

total

3dtotal's free emagazine

01

THE
SCI-FI
ISSUE

Editor's letter

Hello and welcome to the very first issue of total, our brand new, absolutely free, emagazine. A member of the editorial team at 3dtotal will put together a carefully selected collection of tutorial content each issue, covering both traditional and digital painting, as well 3D techniques and processes to get the creative juices flowing, helping you expand and develop your own artistic skill set.

In the very first issue you will be treated to an introduction to the 3dtotal team, and an insight into some of the projects we are working on at the moment. Additionally you can enjoy some of our sci-fi themed articles and tutorials which we hope will help take your own work to the next step.

So sit back and enjoy the first of many issues of total magazine.

Simon Morse
Editor

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In this section of total magazine we will be telling you a little about our company as well as showing you what we have been up to recently. As this is the very first issue of total I thought I would start by introducing you to the 3dtotal team and letting you know a little about the many other projects we're working on at the moment.

Rather than doing a boring and to the point "meet the team" article, I thought it would be fun to introduce the people that make 3dtotal as amazing as it is (yes that's right, "amazing") by sharing some of the pictures from our recent team building day. So really I should start at the top with Tom Greenway.

Tom (01) set up 3dtotal in 1999 and has taken it from being a simple 3D resource site to a globally recognized website and publisher of quality art books and tools. Maybe it's because such a large part of Tom's

life has been spent at a computer, but Tom likes nothing more than to retreat to his small woodland and work on his rather impressive tree house. We had a great day in Tom's wood and made our own bows and arrows which was a lot of fun.

In the foreground you can see (from the left) 3 formidable archers (02) Adam, Rob and Marisa. Adam is our Publishing Co-ordinator which means that he keeps the whole operation ticking over. Adam is also a talented fiction writer so if you like apocalyptic horror, check out his book The Risen by Adam J. Smith.

Rob is an enigma. He spends most of his day hidden away sending parcels around the globe. No-one knows how old he is. There's a chance Rob is actually 200 years old found the fountain of youth. This seems like the only obvious conclusion to the mystery.

On the right is Marisa. Marisa is a talented artist and a great Editor. She manages Graphite magazine as well as putting together three books every year. Marisa is constantly trying to throw things at my face, specifically my large forehead (as she would describe it). Immediately after this photo she hit the target, by imagining it was my face.

Next you can see three more (03) of the team (from the right this time – just to keep you on your toes) we have Imi, Joe and Mel. Imi is our Lead Designer and does an outstanding job of making our books look great. She also keeps the other two designers Matt and Joe in check (those little rascals). Imi is the one and only owner of a "full body bib" or as you and I would call it, a towel tucked into the neck of her jumper. No-one really knows why she needs that level of protection from her food, but after all this time we've stopped asking. The rose between two thorns here is Joe. Joe



is one of the newest members of the 3dtotal family and is a great member of our design team. Every day Joe hosts a mini-quiz and keeps a tally of weekly scores. He even has a Quiz Master jacket and tie to make the whole thing feel a little more authentic. It might sound like I'm making this up, but every day

Joe leads a chorus of "Let's get quizzical, quizzical."

On the left is our Lead Editor and newly appointed Assistant Manager Mel. Mel always goes the extra distance to make sure that our books are as good as they can be and

keeps on top of a pretty mammoth workload. For someone as capable and intelligent as Mel it is taking a remarkable amount of time for her to find Tupperware that doesn't leak salad dressing into her bag every day.



Tristan is not only one of the nicest gentlemen you're likely to meet (04), but also boasts an eclectic collection of psychedelic hats and jackets. Tristan must be at least twice as clever as the rest of us as he has four monitors and we all only have two. Tristan keeps the website and systems up and running and helps me do all the tasks on my computer that I struggle with, like opening Word and finding the "on" switch.

This cool character is Matt (05), the last of our graphic designers and the longest standing member of the 3dtotal team. Matt lays out our stunning quarterly magazine GRAPHITE and always blows me away in regards to how quickly he can come up with an amazing design. Matt is undoubtedly an incredibly wise man. There is nothing that Matt doesn't know about 3dtotal and he supports the greatest football team in history, Manchester United.

Next we have the second of our editors Annie (06). Like Marisa, Annie manages three books

a year and our magazine Character Design Quarterly. Annie took to her role like a duck to water and now manages all her work with fantastic professionalism. Annie wore blue wellies (wellington boots) with big boggly eyes to the wood, which are actually her least conspicuous pair of shoes. There's nothing that Annie doesn't know about *EastEnders*, she has recently taken up roller skating and she was very graceful when I accidentally broke her mug. Sorry Annie.

Our Advertising Sales Manager Becky is the newest member of the 3dtotal team (07). Becky is excellent at coming up with advertising solutions and has come to 3dtotal with some really cool ideas. Becky is from the south of the UK and has proven to be a valuable resource when planning holidays to Cornwall.

Last but not least you have me. My name is Simon and I'm the Studio Manager (08). I'm here to make sure everything happens when it's supposed to and that we continue

to make quality books and products. My job is made much easier because everyone else is so good at theirs. I genuinely feel lucky to be working at 3dtotal and continue to be amazed at the team's patience with me. My favorite pastimes include spending time with my family, art, football, and humor that only a very small group of people find funny.

I hope you enjoyed that little introduction to the team (09) and what we all do. We all feel very lucky to work somewhere that we can be creative and where we can fuel a community that appreciates our products, and we look forward to doing more of the same in the future.

04 - 08

Merry men
and ladies

09

The full ensemble

What are we working on at the moment?

We are constantly working on the next issue of a magazine or putting together the pages of our latest book. 3dtotal is a constant hive of activity so in this short section I thought I would show you one or two of the projects we are working on at the moment.

Anatomy Figures

A few months back we ran another successful Kickstarter project to launch some new anatomy figures that we're really excited about. Our anatomy figure range has been really well received as it continues to be a useful resource to help artists portray accurate human anatomy. We now have piles of boxes full of anatomy figures (10), being shipped around the globe and hopefully putting a smile on the face of our backers.

The tall chap you can see in the middle here (10) is our new adaptable male figure which

allows you to change the pose of the model as well as see muscle structure in more detail. This is our biggest anatomy reference to date and will prove to be a versatile reference for anyone working on characters. You can also see the two new planar head models here which are a great reference when you are working on the structure of a face.

Magazines

Long time 3dtotal fans will be more than familiar with our two magazines 2dartist and 3dcreative. Sadly each of those magazines became a victim to piracy. However we love to make the best out of a bad thing, so from out of the ashes of our two digital magazines arose 2 quarterly print magazines that we are really proud of. In this image (12) you can see the fantastic cover of GRAPHITE issue 4 which is available now. In each issue amazing traditional artists talk about their inspirational approach to creating unique concepts and illustrations. I can honestly say that no other

publication has ever made me want to pick up my tools and create something like this magazine. Marisa and Matt do an amazing job of making each issue just as stunning (if not more so) than the previous issue. In issue 4 we take a look at the breath-taking skills of the guys at CreatureBox, check out some mind-blowing inking by Richard Anderson and enjoy some jaw-dropping delights from Eduardo Vieira (in case you haven't noticed I like hyphens).

Character Design Quarterly (CDQ) is riddled with expert advice about designing unique and purpose made characters for illustration, animation and concept art (13). As someone that particularly enjoys this kind of art this magazine is a joy to work on. The cool thing about CDQ is that it doesn't just include creative solutions and advice, but is also full of industry knowledge from well respected studios and artists.



10



11

10

All boxed up and ready to go!

11

Our new anatomy figures with an existing model in the background for scale

12

Issue 04 of our beautiful magazine GRAPHITE

13

Issue 01 of Character Design Quarterly

14

A small taster of what you might expect from our Mythical Beasts book

Books

The most recent book we have put on pre-order is Mythical Beasts: An artist's field guide to designing fantasy creatures (14). This is a really exciting title where each of the 30 artists involved uses the description of a mythical creature and real world research to design a fantasy beast. I've never really closely looked at mythical beasts, but now I'm hooked and can't wait to suggest doing volumes two,

three and four! Keep your eye out for this one on pre-order in late July/August.

In conclusion

So there you go; an overview of what we are up to at the moment. There's so much I could add to this, but you've heard enough from me and are probably itching to look at the tutorials in issue 1 of total magazine. I hope you enjoy our new magazine and feel like you

know a little more about the people behind 3dtotal. Before I go though I wanted to deliver one final dramatic bombshell to leave you on the edge of your seat and begging for more;

3DTOTAL IS BEING RE-DESIGNED AND OUR NEW SITE WILL BE LAUNCHED LATER THIS YEAR (drops the mic)!



12



13



14

To get information about any of the products you've seen visit our shop – shop.3dtotal.com

3dtotalAnatomy

shop.3dtotal.com

Anatomical reference figures

Whether you use pencil and paper, paintbrushes, clay, ZBrush, Maya, 3ds Max, or Photoshop, 3dtotal's anatomical reference figures are invaluable if you want to understand the form and structure of the human body. All figures are cast in neutral gray resin to make the variation in the surfaces easy to discern.

The range includes:

Male half-skin/half-écorché

Female half-skin/half-écorché

Male écorché

Female écorché

Male skin

Female skin

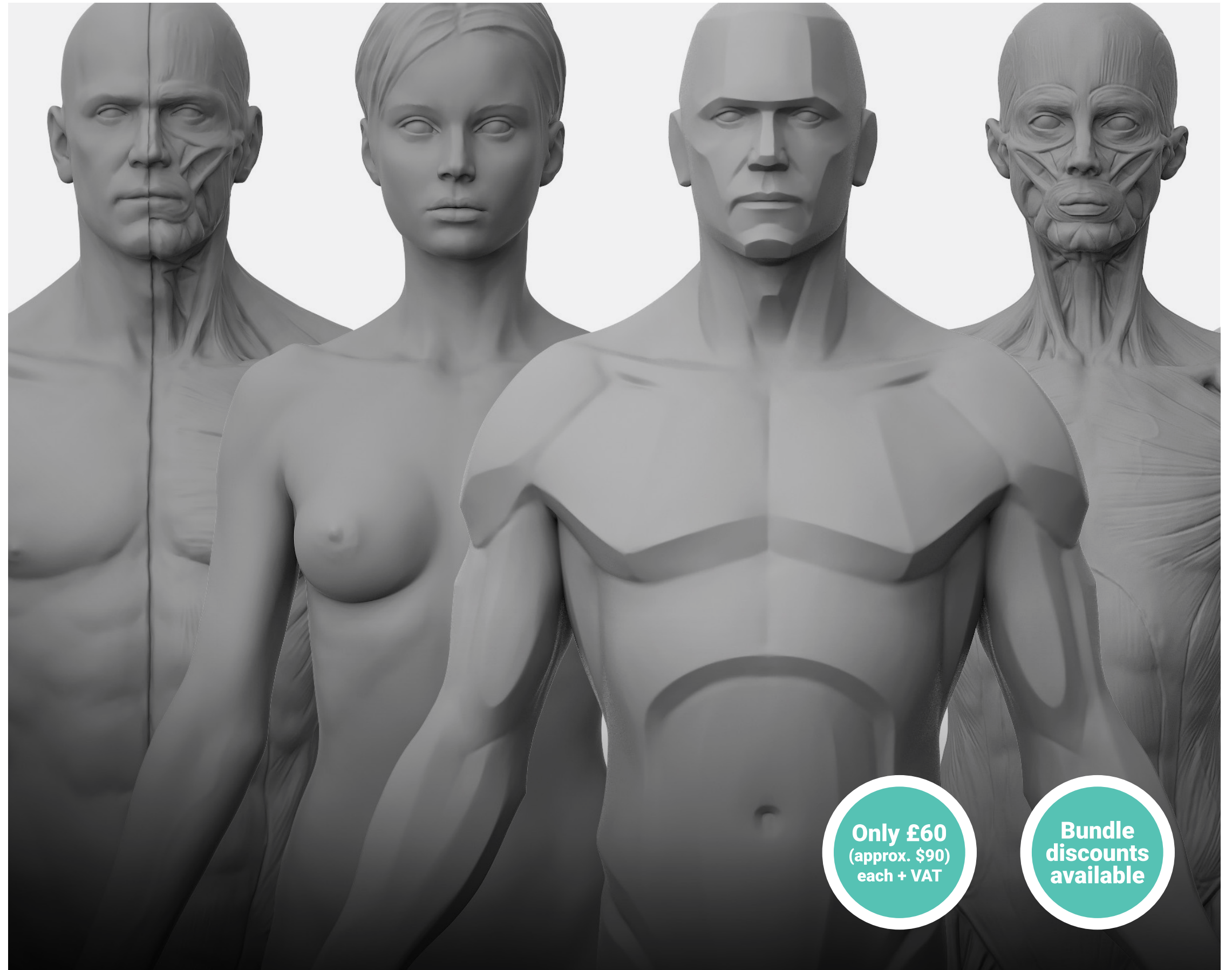
Male planar

Female planar

Adaptable male

Male half-basic/half-complex planar bust

Female half-basic/half-complex planar bust



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Designing a Repair Droid

By Alexander Iglesias

Web: flyingdebris.deviantart.com

Featured in:



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3dtotal

Hello, my name is Alex Iglesias and I am a mech art addict! In this tutorial we're going to go through the process of designing and illustrating a repair droid.

Now when it comes to the basics of mech design, the first thing you want to ask yourself is, "What is this mech/droid supposed to do and how is it going to do it?" In the case of this design, the "what" was part of the assignment and that was repairs. Now, to different people the idea of some sort of repair droid means different things.

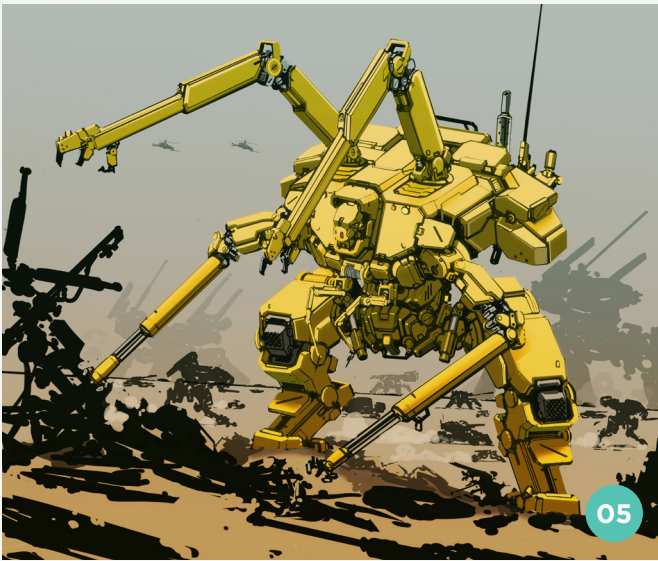
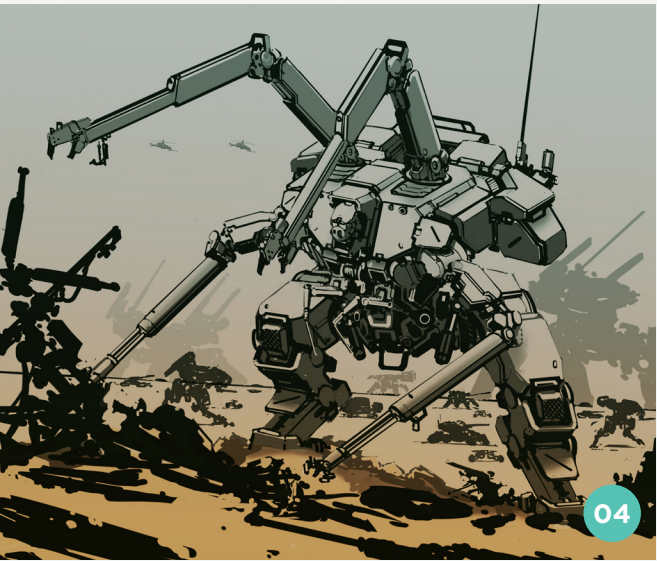
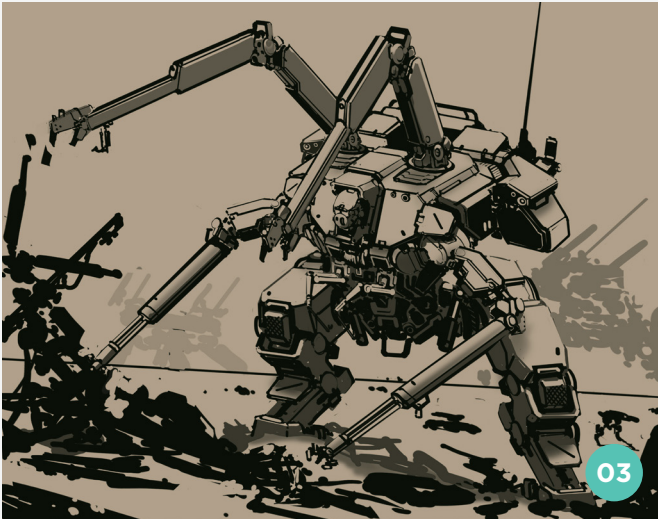
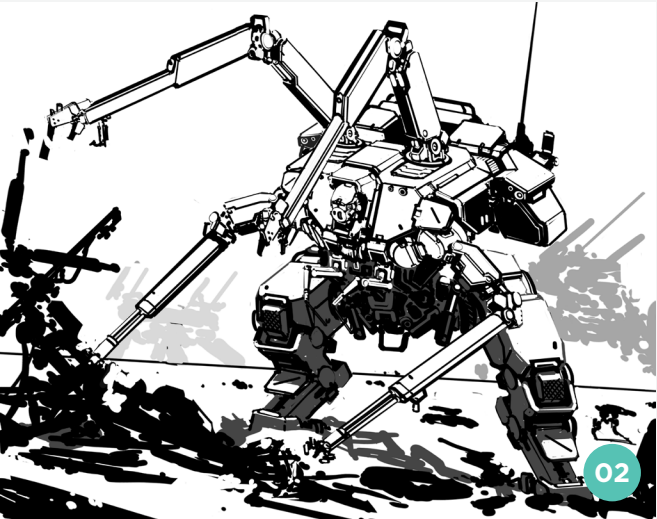
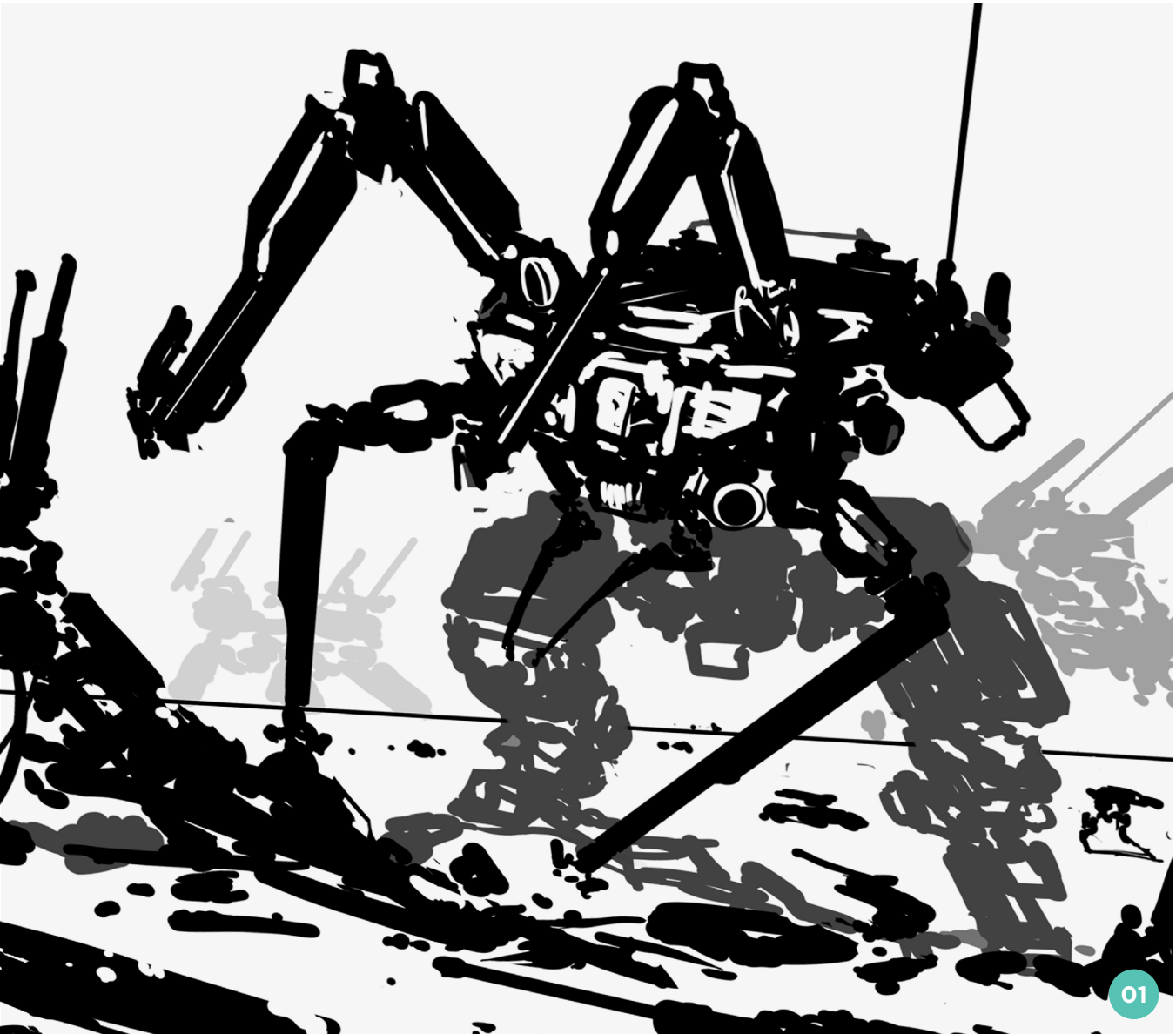
Concept

Some people might picture some sort of anthropomorphic robot handyman; others might imagine spiderbots working in unison, or maybe some kind of ambulatory multi-tool. In the case of this design, I pictured some sort of battlefield engineer unit that follows around combat units and patches them up, or tries to salvage them if they are blasted apart. With that approach in mind I began making sketches exploring that idea.

At this point the idea of the "how" began to form. It would fix up/interact with other droids

via long spider-like appendages ending in pincers, tools, cutters, and so on. After a small bit of exploration of silhouettes, I decided to depict the repair droid mid-work, sifting through wreckage while its allies converge on an off-screen fight in the background (01).

As I looked at the initial sketch it became apparent that there were a few things that didn't quite sit right in the image – it felt too static and lacked energy. The solution I found was to flip, warp and distort areas of the image to make things appear just a little bit more dynamic. Tilting the horizon a little



bit helped this too. Also I put more of a lean into the repair bot's pose, which added a little more implied weight to its form.

Defining shapes

After I was happy with the sketch I started defining the originally ambiguous shape from the sketch into more specific surfaces. I also began experimenting with certain dark areas and aspects of lighting. However, it was still fairly crude and more clean-up work and refinement continued well into the process of this piece (02).

Immediately after I was comfortable with the basic details and layout, I added a flat brown

tone over the whole image and added some rudimentary shadows, in order to provide a bit of a background tone as I continued the rendering process (03).

Adding color

I began to add some color gradients to start establishing the dusty atmosphere of the piece, and started to clean up the design of the droid itself. I also began to establish the forms of the background vehicles at this point. I really wanted to give the impression of some large mobilization consisting of a combined arms force. Part of the reason for this was to give the viewer some rough idea of what the blasted wreckage at the repair

droid's feet might have looked like (04).

For some reason I really enjoy bright yellow color schemes on vehicles. So in the case of this repair droid, to help distinguish it from the combat units and to make it associated with industrial equipment, I applied an Overlay layer of a bright, school bus yellow! I didn't add this yellow to the areas I wanted to leave as exposed metal. I also painted in some dust to show the movement of all of the droids in the scene (05).

