THE ARC HAMMER

Building Process

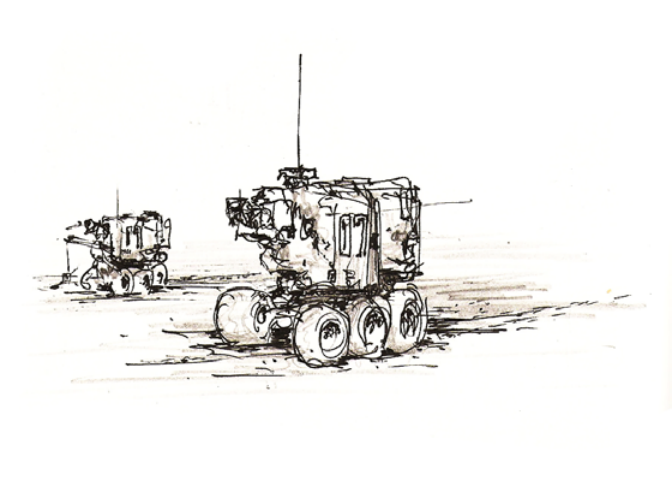
By Pierre-E. Fieschi

INTRO

Over the years people sometimes asked me how I plan my creations and how much it impacts the building process. It is a very interesting question because it forced me to think back at my old creations or to even take notes about my process while building new things.

In 2013 I was invited to an exhibition of LEGO® Models in Paris, by two talented builders; Sylvain Ballivet and Christophe Corthay. Considering the size of their creations and my mostly microscale models I decided with the time I had prior to the exhibition to build three models larger than my usual. Considering that these models were going to be shown to the public, I knew the question of the building process would be asked. So I had to pay attention to what I was doing. One of these builds had a particularly strange process that I had some time to write down: the Arc Hammer.

Because sometimes the process is more interesting than the result; this is how I built the Arc hammer.



INITIAL SKETCHING

As a kid I was lucky enough to have a lot of drawing and painting lessons with incredible teachers, and even though at the time I would rather have spent some time with friends, looking back I can only thank my parents for these lessons. Drawing and sketching is something I do every day, not only in my job as an architect / 3D artist but in more common situations as well. Building with bricks is no exception. I don't always sketch the idea before starting to build, but in most cases, and especially with large builds I try to.

Sketching allows me to lay down an idea on paper when my bricks are not nearby. It allows me to get a first idea of the proportions, perhaps the colors, a little detail here and there, sometimes even partial assemblies or structural solutions. But sketching remains highly conceptual. Sometimes I will realize that one of the things I wanted to do requires a completely different scale than what I had initially planned in my sketches.

So no, sketching is not the key to a fully linear building process. Rather it is a tool to test ideas, and help remembering them. In this case the initial sketch was inspired by Karen Quinn's very awesome Rollright Droids!

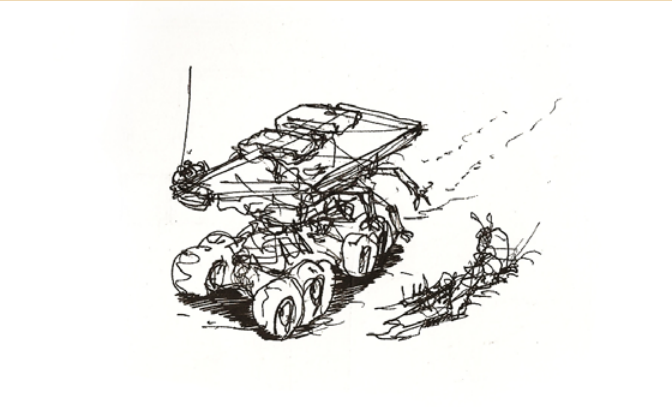
Rollright Droids by Karen Quinn https://www.flickr.com/photos/karenleahquinn/

SKETCHING EVOLVED

From the sketch to the build, you have to start with assembling bricks. And that is when the building process is somehow 'out of control'. That is when I realize that my initial sketch is really rough, and is perhaps not to scale with the bricks or not structurally possible, or that I don't own the proper wheels/metaparts in the right size.
Still this is a very exciting moment for me! The build isn't there yet, but the small boxes of bricks in assorted colors on my clean desk are a delight to the eye – even if I know that it won't last.

