankly speaking I can understand how boring it can be to be harassed on a daily basis with LEGO considerations.

She told me to try to find others fans like me to share my hobby matters. I explained to her that the community was mainly english-language based. She answered: "Why don't you run your own blog then? This way you will find other french speaking people to share with." She was right. I did what she say.

With the help of Google and first visitors spreading the word, the Hoth Bricks readership grew significantly and quickly. There was a demand for a proper french language news website. A lot of young fans do not understand english enough to spend their time trying to understand what other websites talk about. So instead of leaving them watching pictures, I tried to propose an opportunity to interact with the content in their own native language.

**HBM:** To what degree has that goal been fulfilled?

**WB:** There was no "goal" when I decided to create Hoth Bricks. The main idea was to produce localized content for the french language readership and if possible to generate interactions with readers and visitors. This has been achieved.

I am not a "forum" guy. I don't want to spend my time reloading topics, answering to people because they are right or wrong, and participate in endless, and sometimes pointless, arguments. On the other hand, I like to react to fresh news, and to read other people reactions to the same fresh news. Then we move on to the next information and discuss again.

To post a comment on the blog you don't need to go through some complicated registration process and you can express your opinion anonymously or not in seconds. Fighting spam, bad behavior and such things is done automatically in the background, users do not have to bother about that, it's not their business.

Hoth Bricks is also a place where everyone can have his own opinion on the products and on the brand. One can disagree, express a different opinion or criticize something without being banned because what he says is not within some defined "policy".

**HBM:** Why did you call it Hoth Bricks?

**WB:** Since the very beginning, I searched for a name for the blog. But I quickly understood that it was not possible to use the word "LEGO" and that the brand is actively fighting the use of this word in websites names. So I did like everybody else, I planned to use

the word "Bricks" and to combine it with something else. First idea was actually "Hot Bricks". As the blog was supposed to be heavily focused on LEGO® Star Wars™ products and news, I then tried to be more original than that and I realized that Hot / Hoth would be a nice idea. I know that most of the visitors don't get it, but Star Wars fans do, and it's enough to make me happy about it.

**HBM:** Hoth Bricks began as a French language blog, but now it has many non French speaking followers. Did you expect such success? In your opinion, what is the key for having Hoth Bricks become a reference blog in the AFOL Community?

WB: Well, the average LEGO fans has its bookmarks: We all have a few websites where we go every day to check what's new. Many foreign visitors added Hoth Bricks to their bookmark just because they know that once in a while I can have a bit of news that is fresh and not seen everywhere else. It's not every second day, but when it happens, I am always happy to provide something fresh, doing my part to give LEGO® fans their daily dose of news. Being a reference or not is not important to me. I just try to maintain a high level of trustability on the subjects I deal with with by crosschecking sources and references, rumors, etc... Today, the LEGO® world is full of false rumors, wishes becoming truth when they transit from one forum to another, etc... I always try to stay close to the current situation: A rumor is a rumor, a fact is a fact.

The average LEGO fan is spending a lot of fan browsing the internet to find some news. If I am a part of this online cruise for some of them, it's cool!

**HBM:** Hoth Bricks is a one person project, how do you combine the hard work of running Hoth Bricks with you real life job and family?

**WB:** I am lucky to work from home for my "real" job. That gives me enough spare time to take care of the blog(s). Working from home forces you to be well organized because professional and private life are permanently mixed.

Working on the blog(s) is a part of this daily schedule. I always keep an eye on what's happening here and

there in the LEGO world during my day (or night) time. If it's worth it, I now have all the tools that help minimize the time needed to relay an information while it's fresh.

**HBM:** How much time do you spend to keep Hoth Bricks running?

**WB:** It really depends on many factors. The period of the year is for example critical here: Toy Fairs and conventions always bring a significant amount of fresh informations so it's time consuming to process them. But globally, I would say I am always close with what's happening in the LEGO world. It's all mixed up with my pro and family time. let's say that Hoth Bricks eats a few hours of my day time.

**HBM:** Why did you create all those separate blogs (Brick Heroes, Springfield Bricks, Jurassic Bricks ...)?



WB: This is one question that many people ask me all the time. The answer is quite simple: Hoth Bricks was originally focused on the Star Wars products before becoming a more generic media. When LEGO came up with the Super Heroes range, I thought it would also attract people who are not LEGO fans in the first place. There are a lot of comics fans who collect various toys related to Marvel & DC Comics universes. So I decided to give Super Heroes their own space not to bother casual fans with all the other LEGO news.

Same logic applies to The Lord of the Rings / The Hobbit, The Simpsons or Jurassic World topics. I would say it works as expected. Many visitors come just to stay informed about the toys produced by LEGO related to their favorite universe. With these dedicated blogs, they can focus on what's really

interesting for them without being distracted by all the other LEGO® stuff which can be sometimes boring as it is really too specialized for the casual fan.

**HBM:** How do you see the future of Hoth Bricks?

**WB:** I don't have any big plans for Hoth Bricks. It's a blog and it will remain a blog. Growing the active community around it is the only goal here. And it takes time to grow a real loyal community if you don't want to spam forums, facebook groups, Reddit and other sources to promote your website just for traffic and affiliate revenues.

The real value of the blog is its community not the content. The content is here only to generate discussions between fans. All LEGO fan sites report the same content at the same time and I am not writing to satisfy some personal ambition or to be "someone" on the scene, I do it to share with other french language fans and get their point of view on every subject.

I am not planning to make a living from the blog either. This is not my job, I do it because I like to do it, and if someday I feel bored or visitors stop to come and discuss, I will stop.

**HBM:** A website like Hoth Bricks must cost money. How is it funded?

WB: Over the years, with more and more people following the blog, it indeed started to cost more and more: I had to switch hosting companies to get the best service possible and to adapt the server capacity to be able to handle the growing traffic. Even a simple blog based on free tools like Wordpress needs money to run: Quality hosting is not cheap. That's why I use affiliate programs. They help to minimize the costs.

But because I also have a real salary from a real job not related with LEGO products, I am not relying on the affiliate profit generated on the blog. I use the remaining money to fund contest prizes, print promotional material and goodies to promote the blog in real physical events I attend, etc... I even support some charities with this money, but this is more a

personal matter and I don't feel the need to talk much about it.

**HBM:** What is your relationship with TLG?

**WB:** Well, I cannot say I don't have any relationship with LEGO. I am part of their LUG Ambassador program but nothing more than that. I went on The Inside Tour but I paid my ticket to get there.

Here in France, I never had a proper contact with the local LEGO office. LEGO France does not care much about what I do, they obviously don't need me to sell their products and public relations agencies are more focused on Youtube stars or so-called "Geek" websites to promote the brand. But, hey who cares?

I feel it is like it should be: I do want to keep a certain level of independence and freedom of speech. Being too close from the brand just forces you to comply to any of their request about your content. It's some sort of censorship, or call it what you want?

**HBM:** Have you had problems with TLG due to any news leaks?

WB: Every second day now, I run into trouble because of the "leaks". From one side, LEGO CEE Team tries politely to contain the leaks by advising LUGs to refrain to publish all those pictures and informations. On the other side, the lawyers working for TLG are harassing me with legal threats, contacting our hosting company, asking facebook to delete some content, etc...

It becomes really difficult to produce content which is not a press release or a shopping tip today. And while we were all forced not to mention Star Wars Episode VII new sets during all summer thanks to an embargo decided by LEGO and Disney, other websites were talking about those new products every day. LEGO fans had to go somewhere else to get news. We all looked stupid.

Anyway, it's obvious that Disney decides everything here: LEGO is always claiming that they do not want to jeopardize their partnership with Disney to justify their actions towards leaks. But most of those leaks indeed come from LEGO®: Reseller catalogue scans are available everywhere, LEGO server is full of pictures and informations supposed to be top-secret but easily accessible, etc...

It's not my job to control the leaks, if the information is available, it's because LEGO did not do their job to contain it. I just report. I am not responsible for the mistakes of the 1st toy manufacturer in the world. And threatening to sue me does not help.

LEGO® fans love leaks, early informations, previews, etc... They feed their love for LEGO through those exclusive informations. They don't care about most of the public relations stuff.

**HBM:** During these years of following the LEGO community, what do you think are the main changes that have occurred in the AFOL community?

**WB:** Well, I think that some members of this community have trouble accepting that being an AFOL is not "exclusive" to them anymore. During the last years, contents like video games and movies based on the LEGO products have generated more and more LEGO fans.

It's like the "Geek" title: People who use to proudly call themselves geeks, for whatever reason it was, have to admit that the geek culture is everywhere now. Being a geek or an AFOL is not anymore something that is limited to some specific type of people.

That being said, I am happy to see more and more adults being involved in the hobby. Being an AFOL is not an achievement though, it's often a self-attributed title to feel like being a part of something. But many fans are not active on the internet LEGO scene, they have their own clubs, their own small local community where they have fun with real friends.

By the way, I also dislike the term AFOL because it mainly means being a fan of LEGO (as a brand). I love LEGO products, that does not mean that I feel the same for the company that produces them ;-).