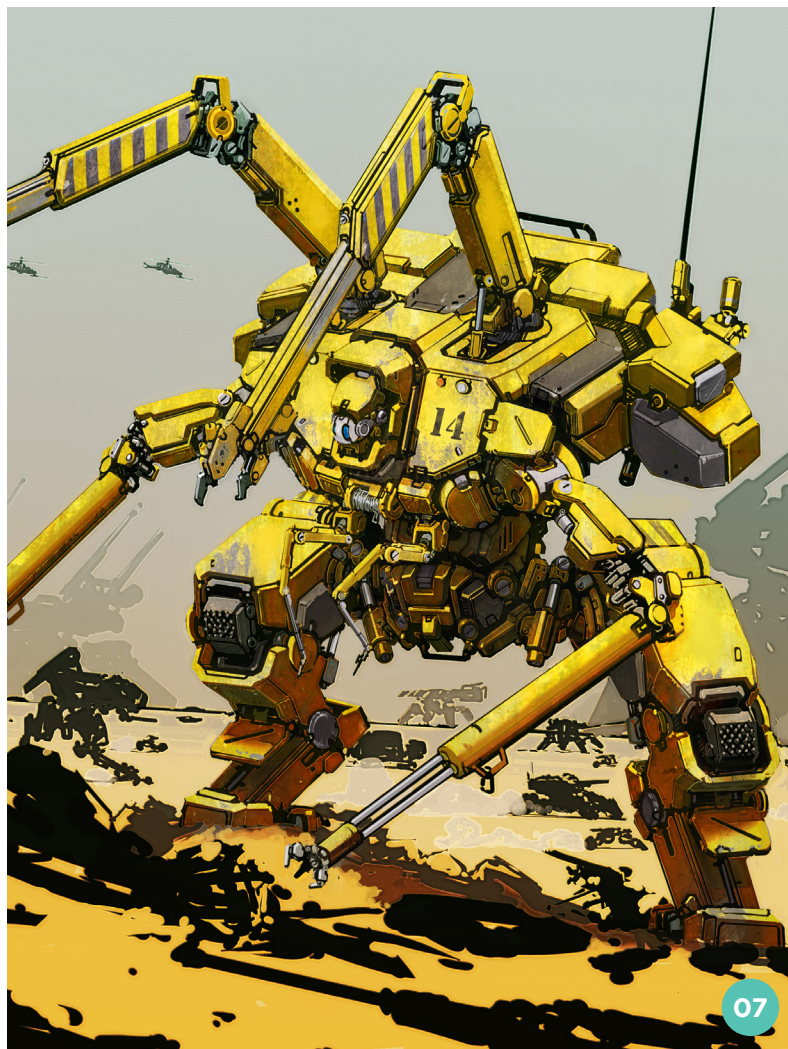
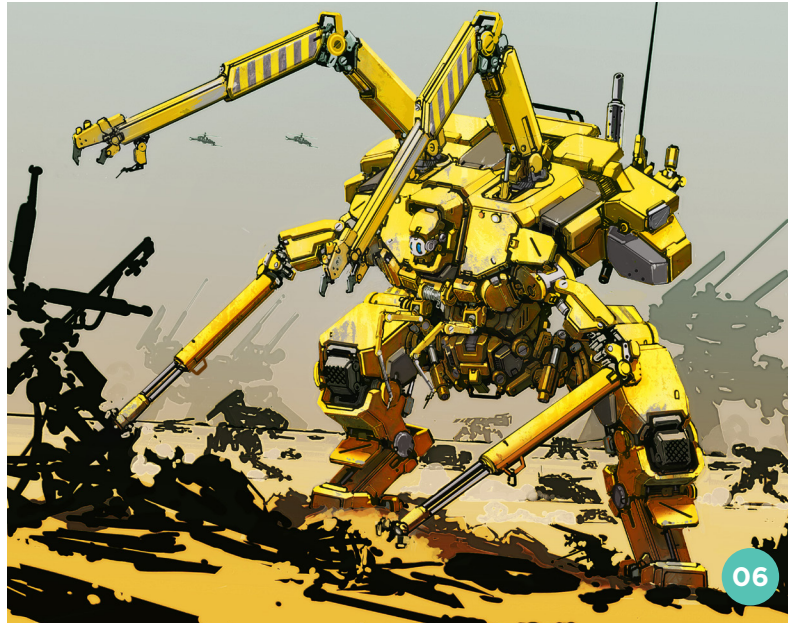
Adding contrast

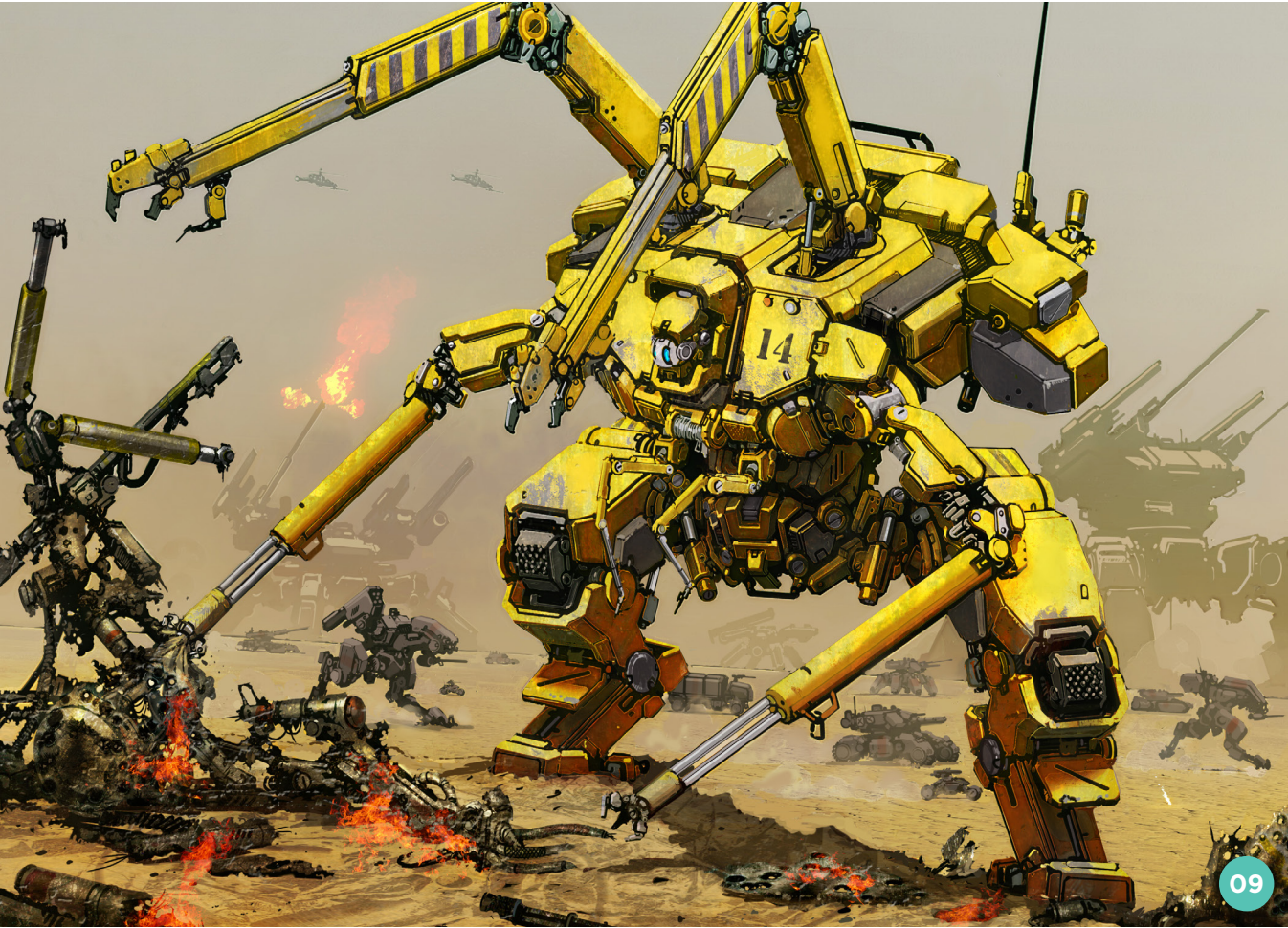
I wanted to differentiate areas further, help diversify the color scheme, and add even more of an industrial flavor, so I made several surfaces much darker and unpainted. The caution strip was also added to several areas as it's a classic, easily identifiable motif that helps cement the industrial aspect further. In order to make the machine appear more used, areas of chipping and fading in the paint were added. Experimentation with the color scheme via the Hue and Saturation tool also caused the overall colors to become brighter and more vibrant (06).

After taking another look at the image, I found that the colors were actually a bit too saturated now and the machine was still not looking worn enough! More weathering was added using grunge brushes I had, in addition to some smaller clean-ups and edits. The overall effect made the machine appear a little darker and its paint job a bit more mottled. At this point I also felt that one of the surfaces was woefully empty and decided to add a number decal for fun. Areas that were meant to be bare metal were also considerably more defined at this stage in the progress (07).

Foreground

The mech's details were pretty much nailed down at this point, so it was necessary to move on to other aspects of the piece. In this case the foreground. First and foremost I had to come up with some convincing dirt! Using the underlying color plus a texture, I found I was able to create exactly what I was looking for (08). After that I had to edit the overall silhouette of the scattered debris, cleaning up the shapes and adding form to them. For added form and detail I used various metal textures and grunge brushes at low opacity to get the necessary amounts of metal noise. The fires were essentially tweaked and modified textures that I applied using the Lighter Color layer style, which really gives that sort of "flames in broad daylight appearance."





With the foreground and focus point where I wanted them it was time to finish off the background. The attack units took a bit of work, namely in cleaning up or adjusting the individual silhouettes. But as they were relatively small, implied detail went a long way here.

Background

The giant weapon platforms in the far distance also got some measure of refinement and definition, but not too much as it would not be conducive to conveying their far away distance and immense size.

My personal favorite part of the background though was the creation of the artillery muzzle flash on the far left giant mech platform. Essentially it was just a sketched blob shape that had some tweaked fire textures dropped

in it. The texture was then merged, set to Lighter Color and dropped in opacity (09).

The end result was something relatively minor, but it goes a long way to showing how much dust and distance there is between it and the viewer. A considerable amount of hand-drawn smoke clouds were also involved.

The image was now looking pretty solid to me, but it was still a bit too clean and flat. Something had to be done about that. Using some gray on a Color layer I opted to desaturate certain areas of the image to make the repair droid seem a bit more worn. Also, finding the bare metal surfaces themselves a little lacking, I decided to clean them up and contrast them a bit more, so as to make those parts stand out.

Final atmosphere

Although the image up to now looked dusty, it didn't really look that acrid, scorched earth, type of dusty. I really wanted that "carcinogens in the air" type of smoke factor in my image. Using some textures of overcast skies and various clouds, and some tweaking of layer types and opacities, I managed to get the amount of smoke desired (10).

Lastly it came down to adjusting the general color, hue, saturation and contrasts to finally make the image pop, plus a few general color overlays and gradients. After a fair bit of tweaking the various image aspects I finally reached a point where I was satisfied with it. The air in the image looked so thick that it could have been cut with a knife. Also the mech looked well-used and sturdy, which fitted the image perfectly.



Modeling a Repair Droid

By Victoria Passariello

Web: victoriapassariello.com

Featured in:



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Droids eBook**

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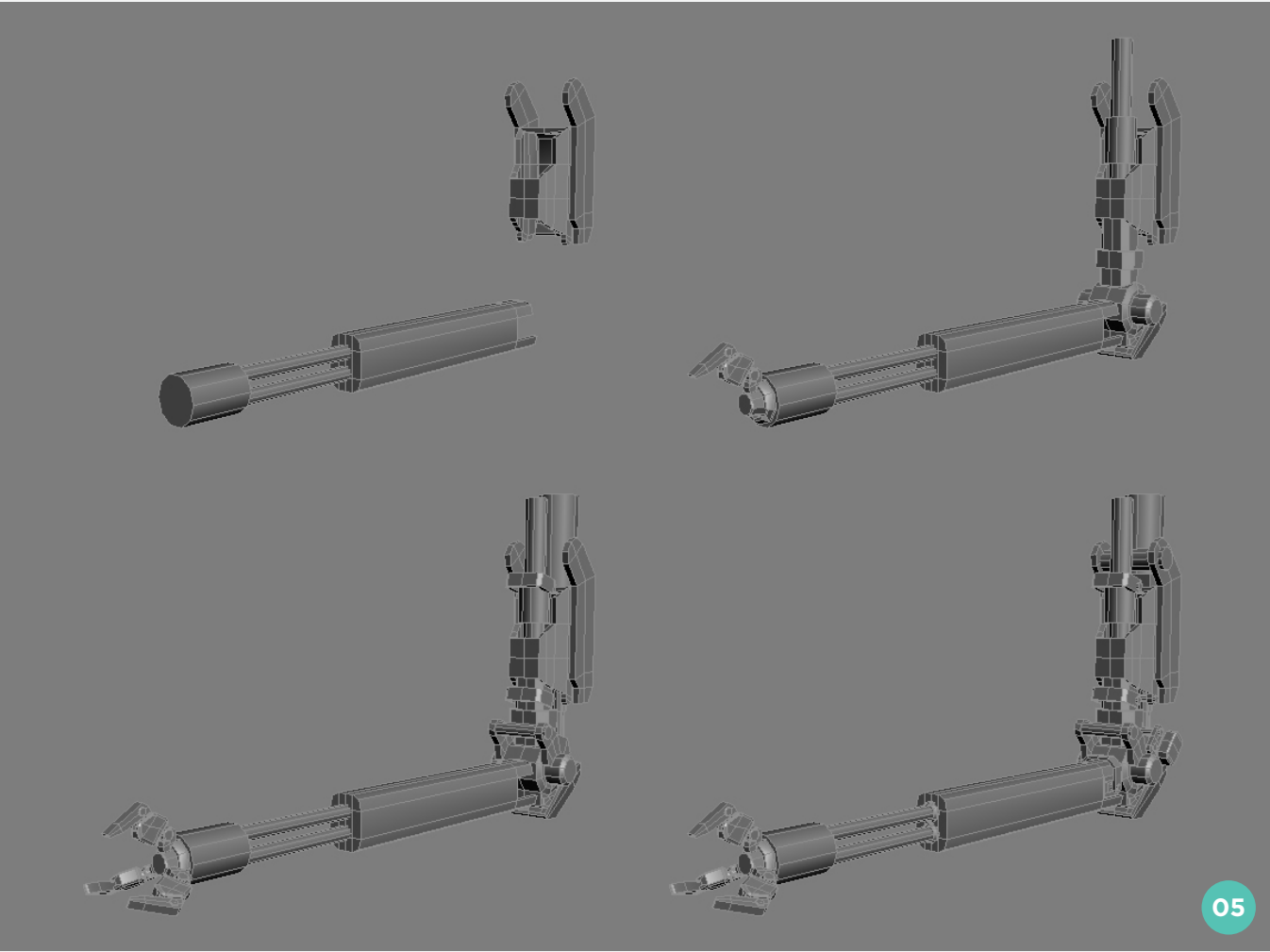
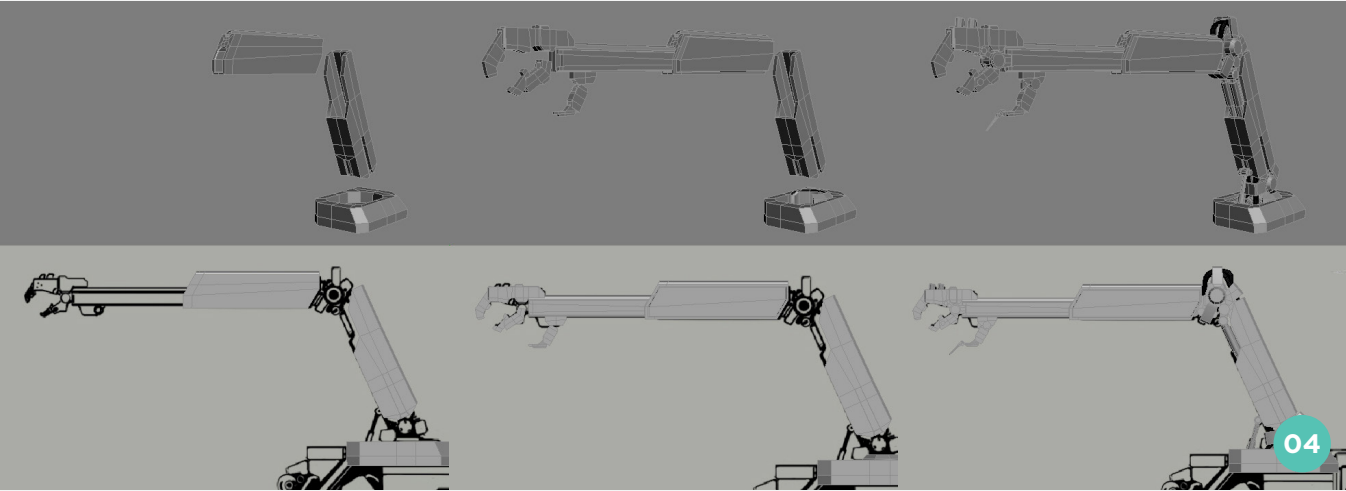
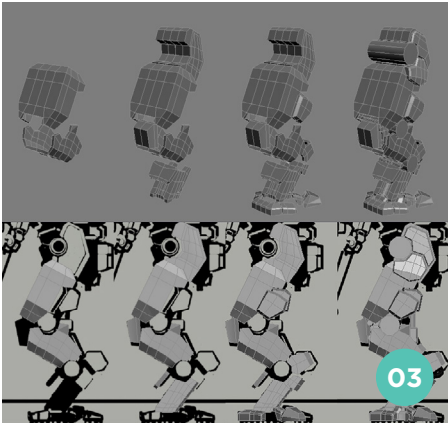
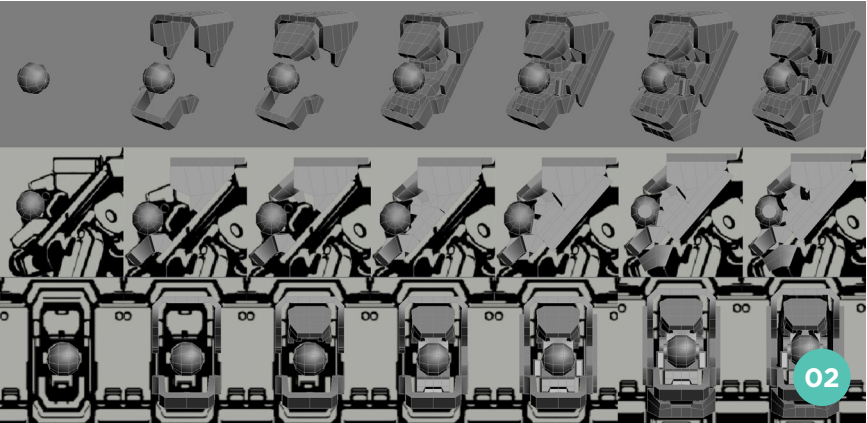
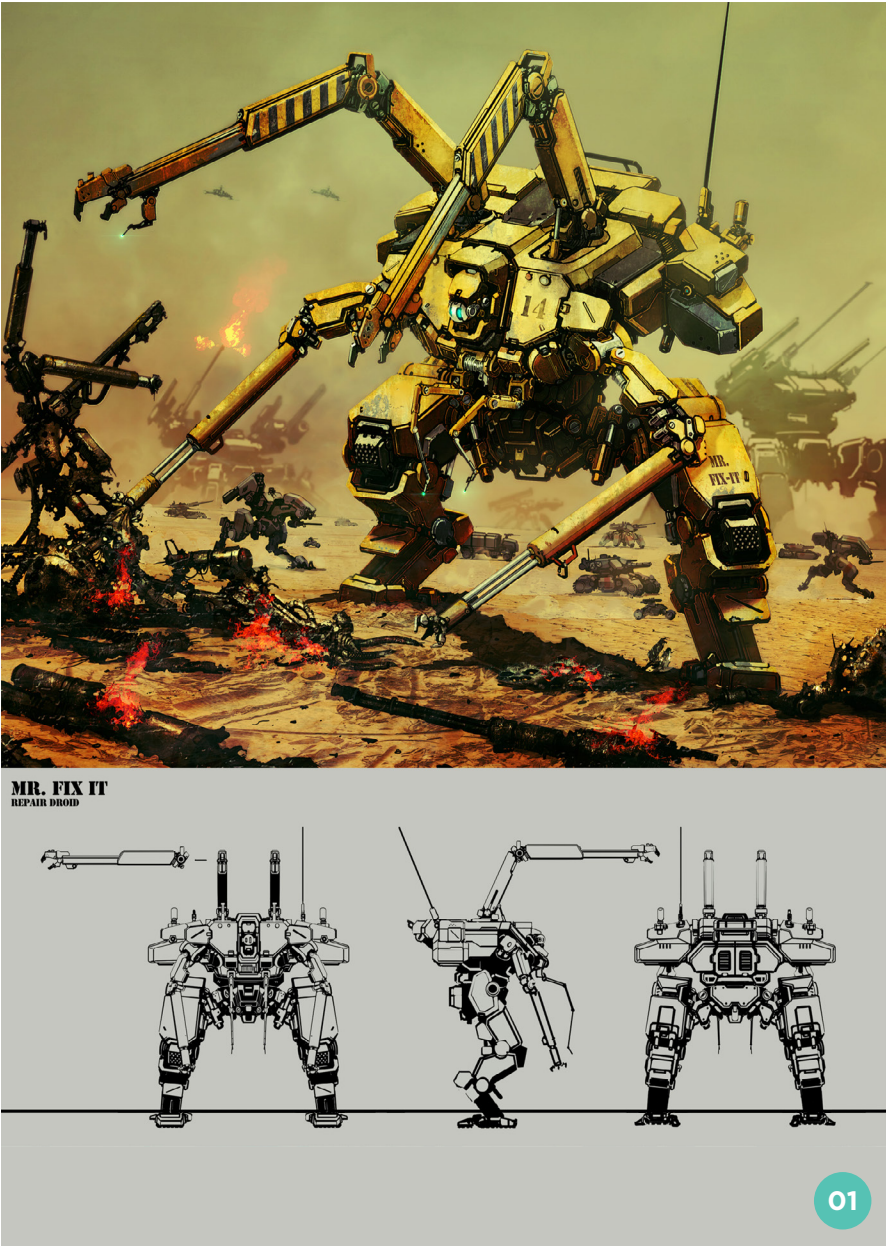
In this tutorial I am going to explain how I brought the repair droid to life in 3D, and what kind of things we should take into account when modeling and texturing a character. This droid was designed by a 2D artist and I was provided with drawings from different angles.

I made the complete model using 3ds Max 2009, and used V-Ray for the lighting and Photoshop CS4 for the textures.

Base mesh

First of all, I took my time analyzing the concept, shapes, proportions, and his attitude. I asked myself, where is he? What are all those arms and what do they do? I ended up making a little resume of his existence in time and space, which is a good way of developing an in-depth understanding of the concept of a character (01). Once I had all this information in my mind I was ready to start creating him! In 3ds Max I imported the front, side, and back drawings first as references and started building piece by piece. I didn't pay attention to details at this stage; I only focused on the main shapes and proportions.

I am going to show how I made the head area. I created a sphere for his little head according to the reference, and then proceeded to make all the pieces around his neck and placed them correctly. I used lots of edge connections, extrusions, and bevels; with only these tools I made almost everything I needed for the whole model (02).



The same method was applied to make the leg. I created the main objects and placed them by following the references. Simple cylinders were enough to show the joints.

Remember that at this point, it was not important to add too much detail; the goal here was to end up with a strong silhouette for the character (03).

Following this process with each area of the robot, I completed the full model (04 – 05).

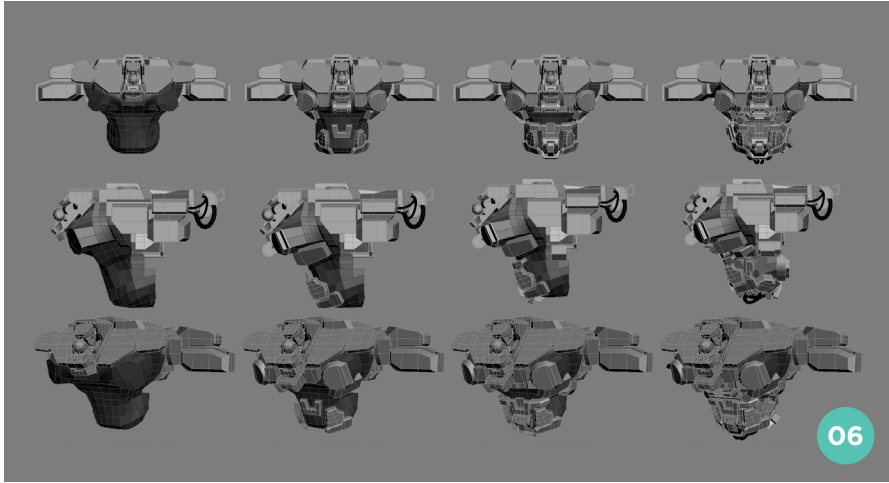
When the torso's turn came, I found it a little difficult to arrange the pieces in the correct way without deforming the figure of the body, so I made a quick mesh simulating his torso and put the respective pieces over it (06).

Since the drawing does not show some areas of his back very clearly, I designed them myself while maintaining his style. I also took advantage of some empty areas where I could include cables. When I had finished the entire base model of the droid, I moved forward to the next step, which was adding the detail (07).

Note: Aiming for simplicity, creating general shapes and establishing a strong silhouette were the goals in this section.

Detailing

Once the base mesh was done, it was time to make the details of every single piece. I



wanted the droid to look real and the more details it had the more real it would look. But what kinds of details should I make?