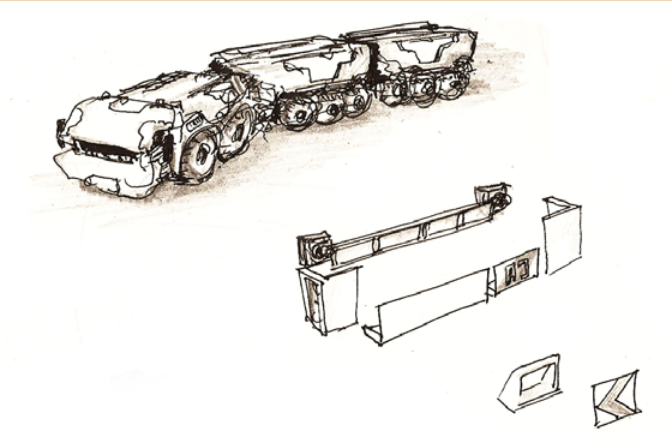
Even if I have an idea – roughly – of how I want the model to look, I try never to restrict my palette; colorful details give a lot of a life to a build. All I know in this case, that I want to reuse a color scheme I have been using for a long, long time: the Sobani tan and dark red combo. So there I am with a rough sketch, vaguely describing the model, and unassembled bricks all over my desk in a somewhat controlled color range. I have to find a proper scale because this is for an exhibition and Karen's Droids could fit inside the smallest of Sylvain's builds. So I have to make it bigger, exaggerate the proportions and the design, more wheels, more top heavy. Perhaps some kind of giant salvage vehicle with arms on the side? That leads to a new sketch.

The Concept behind the build is as important as the Design. What does it do? How does it work? Knowing what that thing you are building does and how it works adds so much sense to it. This is perhaps the essence of science-fiction as well, where completely impossible, non-physical aberrations are hidden behind myriads of technical credible details and functions.

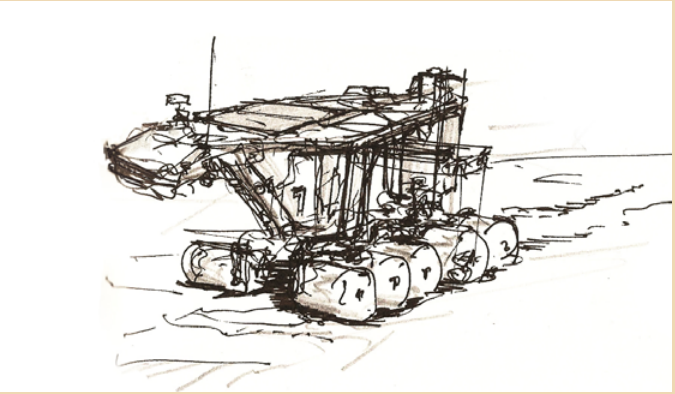


ARBORESCENT DESIGN

So now I know what the vehicle is meant to do and I start table-scrapping with that in mind. Sometimes I take some old tablescraps out of that tablescrap box most of us have somewhere. And I start fiddling with them. At this point I have forgotten all about initial design and in the specific case of the Arc Hammer I started assembling the windshield I had imagined for another build, using the Trans-Light Blue garage door piece with the assembly detailed below.



This little detail once assembled, forced me to adapt the scale of the build. But this felt right and I knew the build was going to start from here. I only had to integrate this windshield back into the sketches!



This brick-induced decision is radical. If I had chosen a different solution for the windshield, the build would have been entirely different. This is what I would call Arborescent Design.