Over the years, I also have a feeling that the

community is growing, but the new "members" are oftenly more like collectors than builders. Look at flickr, it used ot be a nice place to find beautiful MOCs, now it's like Instagram: Every second guy takes pictures of his minifigures in various environment and that's it..

**HBM:** Have you done any activities in "real life" (events, exhibitions) related to Hoth Bricks? Can you explain them?

**WB:** Every year, I attend a few conventions I like in France. It helps me to keep a physical contact with friends and members of the Hoth Bricks community. I go there as a regular visitor, and I am available to discuss with whoever wants to.

It's always good time there, and I can meet all those LEGO fans who build incredible things. They are the core of the LEGO fandom and it's always good to meet the last people who promote through their art the real concept of the LEGO product: Use your imagination and create.

**HBM:** Can you talk about any interesting anecdotes related to Hoth Bricks?

**WB:** There are many stories to tell, some of them are not so funny after all, because of all the haters wandering on the internet and hiding behind their keyboard.

But there is a strange story: I did publish a small piece about working for LEGO, where to apply, how to find job adverts, etc... Since then and thanks to Google, I receive every second day some emails from people who want to work there, explaining me why they are good candidates, detailing their resume, etc... I always feel sorry for them as they reached the wrong person. This shows the power of Google: People just click on the first result, without even reading what's behind.

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#### **Skaerbaek Fan Weekend 2015**

#### By Iluisgib Images by Luiggi Priori

In almost every edition we bring to you an article related to a recent event, this addition will be no different as we take a look at the Skaerbaek Fan Weekend. The very first Skaerbaek Fan Weekend event took place not too long ago, on the 26th and 27th of September. Yes, this was indeed the first SFW. Last year, 15 days before the event, LEGO® decided not to continue organizing the event. At that moment, some AFOLS took the initiative and announced they'd continue on with the successful event. The good news is, they saved Fan Weekend.

When the new organizers announced the return of SFW at the end of last year, cottages, rooms, and Saturday dinners were quickly booked in anticipation, although the registration process didn't start until 4 months later. 380 AFOLS from 34 different LUGS and 23 different countries attended SFW this year. Nothing much about the event has changed: Same amount of exhibition space, workshops conducted by both AFOLS and LEGO employees, a LUG lounge, a LEGO shop, as well as Bricklink stores.







This event, while it provides a chance to see some amazing MOCs, is geared more to AFOL socializing. Again, take nothing away from the MOCs brought (as they are great models from all around the world), but from what we gathered, they weren't the focal point. Skaerbaek Fan Weekend is unique in that you can talk in person with people from all around the globe. Some of the various countries in attendance included people





from: Brazil, Hong Kong, Japan, and England just to name a few. The event featured a plethora of activities. There were two fan conducted workshops: one talking about Piece of Peace (conducted by Masao Hidaka), and another about GBC (conducted by Maico arts). There were also two workshops organized by LEGO® employees. Jamie Berard and Jan Beyer answered any questions from those in attendance for an hour, it was quite a fun time. The other was about LEGO Ideas, where discussion on various topics related to the program took place. On Saturday around 15:00 there was a LAN Ambassador Meeting, perhaps the largest to date. There were about 20 LAN Ambassadors present as well as the LCE team. For 2 hours discussion was had on the present and future of the Ambassador program.



Another exciting activity was the auction. This time some of the fans in attendance donated sets, keychains, parts, and even MOCs to be auctioned off, all of the proceedings will go to the events organization. Special merit should be given to both Tobias Reichling and Bruno Kurz who donated all the architecture scale models from the Euromap they did some years ago, the one which was also on display this year. There were about 60 models representing buildings and other landmarks from all across Europe that were donated. Like every year, the auction was a great time!

At the LUG lounge there was a building contest, the participants had to use pieces from Architecture sets to build something representative of their county. There were about 15 entries, all very high quality models. At the LUG lounge there were also magazines, Master Builder Academy booklets, coffee, and Minifig/polybag trading, all the essentials for a LEGO fan based event. On Monday, we were able to visit the P-Shop and after that there was a presentation and visit to the LEGO® House.

On the 24th and 25th of September, 2016, the event will return for its second installment. There will be, of course, MOCs on display, activities of all kind, and many, many AFOLs from around the globe. Hope to see you all there!

# Great creators of the world: Michał Kaźmierczak (migalart)

By HispaBrick Magazine® Pictures by Michał Kaźmierczak



HBM: Name?

**Michał Kaźmierczak:** My name is Michał Kaźmierczak (Migalart).

**HBM:** Age and nationality?

MK: I was born in Poland in 1978.

**HBM:** When did you begin to build with LEGO®?

MK: I began in 1984 when I was given my first LEGO set as a child. I wanted more LEGO® but it was quite expensive, so what I had, I regarded as treasure.

In 2012 I returned to my passion, which was my imaginary world of LEGO, when my son was old enough to play with LEGO. Quickly I realized the part I liked the most: recreating images of fantasy and science fiction in a LEGO format, but in the best, most monumental way possible.



**HBM:** What are your favorite themes?

**MK:** In my projects converge two of my greatest passions: LEGO and fantasy themes. I love fantasy and science fiction. I can watch Star Wars and Lord of the Rings over and over again, so you could say that Castle and Space are among my favorites.

HBM: You specialize in large scale builds, why is that?

MK: I always dreamt of building large scale scenes with LEGO. Even when I was young I imagined myself recreating huge portions of land with LEGO. Only with the large builds did I feel satisfied with the work done, and I've realized that even when I have trouble imagining large projects, I'm always able to see them through pretty easily.

I can have an image in my head and I know, when I start to build anything, that it will only start to look like something interesting after a couple of months of building.



In addition, I like to see my family's surprised expressions when they see the final result of something that months before barely had shape and came together to form something with meaning.

**HBM:** How do you approach and plan your projects?

MK: It's difficult to explain, but the decision process for such large-scale dioramas requires me to think of many things: the general arrangement of the diorama, the modules that will be divided for transport and assembly, the resistance of structures, etc. Many decisions have to be made. Even how to photograph certain parts is important, as it can be a major challenge to show buildings in all their glory.

Even though every project is different, there are some similarities when it comes to planning each one.

The first step is to decide what to do;) After that, the general plan is made and that's when I decide the scale of the diorama. From there, I try to get references for the more complex structural elements. Sometimes I'll make prototypes using the pieces I have.



The next step is to prepare a list of all the pieces I have to buy on Bricklink. I have a good amount of experience estimating the pieces I will need to finish a project. This process is very demanding and requires a lot of calculating, especially since at this scale you have to try and keep the cost low.

Once all the pieces have arrived, I ready the work space and sort all the pieces that I will need. Depending on the project, I'll separate them in different ways.

When everything is ready I begin to build. I always improvise, as I advance in the construction I decide how the modules should be. I try to keep the scale the same between the various fragments that I go on creating. That's how I do it!

**HBM:** What are some of your prefered construction techniques?

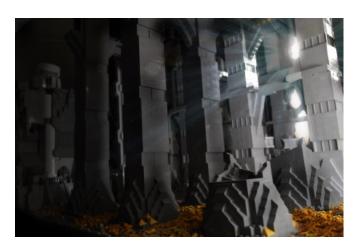
**MK:** I prefer the building style found in LEGO® sets more than an style based on real designs. I love the potential for improvising that LEGO provides. Despite the huge scale in which I build my projects, I prefer the traditional way of building, especially with basic bricks. I think that the traditional way of building is the essence of LEGO.

**HBM:** Do you belong to any group of AFOLs?

**MK:** Yes, I'm a member of two Polish LUGs: Zbudujmy.to and LUGpol.

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### Open Roberta Lab, an alternative to EV3-G

#### By Koldo Olaskoaga

The time when digital devices were limited to desktop and laptop computers is well past and Little by little it is becoming more usual to run applications from within a browser or on a mobile device with files that are stored in the cloud. Among other things, this favors collaboration and sharing the development of projects.

In This context, LEGO® have maintained is focus on locally installed software on computers with Windows or Mac OS X operating systems, a paid version in the case of the Education software. At the beginning of this year they presented an iPad version that was associated to the Education license and in the month of November the LEGO MINDSTORMS Programmer app, a mobile version of the EV3-G programming environment was made available for both iPad and Android. This is, however, not a full version of the software as the palette of programming blocks is limited.

#### Project Open Roberta



Roberta is a project that emerged in Germany in 2002. Its goal, as noted on its web page, is to foster in both boys and girls a long lasting interest in STEM (science, technology, engineering, and math). They make a special emphasis on the involvement of girls.

This project has been financed both by Germany's ministry of education and investigation as well as the UE between 2005 and 2009. Currently it is financed by several German federal states in collaboration with various companies and foundations.

In 2012, tenth anniversary of Roberta, an idea came about to create a cloud based software to program LEGO MINDSTORMS™ robots. Two years later, in November of 2014 Open Roberta Lab was presented, an initiative that has received funding of one million Euros from Google.

Open Roberta Lab is a graphical programming environment with the same set of programming blocks that can be found in App Inventor, Code.org, and others. Installment is not necessary given that it is cloud based, and it is also not dependent on the devices operating system. Thanks to that, it can be used on any device, be it a computer, tablet, or smartphone.

Open Roberta is an open project, the code is available on its servers and collaboration from fellow programmers is welcome.