Well, this is when references took an important role in the creative process. By looking at reference photos of machines,

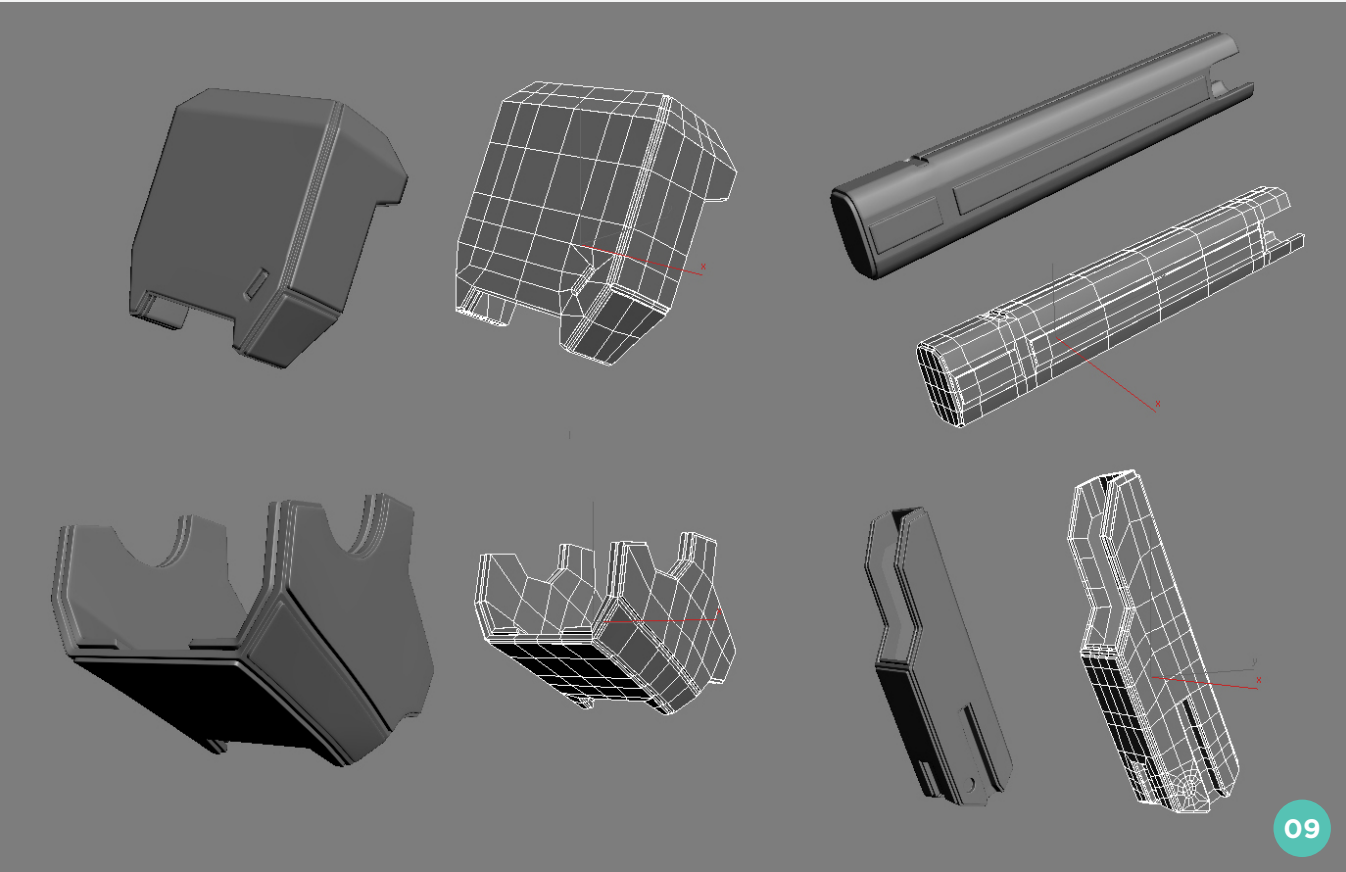
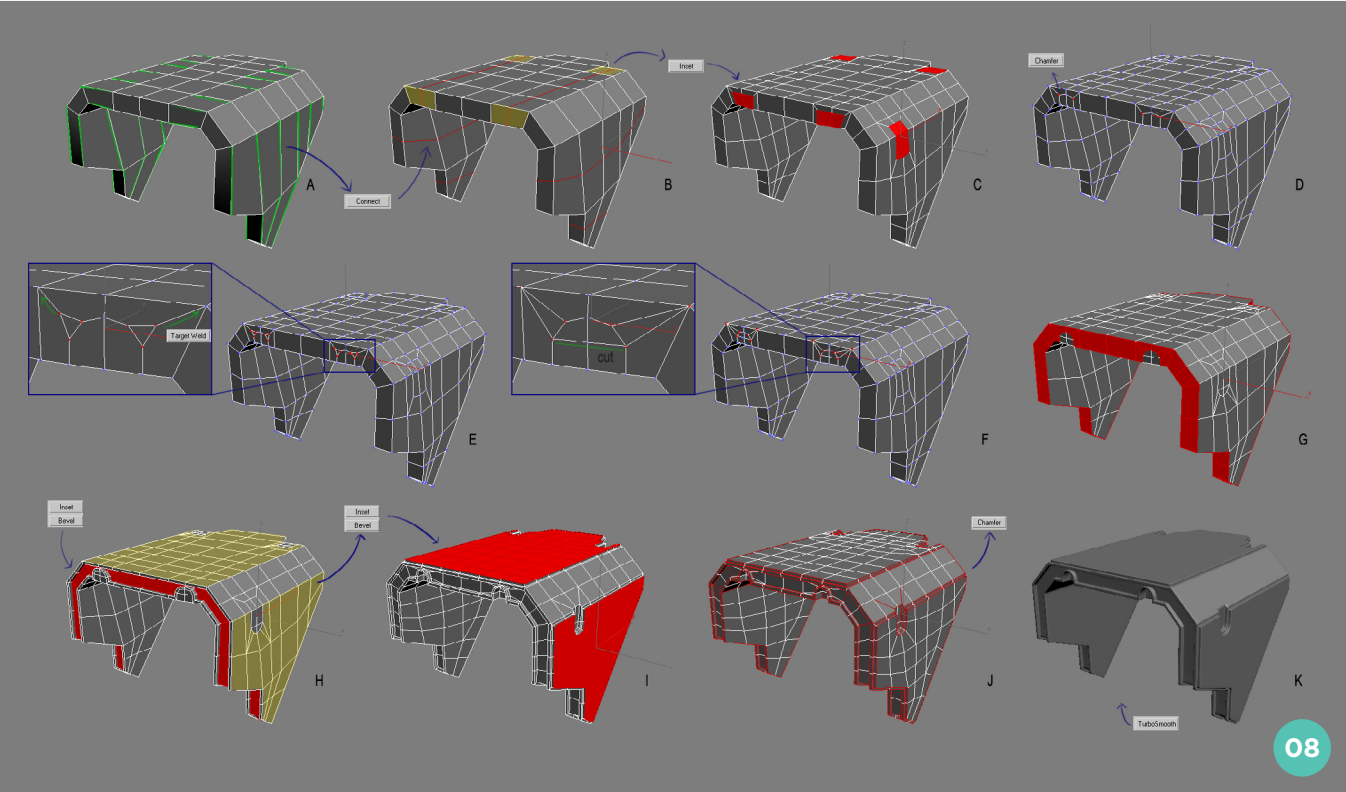
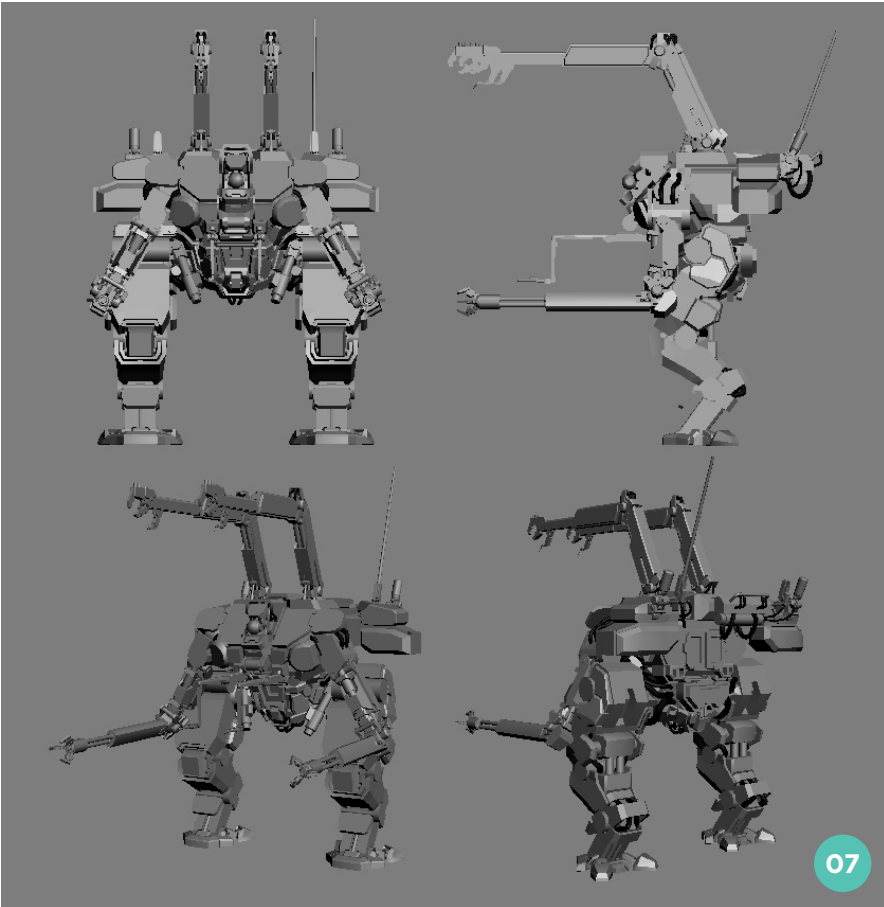
I was able to find interesting details that I applied to my model, like lines to divide pieces or small holes – basically, details that would suggest the droid had been made in some kind of industrial process.

The details were made using more tools than the basic shapes, including Edge Extrusion, Chamfers, Bridge, Weld, and so on.

Now I am going to explain how I made some of the principal pieces. Let's start with the one over the head. I took the base mesh I'd done for it and started by connecting some edges in the areas I needed to. I then suggested the semicircular holes that were on the concept by selecting the respective faces and applying inset and arraying vertices.

After that, I selected all the faces of the edge of the piece, applied an inset and extruded inward. At this moment I took some time to organize the mesh, making better topology, and I then proceeded to select the faces on the top and side, making a small inset and bevel to get the effect I saw in the concept. Finally, to add the TurboSmooth modifier I selected some edges and applied a very small chamfer for the modifier to work properly (08).

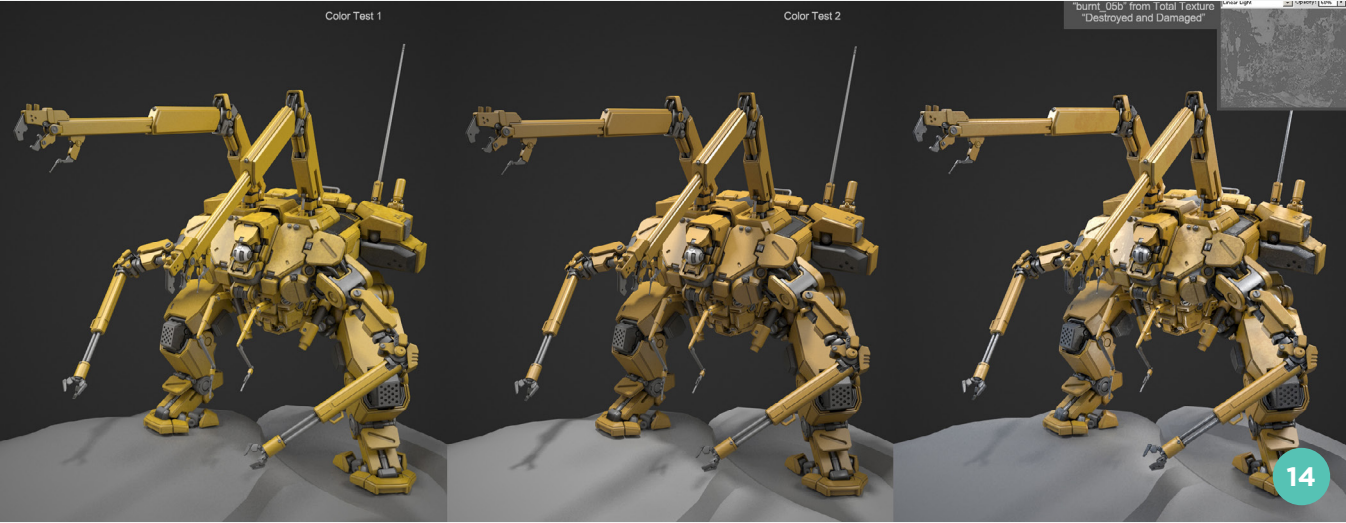
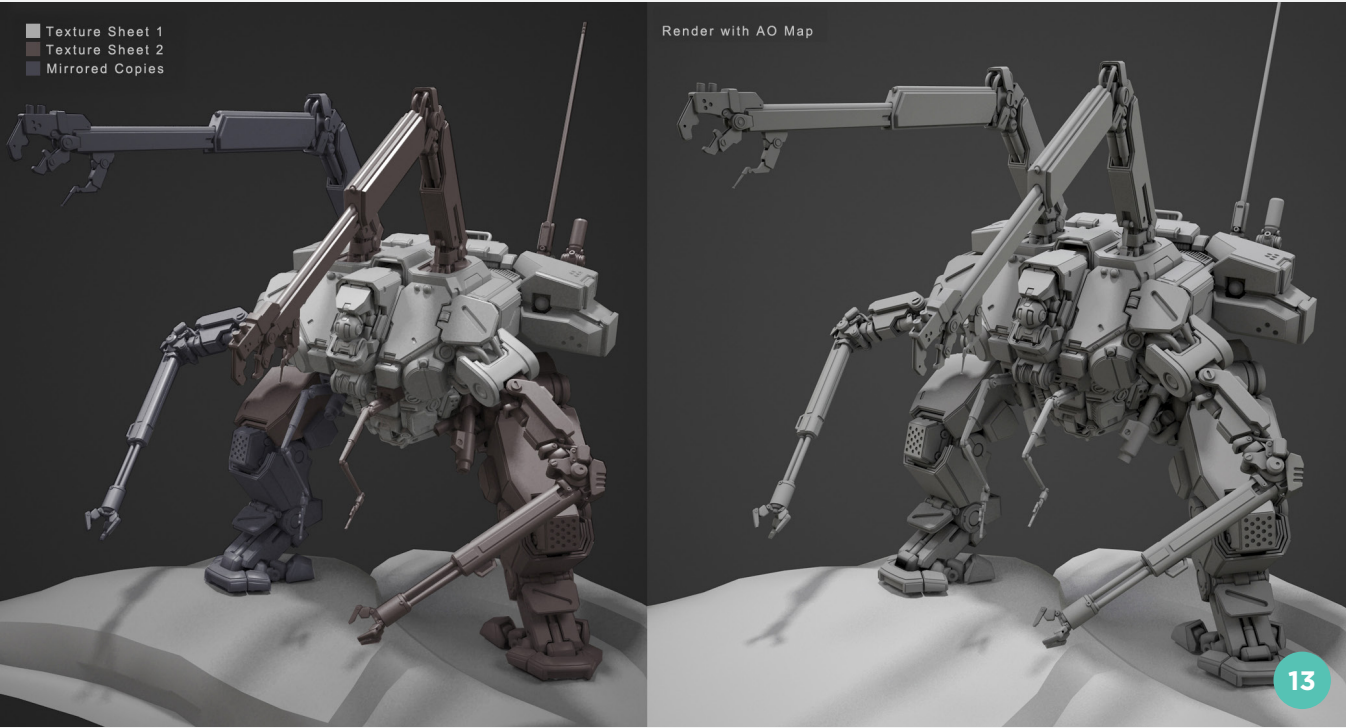
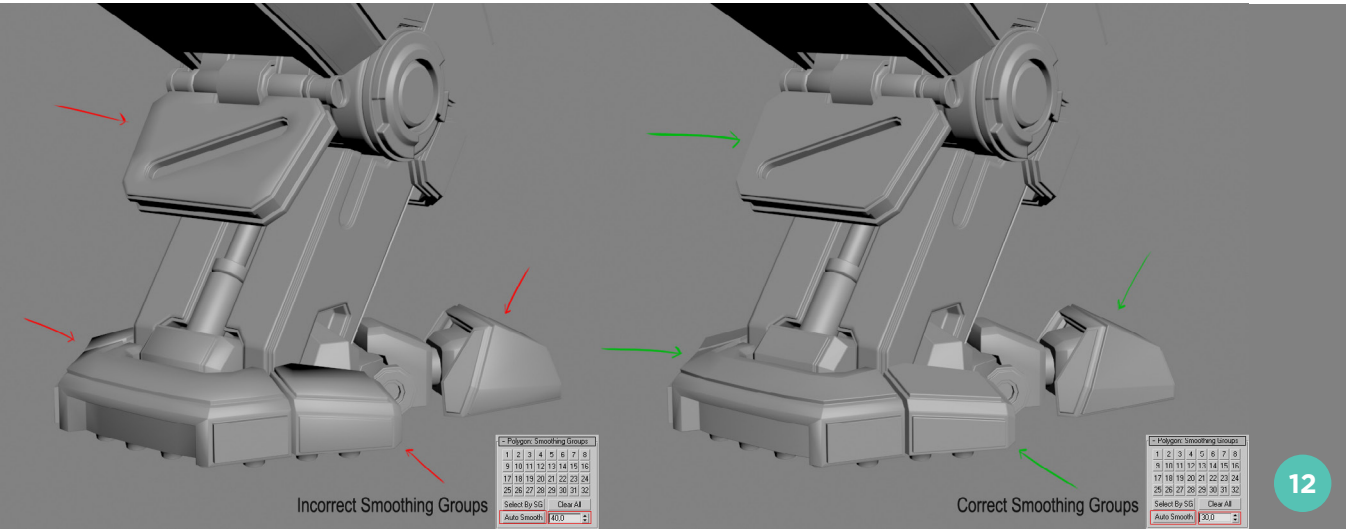
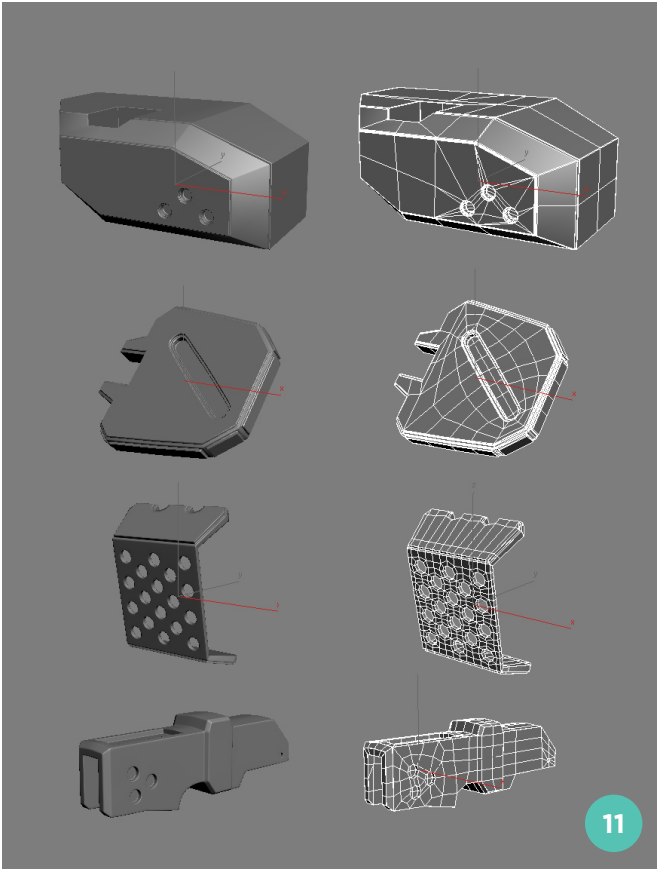
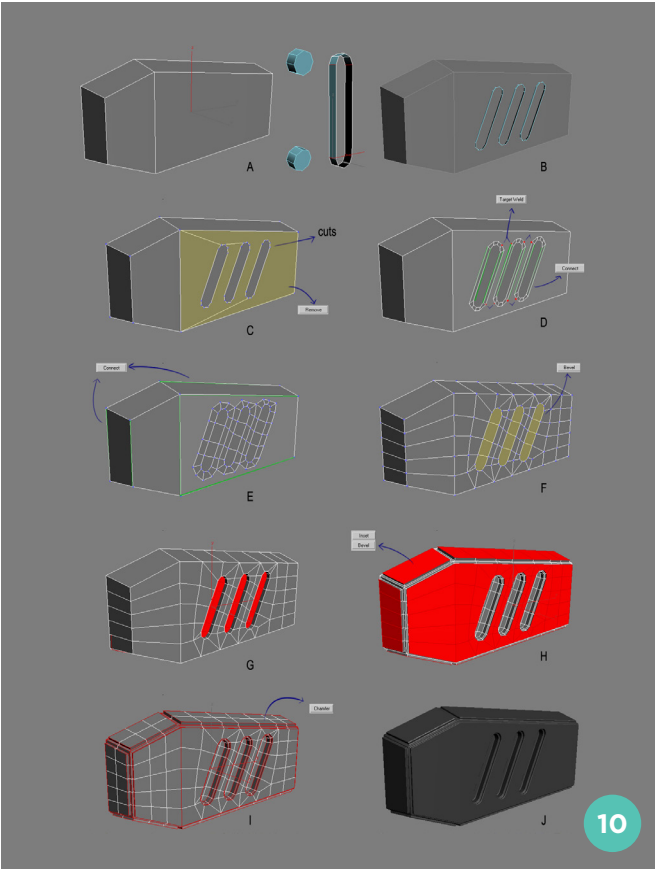
The majority of the pieces were made using this method and applying the same techniques (09).



Next I am going to explain some tricks I used in specific situations. For example, one of the pieces in the torso had some elongated holes. To make these, I started by building some kind of pattern with the shape of the hole. I then made some cuts in the respective faces of the piece, following this pattern,

and with a combination of extruding edges, arraying and welding vertices, I completed the entire section. Finally, I selected the desired faces to extrude them and applied a small chamfer to some edges to give the piece a smoother finish. I

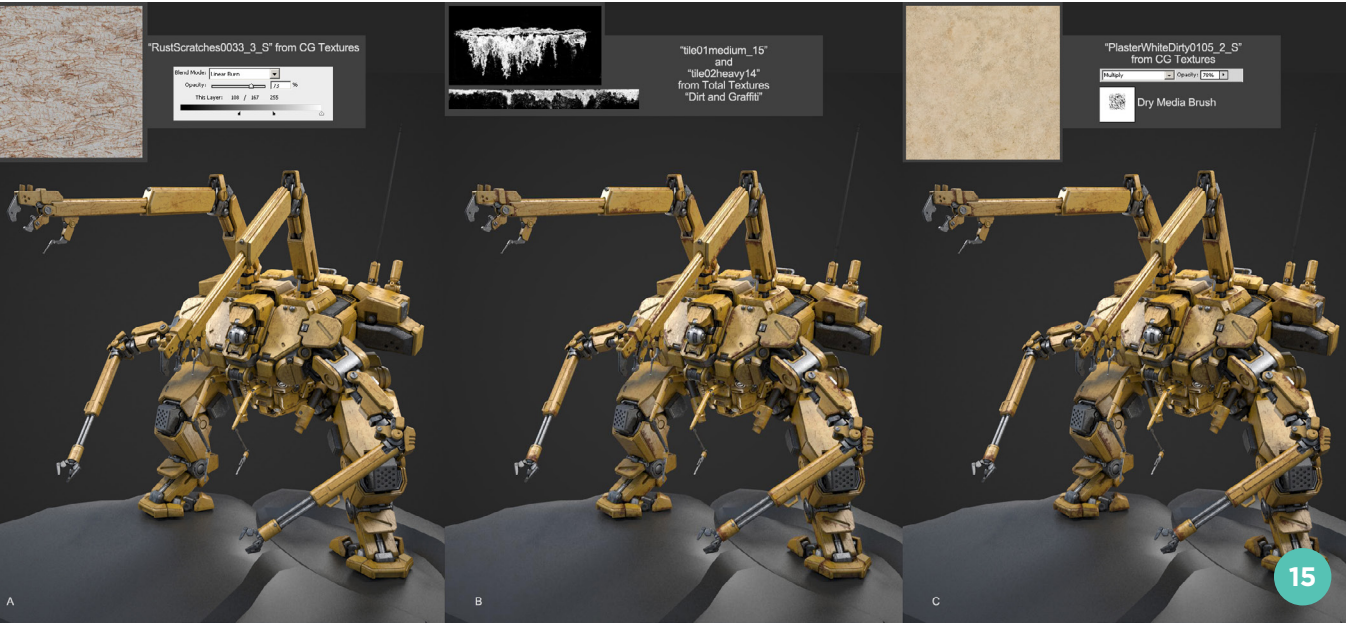
didn't use TurboSmooth for this one; I got the result I wanted by using polygon smoothing groups (10). I used this trick for a good number of pieces (11).



Since the style of this particular droid has a sharp finish, I only used TurboSmooth on some specific pieces (like the shoulders and big joints); for the rest of them I used polygon smoothing groups. Using smoothing groups can be very tricky. I generally set them to about 30 or 35 and press the Auto Smooth button, but I really see the effect when rendering, so I can always change any particular group manually in case I need it (12).

Texturing
After the droid was completely detailed and finished, I continued to unwrap and pose it. I divided the droid into two maps of 4096 x 4096 each. The way to divide the maps is up to you; sometimes its better doing it by materials or colors, and sometimes its better by sections. In this case I decided to divide the maps by sections. I included the leg and all the arms in one map, and the full torso in another one. I also baked

an Ambient Occlusion map to have a better contrast (13). The first thing I always do at the very beginning of the texturing process is to set up the main colors. I painted yellow and gray in different layers and made some adjustments using Brightness, Contrast, and Color Balance until I got the desired result. At that point I also included the "burnt_05b" map from the Total Textures V19 – Destroyed and Damaged DVD to give him a nice metal feeling (14).

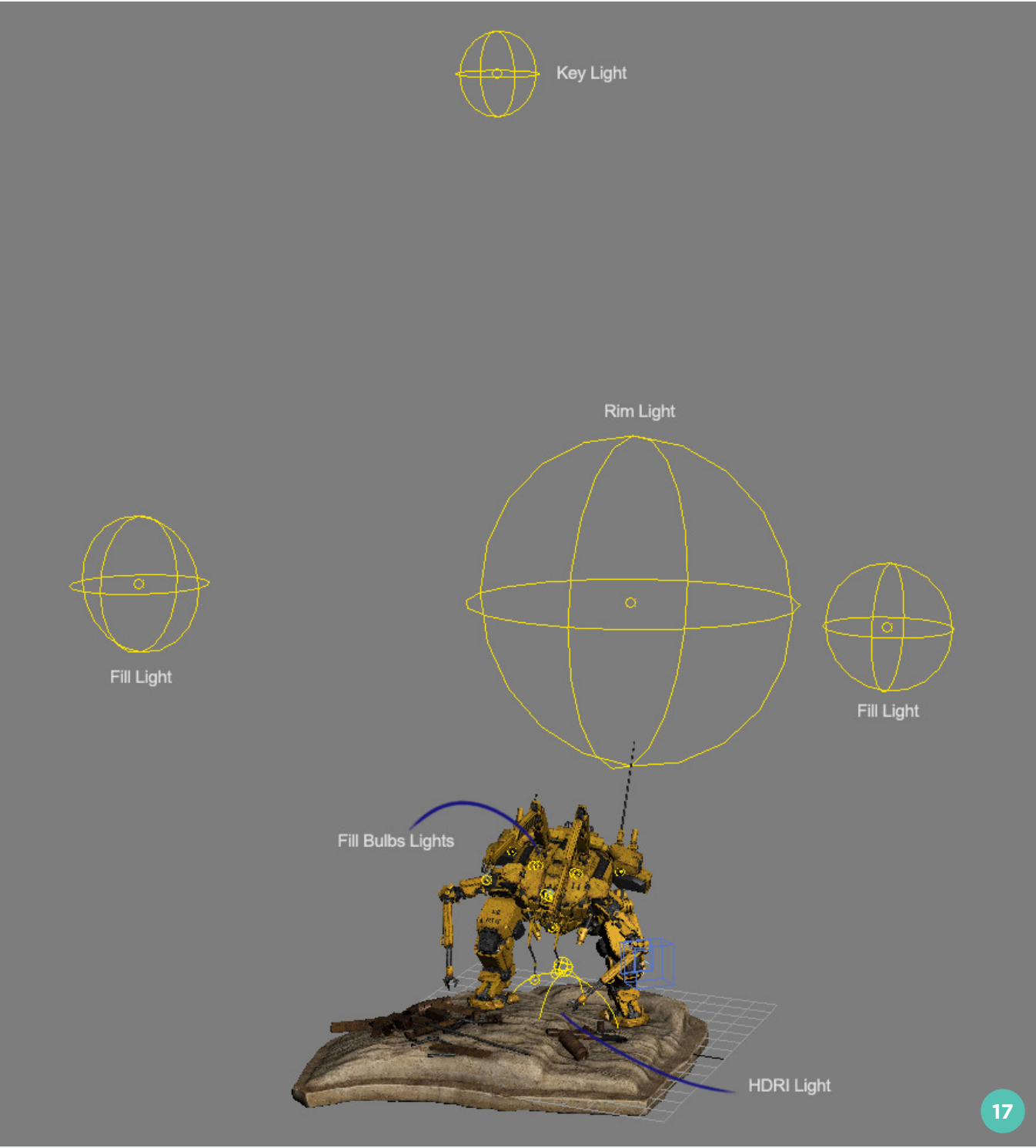


Since he is a repair droid I saw him in a war, fixing the fallen units (as shown in the concept image). So, he has some damage because of the battles nearby, but most of all, he has a lot of rust and dust as he is not well preserved.