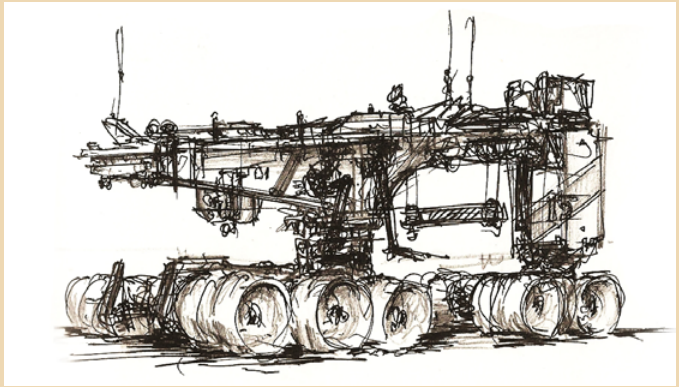
From my interview in Jordan Schwartz's 'The art of LEGO® Design':

Arborescent design would be starting from the idea of using a single brick for a certain purpose. That brick is the 'root' of the build. The design sketches (if any) will integrate and work around that detail. And so the build will start taking form, with the sketch in mind but always deviating from it. This leads to a different sketch, and so on. In the end the 'root' brick is just a small detail in a big MOC that could, at every point of the process, have taken a completely different direction.

BUILDING FREE

Because of arborescent design, during the building stages, which also sometimes include long pauses (waiting for brick orders, being stuck at work etc…) the build deviates more and more from the first sketches. In the case of the Arc Hammer which was a really long build, the design continued to change drastically until the end. Even adaptations to scale were made at the very end - It is the advantage of unprecise microscale compared to minifigscale which is defined by the minifig itself – to make the vehicle seem even more oversized and massive.
I also wanted to integrate a new feature to match the new size: a giant gantry underneath the main section of the chassis. This meant separating the chassis in 2 distinct mobile parts. Obviously the design changed radically into its almost final stage. The very final stage was the idea to inject Power Functions into the design to make the gantry controllable with an IR remote.

I feel building should always be a free process. No theme, scale, convention or initial design in your head should get in the way of building exactly what you want at a given time; because the point is expressing creativity, which beyond having fun, and sharing with our incredibly awesome community, has no purpose.



So this is not really about building process. But more about the Lack of a defined process. It is really the story of a small build, inspired by really great people, which degenerated into something completely unexpected, out of proportions, with a final design that I had no Idea about at the start of the 6 weeks of building time. And that for me incarnates the magic of the incredible media that are LEGO® Bricks and the fantastic Builders community that enjoy it so much.
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This graph compares the evolution of the sketches on the left with what was actually built at that time during the 6 weeks of building.

‘ARC HAMMER’

> CAPITAL PLANETARY DEPLOYMENT UNIT

Construction Timelapse

Sobani Bureau of Expansion

Pierre E Fieschi

21/09/2012

A-15 G

‘Kudon N4e’ Coupled Low Pressure Tires
‘Drake’ Dual Rapid Autocannon
‘Orchid’ Capital Maintnance Gantry

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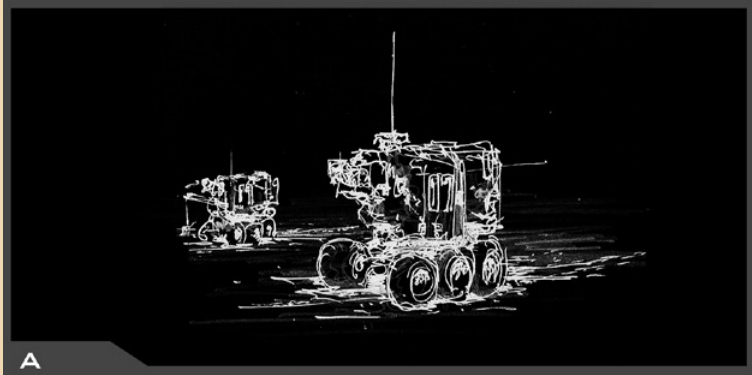