#### How to begin

To be able to program the EV3 using Open Roberta lab, first you need to prepare it. This is because Open Roberta Lab needs an operating system different from the standard one offered by LEGO. This new system is installed on a MicroSD card, so it does not at all affect the system installed on the EV3. Not even the programs that can be stored on the EV3 are affected. If you want to recover the original EV3 system and program EV3-G, all you need to do is turn it off, remove the MicroSD card, and when restarted the original system will reappear.

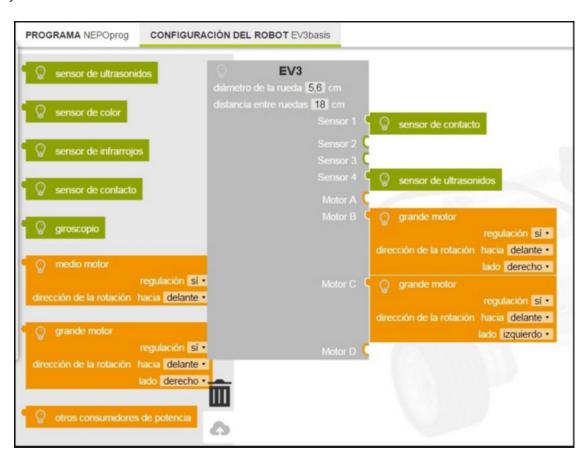
To begin, you need a MicroSD card with a capacity of between 2 and 32GB as well as an adaptor for MicroSD cards. Using a computer connected to the internet you have to download the Open Roberta operating system and Java Runtime environment. The steps and links to download the files can be found in the EV3 Open Roberta setup section.

Once ready, the MicroSD card is inserted in the EV3 and will turn on. If you are going to connect the EV3 with the computer via Wi-Fi, it is recommended that you first connect the skewer Wi-Fi. After a few minutes the installation will be complete and you will be able to begin programming with NEPO.

#### **Programming with NEPO**

NEPO, within months has gone from only being available in German and English, to being available in several other languages, among them is Spanish.

The first step to program the EV3 with NEPO is to define the robots configuration: what sensors and motors are connected to which ports, as well as the wheel diameter and distance between wheels on robots with a differential steering system.



Once configured, the moment has come to program. NEPO offers two different levels: beginner and expert.

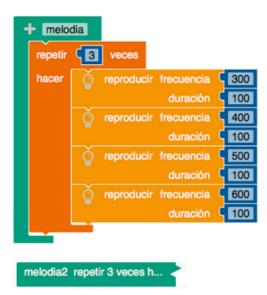
The beginner level offers a palate of fewer programing blocks, this is so not to overwhelm the first time user. In contrast, the expert level offers the complete palate of blocks.

Creating a program with NEPO is similar in the way in which it is done using Scratch. It is done by placing the necessary blocks to get the robot to perform in the desired way.

It is possible to give structure to a program creating new blocks (and collapse them so they take up less visual space) as you can see in the following image, although you cannot yet execute parallel tasks.







If desired, you can see the corresponding code in Java using the view source option in the Edit menu or by clicking on the icon.

#### Connecting the EV3

Open Roberta Lab allows the possibility of connecting and downloading the programs to the EV3 via a WIFI connection. This allows you to program from devices that up till now weren't able to be used, such as smartphones, tablets, and Chromebooks. The EV3 must have a wireless skewer so that it can be connected to the appropriate wireless network.

Both the device used to program and the robot will need to be connected to the same Wi-Fi router. From that moment you can link a computer to a robot using the code provided by the EV3.

It is also possible to connect the Ev3 via USB from computers with different operating systems. On a computer with Windows, Linux, or MAC OS X it will be necessary to pre-install an application on your computer. On Chromebooks, it will be enough to install an extension for Chrome.

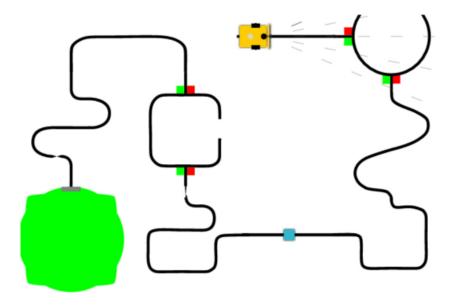
#### **Sharing Programs**

Another valuable feature of Open Roberta Lab is the ability to share programs with other users. You can share with the option of read or write only, this aids in developing a group project, something very useful in education.

Google drives is a way in which files are shared to facilitate collaboration in workgroups or to allow access to 3rd parties. In Open Roberta Lab there are certain differences that are worth mentioning. The programs are not stored as edited and there is no sign indicating that more than one person is simultaneously editing. In a situation like this, whoever first saves, modifies the cloud copy, while the other editor upon trying to save will receive a message informing them that the program has recently been saved and you can modify the changes via Save As.

#### The Simulator

Open Roberta Lab can be use with or without a robot. It offers a simulator with five different scenarios in which to run programs. The editors for simulation and real life programming are separated so for now you cannot test run a program in the simulator before downloading it to your EV3. For now it is also not possible to change the default configuration of the robot in the simulator.



#### The future of Open Roberta

The Open Roberta Lab as a programming platform for robotics doesn't stop at the EV3. Rather it aspires to extend to other robotics platforms used in education. The next step will be the NXT and after that possibilities includes Thymio, Edison, NIBObee, Raspberry Pi and Arduino among others.

The development wiki shows some other ideas, like configuring a Raspberry Pi 2 as a server in order to use Open Roberta Lab in an environment where internet Access could be a problem.



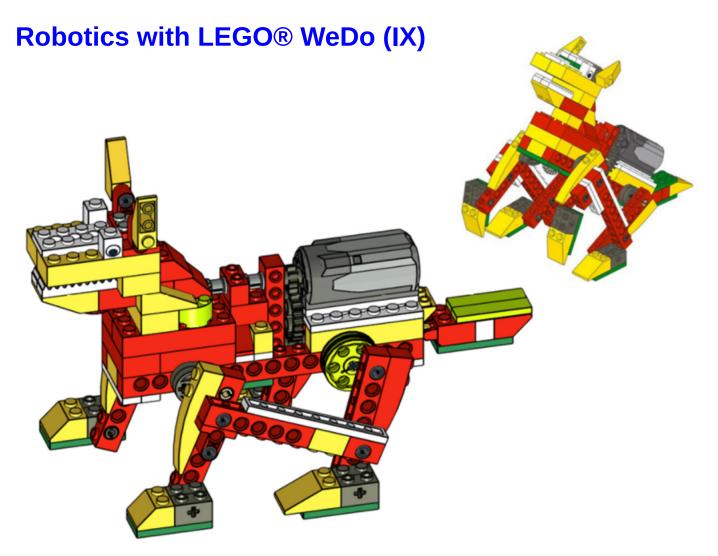
#### Final note

Open Roberta Lab is still in the beta phase, with that said, some of the features may present a problem, certain features may also be changed, but without a doubt, for the better. So take a look at the Open Roberta website to see how it is growing.

#







#### Labeling LEGO® Devices WeDo, 9th Edition

#### by Diego Galvéz

In this current edition we will explain in detail how to configure and program more than one device connected to the same computer.

For certain projects we may find it necessary to use more than one motor or more than one sensor. For such cases, the WeDo software comes with a tool called "Labeling".

This tool allows you to work using multiple electronic devices. Before getting into detail about "labeling", you should have clear the maximum number of electronic devices that can be connected to computer.

#### Hub

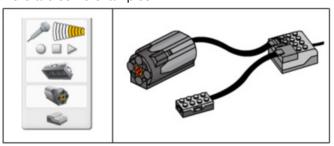
The Hub allows for the connection of motors and sensors to the computer.

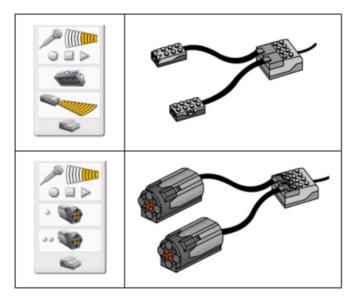
The software will recognize a maximum of 3 Hubs connected at once.



Using the Hub, you can create many different motor and sensor combinations.

#### Here are some examples:





One Hub can recognize a maximum of two connected motors.

Using what is shown above, we see that the WeDo software will recognize a maximum of 6 motors (2 motors per Hub and 3 Hubs connected). The same maximum number applies for sensors that you wish to connect to the Hub.

#### Labeling the motor

To label a motor using WeDo software, the following is done:

While holding down the **SHIFT** key, click on the **Motor Block** to which you would like to assign a label.

For example, the Motor This Way Block:



Following the procedure described above, you will notice an empty circle appears above the **Motor This Way Block**. This tells us that the action has been "labeled" to be carried out by motor number "1".



If we wish to label a second motor, what we do is repeat the previous action twice.

We can label up to 6 motors (given that there are three Hubs connected).



#### **Example**

A program to make two motors turn in opposite directions simultaneously.