To achieve a general rusted and scratched look, in my repertoire of maps I found one called "RustScratches0033_3_S" from CG Textures, which worked perfectly for this purpose. I made some adjustments to the map, like changing the blending options, brightness and contrast, and then applied it.

To give a final touch to the rust I made a new layer filled with a red color (similar to the one in the scratches) and masked in the "tile01medium_15" and "tile02heavy14" alphas from the Total Textures V05:R2 – Dirt & Graffiti DVD in areas where there would probably have been more corrosion. Concluding the dirt session, I added dust by masking the "PlasterWhiteDirty0105_2_S" map from CG Textures with a Dry brush; again making the necessary adjustments to make the map look like dust (15).

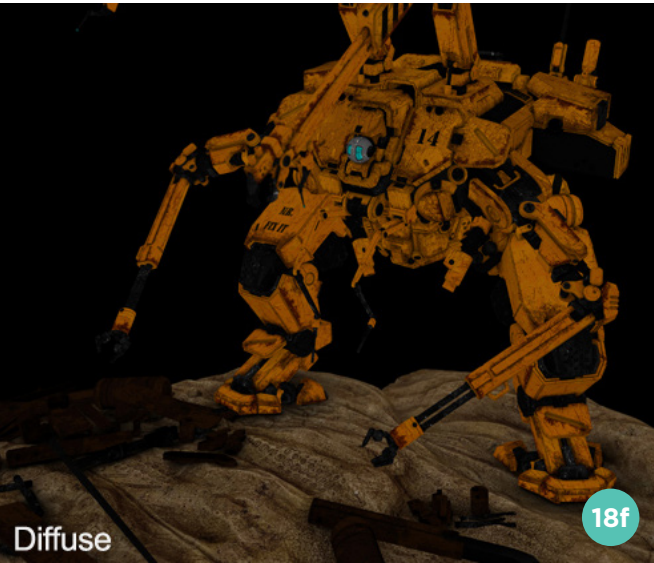
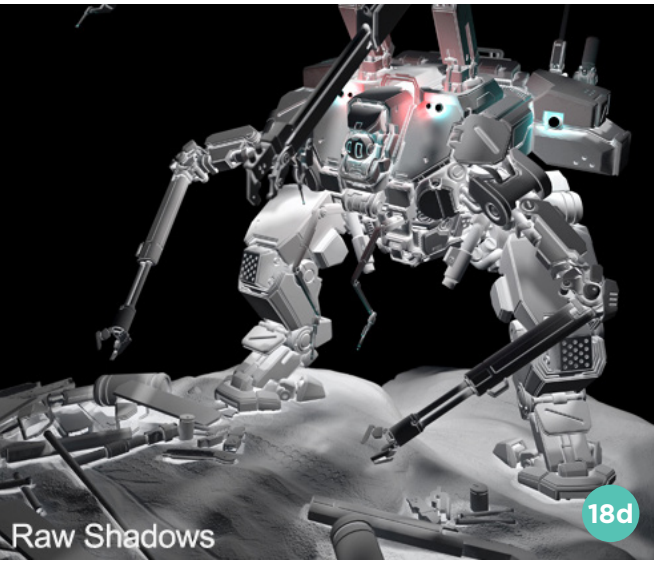
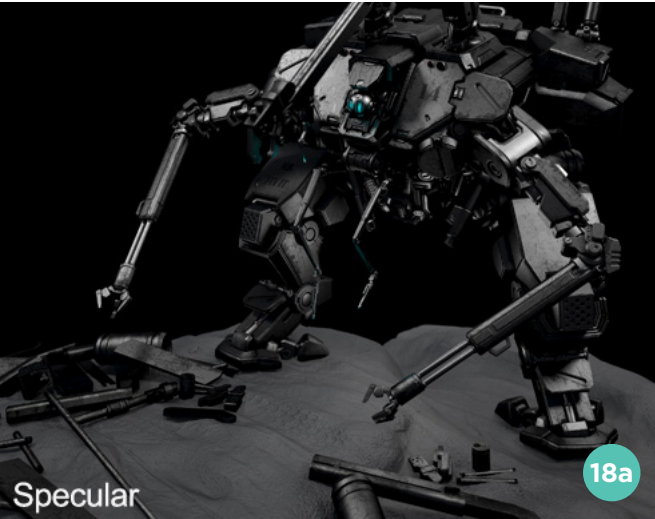
Finishing the diffuse, I added the text and the hazard bars "symbol_18" from the Total



Textures V07:R2 – Sci-fi DVD, and applied a trick to integrate these symbols into the texture, which was modifying the underlying Blending layer (16). Using blue I also painted small bulbs and his eyes, but in addition to

this I added some lights near the bulbs in 3ds Max to get a better result. Talking a little about the lighting (17), I would like to thank my partner Eduardo Balestrini

for helping me with this project by making the shaders and illumination for the robot. He used a global HDRI with a key light and some fills around. He also, very kindly, sculpted the terrain for me.



To finish, I rendered out some passes with V-Ray for post-production (18a – f), then in Photoshop I played with blending modes and adjustments until I got the final image.

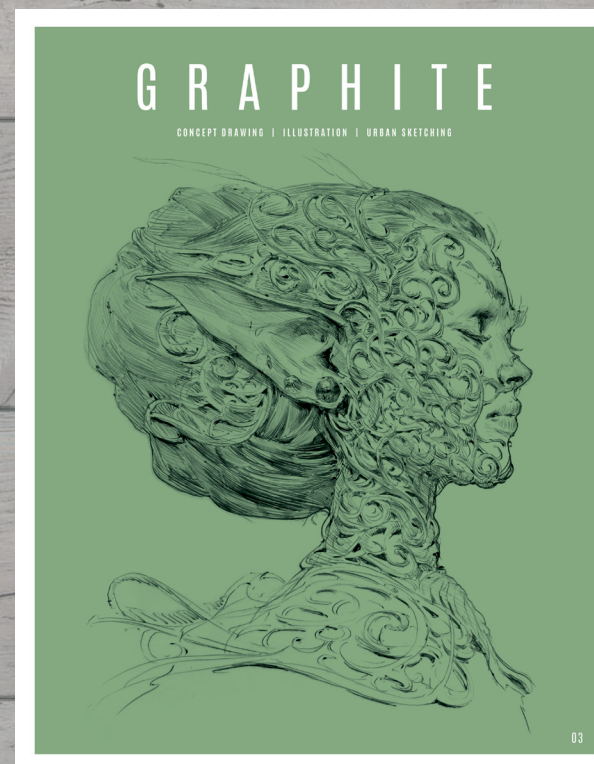
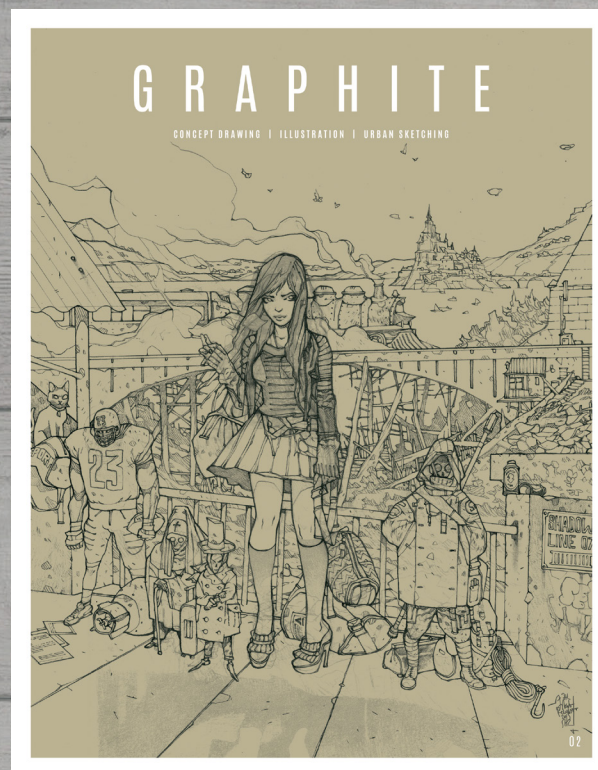
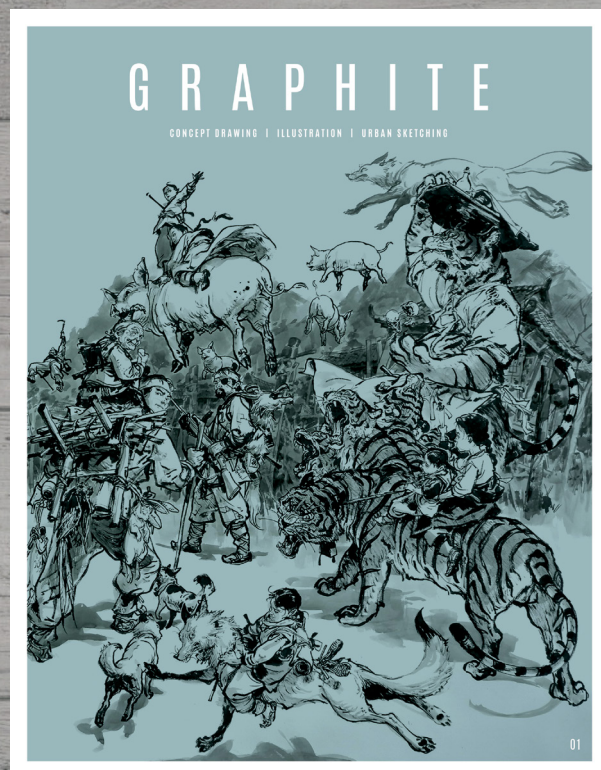
Conclusion
The repair droid has a very particular design, so it was very interesting to do. I really enjoyed making it, so I hope you like it and I hope this

tutorial has offered you some useful tips for your future projects. Thank you very much for taking the time to read this tutorial.



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Best of the 3dtotal Gallery

Featured artists:

Viacheslav Gedich

Marcos de Moraes Sampaio

Ben Filliat

Munkhjin Otgonbayar

Alexey Egorov

Marek Denko

Manuel De Jorge



Sicarius

By Viacheslav Gedich

We see a mass of images like this one submitted to our gallery every week, but every now and then an artist really gets it spot on and comes out with something original and well presented. The design and execution of this is great.

3dtotal



Free Hugs

By Marcos de Moraes Sampaio | Web: noton.com.br

What can I say, I'm a softy! I've always been partial to a nicely executed cartoon image. This image is consistent in its design, engages well with the viewer, and quite simply put a smile on my face.

First come first served

By Ben Filliat | Web: [instagram.com/benwoohaah](https://www.instagram.com/benwoohaah)

It is often the case (particularly with 3D artists) that the final presentation of a sculpt is given too little thought. Here's a great example of a nice, clean, simple sculpt that is presented really well.



Sci-fi Environment

By Munkhjin Otgonbayar | Web: facebook.com/illiminato.forza

These sci-fi corridors are swiftly becoming a fashionable topic for 3D artists and we see a lot of them submitted to the gallery.

I particularly liked this one because of its contrasting clean and tarnished surfaces which give it bags of character.



Blind Hunters

Near right

By **Alexey Egorov**

Web: [behance.net/Air-66](https://www.behance.net/Air-66)

Alexey is a regular contributor to our gallery and has mastered the art of generating edgy digital paintings. Within seconds of looking at this your thinking about whom these characters are and what are they hunting? It's a great way of engaging with your audience.

Her Eventual Hesitation

Far right

By **Marek Denko**

Web: [marekdenko.net](https://www.marekdenko.net)

I've been involved with 3dtotal for over 6 years and still firmly believe no-one can tackle a complex 3D scene as well as Marek. The textures and materials here are second to none. I could talk about how amazing this is all day long.





The Black Opal Gang

By [Manuel De Jorge](#)

Web: nbquaternion.artstation.com

Sometimes a simple clay render can be a great way to present an image. The outcome of not being distracted by textures and materials in this case is that you really get to appreciate the design and personality present in these characters.

**Submit
your
gallery
images!**

[Click here for details](#)

Skyscraper city

By Christopher Balaskas

Web: balaskas.artstation.com

Featured in:

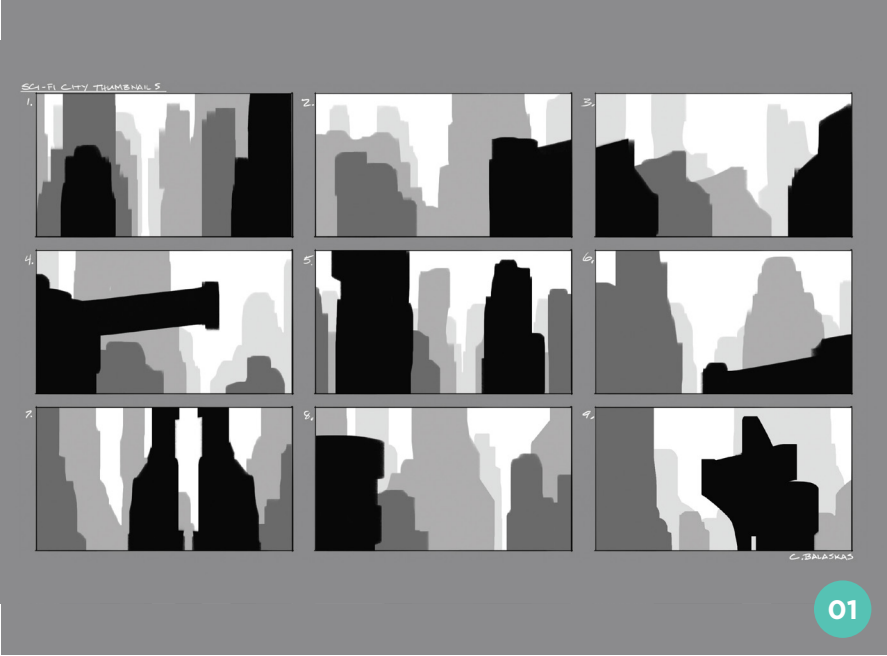


**Beginner's guide
to digital painting
in Photoshop:
Sci-fi and Fantasy**

Available at shop.3dtotal.com



3dtotal



A futuristic sci-fi style city demands an accurate use of perspective in order to convince the viewer to suspend their disbelief, engage with the subject matter, and let their imagination run free. A good knowledge of perspective, and its rules, is a critical foundation skill for an artist, so I encourage you to explore and study the great wealth of information and tutorials available either for free or low-cost on the internet or in books dedicated to the subject. If perspective is implemented incorrectly, it's often the first thing that a viewer will notice, and the rest of the image (no matter how polished or jazzed up with fancy effects it is) will suffer.

In this tutorial we will go over the basics of setting up a two-point perspective layout which will serve as the guide to rendering a large, hi-tech urban area with ships whizzing about its sky. In addition, we will address the need to convey depth by using atmospheric perspective. This practice involves increasingly fading objects into the distance by reducing their contrast and opacity. How strongly this effect is used greatly determines the sense of scale and mood of a piece.

Finally, we will add smaller details and signs of life that will bring a sense of narrative, energy, and character to the environment. I feel that the strongest artworks have the fewest elements necessary to tell a little piece of a story. They let the viewer's mind fill in the blanks with their own imagination. With all this in mind, let's start a new illustration!

Thumbnail sketches

Begin scribbling ideas down with small thumbnail sketches, around nine per page (01). Working at a small scale allows you to produce a good deal of ideas rather quickly without getting caught up in details. Use a simple square brush (which suits the architectural elements we want to draft) and focus on the relationships between shapes and composition. Using only four grayscale values and a white background easily establishes a sense of depth in the space. The last of the group immediately appeals to me as a place to which I could add human activity, so I choose this as my basic composition. I then select and copy it using the Marquee tool.

“Focus on the relationships between shapes and composition”

01

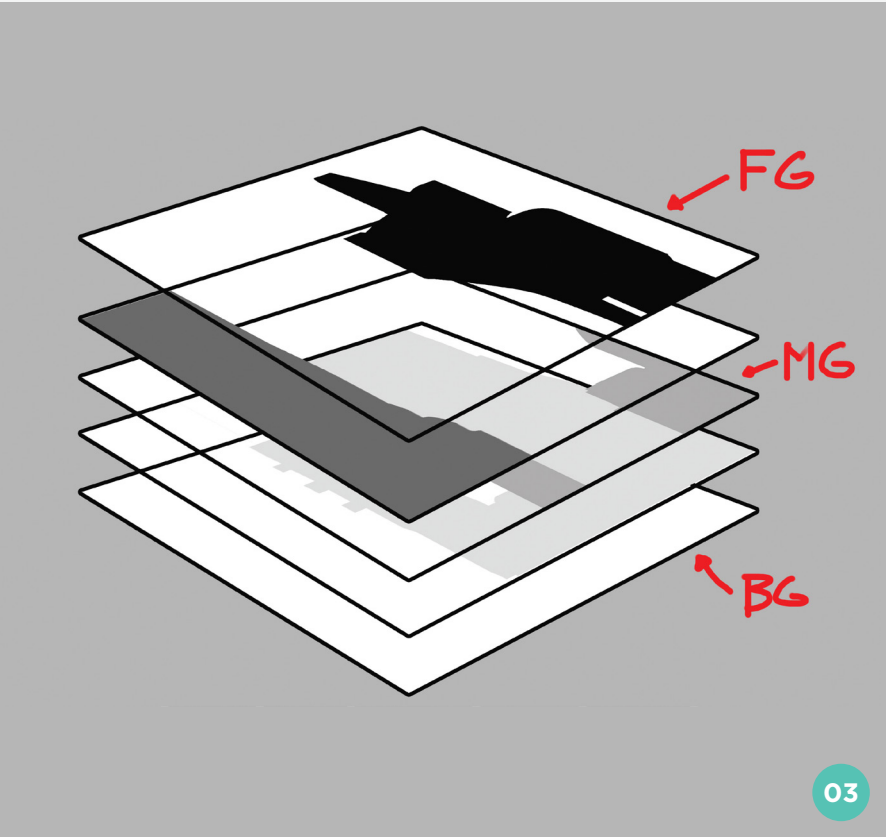
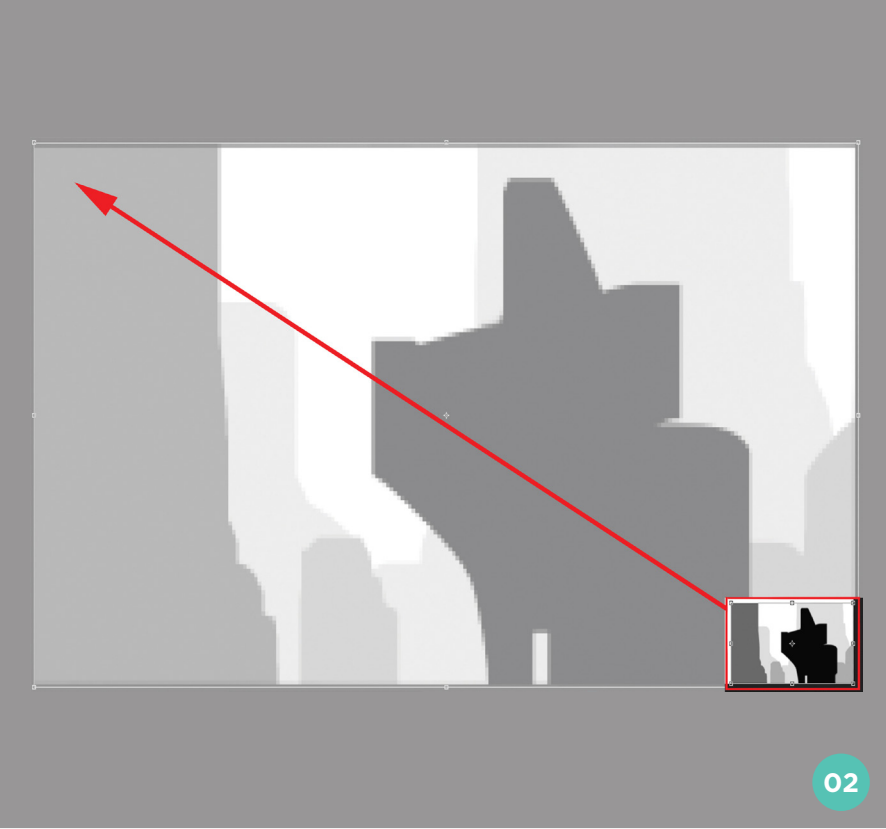
Small grayscale thumbnails allow you to focus on big strokes, shapes, and composition

02

Copy and paste, then scale up the image to get started

03

Set your layer structure logically to avoid wasting time later



Creating a new document

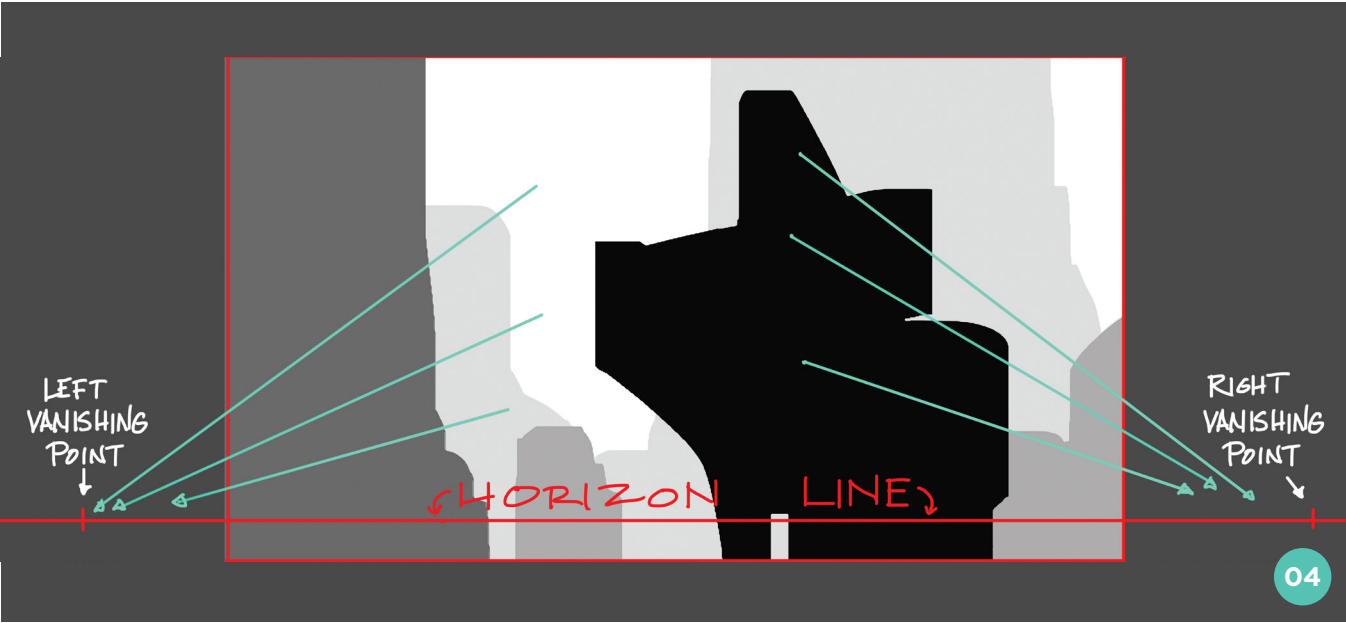
Since this image is going to be used for print medium, I create a new document at 6,000 × 3,375 pixels at 300 dpi, which preserves the aspect ratio of the original sketch (which is 16 × 9). Paste the image from your clipboard. It is not necessary for you to work as large as this, but if you decide to print your work later on you'll be glad that you did! Using Edit > Transform, scale the pasted image up to the edges of the document (02).

Separating elements onto layers

The image is now ready to be refined into layers. You can repaint every element on its own layer above this image, or use the Magic Wand tool to select them. The Magic Wand tool is a selection tool that allows you to select areas of consistent color – try it on a photo to see how it works! You can adjust the Tolerance on the Options bar to dictate how wide the color range is that will be selected (03).

I use the Magic Wand tool to select each item. Since these are simple blocks of gray it is easy to click on them. Use Ctrl+X then Ctrl+V to cut and paste the blocks into layers, keeping the foreground elements on the top of the layer stack and the background elements towards the bottom.

After the layers are created you can fill the background with white, and then clean up the edges on each layer to get rid of any messy pixels, filling in any gaps left from the cutting and pasting process as you go. Now you have a foreground, middle ground, and background on individual layers with a white backdrop. Your image is ready for figuring out the perspective grid and guides!



Establishing vanishing points

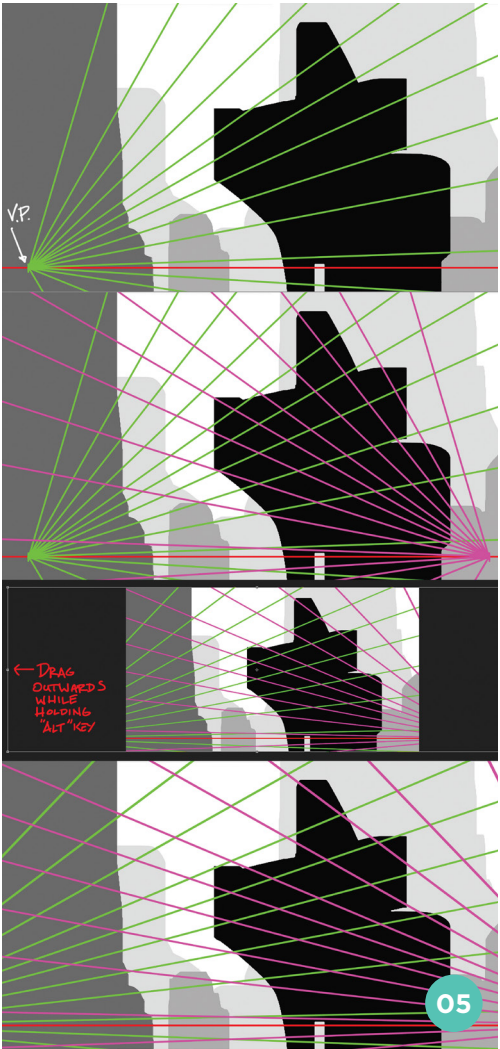
It's time to find your horizon line. I decide to set the horizon low, which will direct the viewpoint upwards. This will make for an interesting scene full of atmosphere with a large scale (04). Place both the left and right vanishing points off the edge of the page. This will reduce the distortion created by having them too close together on the page.