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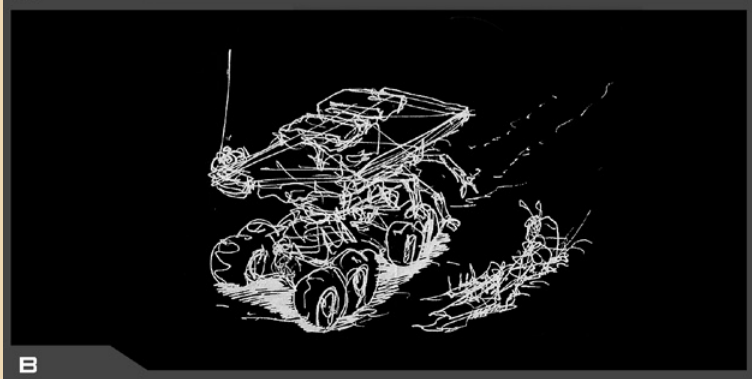

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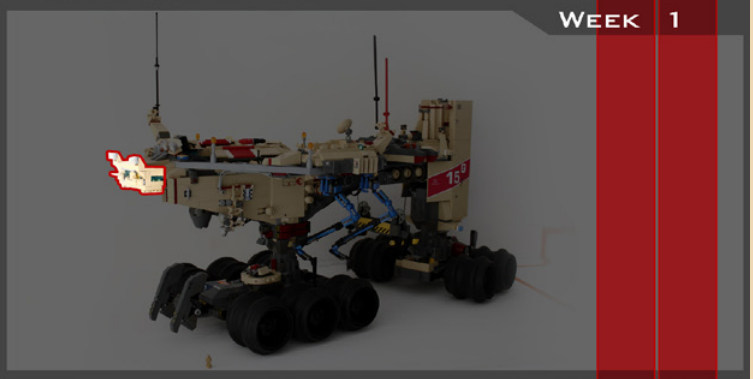
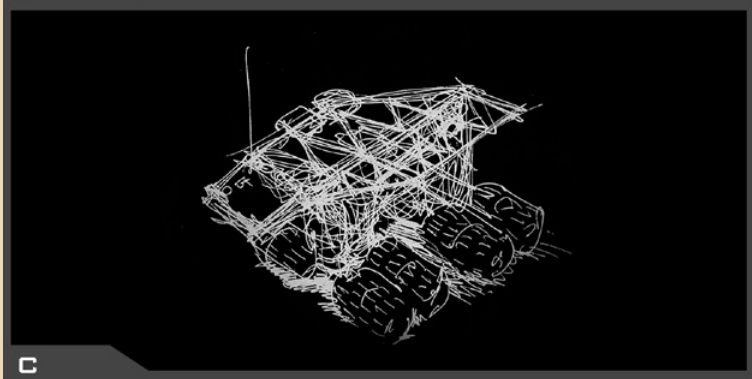
Week 1