Upon observing the upper left part of the screen (Connection Tab), you will note that the software automatically detects the two motors connected to the Hub:



First, create the following program:



When you run it, you will notice that:

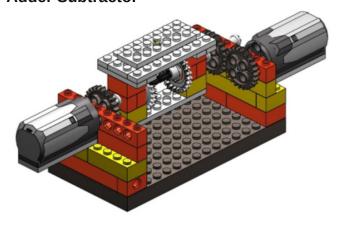
- Both motors turn counter clockwise for a short period of time.
- Later they turn counterclockwise for 3 seconds before coming to a stop.

Since there are two motors (motor 1 and motor 2) you can assign a direction to each one of them.



This way, when you run the program, both motors will run in opposite directions simultaneously for 3 seconds. Note that after 3 seconds both motors stop. This happens because the **Motor on for** block( hasn't been labelled and so the action affects both motors. In this case both motors will be stopped after 3 seconds.

#### Adder Subtractor



This mechanism used in this build is called a differential and it allows the operation of the adder subtractor. So where does the name come from?

The turning of the differential is the addition (or subtraction) of the turning of both motors. When **both motors turn in the same direction**, the differential is the sum of their powers. Try the following examples:



The differential turns at a power level of 20.



The differential turns at a power level of 5.

However, if the motors turn in opposite directions, the differential subtracts the power of one motor from the other. Try the following examples:



The differential will not turn.



The differential will turn with a power level of 5.

Take a look at the following programs. What is the power level that results from each of them?



The first one is a simple addition and the result is 5. The second is a subtraction and the result is -5. What does the negative number mean? It means if 5 is a clockwise turn with power level 5, -5 is a counter clockwise turn with power level 5.

In the next edition we will discuss "labeling" sensors.

You can find building instructions for the differential on my blog notjustbricks[1].

#

[1] At notjustbricks.blogspot.com you will find multimedia materials (images and videos) of the author's creations, some of which come with building instructions.



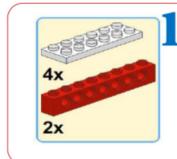
## WeDO theme: Walking machines The Ostrich

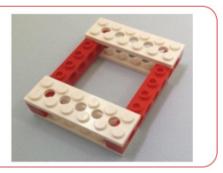
#### By Eduardo Ventura

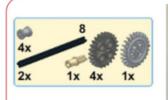
The ostrich is the largest and heaviest living bird. As its species name, camelus, suggests, the ostrich was once known as the "camel bird" because of its long neck, prominent eyes, sweeping eyelashes, as well as its jolting walk. Also, like camels, the tolerate ostrich can high temperatures and go without water for long periods of time. Native to Africa, ostriches are found in savanna and desert regions, were they graze among giraffes, zebras, wildebeest, and gazelles.



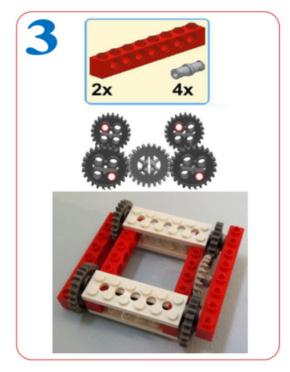




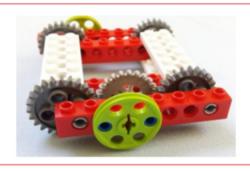


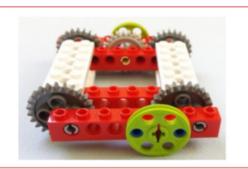




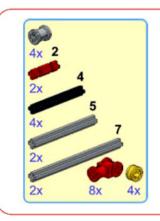




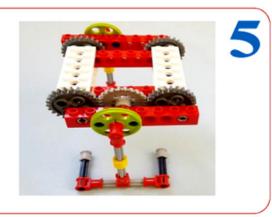


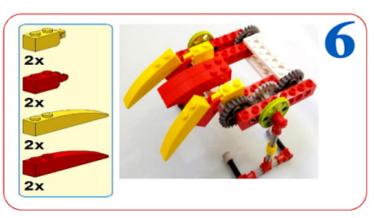


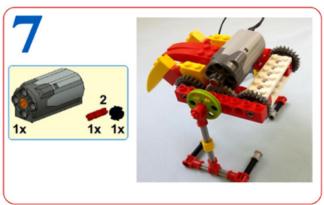


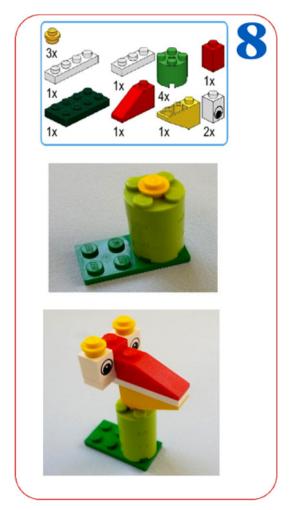
















## Reviews

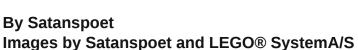
#### **Review: 10251 Brick Bank**

Set: BRICK BANK

Set number: 10251

**Parts: 2380** 

**Contains: 5 minifigs** 



Our city keeps expanding with the addition of this new set that belongs to the series Modular Buildings de LEGO® Creator Expert.



For the fans of modular LEGO sets, the new 10251 Brick Bank is a very good reason to celebrate. Not only is it a new modular building, but a corner, which we hadn't seen since the 10232 Palace Cinema in 2013.

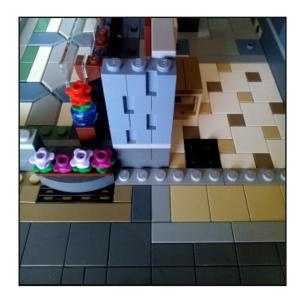
This time the building is a bank and a small launderette, built with little over 2380 parts and that will add to our existing block of modular buildings. In addition, the set contains 5 minifigs, the director of the bank, a secretary, a cashier, a mother and a child.

The box contains 20 bags numbered 1-4, a tan baseplate and a manual.



The building is 3 levels high. We start with the first level which contains the lobby with an arched entrance, a counter with hidden alarm buttons and safety glass, and a vault with safety deposit boxes and a large round door, next to the bank we will build a small launderette.

We will use the bags numbered 1 and 2. First the pavement around the building is tiled, and then the floor of the bank and the launderette.





Up next is the large vault with safety deposit boxes where a large amount of money will be stored, and the the counter with the safety glass.



The launderette will have a small table, four washing machines and a decorated shop window.



A nice detail on the façade is the decoration over the entrance to the bank, with a microfig and feathered wings as well as the stained glass windows built with 1x1 Trans-Clear and Trans-Clear Green plates, and of course the large columns.







The façade of the launderette sports minifig legs and the door of a washing machine.



Another beautiful detail are the stairs that lead to the second floor.







Next up is the second floor which is built with the bags marked 3.

Right after going up the stairs we come to the office of the secretary that contains a desk, a typewriter, a filing cabinet with drawers that open, a fireplace and a coffee machine.

machine.







In this phase we also find the office of the director of the bank, which contains a large desk with a lamp, a big leather chair and a small filing cabinet.



The façade of this floor of the building is white and is made with columns of Brick Round 2x2 [Grill].

Next up is the large clock that will hang from the corner of the building.



Now we need to build the top floor of the building. This is done with the parts in the bags that are numbered with a 4. In this phase we build a large shylight that lights up the inside of the building and a hanging lamp.



Finally, all that is left is finishing is off with a bench, a small tree and a lamp post and the building is ready to be added to the city.





To sum up, this new modular is a great set, full of details both outside and in, it doesn't contain a single sticker, the building process is entertaining and it is a must-have to complete the whole block of buildings.



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

#### **Review: 21304 Doctor Who (LEGO® Ideas)**

**Set: DOCTOR WHO** 

Set number: 21304

**Parts: 623** 

**Contains: 4 minifigs and 2 daleks** 

## By Jetro Pictures by Jetro & LEGO® SystemA/S



LEGO Ideas is a curious beast. Thousands of submissions are made every week and many of those never make it past a handful of votes. A few lucky (or should I say well-designed and properly presented) submissions make it to the 10.000 votes necessary to be reviewed by LEGO®, and of those only a couple are made into actual sets.

Doctor Who is one of the latest products to come out of this series and is, by any standard, a curious, but interesting choice for a set.

Who is Doctor Who? The doctor is old; ancient by human standards. No one is exactly sure (possibly not

even he himself), but the figure is somewhere around 2000 years. But more importantly, he has been on TV for a very long time. The first Doctor Who episode was broadcast on November 12, 1963! The show ran until 1989 and then went on hiatus. A film was produced in 1996, but the complete return of the Doctor came on March 26, 2005 the series was relaunched with the Episode "Rose".

For those who have never watched an episode (shame on you!) the show can probably be best described as a science fiction series with a sprinkling of British humour. The Doctor (the self-assumed title/name of the main character – no other name is ever pronounced) is

a time lord and travels in a spaceship disguised as a police box, named the T.A.R.D.I.S. (Time And Relative Dimension in Space).

Of course the actor representing the doctor is not the same, and as a matter of fact changes ever so often. This is accounted for by the fact that just like a cat has nine lives, the doctor has a good few too and when faced with a particularly complicated crisis can shed his old persona and regenerate. This explains the fact that the LEGO set under review comes with not one, but two doctors (the 11th and 12th).