Don't place the vanishing points too far out however, as this will flatten your perspective greatly and reduce the sense of depth, making the image look like it is being viewed through a telephoto lens. A happy medium between the two works best. The left sides of objects will recede towards the left vanishing point and the right sides to the right vanishing point.

Creating grids

The backbone of any drawing, especially one with architecture, is the perspective grid and layout. An easy way to set up your perspective grid using vanishing points out of frame is to create a new layer, draw a simple tick over your horizon line, and then draw a series of lines converging to the vanishing point (05). Duplicate this layer using Layer > Duplicate Layer, then hit Ctrl+T, right-click, and select Flip Horizontal.

Now drag the flipped vanishing point to the right by using the Move tool (V) and holding the Shift key until it is close to the right edge of the image (2). Hit Ctrl+E to flatten the two layers into one, and press Ctrl+T again. Holding the Alt key down, grab the edge of the Transform box and drag outwards until both of your vanishing points are out of the frame (3). Press Enter

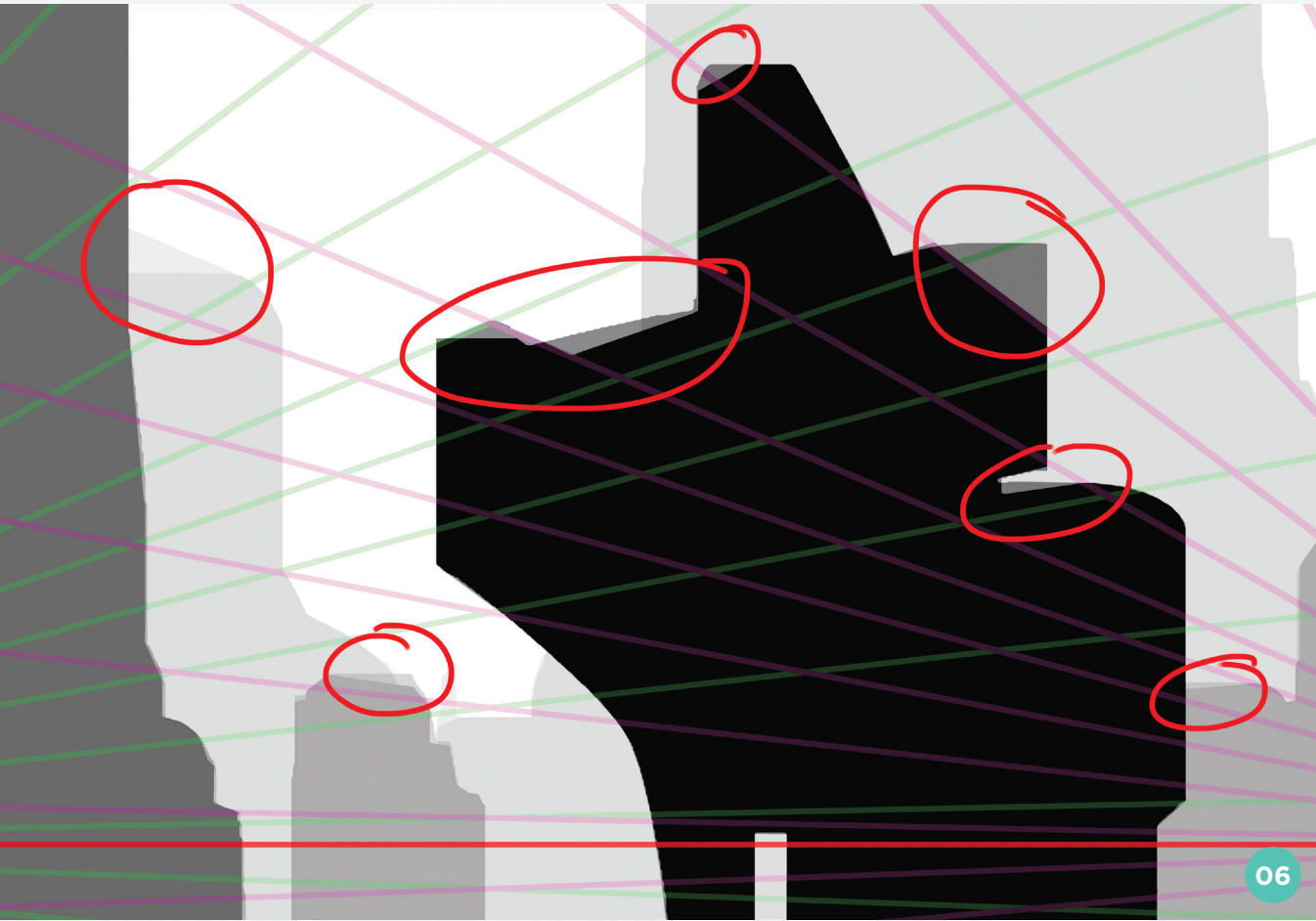


04
Select a horizon line and two vanishing points

05
On a new layer use your vanishing points to draw a perspective grid

06
Shape silhouettes into perspective by erasing and painting with the grid as a guide

“Add as many lines to your grids as you feel are necessary”



when you are happy with your placement; you've now completed the perspective setup for your image (4)!

Add as many lines to your grids as you feel are necessary. The more you have, the more precisely you can render objects without guessing at the correct perspective. I should note that this is a very basic setup, and that it can get considerably more complicated. It pays to be as precise as possible at this stage of the painting as it will save you headaches in the clean up further down the road.

Clarifying silhouettes

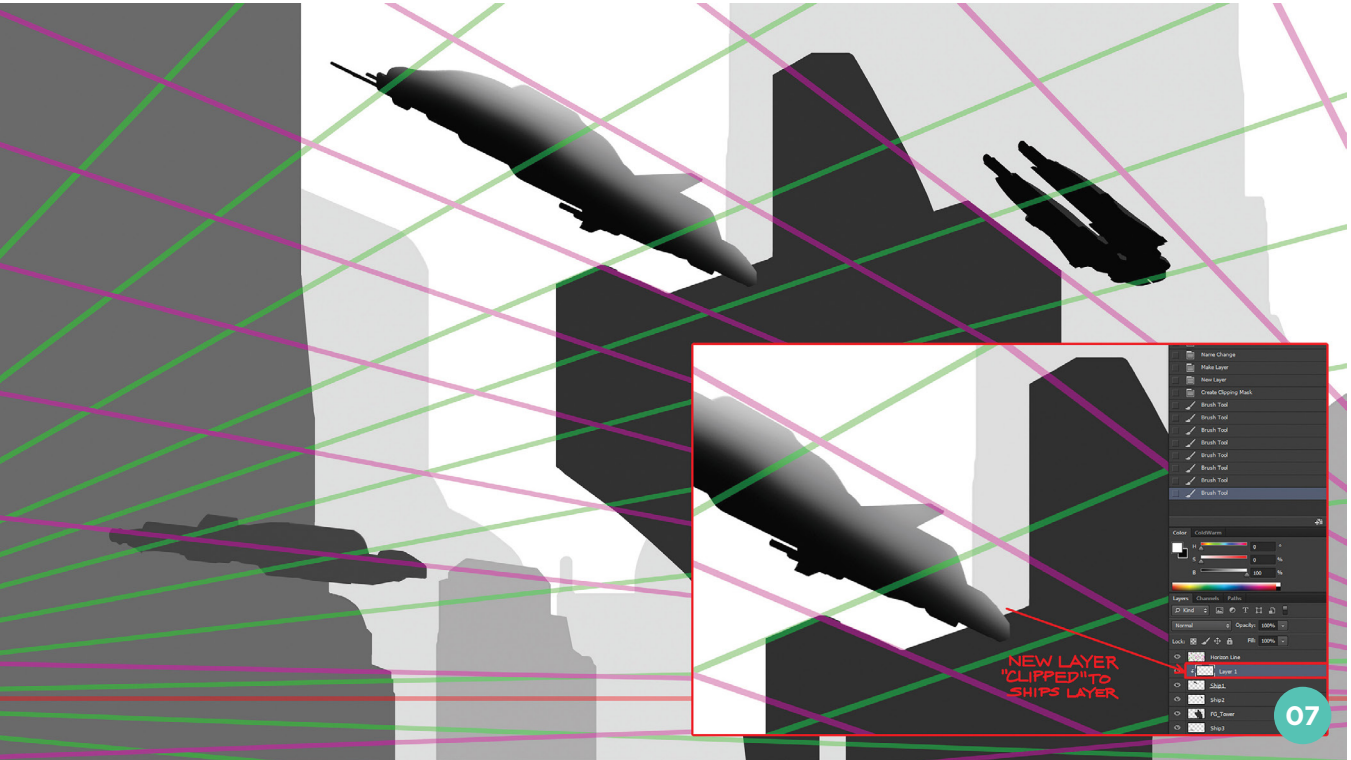
Reduce the Opacity on the perspective guide layers down to 40% so that they are

not distracting, yet are still visible enough, and begin to refine the building edges in accordance with the grid. Adding with a paint brush or subtracting with the Eraser tool where necessary, clarify the volumes (06).

Make sure that you have some rounded forms as well as linear, square shapes for a pleasing variety of forms. In this manner you can prevent the architecture from becoming homogeneous in style. Take your time here and think about how your volumes will appear when lit as you clean up and edit the silhouettes.

PRO TIP Be an explorer

Always try new things! Experiment constantly with settings, layer modes, new brushes, and so on. Many of my “eureka” moments in painting have come while messing around like this, particularly with features I seldom use. Often you will discover a new painting technique by trying things you don't quite understand, or never thought you would need to bother with.



Adding the ships

Using the perspective lines to guide you, quickly block in silhouettes of the ships using very basic round and square brushes with no Opacity settings. Try to place your ships (and all elements for that matter) in a way that will help the eye flow around your image. Thinking forward in the process a bit, I am going to focus on the top two ships and let the third be less detailed, so I use a lighter gray to block this one in. Each ship is on its own layer, and I add a clipping layer to each one by creating a new layer, then Alt+clicking between the new layer and the ship's layer. This will allow you to paint in some highlights, defining the forms without worrying about going "outside the lines," so to speak (07).

Imagine that the light is coming from above in the image. Paint in some white tone where the light would illuminate the shape using a soft round airbrush. Then create some details and panel lines by erasing out using a smaller hard round brush. This is a very quick technique to establish form in your silhouettes and is used quite often in concept

art. Put simply: block-in the shape, clip a new layer, lay-in highlights on the new layer, then erase out shadow and details. Repeat this as often as you need to.

Beginning rendering

This way of building up a silhouette is certainly not the only method to accomplish the rendering of an image (nor is it the one I always use), but it is a simple process for a beginner to pick up. You may find later on that painting in line work on another layer rather than erasing out is more suited to your style of working. With practice you'll find what suits you best. Regardless, continue the painting of the ship silhouettes with a soft round brush, using the Eraser or a small hard brush on the details until you are happy with the panel lines and the level of detail on each ship. Occasionally add a bit to the silhouette layer to make corrections to the shape's perspective as you go. Once you are happy with each ship's look, select the clipping layer and press Ctrl+E to merge the highlight and panel layer with its parent layer (08).

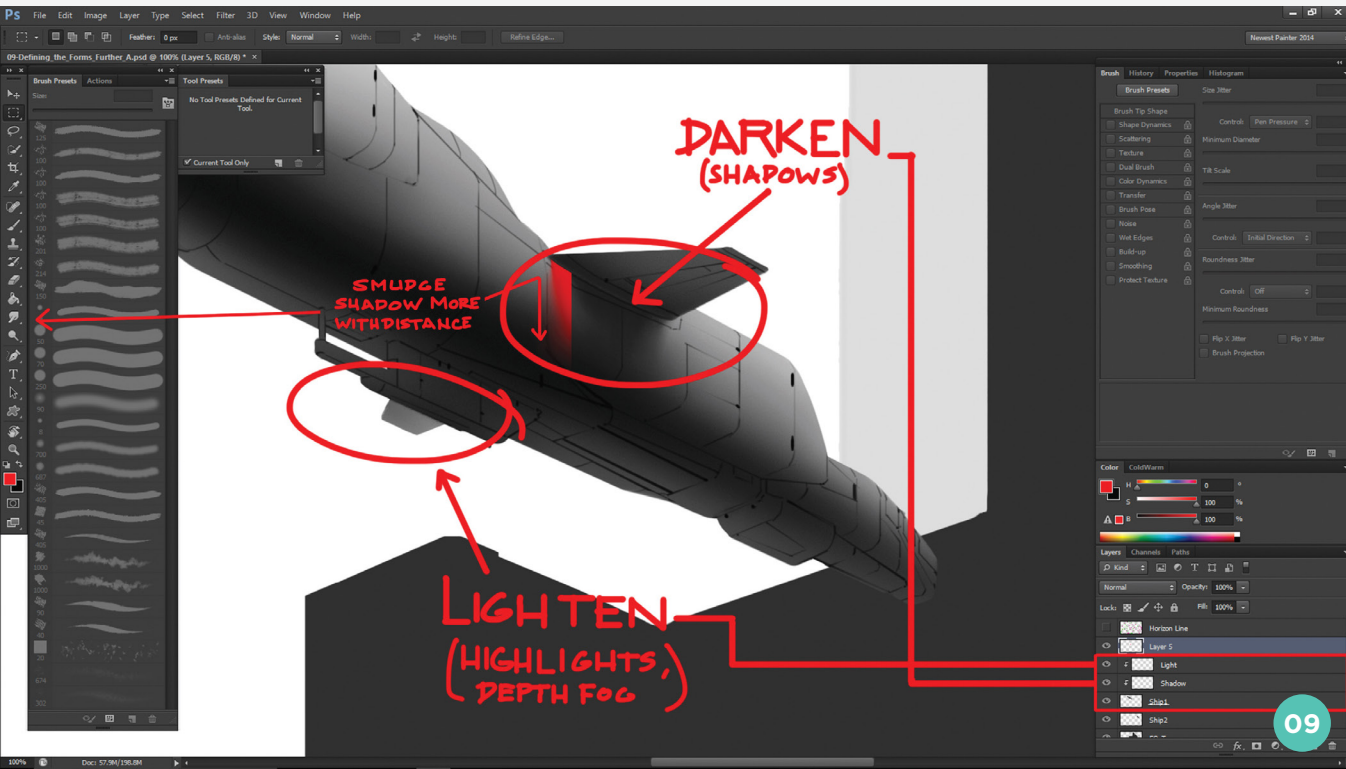
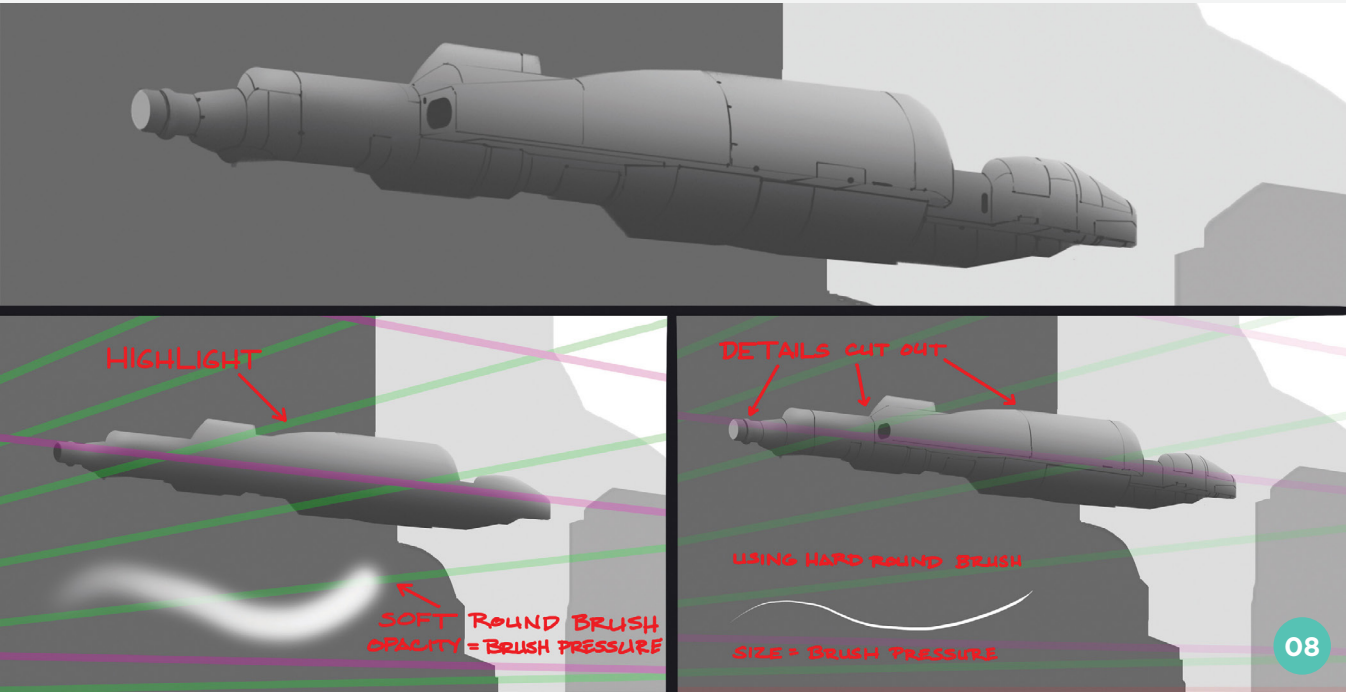
Defining the forms

With your panel lines as a guide, you can use more clipping layers to define the secondary shapes of the ships. Using Darken and Lighten layers (being careful not to lose your lines underneath), the shapes should be visually separated and the crafts given more depth and complexity (09).

07
Block in your silhouettes, painting highlights where the light will fall

08
Use soft round brushes on a clipped layer, with details erased or drawn with a small hard brush

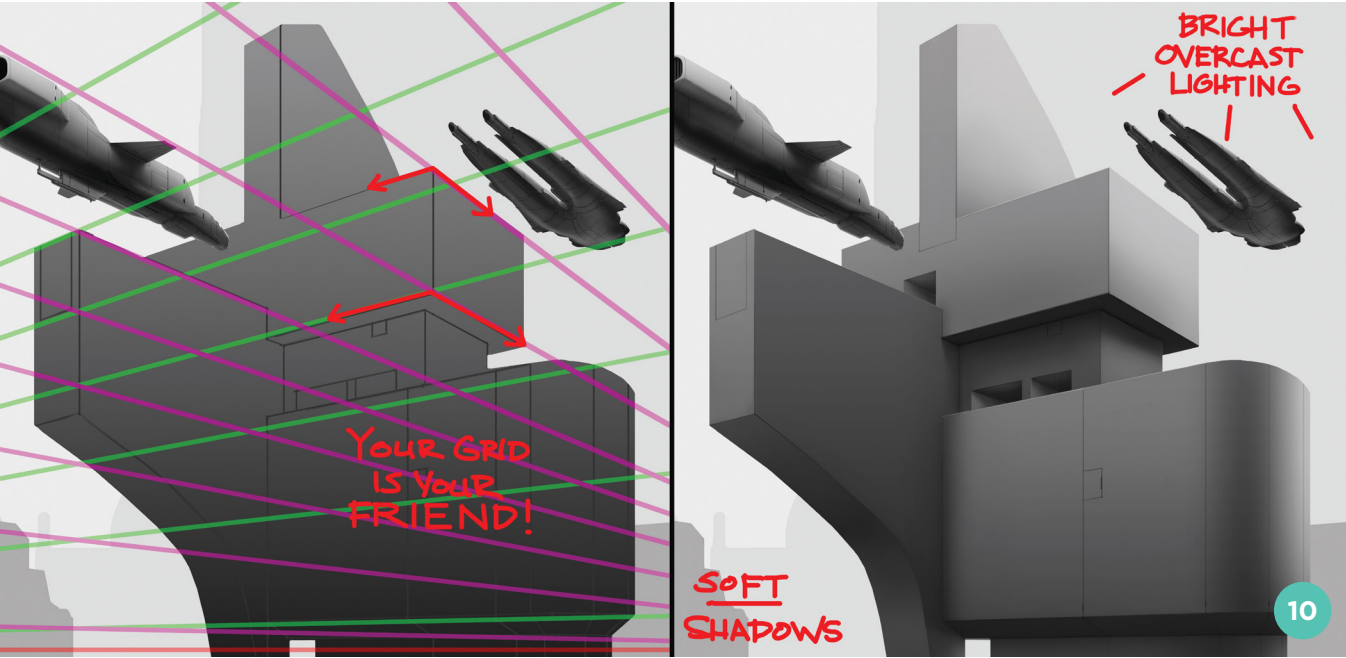
09
Use Darken, Lighten, and the Smudge tool on clipping layers to define the ship further



By adding a slight reflective highlight towards the receding edges of the curved surfaces, the ships begin to appear more at home in their environment. In this image, I'm aiming for indirect sky light so I keep most of the

shadows relatively soft. An irregular-shaped Smudge tool helps to fade hard shadows into soft ones which have a greater distance from the casting edge. Repeat this and the previous step on all three ships until you are satisfied

with their appearance. Take your time; there are no rewards for rushing things. The more time you spend rendering and thinking about how light falls on your objects the better your painting will turn out.

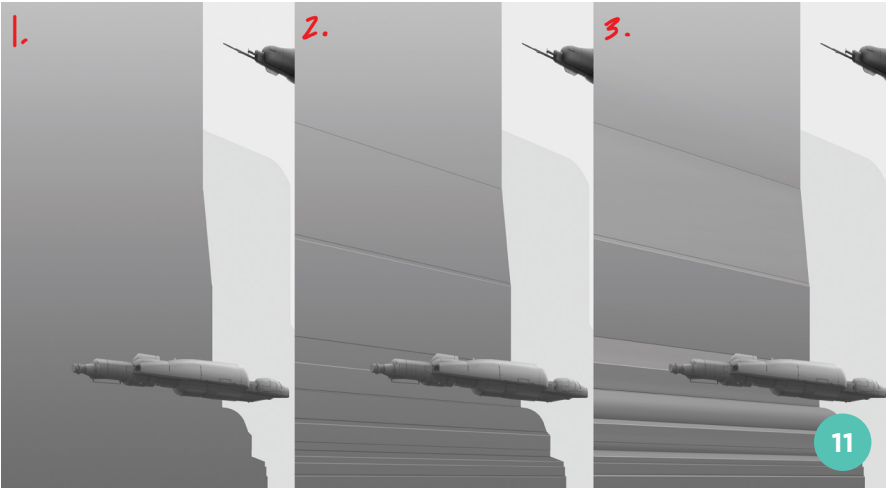


Rendering the tower

Time to start adding definition to the architecture in this scene! You can use the same process as you did for the ships, except that rather than using a gigantic airbrush, opt for the Gradient tool. Add a new layer, clip it to your silhouette layer, and use the Gradient tool to drop in a smooth transition from light gray to dark gray. This will give you a basic top-down lighting effect (10).

Using our friend the perspective grid again, erase the lines and tones that will define the volume of the dock from the clipped Gradient layer. You may also choose to draw with black on a layer above this instead. It is a little tricky due to the peculiar shape, but after a couple of tries I'm happy with the basic shape I have created. Now that you have a gradient giving you a general top-down lighting effect, and the lines which define the volume, you can merge these layers.

By observing how light behaves in the real world around you, and by using those studies in your work, the most otherworldly scenes can be made believable. To render further you can simply add another clipping layer, paint in light and shadow, merge down, and



then repeat until you are finished. Once you have your grids defined, and silhouettes and line art complete, it is just a matter of painting in the light and shadow of an object in accordance with your chosen lighting. This is basically the process you can use, over and over again, for rendering each item.

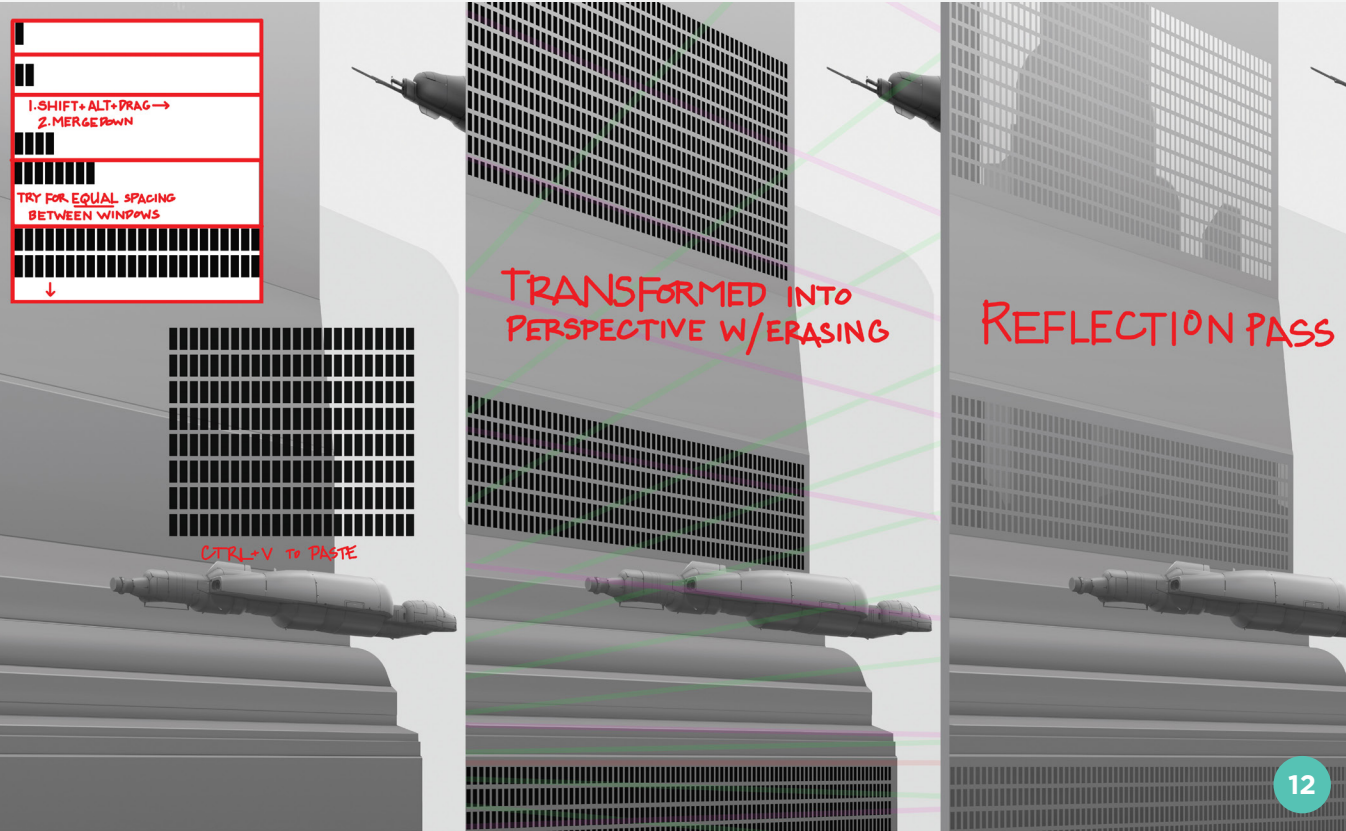
The mid-ground and background

Now that your basic foreground structure is rendered to a decent level it is time to turn your attention to the other buildings in the scene. The exact same process is used here,

but this time I am careful to keep the elements a little simpler, keeping the contrast low and concentrating on form over detail (11).

