



# Our Standards of Artistic Excellence

**"PRACTICE WHAT YOU  
KNOW, AND IT WILL HELP  
MAKE CLEAR WHAT YOU  
DO NOT KNOW."**

Rembrandt van Rijn

# Our Standards of Artistic Excellence

Chapter I – The Brief

Chapter II – Shapes and Volumes

Chapter III – Textures and Materiality

Chapter IV – Artistic License

# II. Shapes & Volumes

Volumes and shapes define an asset and its character from a 3D point of view.

The relationship between the volumes, regardless of their size, will be defined through the placing in 3D space and the proportions between them.

An artist's ability to observe, understand and reproduce Shapes & Volumes in 3D is crucial.

# Key Elements

## Geometry steps

- a) Blockout/Prehigh
- b) Highpoly
- c) Lowpoly

## Proportions

## Silhouette

## Artistic Anatomy

Once we have the final idea that we must achieve with an asset and we have all the references gathered, we can begin the actual production stage.

We begin by developing the geometry, followed by proportions and silhouette.

Always remember to evaluate the model from multiple angles and compare it to the given concept and the references gathered in the previous step.

Make a habit out of zooming out often to see what the asset looks like from a distance.

# Geometry

We begin with the blockout/prehigh stage, followed by the highpoly and the lowpoly stages.

**Tip:** Though there are many ways to model highpoly geometry, we recommend focusing on classic sub-D modelling. This technique is used to create high-resolution models by manipulating a lower-resolution “cage” model and using software to subdivide for a smoother surface.



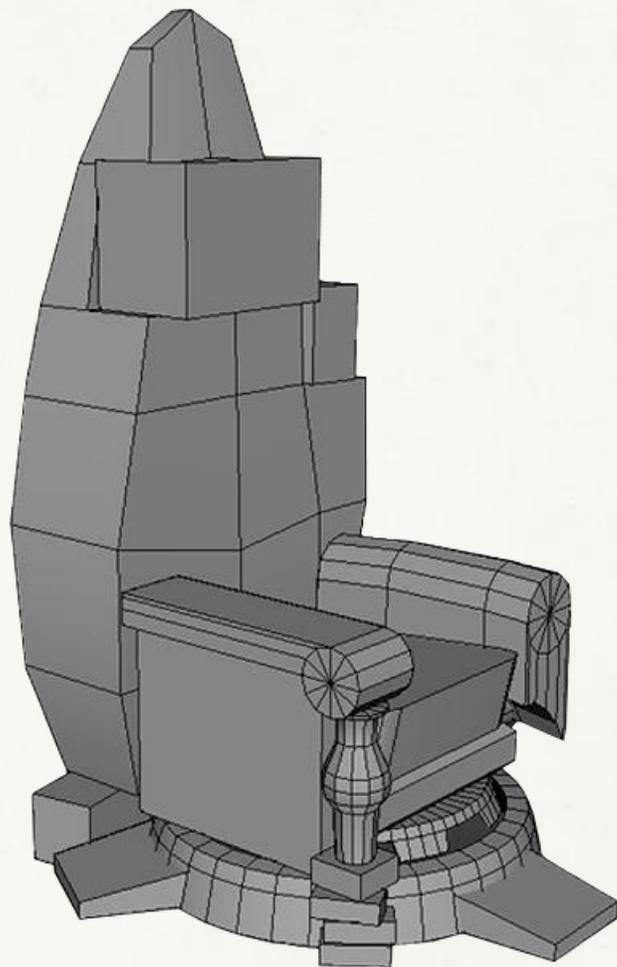
# Blockout & Prehigh

The Blockout stage is when the large volumes and general proportions are traced.

The importance of this step is that it is the first, rough impression about our future asset.

Prehigh can sometimes be the first step in creating a character/creature asset. It doesn't have a poly budget.

The importance of this step is that it will help us trace large volumes, asset proportions and some medium-sized details of the asset.



# Highpoly

Highpoly (HP) represents geometry with unlimited poly budget.

These details will be transferred through various maps (Ao, normal map, curvature etc.) on the Lowpoly (LP) geometry through the process known as Baking and will be the basis of the texture stage.

In the case of character/creature assets, the HP can evolve directly from the Pre-high geometry.

Asset materiality can sometimes be observed during this step. For instance, we can see the stone and wood fibers on the Jungle Throne asset.



# Lowpoly

Lowpoly is the geometry that will be introduced into the game engine. Due to the necessary optimisations, it will have a limited poly budget.