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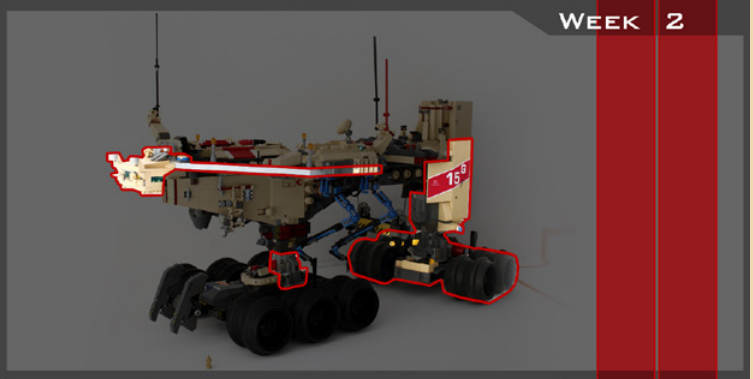
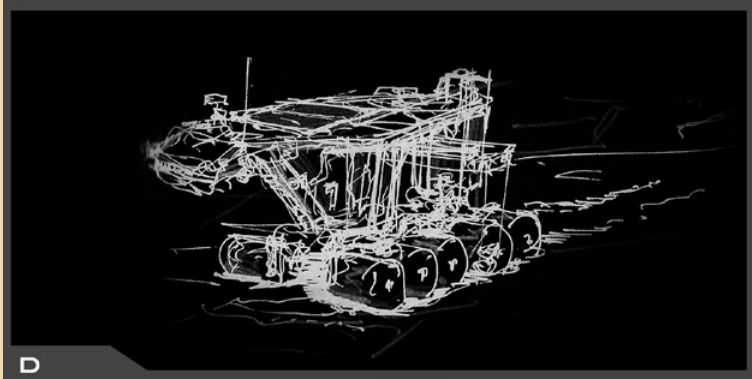
Week 2





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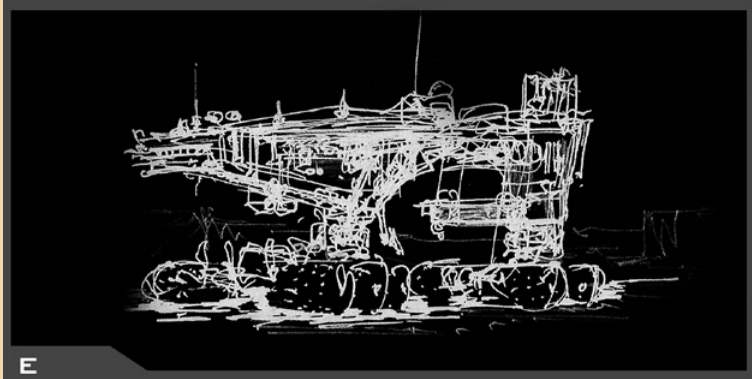
Week 3



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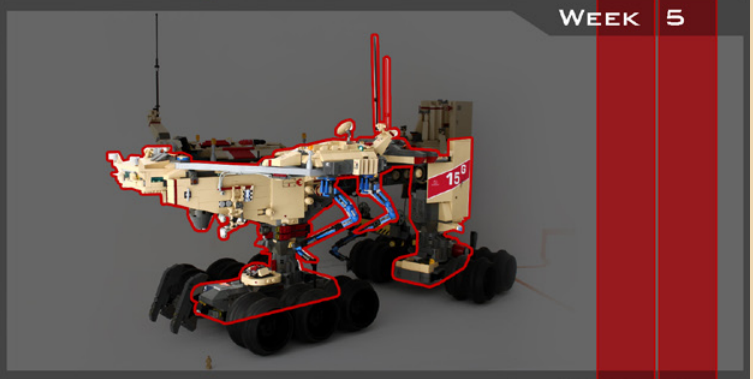
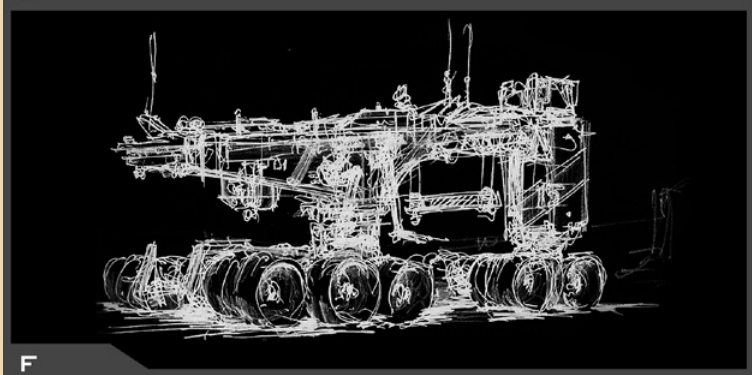
Week 5





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Week 6