In the mid-ground and background you don't want to distract the viewer too much from the main subject, so make sure that you don't add anything more complex than is present in the foreground. Suggesting details and elements rather than rendering them fully will give the viewer's eyes a break in these areas.

Making sure that your darkest feature on these structures doesn't deviate too far from



10

Use the perspective grid again to help you render the architecture with soft shadow

11

Render the mid-ground and background with fewer details than the foreground

12

Create windows on a new layer using Move, Transform, and your perspective grid

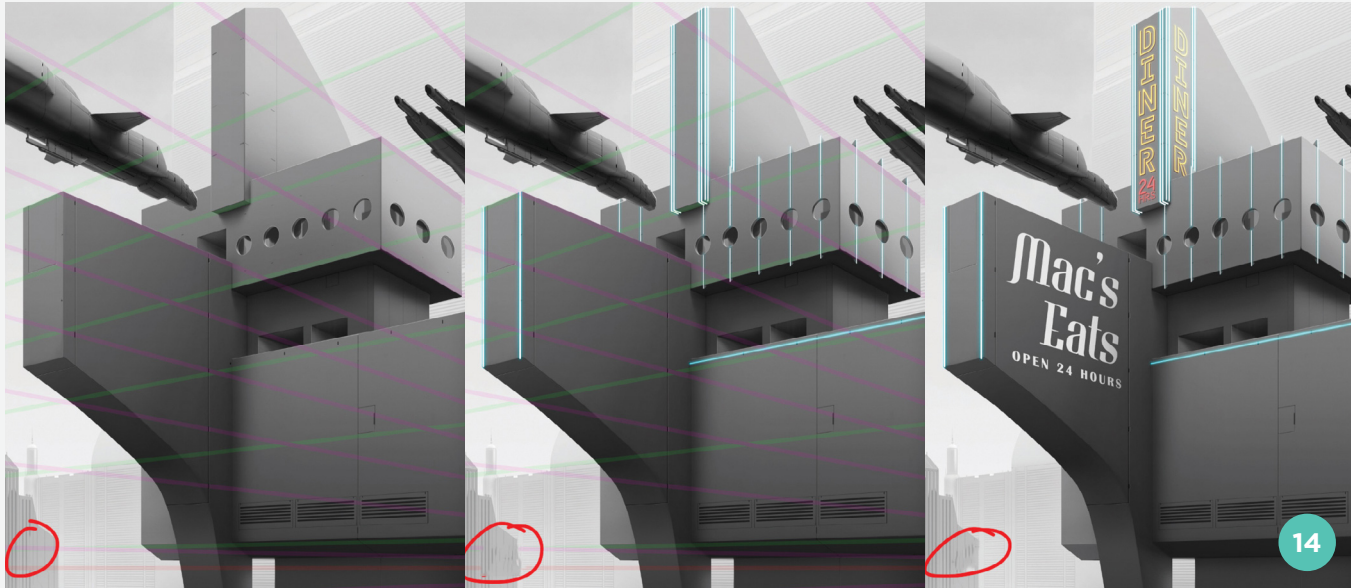
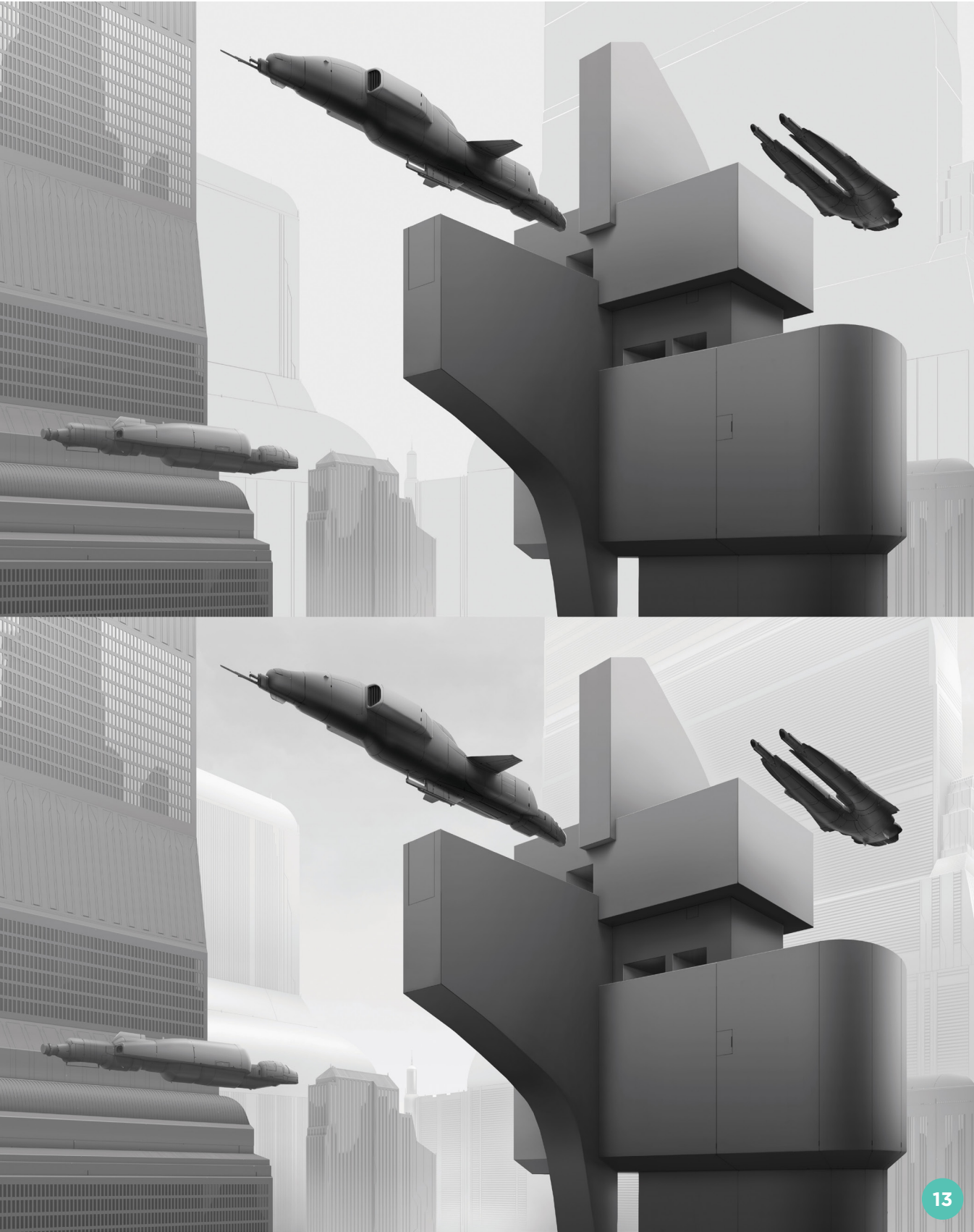
their initial fill color ensures that they retain their relative distance in the scene. This time around I draw my lines on a layer above the clipped Gradient layer, rather than erasing out, using 100% black and 100% white with the layer's Opacity set to 25%. Remember that light gets trapped in convex corners, and bounces onto adjacent surfaces. This is true of indirect, soft, and diffuse light (which create soft shadow, and less bounce), as well as direct light like the sun or a lamp (this generates sharper shadow and more bounce).

Windows and details

A great way of letting the viewer know the scale of any scene is by adding elements which they can relate to. You can do this by adding windows to the building on the left of the scene. As an easy and quick way of dropping these in, open a new document (1,000 x 1,000 pixels in this case) and use a simple square brush to make a rectangular shape on a new layer.

With the Move tool, click and drag this layer while holding the Alt and Shift keys. This duplicates the layer, and holding the Shift key constrains the movement up and down, and side to side. Move to the side, then merge this new layer down. Repeat until you have a row of windows (12).

Familiar objects give cues of size and distance to the viewer so the smaller your windows, the larger the scale of the structure. Repeat the process of duplicating and merging down until you have large blocks of windows for your building. Copy and paste the layer into the scene, then use Edit > Transform (Ctrl+T and right-click) and choose Perspective to distort the block with the perspective grid. Clipped to the building's silhouette layer, erase the window layer out here and there to add more interest. Paint a simple reflection of a skyline on another clipped layer. Draw in panel lines to finish up. The rest of the buildings can then be rendered out using the same process.



Far background and sky

We will stay in grayscale for the bulk of this process until later. If your image looks good in black and white then it will be simple to color. It is easier to correct problems without color complicating things for you. Again, drop in a gradient with the Gradient tool, this time a much lighter one, using a small hard round brush to draw in the details. You don't want to draw too many details, and they shouldn't be too dark either. That way these buildings appear much further away than the rest. Remember that with atmospheric perspective, as an object moves further away from you it becomes lighter and loses contrast, with a little less saturation. Its color will also tend to shift towards the dominant color of the sky (13).

I use white lines to draw outward corners, and a medium gray for recesses. This will help me to remember how the planes of objects turn when I come to render shadows and light. The same painting process as before can be used, but keep your painting very simple so as not to distract from the foreground too much. For the bright sky I use a custom-made cloud brush (you download brushes for this tutorial from www.3dtotalpublishing.com/resources) and work from dark on the left to lighter to the right.

Back to the tower

The tower's structure has a decidedly retro feel and invokes a 1950s American Googie style. The idea of an old diner or pit stop in the slick upper levels of a massive metropolis interests me and provides a good subject contrast (new world against old), so I start to quickly research architecture and color schemes from this period (14).

Using these designs as a jumping off point, add some details and elements to give the image a similar flavor. Some big porthole windows will look good, so drop in some simple circles with a hard round brush and use Transform to place them in the correct perspective. Then paint in some simple reflections. A quick search online for a neon font will turn up a few useful ones. I work up a couple signs which you can do using the Type tool. Go with bright colors for this, selecting Type > Rasterize Type Layer, and then place the letters using the perspective guide as before with Transform > Perspective or Transform > Distort. Little details add personality and a narrative to objects in your scene. Be careful not to get too dense with detail though; sprinkle it where it needs to be, and then suggest the rest.

PRO TIP

Good saving habits

Save and save often. Despite newer versions of Photoshop being able to auto-save and recover files after a crash, sometimes the loss of ten minutes' work can derail you. To be on the safe side, train yourself to hit Ctrl+S often.

Also, save your files with reasonable names and incrementally in case you need to hop back a good distance on an image. Otherwise, good luck finding that image you named "asdfhjk;l.psd" because you were groggy at 3:00 am!

13

Create windows on a new layer using Move, Transform, and your perspective grid

14

Render the far sky and background with a lighter gradient

PRO TIP

Creating custom brushes

You can create your own custom brush quite simply with any black and white image. With your newly created image open click on Edit > Define Brush Preset. Once you have done this a window will appear giving you the opportunity to name your new brush. Once you have done this your new brush has been created and is ready to use. If you look at your Brushes you will most likely find it at the bottom of your list.

This brush would be fine to use as stamp, but it isn't very versatile as a brush yet. The next step is to click on the Brush tool and then select the Brushes Palette option. This will open a pop-up window: scroll down the list and find your new brush and click on it. Select the Brush Tip shape option and you can very easily change the spacing and angle to make the brush easier to use.

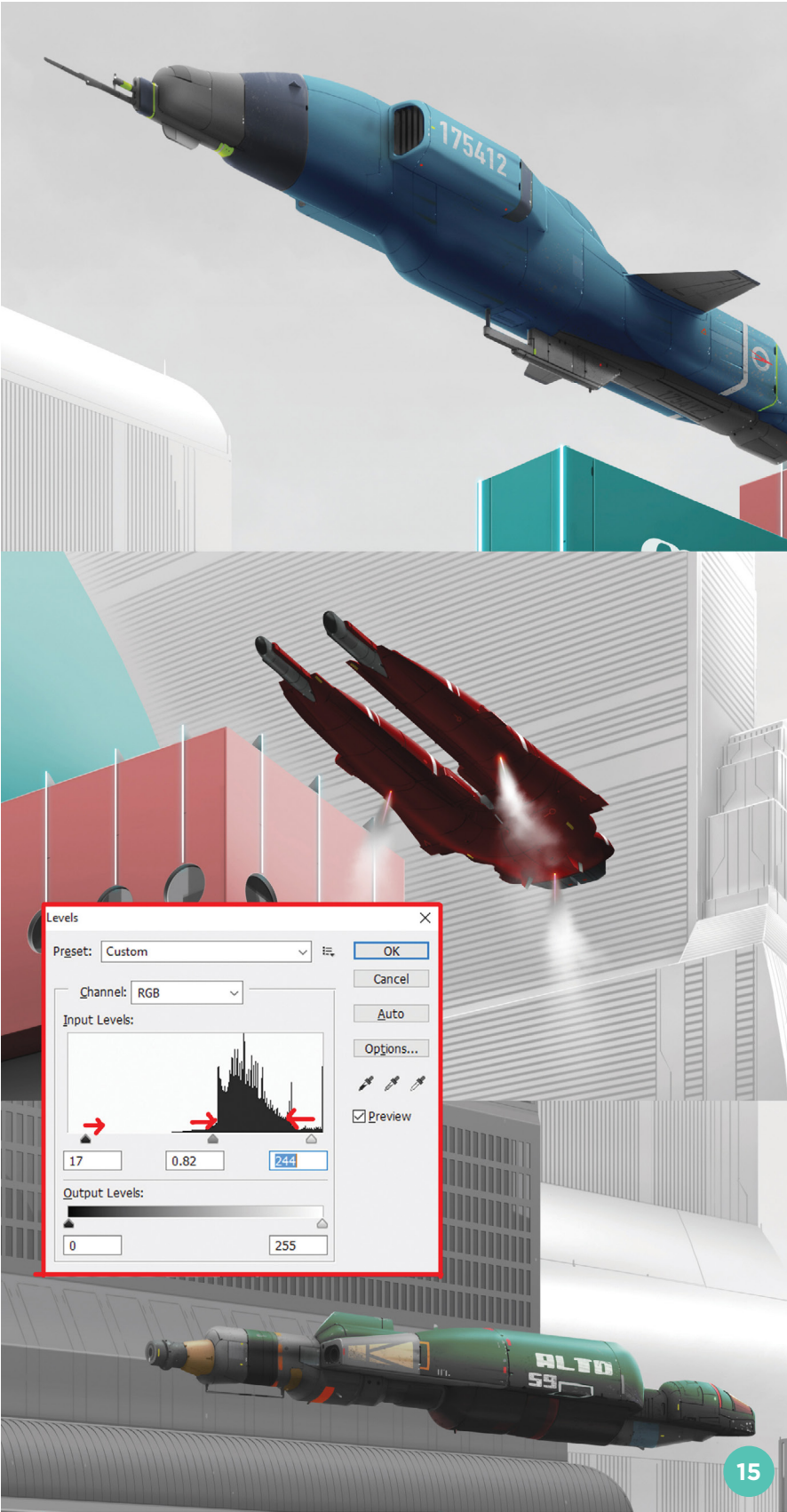
By choosing the other options in this list you can continue to customize your brush and make it ready for use. Have a go yourself!

15

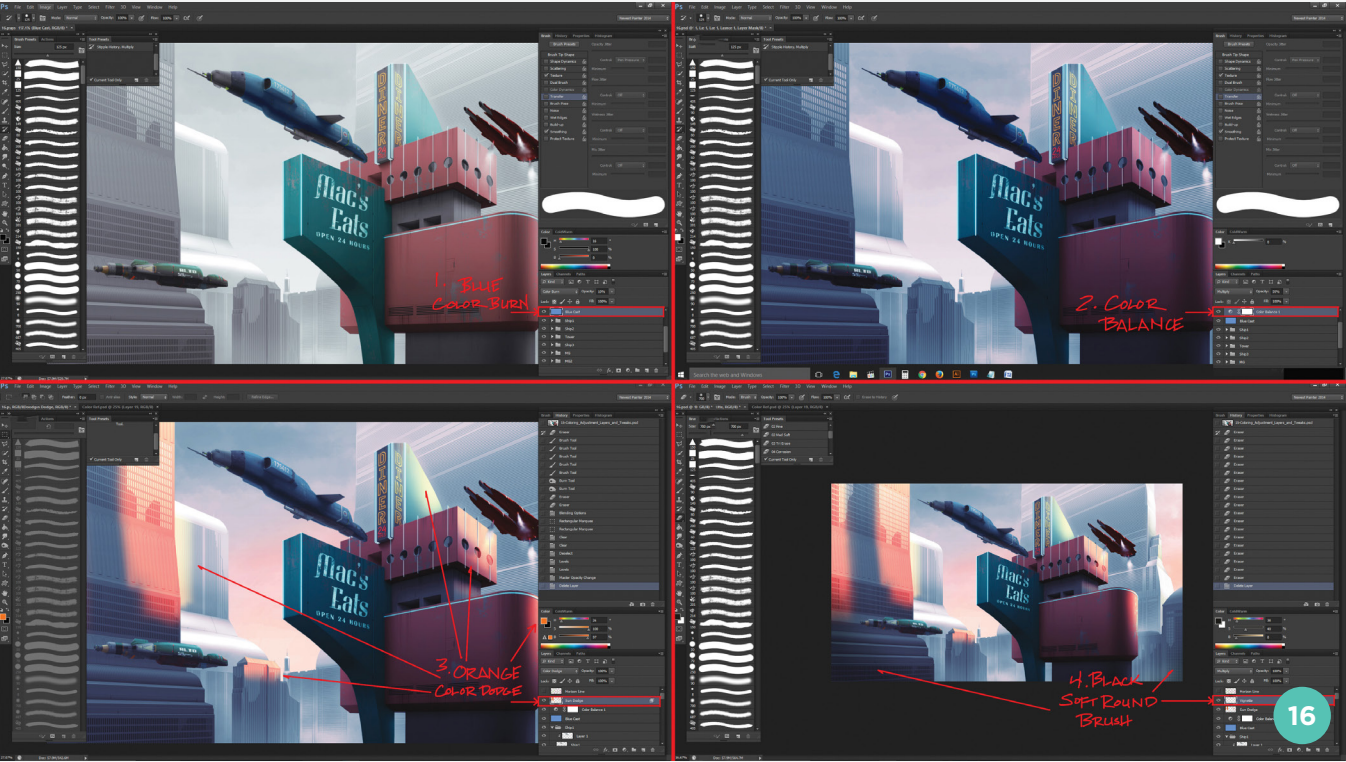
Most problems with luminosity and value can be addressed by adjusting the Levels settings

16

Use adjustment layers to alter colors until you are happy with the general tone



15



16

Coloring and adjustment layers

After taking a step back from the image for a moment I feel that my background elements are a little too low contrast and bright, so I select each layer and adjust their Levels (Ctrl+L). Raising the black, and shifting the mid-tones to the right, and then pulling the white levels in a bit, corrects this (15).

Now that the contrasts are fixed you can start to lay in colors on the diner by adding a clipped layer in Overlay mode. I choose to work with a coral pink and sea-foam green on the diner as those were popular colors in the 1950s and they naturally complement each other. You can use the same clipping process as you did for the ships, and then paint in colors. Use Overlay, Soft Light, and Vivid Light modes now.

Experiment with different kinds of layer modes to see what effect they have on your colors and values. At this stage I also add a bit of weathering and grime to the diner to give it that “used” look. Erasing out some

areas of the diner’s color layer simulates worn and chipped paint.

Further tweaks

On top of my layer stack I add a new layer, fill it with a bright blue, and set it to Color Burn at 10%. I decide a sunrise or sunset scheme will be more dramatic so this gives a blue cast to my scene. Above that I add a Color Balance adjustment layer. To do this go to the adjustment layer setting on your layer panel (the half white and half black circle) or follow Layer > New Adjustment Layer > Color Balance to quickly push the image in the correct direction. Set the adjustment layer to Shadows: -100, -64, and +100; Midtones: -100, +34, and +100; and Highlights: +50, -5, and -100. Leave the “Preserve Luminosity” option unticked. This brings even more of a sky-blue cast to the scene, especially in the background, while also putting red and yellow in the brighter areas (16).

Next you can add a Color Dodge layer and paint with a saturated orange to wash sunlight across the buildings. Use shadows

to indicate that there are some out-of-scene structures. Add another layer in Multiply mode to the lower corners with black to keep attention on the central elements.

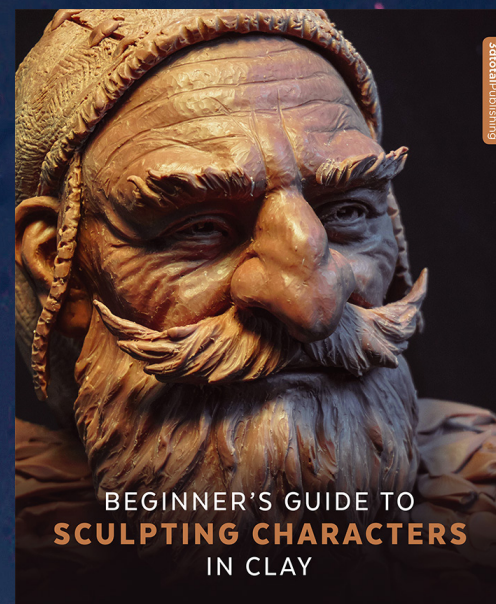
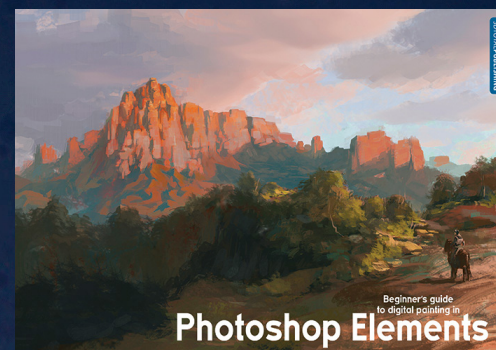
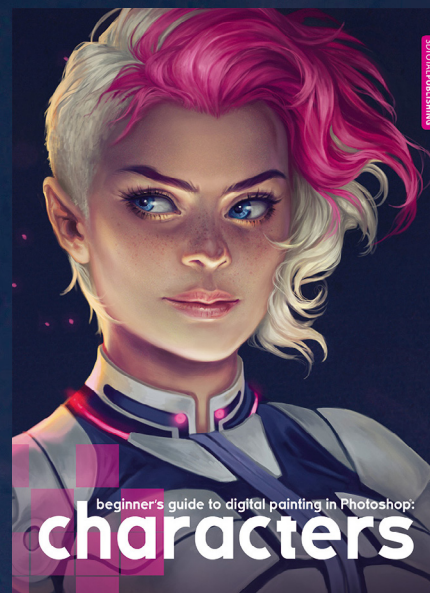
It’s possible to tweak endlessly using adjustment layers. Try not to get too caught up in making things perfect. Get the right feel and then move on to the next task.

Finishing up

Finally paint a few in lights on a new Color Dodge layer to give life to the diner and ships. Add one last adjustment layer, this time a Photo Filter one set to Sepia at 25%, to warm the image up just a bit. You could keep going with this and add more and more detail, but the image will become overcrowded.

We have covered how fundamental perspective is in constructing a sci-fi scene (or any genre of art, for that matter). However, the methods here certainly aren’t the only ones and I encourage you to develop your own workflow. Experiment, learn from your mistakes, and keep going!