The normals on the Lowpoly geometry will be influenced by the baking of the NM map. That way, we'll have smoothly-curved, unfragmented surfaces and beautiful bevels.

Some elements of Lowpoly can be generated from the Pre-high geometry (belts, buckles). Retopology will be used for the rest.

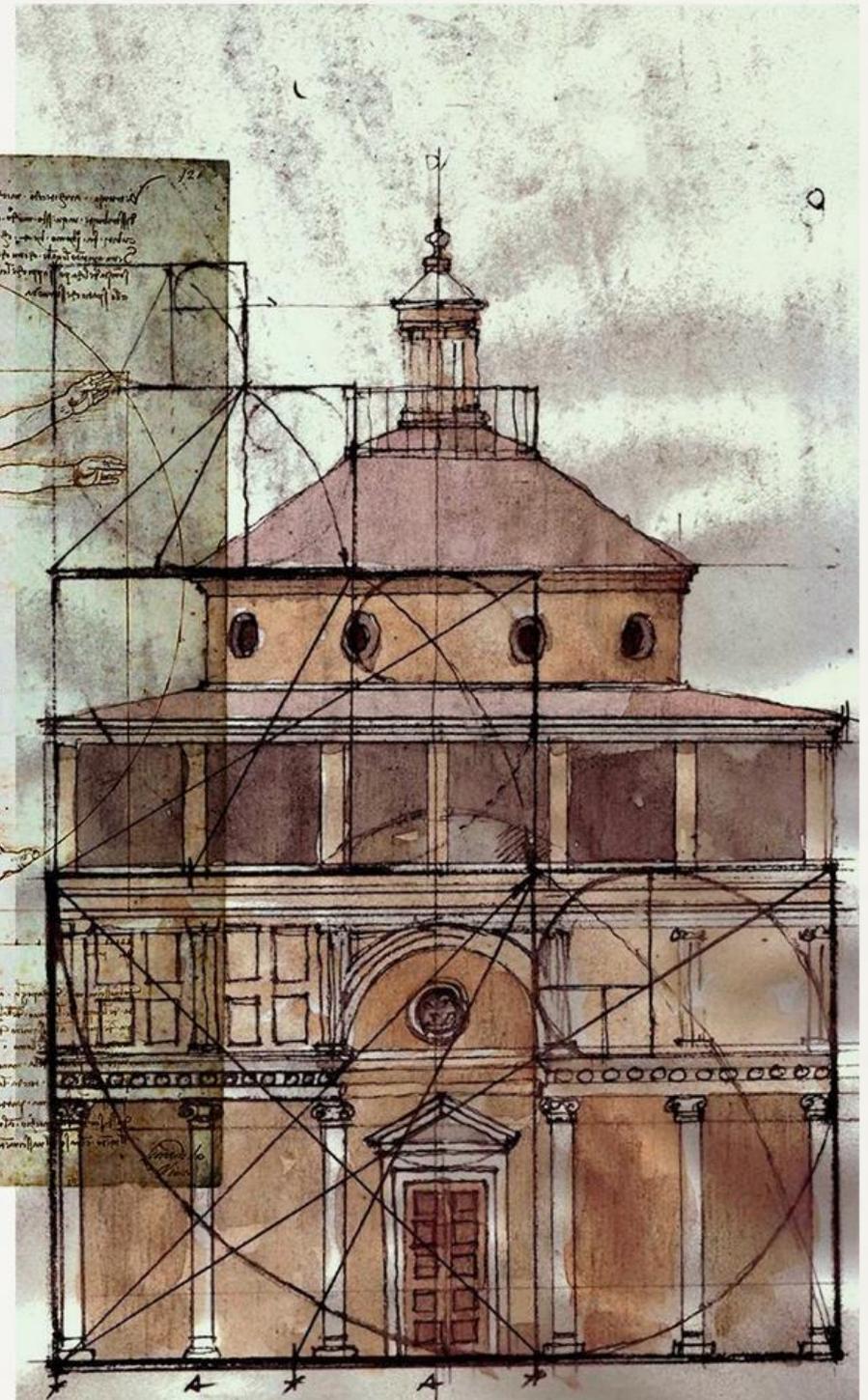
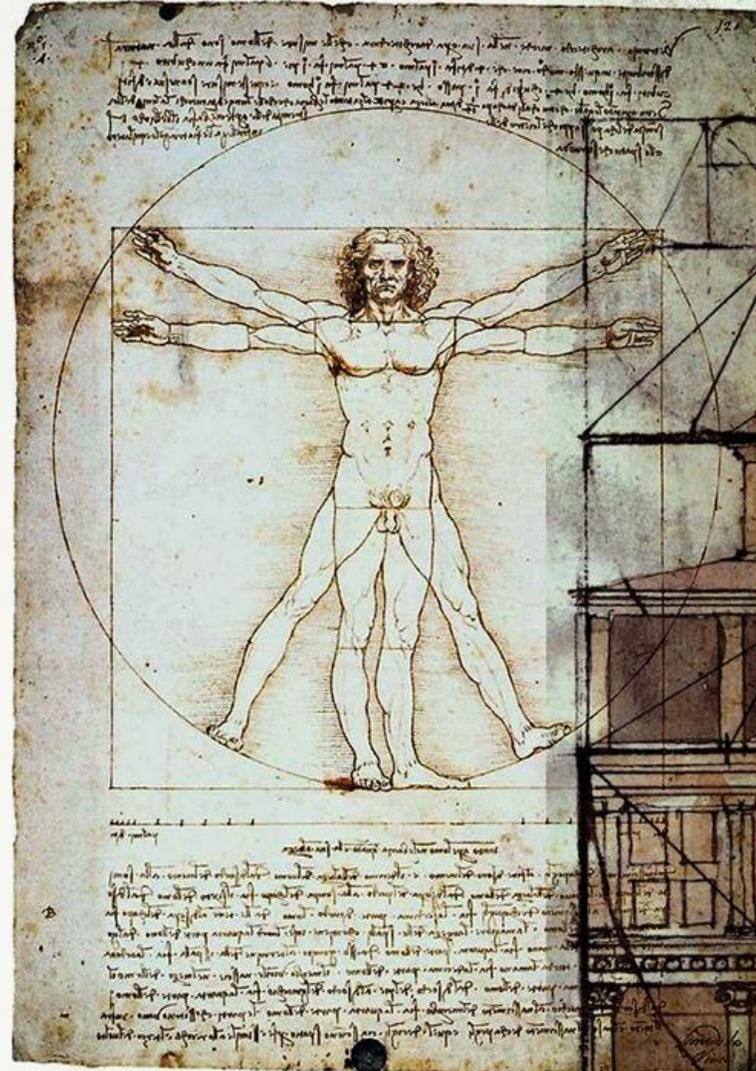
**Tip:** Don't add unnecessary geometry on the model but optimize it as you go along. How to check if it's unnecessary? Try deleting the edges of vertices. Does the model shape change visibly? If it doesn't, then delete it.