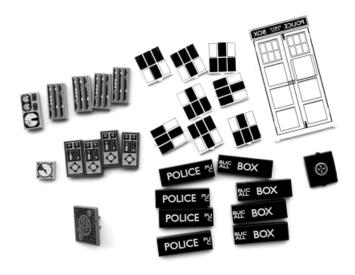
Although he is very much a loner he likes to travel with a companion who fulfils a very similar role to doctor Watson in a Sherlock Holmes story – it gives the doctor a reason to explain, pontificate and find his way back. 21304 comes with a minifigs of Clara Oswald, the latest companion to travel all time and space together with the doctor.



One of the inescapable facts of the series (and one that has been turned into a running joke in the series) is the fact that the T.A.R.D.I.S. is "bigger on the inside". This has been very well captured in the LEGO set. While the blue Police Box can be displayed as a single element in a beautiful dark blue, after removing the roof it can also be folded open to reveal its interior, the console room (just one of many, but the only one to be shown normally) that holds the (you guessed it) console from which the doctor decides where or when to travel to. The console has been very well captured in LEGO, including all manner of control interfaces on the six panels around it as well as the time spinner at the top.

Time to have a closer look at the details of this set. Aside from the quality packaging that all LEGO Ideas sets have, one of the first things that drew my attention was the large number of printed elements in the set. There isn't a single sticker and some of the printing is really spectacular, giving the set a real quality feel.





The mechanism that allows the T.A.R.D.I.S. to open for example, requires the printed tiles on three of the four sides of the blue box to be split in two, but after closing it the printing matches up beautifully.

Another interesting design feature is the fact that the console as a whole is built around an axle, meaning

you can easily pull it out. Doing so allows you to store the entire set in its original box..

In addition to the two doctors and companion, the set comes with two Daleks, the most traditional enemy of the doctor. The models are brick built and slightly larger than they really ought to be (they should be smaller than the minifigs), but they are well designed and a feast to the eyes. The final minifigs is that of a weeping angle, possibly the most frightening of all the monsters that populate the Doctor Who universe.

21304 – Doctor Who is a real (LEGO) collector's item. It beautifully captures the spirit of the series (even though I would personally have preferred the 10th doctor with Rose as his companion), and the inclusion of the green tipped sonic screw driver and the 11th Doctor's fez just go to show to what lengths LEGO has gone to make this set "just right".

#



#### **Review: 60098 Heavy-Haul Train**

**Set: HEAVY HAUL TRAIN** 

Set number: 60098

**Parts: 984** 

**Contains: 5 minifigs** 



#### By Lluisgib Images by LEGO® SystemA/S

A new Cargo train has arrived to our cities. The engine is red, the cars are interesting and they carry new and unseen load... and there is also a loading area!



The set comes with 5 minifigures. 3 of them are employees of the railway company. The other two minifigures are construction workers and have appeared in several sets. The torsos of the railway company have been used in the prior cargo train. Anyway, they are great!

Yes, the engine looks like a yellow one that appeared some years ago (Set 7939 - Year 2010). At first sight you could think that it's the same engine. But although it looks familiar, the construction of this new engine is completely different compared with the prior one.



The building starts with the engine. Instead of the cargo train launched last year, with a blue engine that looks very "American" (it reminds me of the Maersk train engine), the engine of the 60098 looks very "European". It's nice that LEGO mixes these two different concepts of cargo engines, because we have more diversity in our train lines.

The engine has two symmetric cabins. They can be opened and you can put a minifigure inside. Just behind the cabin, there are 2 windows (one on each side). They are simulating the entrance doors to the cabins, with the rails that help to come into the cabin. Although the look is very realistic, those "doors" are not real and they are only for decoration. Inside the area covered by these windows, there is the IR sensor on one side. On the other side there are some bricks simulating another IR sensor, basically to keep the symmetry on both sides. To unite both cabins, there are two Tile, Modified 6 x 16 with Studs on Edges that cover the battery box. This building technique is different compared with the yellow engine. On this old engine, all laterals were build with bricks, instead of this new way. This new method allows you to have two small corridors in the engine, to go from one cabin to the other. Because of this reason, the designers have added a handrail to keep the train employees safe. The roof is made up of 2 separated parts that cover both sides, and it is open in the middle, to give access to the battery box. Like other trains, this engine is ready to add lights and give more realism to the model.

There are three cars in this train, as usual. Two of them are not really interesting themselves. They both are platforms, one longer than the other. The long one, that has 4 axis, comes with a yellow excavator. It is a very nice addition because it helps to pick up the round

bricks 1x1 and carry them to the loading area and be charged into the cargo-car. The short platform comes with an helicopter. Due to the weight it has to carry, it only needs two axis. I have to admit that I experimented some problems in our last event with this car. Depending on the car you have beside the tail of the helicopter, there could be some collisions.

The most interesting car for me is the hopper. It is a brown car with the possibility to load cargo in the top, and unload the charge from both sides of it, where there are two doors that you can open. The color of this car is reddish brown and light stone gray, and the pattern is very realistic. This is the typical car that you'd like to build 15 or 20 of and make them run with a double traction engine.



The track circuit is the simplest I got in a LEGO cargo train. This is the second time that there are no switches in a cargo train set, and there is only an oval, although it has more straight tracks compared to the passenger train. There is also an ungated railway crossing.

The loading area has a crane that can be moved in parallel of the track. The cabin turns 360 degrees and it has an arm that can be moved frontward and backward

with certain limitations. It uses the same parts as the very old cranes of the 90's seaports. All these movements allow the crane to take the load from the ground and go to the hopper and leave the load there. All this load area is strongly connected to the track and very playablea.





The set is very nice and there could be different reasons to get it. For the newbies it's a beautiful train, fun building and lots of playability. For the people who have the set with the yellow engine, the cars are a good reason to buy the set, or at least to try to get the parts of them (especially the hopper). Price wise, the set comes with nice additions like the excavator and the loading area, although I missed the two switches that usually come with the cargo trains.

#

Acknowledge: CEE Team for providing this set.



#### **Review: 75055 Imperial Star Destroyer**

Set: IMPERIAL STAR DESTROYER

Set number: 75055

Parts: 1324

Contains: 6 minifigs and 1 mouse droid

#### **Text and pictures by Legotron (A. Bellón)**

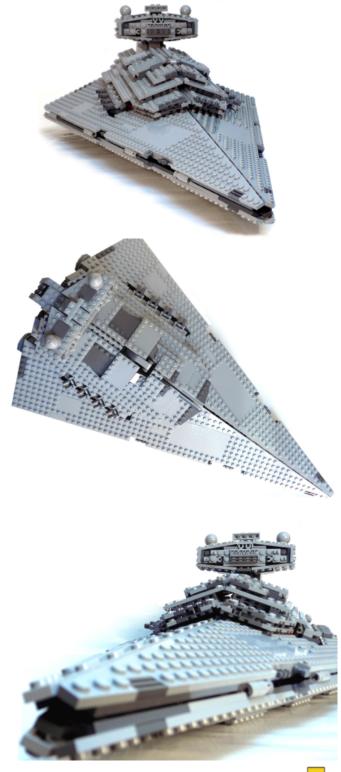
Travelling to the edge of the galaxy in one of the mythical ships from the Star Wars™ sagas.



LEGO® first brought this set to market in 2014 and it was one of the star sets of that year. Nothing short of an Imperial Star Destroyer. This set is a reedition of the 6211 Imperial Star Destroyer from 2006 which represents this mythic space ship in a format that allows you to play with the minifigs from the set in the interior of the ship. Obviously it isn't to scale - it would be impossible to build it at that size.

As I also have the previous set,6211, the first thing that came to mind were the logical comparisons of which might be better, or more similar to the original. Looking at the pictures on the box I already knew that this new model was closer to the model from the films, especially in the bridge section, and that more attention had been given to detail, trying to cover up the spaces where the different sections of the ship come together.

Building it was quite entertaining. While it is true that there are a large number of Technic and structural elements that are repeated, these are absolutely



necessary for the integrity of the ship. The ship is built in stages which shape the main structure, the panels, the superstructure and the bridge. As construction advanced I started to notice the structure of the ship is considerably smaller than that of its predecessor. It felt strange, since the part count is very similar to that of the 2006 model. The process is very similar as well. First the base is built, then the sides (which make the ship appear larger). At this stage it felt like a lot of emphasis was given to the hook for the stand, but the interior, which is supposed to be the place to play with the minifigs, was left empty.

In the next stage the bridge is built and, after completion, connected to the hull. Next the upper panels are built and despite the fact that these are mobile (they can be opened and closed to gain access to the interior), they fit very well. Finally, it is time to build the superstructure which, curiously is not connected in any way. It is simply placed in the space that is left when you open the top panels, between the bridge and the handle for transporting the ship. It isn't a complicated process, especially when you take into account the size of the ship and I felt I built it quite fast..