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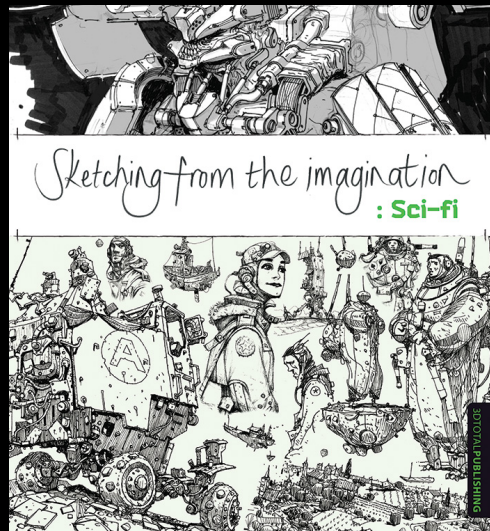
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Sci-fi Sketching

By Nikolay Georgiev

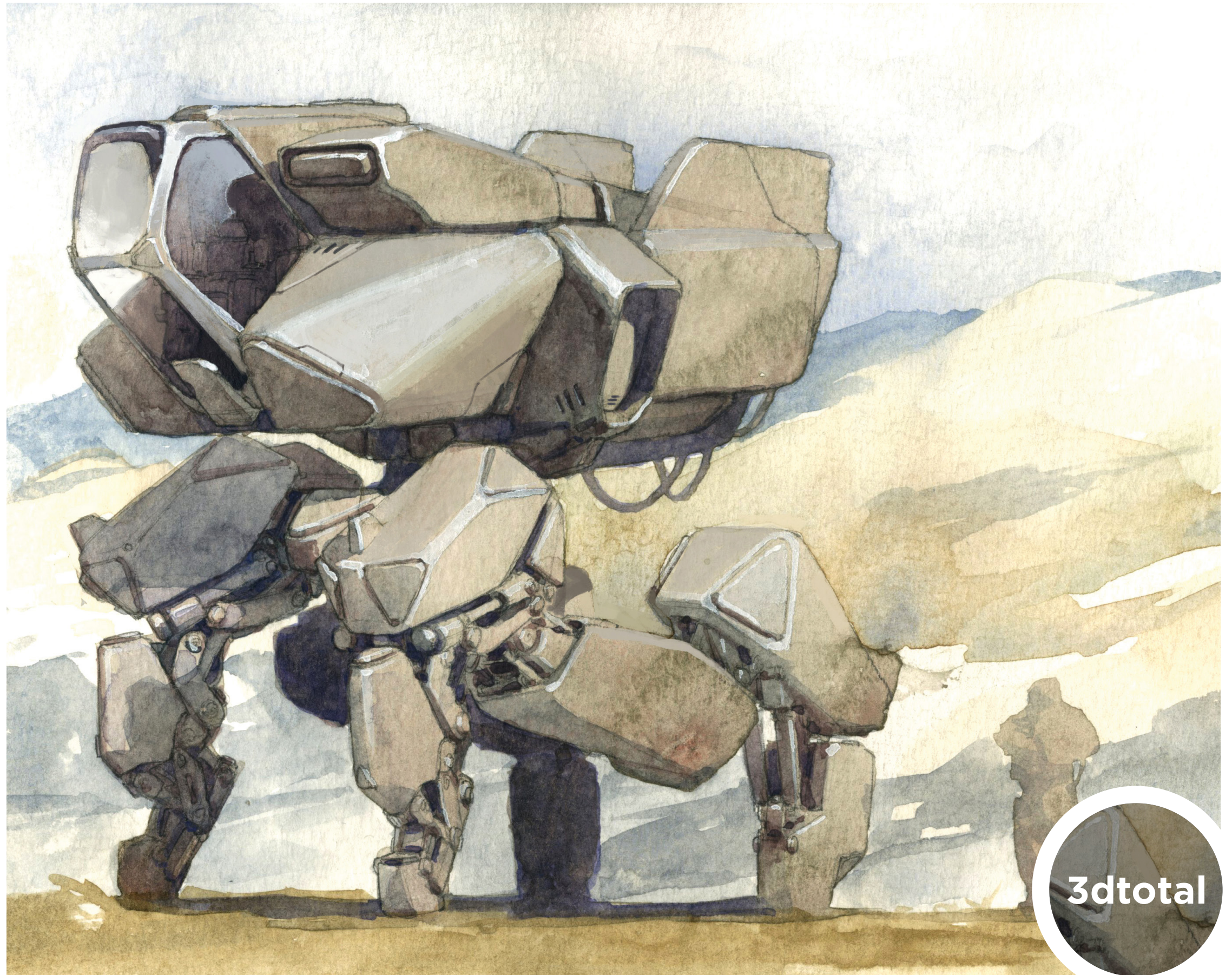
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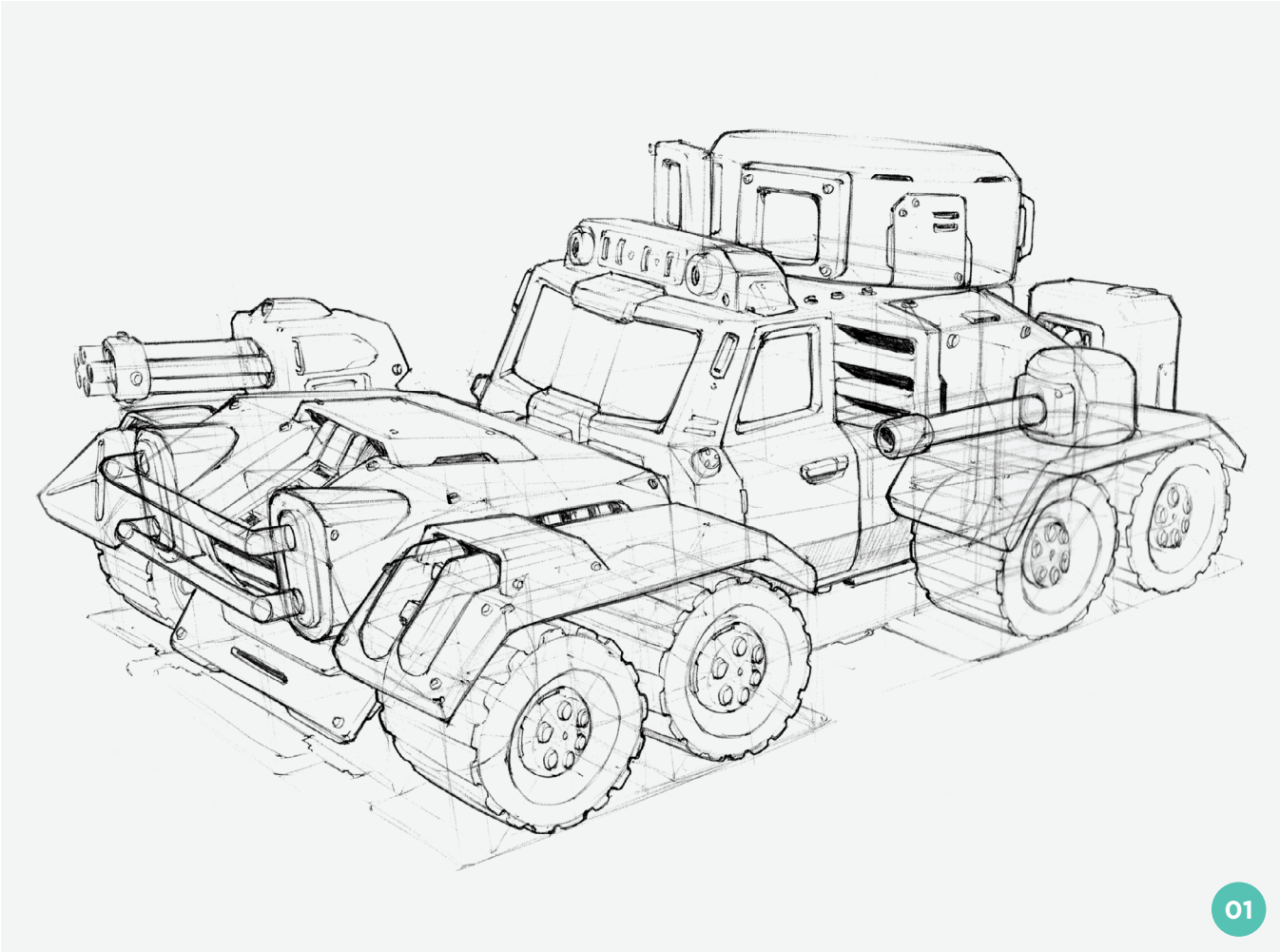


Sketching for the
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I started sketching frequently again quite recently, in the last year or so. Previously when I needed to draw or sketch something by hand, I had always just used plain sheets of paper rather than a sketchbook. Working on games easily removes you from traditional media, with digital tools being so accessible and easy to use. But sketching is something else, so I got a few different sketchbooks and started to sketch – mostly sci-fi stuff, since that is what I love most.

I re-discovered the wonders of watercolor, brush pens and inks, ballpoints, and the one and only mighty pencil. I found out that a sketchbook is a wonderful sidearm for your inner artist, since it offers a limited canvas and a finite number of pages, and if you use the right tools you easily learn to be more

decisive with your designs and scribbles. Using a ballpoint gives you a confident line and no going back, which is perfect for people who worry too much about a drawing and don't focus on design more.

Using different media and forgetting about undos for a while is really helpful, and in my case really refreshed and restarted my artistic drive, as well as actually giving me a few good ideas to quickly design and explore concepts in different ways.

Inspiration and Ideas

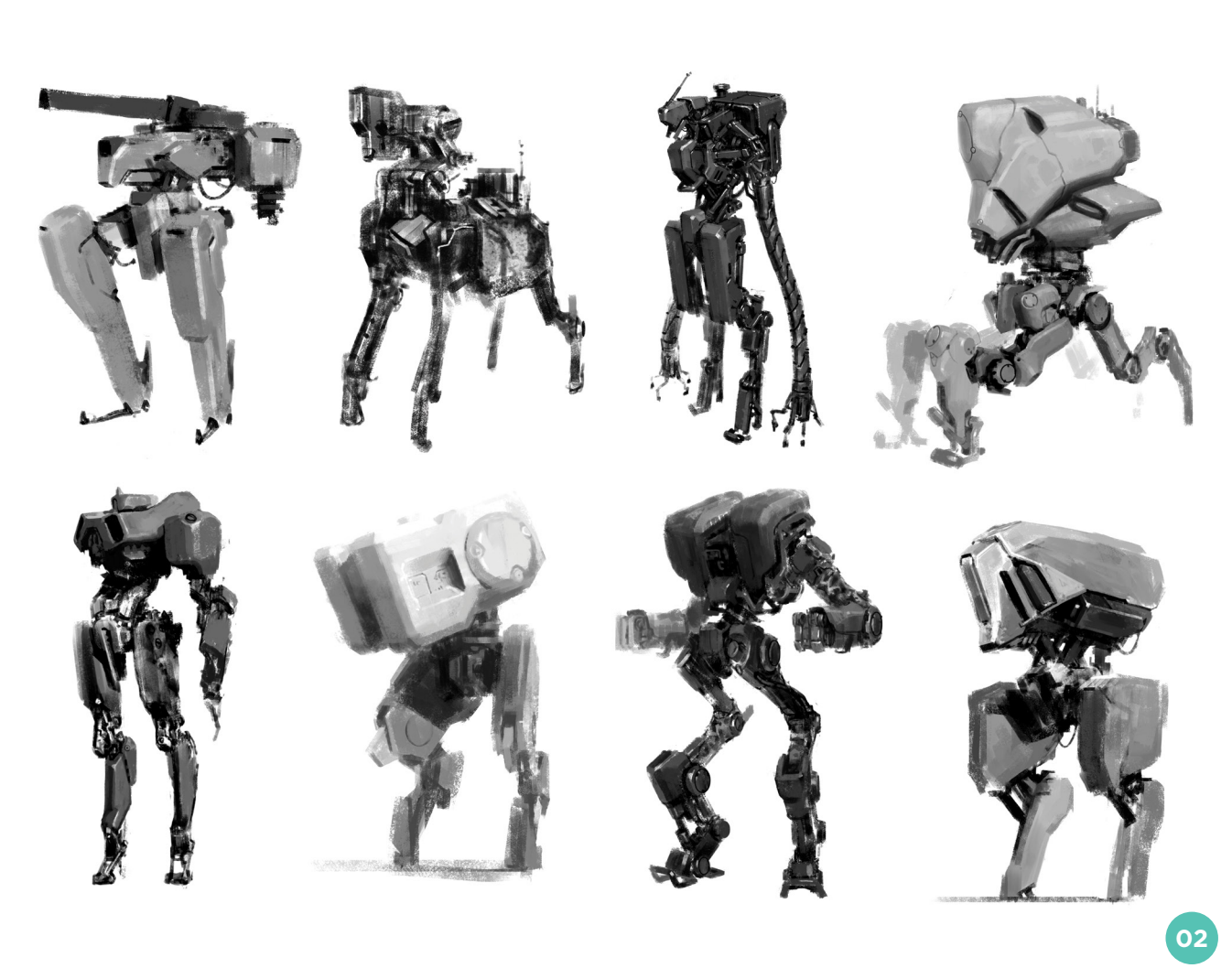
I find inspiration in lots of places: current, old, or new machinery; advances in science and space; looking at photos from NASA; military technology; and, of course, looking at other peoples' art. Artists share a lot these days –

01

Military Land Vehicle. A practice in perspective drawing. Something more light-hearted and a bit cartoony is a breath of fresh air once in a while.

02

Digital sketches. When you seem to favor a scribble from your sketchbook, you can always explore it further digitally to see where it takes you.



in some ways we are like children. You see someone playing with an awesome toy and you want one too, but not his, you want one of your own. Another great source of inspiration is books: sci-fi ones, classic or new, it doesn't matter – there are worlds inside that no one knows for sure how they look.

Materials

As I already mentioned, I like to try different materials and tools and also different combinations of them, such as watercolor, pencil, colored water-based pencils, a brush pen, gouache, ballpoint pen, and black and gray markers. I use a few brushes that have water compartments within them because it's easier to carry them this way.

My pencils differ: I mostly use 2B regular wooden pencils for loose sketching, a fat mechanical HB pencil, and a few different sizes and softnesses of mechanical pencil for detailing and small sketching. Ballpoint pen is harder to choose; I carry a lot of them, mostly black and sometimes blue.

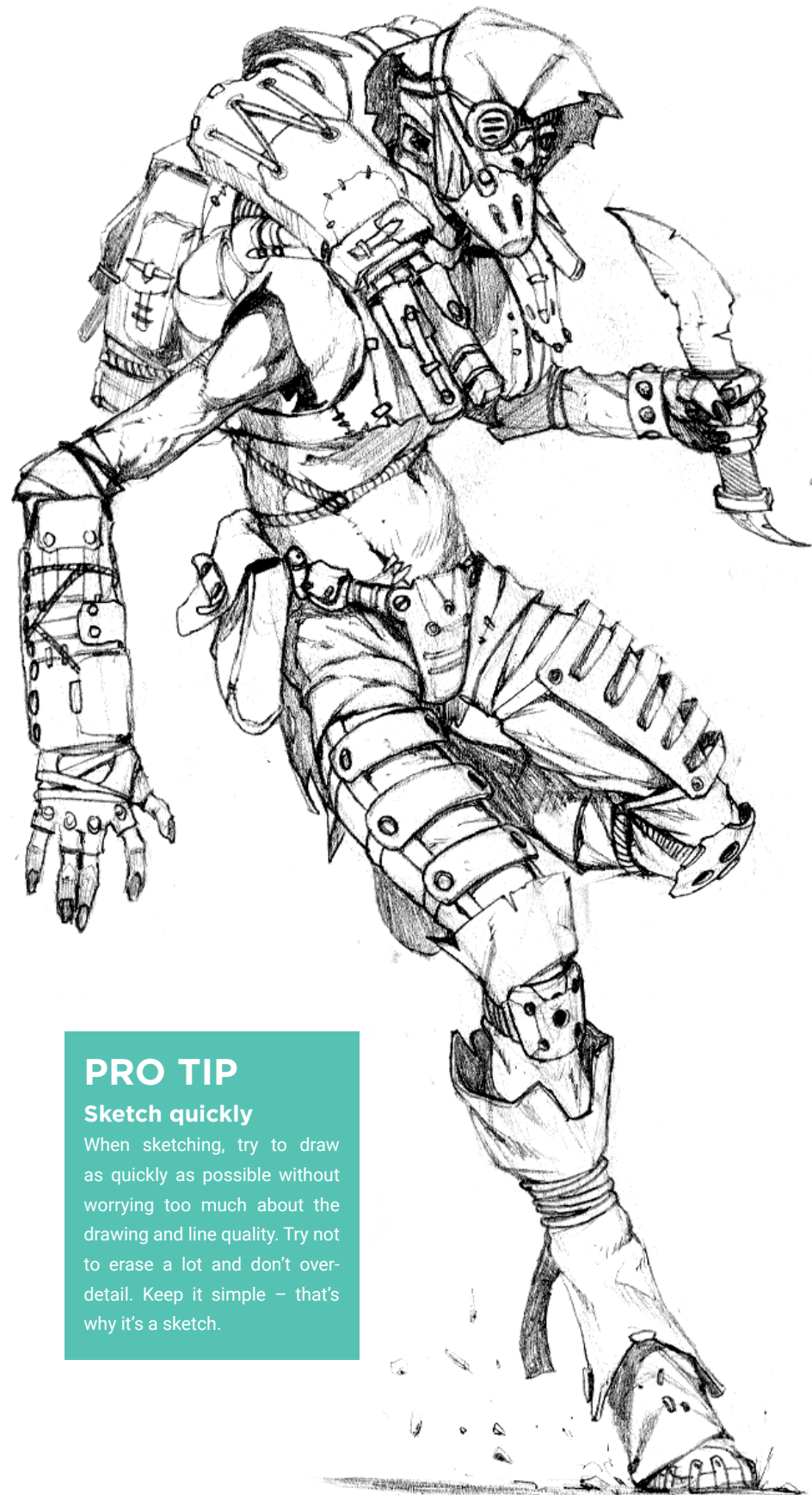
I use two different types of paper: one is the watercolor grade of Moleskine and the other is the soft, plain paper Moleskine, which is better for ballpoint-pen sketches.

Sketching Techniques

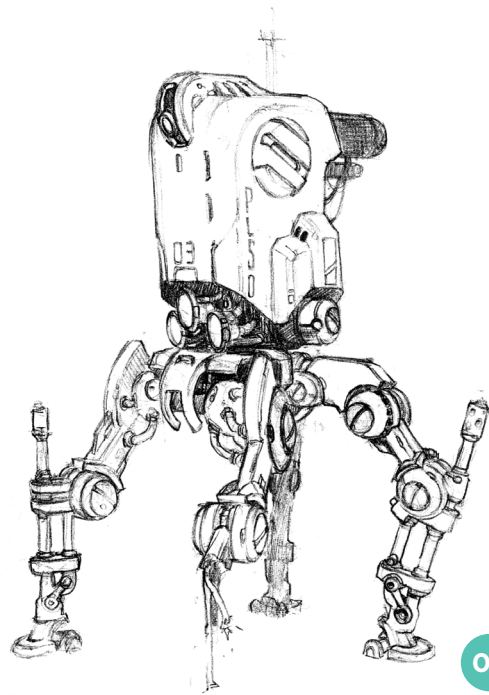
I have found a few useful techniques for designing, some for early stages like thumbnailing, some for exploring silhouettes,

and some for quick, detailed designs. Recently one of my favorite methods has been doing silhouettes in watercolor on a bigger scale with a large brush, then detailing and figuring out design within the silhouette, and then doing another watercolor pass to shade and further develop the idea.

For thumbnail sketching I use a brush pen or a marker to draw small silhouettes and look for interesting shapes. Then I try to make loosely shaded quick sketches of some of the scribbles using a brush pen or a ballpoint and brush pen using only opaque shadows.



04

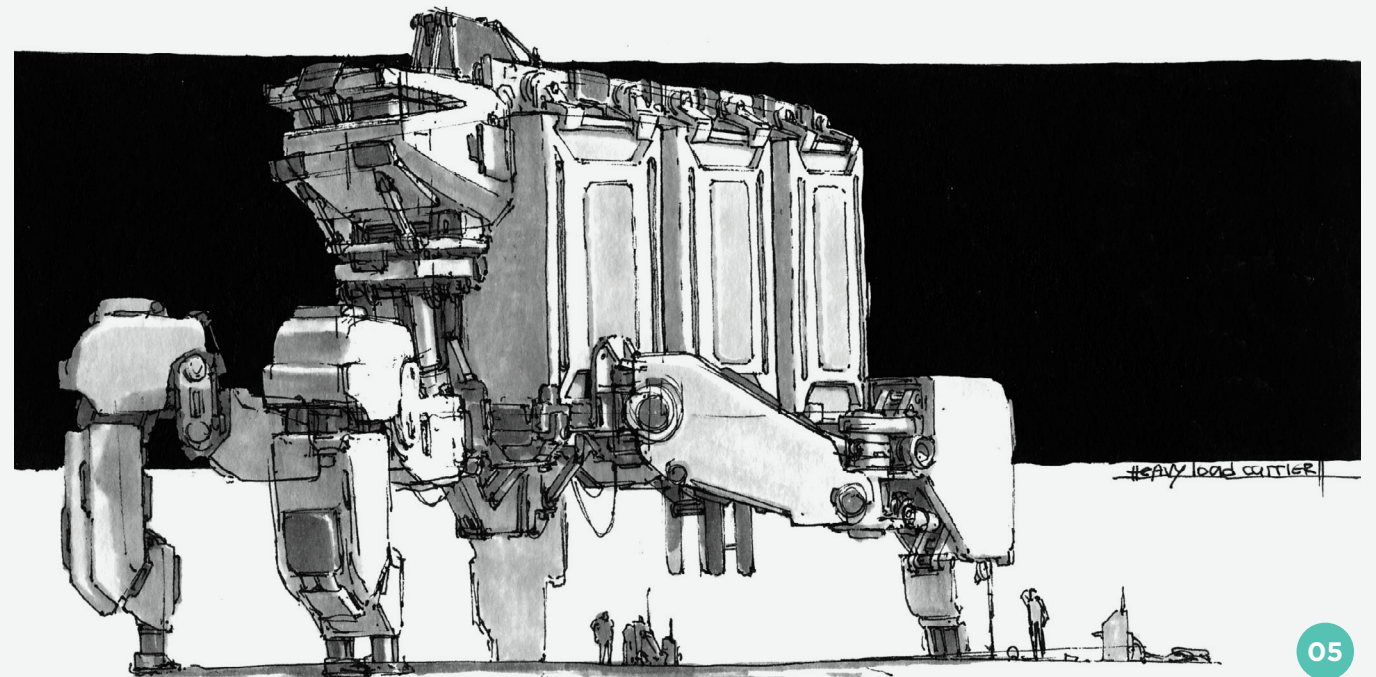
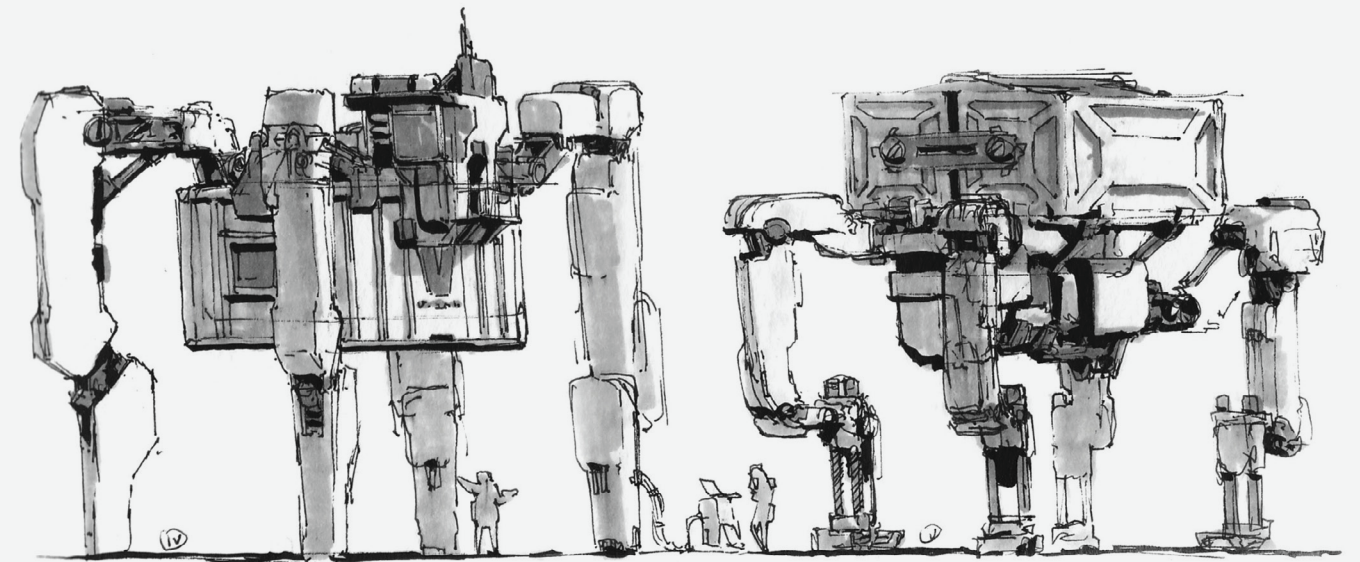


03

03
This is a very old sketch, done on a single sheet of paper and lost, as can be expected. I got tired of drawing the same leg and broke it off.

04
Nomad. Another very old sketch, lost, because it was on a single piece of paper. Who doesn't like post-apocalyptic worlds and mutants?

05
These are exploratory sketches for a cargo transport mech, done in different sizes and at different levels of detail. The large one is the furthest I've taken the design, but having these I can always go back and develop the design further.

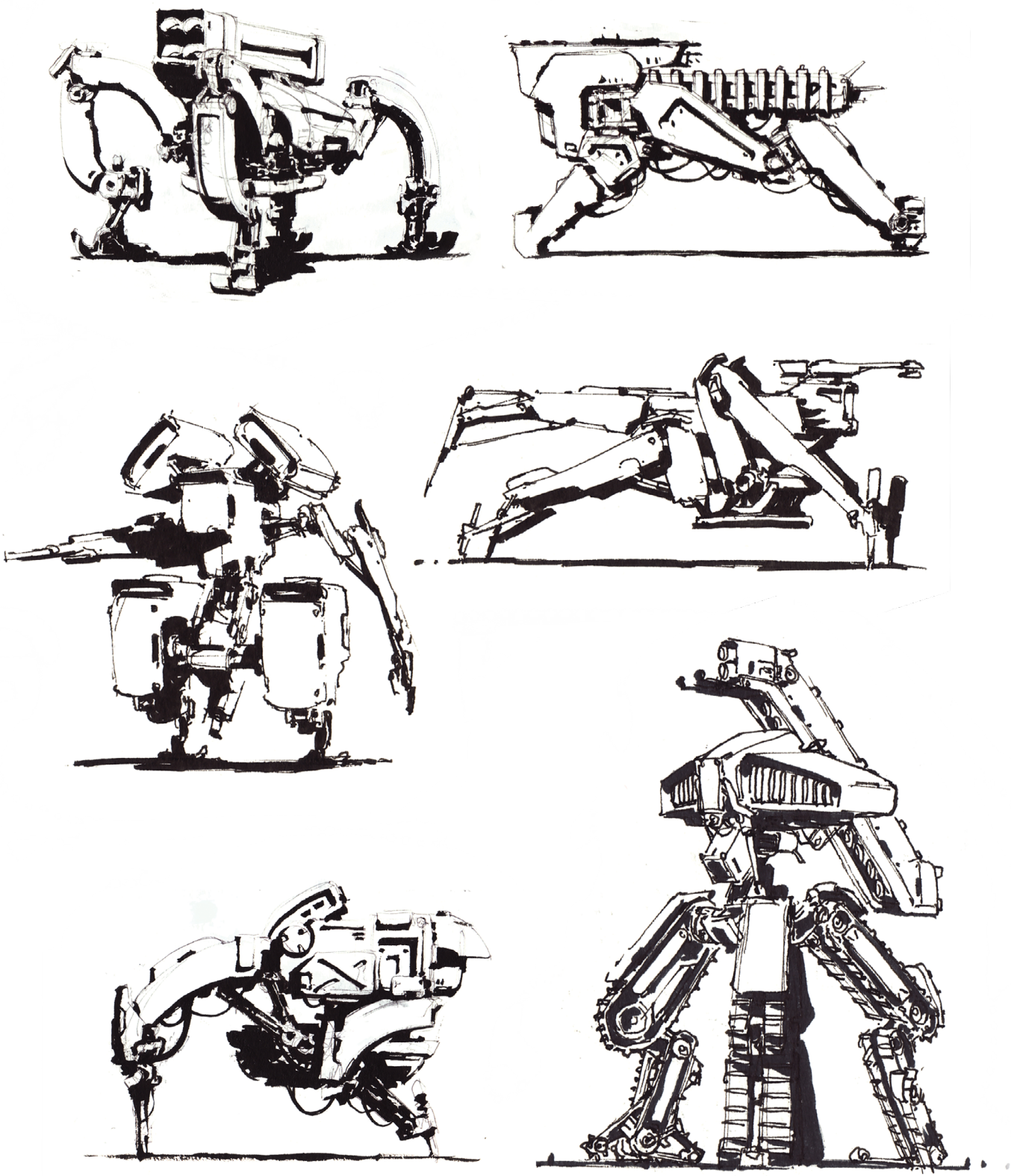


05

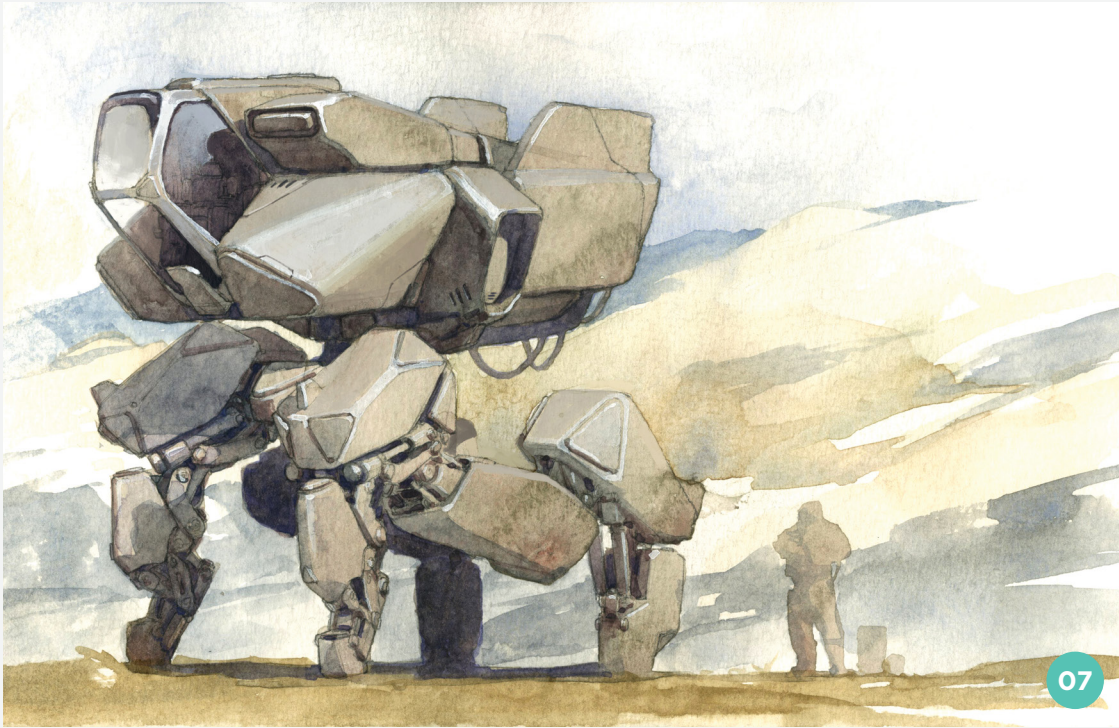
PRO TIP

Sketch quickly

When sketching, try to draw as quickly as possible without worrying too much about the drawing and line quality. Try not to erase a lot and don't over-detail. Keep it simple – that's why it's a sketch.



06



07

06
A few brush-pen sketches, nothing special, but a very easy way to put down lots of ideas quickly, without worrying about details.

07
Another watercolor sketch, this time with suggested environment and scale.

08
Designs derived from looking for form inside a watercolor silhouette, utilizing colored parts on occasion; they're slightly refined, with some function, but still mostly a visual exploration. This technique is mostly suitable for exploring visual styles, not a particular functional design or a well-described task.



08

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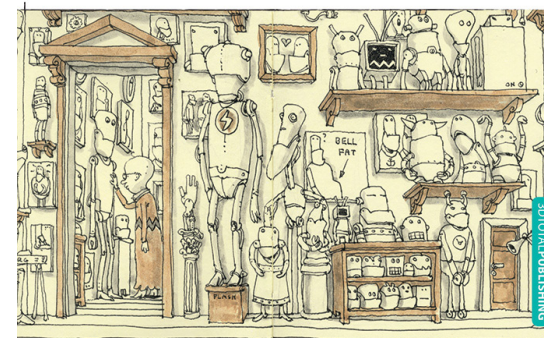
Sketching from the Imagination

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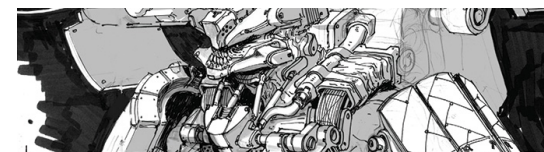
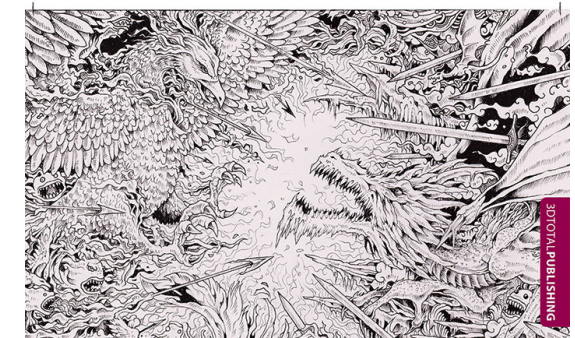
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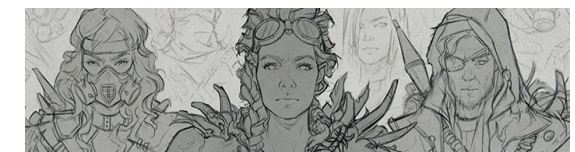
Sketching from the imagination
An Insight into
Creative Drawing



Sketching from the imagination
: FANTASY



Sketching from the imagination
: Sci-fi



Sketching from the Imagination:
CHARACTERS



The Robot Slayer

By Artur Sadlos

Web: society6.com/artursadlos



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In this tutorial, I will lead you through my process of creating an appealing fantasy illustration. I'll share my insights into the process as well as some practical advice. It will be mainly focused on composition, light, and color. By following my steps, you will learn how to control your artwork from the very beginning, to the finished piece. My main objective is to provide a reliable method that allows avoiding mistakes in the later steps of the process. You will also learn about the importance of the sketching and reference assembling process and how to maintain consistency with your design language.

Quick sketches

I usually start by doing series of small, quick sketches (thumbnails). I like to draw in the good old sketchbook with a pencil or a fine liner. The traditional analog tools are the most natural way for me to work on ideas in the early stages. I don't feel restricted or overwhelmed by any software, shortcuts, lag or anything else - just pure, streamlined thoughts laid down directly on paper. The addition of too much technology like tablets and software could slow me down unnecessarily using up my time and energy. At this stage, I have no need of using any adjustment layers or even Ctrl+Z (01).

Such rough doodles allow me to check out various solutions (like composition) quite quickly without bothering myself with unimportant details. Usually, I'll do several to a dozen of aforementioned sketches before proceeding to next stage. Further parts of the process will require a lot of work, so it's better to be sure what about what I want to achieve from the very beginning.

References

Once I've got a clear idea for the illustrations, I'm going for a reference hunt. At first, I just collect as much content as I can. I do a solid and wide-ranging search, as I'm trying to cover all the elements and aspects of the artwork, not only items but light and color references



as well. It's an organic process combined with more sketching when a new idea is ignited by a fresh find. When I find something cool that hasn't necessarily crossed my mind earlier, but fits the feeling I'm aiming for, I will try to incorporate it into the initial sketch. It's still early in the process to make a lot of changes, and since I'm operating with rough and quick drawings, I'm not losing any important and time-consuming work.

Value study

Creating strong values is an essential step (02). You can establish composition and contrast without worrying about the color for now. Block in all the crucial elements to have a good foundation that will hold the consistency of your artwork in place as you progress. If your illustration works at this stage, you can be almost sure it will also work at the end. Try hard to make this step as good as you can. Take your time and don't rush forward if you're not fully satisfied with it. Solid values are critical and will almost always guarantee a comfortable work load to the very end, without unnecessary troubleshooting along the way.

Proper sketch

First I create a Levels Adjustment Layer over my value study layer. I decrease the black end of the graph in Levels to lower the contrast and brighten the layer with my values (03). Next, I create a new layer over it and call it "Proper Sketch." This layer's purpose is to create a more detailed sketch over what I already have. Now I can carefully push the design of the whole thing with greater accuracy and much more attention to detail.

At this point I keep developing the initial idea without major changes the core of it. It should enrich the basic sketch and not change the main course. I build up the complexity of forms based on the set of references I collected before. I'm trying out my options; what works the best regarding the design I'm looking for? What does not? I consider this step complete at the point where I'm certain that I have enough information for further work.

01

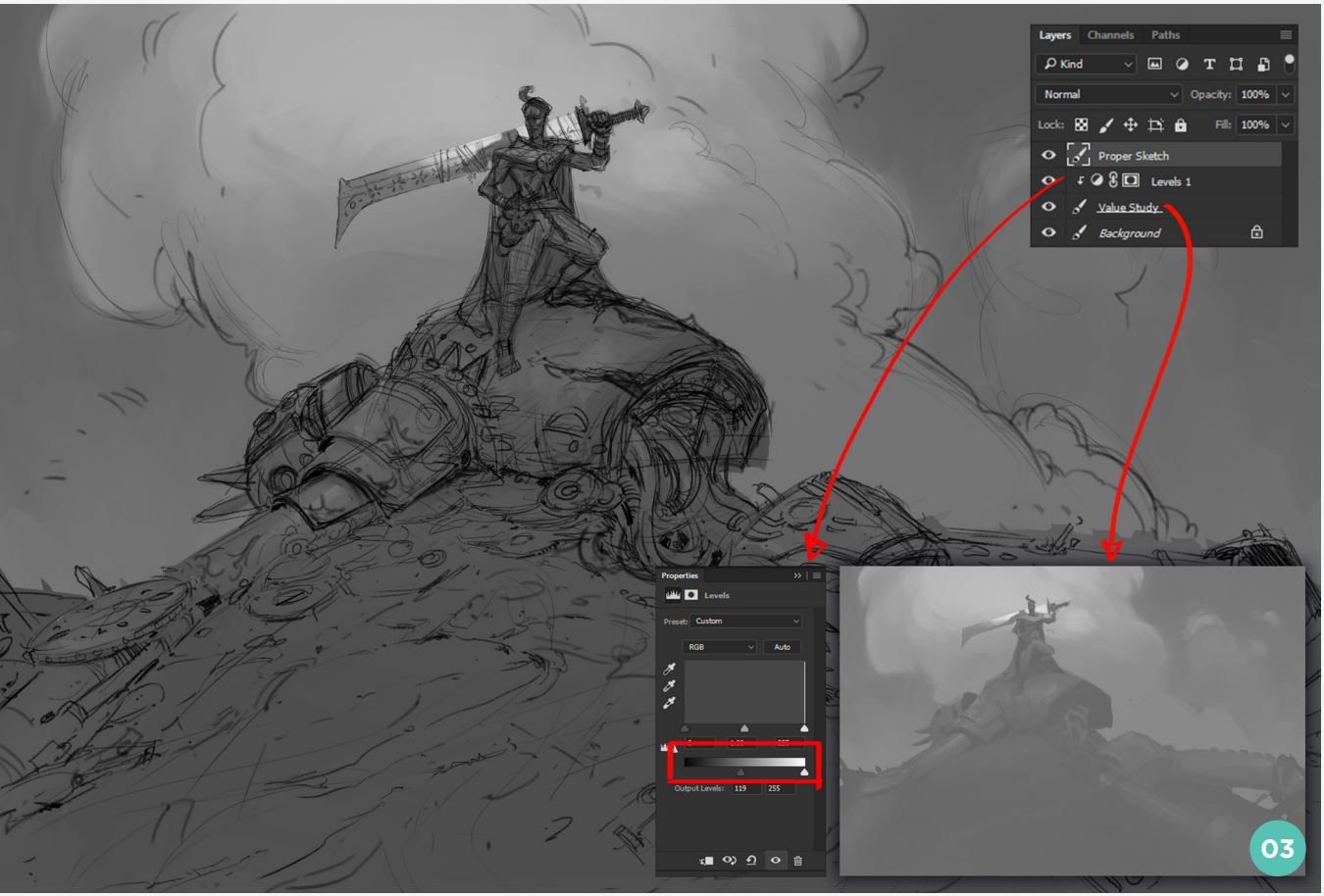
Initial sketches are only meant to help you come up with the idea. They can be ugly as long you can read them

02

Solid value is like a spine to every painting. Take the time to come up with strong values. And keep it simple

03

Having fairly solid sketch will help you to paint better all the elements. Drawing is understanding





04

I recommend doing simple color studies to set up mood and light before you go for any heavy rendering. It will save you a lot of trouble later

05

When I don't understand something, I draw it. I don't like going to fight unprepared

06

I keep my image small enough to fit on the screen. That way I can see the whole picture and avoid going to soon into details

Color study

There are two approaches that work for me at this stage. First one is to make a color sketch from scratch and the second one is colorizing the value study I've made earlier. This time I went with the second option (04).

First, create a new layer with Blending Mode set to Color. I paint on this layer to add colors to value study below it. It's a relatively simple task at this point because the values are already defined and adding colors to a well-done value block is a fairly manageable process. Additionally, I use Color Balance and HSB sliders (if you feel more comfortable with some other sliders, you can go with them as well) with the support of Lasso Tool for selection of specific areas for better color control.

Finally, I start painting roughly, especially over the areas that require a bit more precision and refinement. In this case, I already knew at

the beginning that I wanted to have a sunset scenario in my painting, with the last beams of saturated light illuminating the character's figure, while the fallen robot is left in the shadow, catching bits of the faint overcast light from the dark, blue sky. Classic move and it's always effective. Sometimes there's no need to reinvent the wheel, to tell the story properly. Reach for the tools that work best.

Additional designs

When I feel like the design of elements in the picture still need some figuring out, I spend extra time doing supplementary sketches, with a purpose of exploring various parts of the artwork (05). I like to know what I'm painting because it always pays off and saves a lot of time later on. I tend to make these sketches, even if a lot of the elements are barely visible in the final image. This gives me is more design confidence and a better understanding of the subject I'm dealing with. It also allows me to pick the best option from

a pool of various designs, instead of forcing myself to go with the first idea that pops up.

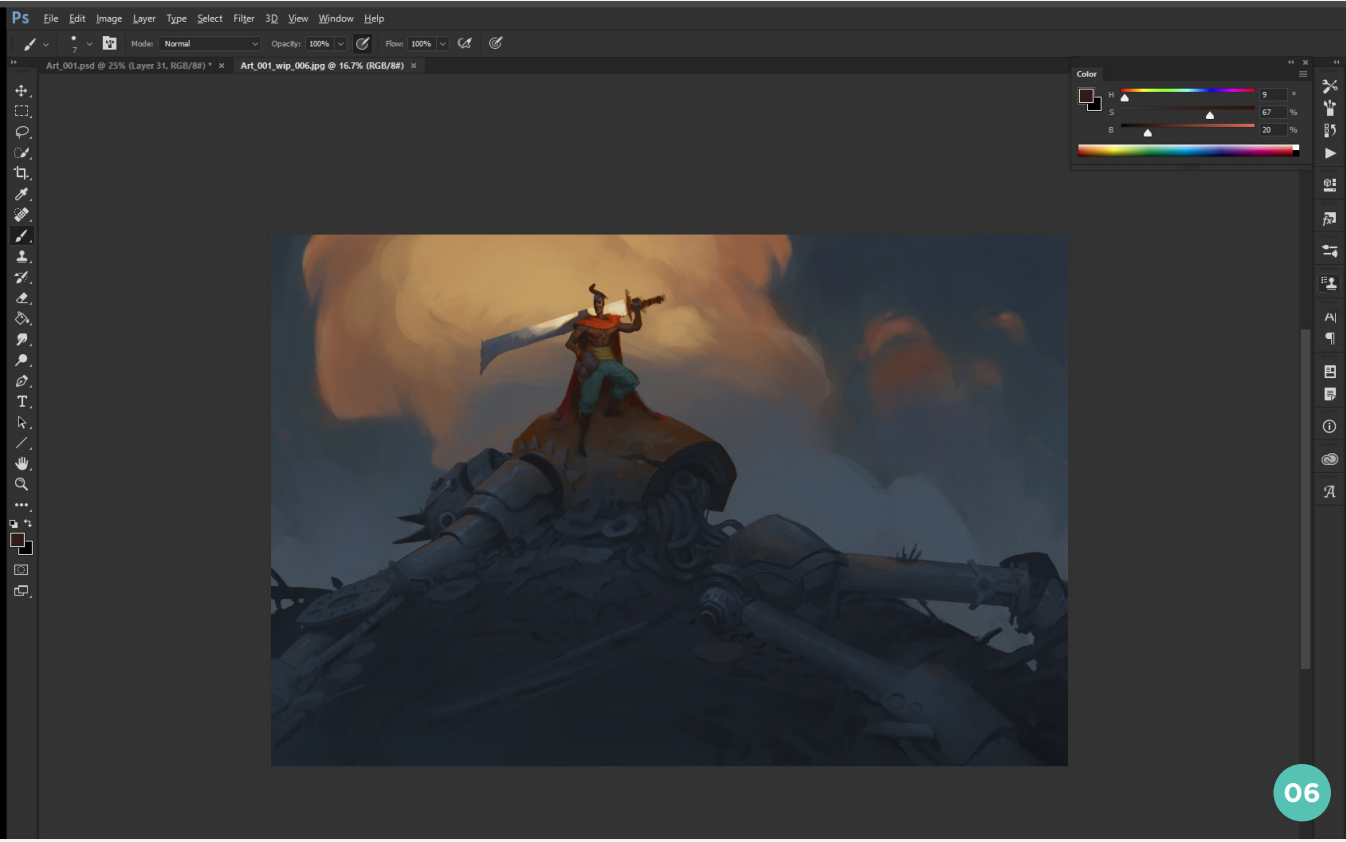
Painting (finally!)

I usually start painting with more broad strokes to avoid getting into small things too early, and then as I go on, I slowly get into more detail. I constantly keep my focus on looking at the whole picture, trying to avoid concentrating on one little part for too long. And when I say it, I mean it. Literally. I work zoomed out, I do not enlarge the image (like on the screenshot), and I very rarely zoom in, if ever (06).

Avoiding close-ups prevent me from going into unnecessary details and help to keep a healthy workflow. Going from bigger shapes to smaller ones will let you keep better control of the image and save you a lot of time later on.



05



06

Unexpected changes

Every once in a while, despite the careful process of planning out the whole painting, I tend to break my rules and change some parts of the image later in the process. In this case, while going through the references (Orientalist paintings mostly), I realized that, instead of a fantasy style warrior boy in a dynamic pose, what I'm aiming at is something more dignified and classy - something that some egoistic monarch would hang on his wall in his palace; a proud portrait depicting richness, splendor, and accomplishments; one of those paintings that are supposed to make an impression on visiting guests and build an aura of nobility and power in the room (07).

Detail time

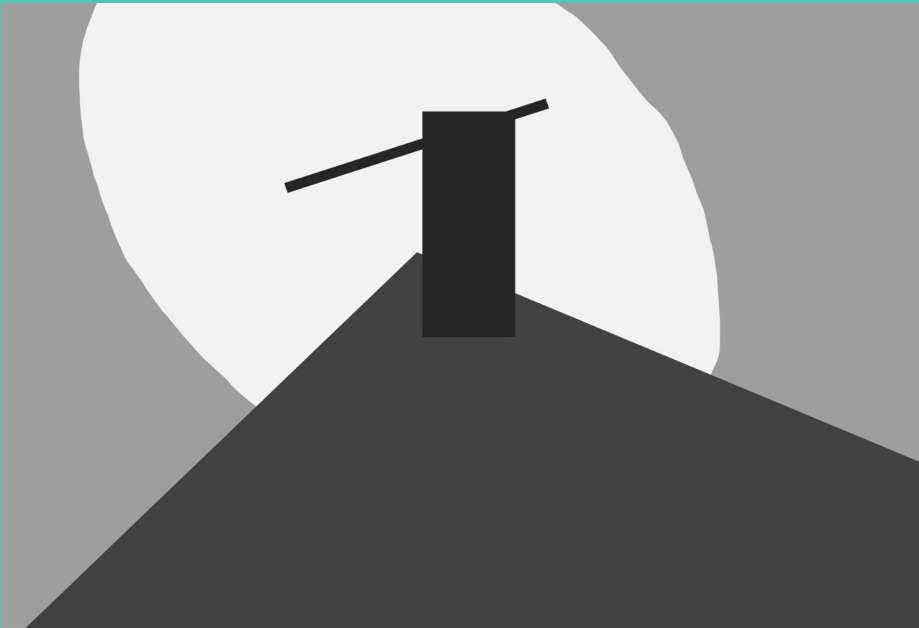
If you thoroughly followed all the previous steps, at this point, you should have a pretty solid image. What it needs now is major polishing up, as well as adding a few details. In this case, I have to remember to put my main focus on the character, because that's where the focal area is. He plays the lead role in this painting, and it's crucial to put some extra work on him.



PRO TIP

Simple shapes

The composition can be broken down into basic shapes. Triangles, circles, squares. Try to simplify your value study to the possibly simplest shapes and see if it's interesting. Maybe there is something you can tweak? If you struggle with simplification of your image, it might mean that your composition is overly complicated or your focal point isn't strong enough. Experiment with this technique to learn more about composition and layout.



07

There is never too late to change something. If you truly feel that it's the right thing to do, don't hesitate to kill your darlings

08

Now you can put your headphones on and work on the details. If you cautiously followed the solid plan before, then now it's time to take a benefit of it

09

Establish a backstory with details and make the world believable

I can leave the other parts of the picture painted loosely to some extent, so the viewer's eyes stay focused on the most important parts of the image. This is another essential tool in the bag that allows you to control the viewer's attention, supports the narrative and lets the viewer's eyes rest in the areas with less information (08).

Images with equally distributed detail density throughout the image have a high risk of being uninteresting or chaotic. Use contrast when managing the detail placement. Create visual groups of detailed and less crowded areas to make it instantly readable for eyes.

Tribal motifs

The leading design inspiration for this image is African art and culture. The idea for robot's design has originated from African patterns, masks, and wooden statues. A cohesive design language fundamentally supports



building subtle back stories and bonds the world of the image together. By incorporating this layer of concept, I can suggest that this illustration is an integral part of a larger, rich

world, and what the viewer is seeing, is only a small part of a vast universe. It inspires curiosity and makes the mind hungry for more (09).

Painting the background

It's time to proceed to the substantial part of working on the sky and clouds in the background. I have to keep it in my mind to maintain the high contrast in the area around the character. Since the mood and effect are the priority for this illustration, I don't hesitate to make it slightly theatrical at the cost of the loss of a little realism. The character needs to pop out and be, in this case almost literally, in the spotlight. If an area of the image is important, make sure to give contrast of some sort. It can be executed through a value contrast or a color contrast. You can also use sharp and soft edges or high and low detail range for the same purpose. Be creative and always use choose your tools in favor of the story for better effect (10).

Texture noise

Photo textures are a great and efficient way, regarding time and effort, to create a random noise suggesting detail in the image. In this case, I used it to visually enrich the pile of metal scrap under the defeated giant robot. For this purpose, I've closely searched for photographs with metal junk parts in it, like car wrecking yard pictures. Then I placed the photo texture in a layer with Blending Mode set to Overlay or Lighten/Darken (experiment with different modes at will, but these three work sufficiently most of the time). Next, I turn on the Layer Mask and carefully uncover the areas of it with a soft brush, while patiently looking for the best result (11).

Character details

I've incorporated a tribal motif into the sword. I'm focusing on putting in and refining more details as I go on, adding some texture and pattern variety to materials, as well as enhancing the design with the addition of ornaments. I want to make the character as visually rich as possible. The more refined the fabrics and jewelry, the better. It will substantially strengthen the noble warrior king vibe I'm aiming at (12).



PRO TIP

Flip the image

I constantly flip my image horizontally while painting. That way it's much easier to keep a fresh look at the painting and avoid a lot of compositional mistakes. I recommend setting up a keyboard shortcut for it in Photoshop as I did because it just makes it super fast to do the checking at all times. And while we're at it, why not try flipping it vertically every once in a while?

Extra content and information will add up to the character's back story. The references, I'd gathered at the beginning of the process, are now strongly contributing to my workflow, essentially supplementing my design choices, as it allows me to stay true to the African tribal inspirations. Consistency in the design language is critical for achieving a believable result. All the design ingredients should harmoniously match each other, creating a visual dish with depth and punch to it, while still maintaining its core taste and inspiration. By thoughtful reference studying, I allow myself to make better design choices.

Almost done

This is the extra mile time (13). The rest of the time is spent mostly on refining the painting, connecting some loose ends and scanning the image for elements I could improve. I fully zoom out once again to check out the whole piece and to see how it presents in thumbnail size at this stage. It allows me to determine if my values are still on point and if my image preserved its readability. I'm comparing the almost finished image with my initial value and color sketches, to make double sure I haven't missed anything during the process.

- 10
- While working on details, remember to not loose focus on the whole picture
- 11
- By using textures wisely, you can significantly speed up your work. But do not overuse it. It's easy to spoil the picture with unnecessary visual information, making it chaotic
- 12
- The main character is the major subject of the image, so we put more detail and richness into it
- 13
- Don't forget about final touches. Take this extra mile to make it as good as you possibly can



Extra tweaks

Now, when I have my finished painting, the last thing I like to do is make some subtle color and brightness tweaks, using Adjustment Layers and Camera Raw filter. I also display my work on the second monitor to double-check the way it presents in different settings. It more or less simulates the way most of the people, the audience, will view my work. My second monitor is not calibrated and has a lower grade display, compared to my Cintiq, so it works well for that purpose. If you do not have a double display setup, try checking your work on your mobile or tablet and prepare a version that looks possibly best on those various devices.

Right

The finished image

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