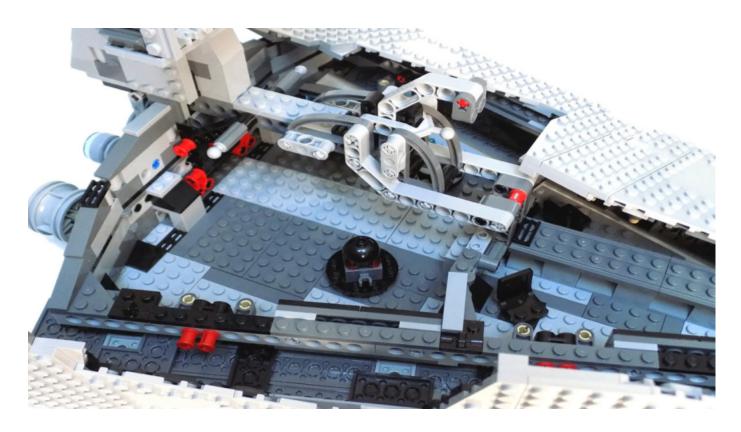
Next I built the minifigs. The set comes with 6 minifigs, all of which are new or at least have new printing. Darth Vader comes with a new torso, a new head and printed legs. Up next an imperial officer with a new torso design and a new cap which is much closer to the original from the films. There are also 2 stormtroopers, 1 navy trooper and 1 imperial crew member with new prints. The set also contains a



mouse droid and a microfig that represents a hologram of the Emperor.

The set gave me conflicting feelings. On the one hand the exterior design is much nicer than that of the 2006 set, with a better scaled bridge and with fewer visible gaps. On the other hand, I didn't understand how the set could be so much smaller and have fewer minifigs given there is only a 15 piece difference over 1324. The set comes with 4 minfigs less than the one from 2006, although the selection is very interesting. It contains some functional elements, like the cannons and the "famous" projectile launchers. The idea of a handle that can be extracted to transport the ship is very nice, but I can't help feeling the part might break at any time. However, I believe the set has many shortcomings, and I don't mean in comparison to the 2006 set. The finishing of the top side is poor. Taking into account all the work done to make it look better I believe the area of the engines could have been done





better as it is notably inferior to the rest of the ship. But the biggest failure without a doubt is the interior. Taking into account that this is supposed to be a playset and the design of the ship is oriented towards being able to open the top cover and play in the interior, the interior decoration is very poor. Contrary to other sets of this type there is more than enough space to make rooms, halls, doors, etc.

The interior is practically empty, almost without decoration, there are just a few stickers and control panels. A few rooms or halls with some decoration like in the films could have been included and added to the playability. I believe this is the weakest aspect of the set. Another element I didn't like is the superstructure. As it is not attached to any part of the ship it moves constantly. It is a minor detail, since when you play with the set it is not in place, but could do with a better connection.

To sum up: It is a beautiful looking set with a lot of playability that you can still find in the shops. For those who do not have the previous model, it is the best way to get a large scale iconic ship from the Star Wars saga. However, it has some shortcomings. You could say that all attention has gone to making it look better on the outside and the inside was forgotten. As for the minifigs, all are new or have new printing (at the time



the set came out). It has a lot of playability as the interior is easily accessible and there is a lot of space to play in, but few elements to interact with. Of course you can easily remedy that yourself.

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

#### **Review: 75827 Ghostbusters Firehouse Headquarters**

Set: FIREHOUSE HEADQUARTERS

Set number: 75827

Parts: 4634

Contains: 9 minifigs y 3 ghosts

# GMSTRUSTRES

## By Otum Pictures by LEGO® SystemA/S



WHO YOU GONNA CALL?

As one of the ghosts our heroes hunt have emerged this building, The Lego Group had closely guarded the release of this set, all fans were convinced that they only would enjoy the Ecto-1, but it is not!!

Let's start from the beginning, the box, prepare a wheelbarrow to carry it, it's a box with similar size than the Death Star one, so it's not easy to carry.... When the box is opened, there are two white cardboard boxes, some numbered parts bags, and the instruction book. Presumably because it's one of the first set coming out from factory it hasn't been packed as it's supposed to be finally, so all the part bags are going to be inside white cardboard boxes. The instruction book has around 420 pages, glued!! Which gives more fun to the building of the set jejeje... Before you ask for it,

yes!! There's a stickers sheet, in fact there are two, one is for all the decoration and the order one is are for mirrors....

Let's go with the minifigs, the set has 9 minifigs, plus Slimer and two ghosts. The minifigs are the four main characters of the movie (Ray, Egon, Winston and Dr. Venkman), the secretary (Janine), the Dana Barret/The Door Guardian one, the Louis Tully/The Key Master one, a zombie driver and the ghost at the library (the first one they saw). All the minifigs have double face, a smiling one and other one afraid or anger.

















The set is bigger than the modular buildings, but it fits perfectly with them. The main difference with the modular ones is that this building opens as a book, i.e. the walls move to show the inside. This circumstance means a different way of build it compared with the modular buildings.

With the first four parts bags the lower level of the building is built. In it you will find the park area for the Ecto-1, the uniform closets with the proton bags, the Janine's desk, also the Dr. Venkman one and the contention chamber. Build it is quite easy, with no great technics, but as said before, you must not think as a modular building, where the four walls are made and then you go to next floor, in this case you are building a wall that opens.

With the next three numbered bags, the first floor it's going to be built, but only the fixed area, not the entire floor, i.e. the movable wall it's going to be built later. Things to say about the building process are de stone around the windows, the result is great, and gives that

characteristic image that the building has. This is been repeat during all the building process till the end of the set. Talking about the interiors, you will find the bedroom (with three beds!!!), the kitchen area, where Slimer do his best... Really wonderful the detailed things that the kitchen has, the fridge opens, there is an extractor fan, pizza boxes, even the roaster with the pink fluid shown at Ghostbusters II.



With the eighth bag a movable wall part is built, inside it there's the bathroom, as the kitchen fully equipped and tastefully decorated with green snot from our friend Slimer...



With bags numbered from 9 till 11 the next floor is built, also the fixed part of it, the inside it's detail after detail, that gives color and life to the set, in this part of the set we will find the pool table, a dartboard, also the Egon's lab, plenty with computers, analysis staff, even the helmet used for analyze the Louis' brain is in it.





With bag number 12 another movable wall part is built, inside it there's the rest of the analysis lab. The building process of this parts is not really complicated, and in all situations is done in the same way, the wall is built without the windows, later the inside is built, plus the windows and finally the structure that is going to hold the next floor.

With the las two part bags, you will build the rest of the building and the roof. The building part left is the movable one, which are the steps that connect the different floors of the building. At the outside we will see the typical metallic fire escapes. The ventilation fans at the top are used also as hook to keep the building close.

Finally, as said several times it is an easy building set, but plenty of details that bring us the most known scenes from the movie during the building of the set. The building fits perfectly in a city diorama, and the outside image makes it really beautiful. The truth is that it price can stop you from buy it (379,99€), but there





are more than 4500 parts, which means a part cost around 0,07€, with 9 minifigs and a licensed product... Because all this, if you are a true Ghostbusters fan, and you can save some money don't doubt about getting it, you will really enjoy it, much more if you consider that this set can have it inside shown all the time. You know, "if there's something strange in the neighborhood..."

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



## **Entrevistas**

# **Kevin Hinkle - Community Manager of LEGO® Community Engagement (LCE)**

By HispaBrick Magazine®



**HispaBrick Magazine:** Small introduction of yourself, profession, likes, dislikes......

Kevin Hinkle: I have the privilege of managing the relationship between the LEGO® Brand and the AFOL (Adult Fan of LEGO) community in the geographic areas of North, Central & South America. I've been employed by the LEGO® Group for over ten years and currently reside near our Marketing & Sales Office in Enfield, Connecticut; USA. I have two wonderful children, both boys, with my wife of eleven years. My personal interests (outside of engaging in the LEGO hobby of course!) include illustration, animation and graphic design. I also have a strong passion for console & handheld video gaming.

**HBM:** Did you play with LEGO when you were a kid?

**KH:** Absolutely! As many members of our AFOL community can relate- I owned a large plastic container that hosted my collection of LEGO elements as a young child. I routinely rejoiced at the arrival of a new LEGO product catalog in our mailbox at home. As a

child, I was very impatient and had difficulties saving my allowance to purchase any large LEGO products. More often than not, I would settle on something small just so I could purchase something as soon as possible. The large sets remained on my holiday wish list for a majority of my childhood and I'm happy to report that those wishes usually came true. I have fond memories playing with products in both the Aquazone (1995) and Western (1996) play themes as personal favorites.

HBM: How did you get employed by LEGO?

KH: My career at the LEGO Group began in September 2005. At the time, I was living just outside Denver, Colorado; USA and was in need of a part time job while attending college. To my delight, a trip to our shopping mall presented an interesting opportunity: A LEGO Brand Retail Store. I had never heard of such a store so the entire visit was guite nostalgic! I inquired about open positions but at the time, there was nothing available. Nevertheless, I secured a job working in that same shopping mall but at a different retailer. I had mentioned to my new colleagues on several occasions that it would have been awesome to work for the LEGO Store and that I was disappointed that there hadn't been anything available. My colleagues kept that in mind and only four months into my employment elsewhere a teammate of mine gave me the heads up that a "Now Hiring" sign had appeared outside the LEGO Store. That very day I walked over, filled in an application for a part-time Sales Associate (now referred to as Brick Specialist) and snagged an on-the-spot interview with a Store Supervisor. A couple days later, I had a follow-up interview with the Store Manager and while driving home from that interview I received a call on my mobile phone offering me the position. Since then I've enjoyed a long and wonderful career spanning multiple titles, teams, and locations within the United States.



**HBM:** Was it something planned?

KH: I had never planned to work for a toy company, let alone the LEGO® Group. Although I consider myself quite lucky to have secured such a fun and rewarding career, it all seemed to fall together rather than be orchestrated in any particular fashion. My initial goal was to finish out school and seek jobs in the animation and/or illustration industry. I spent several months submitting resumes and portfolios for review, but no one could offer me the stability that I had already built with my career at the LEGO® Group. As such, I made the decision to focus on my career with the brick and put my artistic ambitions on the back burner.

**HBM:** How did you join LCE Team?

KH: I joined our department in 2011 when we were referred to as CEC, or Community Engagement & Communication. At the time, I had put approximately six years into my LEGO career exclusively in our retail division. During these six years, I had the opportunity to work in three different locations with three different teams and hold four different titles. Although I was quite happy with the connections I had built and skills I had acquired, I felt compelled to explore other options within the organization. While browsing vacant positions on our company website, I came across a

posting for a role titled North America Community Coordinator. I reached out to the hiring manager to get a better understanding of what the job was and what was expected. After taking quite some time to think it over and discuss with my family, I submitted my application. While still serving as a LEGO Store Manager in Austin, Texas; USA I participated in three separate interviews and was offered the position thereafter.

**HBM:** How is the health of the North America Community?

KH: I think the term "health" can be defined quite differently depending on with whom you are speaking. From one perspective, the North American AFOL community seems very healthy as demonstrated by the explosive growth of recognized LEGO User Groups during the last four years I've been in this role. One could also draw this conclusion based upon the number of events the North American RLUG community has either hosted or participated in year over year.

From a slightly different perspective, we've noticed an interesting trend in which "LUG fragmentation" occurs frequently in North America. This is when a LUG splits into two separate, independent LUGs (or even three in some cases!) due to various reasons. Although there are a vast number of logical reasons for something like this to occur, the reasons cited most often are due to difference in opinion between individuals.

As this has occurred so many times in the region over the past few years, my perspective on the matter is that the North American community is indeed healthy but potentially fragile in some respects.

In terms of engaging with the LEGO hobby, I'm consistently impressed and inspired by the amazing AFOLs I encounter not only in North America but Central & South America as well! Their skill in building and creating truly breathtaking models are second to none.

**HBM:** How many LUGs are there?

**KH:** That's a very good question and one I get quite often both from colleagues internally as well as from fans externally. As of this writing, we have granted recognition to 102 LEGO User Groups in the territory I am responsible.

This equates to 92 in North America (Canada, Mexico & the United States) and 10 in Central & South America (Brazil, Chile, Colombia, Guatemala, Panama & Peru). November of 2014 we launched the LEGO Ambassador Network, or LAN for short, which hosts a map that will help members of the AFOL community search out recognized LUGs across the globe. There you can find links to their websites, membership data as reported by their Ambassador and even a short description.

**HBM:** Are there differences between European LUGs and North American LUGs?

**KH:** I believe so but not regarding their approach to the LEGO hobby. From my research, European RLUGs tend to be much more rigidly structured. There tends to be a sturdy infrastructure involved with various roles to be occupied and even committees to make club decisions.

Although there are certainly RLUGs in North America that share this trait, most groups are more loosely operated. Differences can also be seen in the geographic areas they choose to cover. It seems to be more common for a European RLUG to cover a country, or large geographic area, with support put into place for smaller chapters or sub-groups.

In North America, RLUGs favor smaller geographic areas that can even be based in a particular city or town. I've experimented with opening discussions on umbrella groups or chapter systems a few times with the community here and each time it seems to spark some interesting debate.

**HBM:** And regarding events, what are the main differences?

KH: On average, AFOL events outside of North America focus more on the aspect of sharing the hobby with a public audience. I've even noticed this trend in Central and South America as well. Events in North America tend to focus on sharing the hobby with fellow members of the AFOL community. A great example of this concept is by examining the number of AFOL conventions we have here each year. A convention is an AFOL event that focuses primarily on engaging with and promoting the LEGO Brand and hobby amongst fellow AFOLs & teenage fans. This is accomplished by offering a number of "private days" in which only registered attendees (which would be fans) can participate in a wealth of seminars, workshops, keynotes, games & activities. There is a time in which the event is opened to the public so that operating expenses can be covered. In 2015, our records indicate there were 16 AFOL conventions in North America. In addition to long running events such as BrickFair, Brickworld & BrickCon, we've witnessed explosive growth with newer events such BrickSlopes in the state of Utah, Philly Brick Fest in Pennsylvania, BricksCascade in Oregon and Brickfête Toronto in the province of Ontario.



**HBM:** Are all the Community support programs available?

KH: Yes, the support programs and opportunities that

we operate as a department are offered globally. An additional benefit of launching the LAN in 2014 was the ability to publicly publish the details of each of these programs on the platform. Now anyone interested in learning more can find the information, not just RLUG Ambassadors. As with any global initiative, within each of the support programs there may exist minor differences in execution due to local or regional laws, policies, and procedures. If there is a need locally to differ from the global operating model, we communicate this with the affected region both within the program documentation but also in discussion with the relevant RLUG Ambassadors.

**HBM:** What perception is there in the USA of the European AFOL community?

KH: From the discussions I've had, many members of the RLUG community in North America seem quite interested in the governance and/or administration of RLUGs in not only Europe, but other regions as well. The average total membership of a North American RLUG is quite small compared to many of the European RLUGs. Additionally, North American RLUGs tend to cover much "smaller" areas such as a city or portion of a state/province. As such, the concept of a countrywide RLUG is foreign and interesting to the community here.

**HBM:** What is the expected evolution of LUGs around the world: bigger groups absorbing different communities or greater number of LUGs of decreasing size?

KH: I believe we'll witness different forms of evolution in different geographic regions. For the North American region, I believe the trend of "LUG fragmentation" will continue and we will see more and more smaller groups that cover smaller areas. Again, I'd like to curb this with discussion and best practice sharing from other regions but there is more work to be done there. I believe South America is in an interesting position as it's susceptible to influence from not just North America but from Europe as well. As was mentioned to me

by a few AFOLs from Brazil- it's just as convenient to fly to Europe as to the United States from their position. Thus, I believe the South American region will evolve with factors coming in from both sides of the Atlantic Ocean, and that will surely be interesting to witness. As for other regions of the world, I defer to my counterparts who maintain a pulse on the community they look after.

**HBM:** The United States is the home country of many of the most well known companies that make accessories for LEGO minifigs and they are very involved in the NA events. What is the LEGO viewpoint of this aspect of the LEGO hobby?

KH: Very true indeed! I will admit that the AFOL community in North America is certainly known for their entrepreneurial spirit in terms of engaging with the LEGO hobby. Many businesses have sprouted from the community here and it's another trend I've noted in my tenure. Our viewpoint of these AFOL born businesses is the same we've always maintained. We understand that our products and services may not cover every single aspect of a hobby that one may seek. These businesses have the potential to fill in those holes and service those niche interests. The same could be said to some of the wonderful websites that operate in which a service such as logging your entire LEGO product collection exists. As long as there are no trademark and/or copyright violations and that the business is representing itself properly, we have no concerns.

Our primary focus is to ensure our consumers (regardless of their age) understand the origin of the product or service and how the LEGO Group is, or in most cases, is not involved. Where my role in this becomes quite difficult is that many members of our community will reach out to me seeking approval, partnership, or basic legal counsel in regards to launching a new business or service that ties into the LEGO hobby. This is not something we provide so such outreach and follow-up can seem confusing and/or disapproving to some

algo que ofrecemos, así como la divulgación y seguimiento y puede parecer confuso y/o desacertado para algunos.

**HBM:** Which are the most "LEGO" Countries in South America?

KH: From a company perspective, we only have an official corporate presence in Brazil. Other countries in the region rely on third party distributors and partners in order to sell LEGO® products and execute marketing initiatives. From a community perspective, we have RLUGs in many countries! Our records show RLUGs present in Brazil, Chile, Colombia, Guatemala, Panama & Peru. Each of them are just as passionate about the LEGO Brand and hobby as their counterparts up North. They host regular meetings, events, and engage online via forums, email distribution lists and websites.



**HBM:** Are there countries without LUGs? Do you know why?

KH: Certainly! Just as we see in North America, numerous states and provinces currently do not have any RLUGs on record. There could be a number of reasons for this- perhaps the AFOL community in a particular area has not organized themselves enough to form a club or group. Perhaps LEGO products are very difficult to purchase in a particular country or their cost is seen as prohibitive of the hobby. With so much coordination and communication being executed already with the RLUGs we do know about, my

colleagues and I don't place a tremendous effort on researching new LUGs that are unknown to the LEGO® Group. We hope that by sharing all the relevant information online via the LAN and word of mouth in the physical and online AFOL community, new groups will know who to contact in regards to seeking recognition and participation in our support programs.

**HBM:** Is it difficult to grow there?

KH: In some areas, I believe there are factors that do indeed make an RLUG community more difficult to establish and grow. As with anything, I think time and patience pay off when it comes to anything related to the AFOL community! There is so much information out there amongst the AFOL community. I would highly encourage those seeking advice on establishing a new LUG to search online and ask their fellow AFOLs. In terms of North America, I would encourage members of the community to reference our map on the LANyou may be surprised that an RLUG already exists where you are! Reach out and see where it goes.





### **Interview: Lennart Cort**

#### By HispaBrick Magazine®



HispaBrick Magazine: Please, tell us about yourself.

**Lennart Cort:** My Name is Lennart Cort I am 27, I live in small town called Give approx 15 km from Billund with my girlfriend and dog. I work as a salesman in Billund Airports LEGO® shop.

**HBM:** Did you play with LEGO® when you were a kid?

**LC:** Yes I did. LEGO® and Micro Machines (military theme) was my favourite toys.

**HBM:** Are you an AFOL?

LC: Yes indeed I am since 2010.

**HBM:** Which are your favourite LEGO® themes?

**LC:** As a kid I had lots of different Themes and I played with castle, space, city and pirates. Back then I probably enjoyed castle the most.

Today I like the creator expert theme and UCS Star Wars

But what I like most is to MOC, so all my money I spend on bricklink buying pieces.



**HBM:** Did you want to work for LEGO®?

**LC:** Yes that would be great and I hope I might eventually wil.



**HBM:** How did you get into the Billund Airport LEGO® Store?

**LC:** Just normal application and then it's not bad to have passion for what you sell.

**HBM:** Why did you think to build a model of the Billund Airport?

**LC:** I knew Billund Airport was very much interested in a set for their 50 anniversary.

Since i hadn't build any buildings yet, I figured I could build one in the LEGO® architecture-style.



HBM: How long did you take to build it?

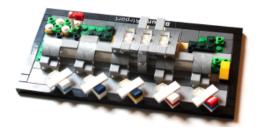
**LC:** Not that long, luckily for me Billund Airport is mostly light gray and that is the colour I have most of.

**HBM:** But it was in a bigger scale than the final model. How bigger was it?

**LC:** Approx 3 times bigger so the official set is less detailed than what I started with.

I think you can compare it to the LEGO® Cussoo/ideas sets, they tend to be changed from the originals to the official sets.





**HBM:** How did your idea come into LEGO®?

**LC:** After I showed the model to Billund Airports management they immediately took picture of it and mailed to Jørgen Vig Knudstorp (LEGOs CEO) at LEGO®. Just that was an awesome feeling.

**HBM:** How did you feel when you knew that your idea became real?

**LC:** I was very glad. I know I had been at the right place at the right time for such a thing to happen, and of course with the right model.

It's really awesome to be a part of.

**HBM:** Then, Mel Caddick designed the real set. Did you have any interaction in the design process?

LC: Yes, she did. Sadly I had not, even then it was a secret for me.

My model had been gone for months, and without my knowledge it was at LEGO, when it was returned to me I got it back with black tiles written "Billund Airport" on them, you know them they use in the architecture sets. Then I knew what was going to happen.



**HBM:** Now the set is on sale exclusively at the Billund Airport. How is the reaction of the people when they know that you are the person who thought about it?

**LC:** People are very kind and of course asks a lot of questions about it. I really enjoy meeting other AFOLS in the shop.

In general people a pretty cool about it, but sometimes some have reacted like I was a movie-star, that's really a strange feeling and I start to blush with all that attention.





**HBM:** Have you designed another model that could be a LEGO® set?

LC: I still build, but I haven't built anything LEGO set-friendly since. I am currently working on a minifig-size viking ship.

I did a model of a Eurofighter for Airbus GmbH, which also was a awesome experience and my F-16 model is at the Danish air museum, so things are going great.



HispaBrick Magazine Note: The LEGO® Group is not considering to produce any modern warfare sets.

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## **HispaBrick Magazine Event 2015**

By HispaBrick Magazine®

On **December 5 and 6 the 4th** edition of **HispaBrick Magazine**'s annual event took place. Fans of LEGO constructions gathered at the mNACTEC in Terrassa (Barcelona) to display their creations.

The exhibition was focused toward layouts and original constructions and the MILS system was prominently displayed, in the medieval display, in the Battle of Hoth display and in the Circuit de Catalunya. In addition, on this occasion the Imperial Hangar was on display and we received the visit of a famous Star Wars character. Another ever present theme is City, both vintage and

current, as well as the large collection of vehicles from Panzerbricks.

MINDSTORMS and Technic once again proved to be the theme that attracted most spectators, both children and adults. There were continuous demonstrations of the many different models that were on display. The absolute star was an EV3 Rubic Cube solver.

In addition to the exhibition there were other activities for the almost 9000 visitors that came to the event. #







































Registration for the event will start some time in February. As has been the case for several years, the event will take place during the Collectors' Fair in Mungia. **HispaBrick Magazine®** will be there organizing the LEGO® constructions exhibition.

For more information about registration and the event in general, please visit HispaBrick Magazine website: http://www.hispabrickmagazine.com/

# XIV Feria de Coleccionismo Mungia - 2016



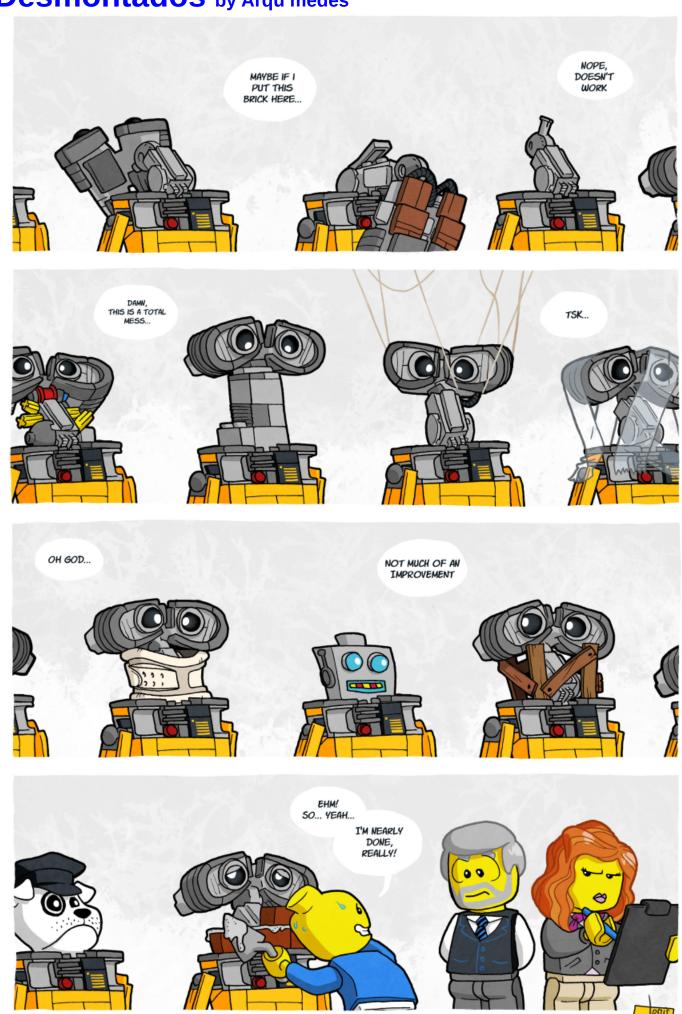
Gaztegune (Aita Elorriga kalea 1)

2 de abril: 10:30 - 14:30 y 16:30 - 20:30

3 de abril: 10:00 - 14:30



## **Desmontados** by Arqu medes



### How to collaborate with us

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

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

You can also find us at Facebook: http://www.facebook.com/hispabrickmagazine and Twitter: @H B Magazine #

### Our collaborators on the Internet

Antonio Bellón (Legotron) http://www.abellon.net/Panzerbricks/

Arvo brothers http://www.arvobrothers.com

Carlos Méndez (Car mp) http://www.flickr.com/photos/carmp/

http://notjustbricks.blogspot.com

http://debiologoadibujante.blogspot.com/

http://www.brickshelf.com/cgi-bin/gallery.cgi?m=manticore

http://www.brickshelf.com/cgi-bin/gallery.cgi?m=linmix

http://www.brickshelf.com/cgi-bin/gallery.cgi?m=satanspoet

http://www.flickr.com/photos/eilonwy77/

http://lroboticas.net

http://www.brickshelf.com/cgi-bin/gallery.cgi?m=lluisgib

https://www.flickr.com/photos/migalart/albums

https://www.youtube.com/user/yamsemaj/videos

https://www.youtube.com/channel/UCmNg6jpFaqt3frv18LJmInQ

http://www.brickshelf.com/cgi-bin/gallery.cgi?m=otum

http://www.hothbricks.com/

Diego Gálvez

Jesús Delgado (Arqu medes)

Jesús (Manticore)

Jetro de Château (Jetro)

José (Satanspoet)

Katie Walker (eilonwy77)

Koldo Olaskoaga

Lluis Gibert (Iluisgib)

Michał Kaźmierczak (migalart)

Oton Ribic

Pablo Llorens

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