# Proportions

The relationship between the volumes of an asset will be defined through its proportions and its placement in a 3D space.

It represents the ratio between the width, height and length of an asset, between the dimensions of the intrinsic elements and often between the dimensions of the details relative to the whole.



# Proportions

Great care and attention must be used for proportions because they can validate or invalidate certain visual characteristics of an asset. Correct proportions can ensure the successful depiction of an asset, can place the asset in a certain artistic style or can even create scale illusions.



# Silhouette

Represents the contour of the asset, the shape through which it will be identified and detached from the rest of the décor.

**Tip:** For a better observation of a silhouette, it is recommended that the 3D asset have a matte black shader attribute, and the background should be brighter. That way, we can notice possible technical problems, such as holes in the geometry, non-planar polygons or reversed normals.

Depending on the angle from which we see the silhouette, it can be created by the large volumes upon which we add the geometry detail profiles that define the asset.

A successful asset will have a pleasant silhouette regardless of the angle it is seen from. That is why we must try and develop an interesting silhouette, as much as the concept allows.

In the case of a building, as below, we'll try to “break” the monotony of the silhouette through balconies, open windows, AC devices, cornices etc.



# Silhouette

Over the centuries, we can notice a history of the human silhouette that goes hand in hand with the evolution of clothing. Dresses and their styles often reflected the socio-political, economical and geographical context of the age. As such, an accurate silhouette can instantly transport the viewer into a certain age.



500BC-500AC



500AC-1500AC



16th century



17th century



18th century



19th century



1900`s



1920`s



1950`s



1970`s

# Artistic Anatomy

Knowledge of artistic anatomy is paramount.

Artistic human anatomy is incredibly important in order to correctly show human characteristics and to ensure credibility in the case of humanoid assets in a sci-fi or fantasy setting.



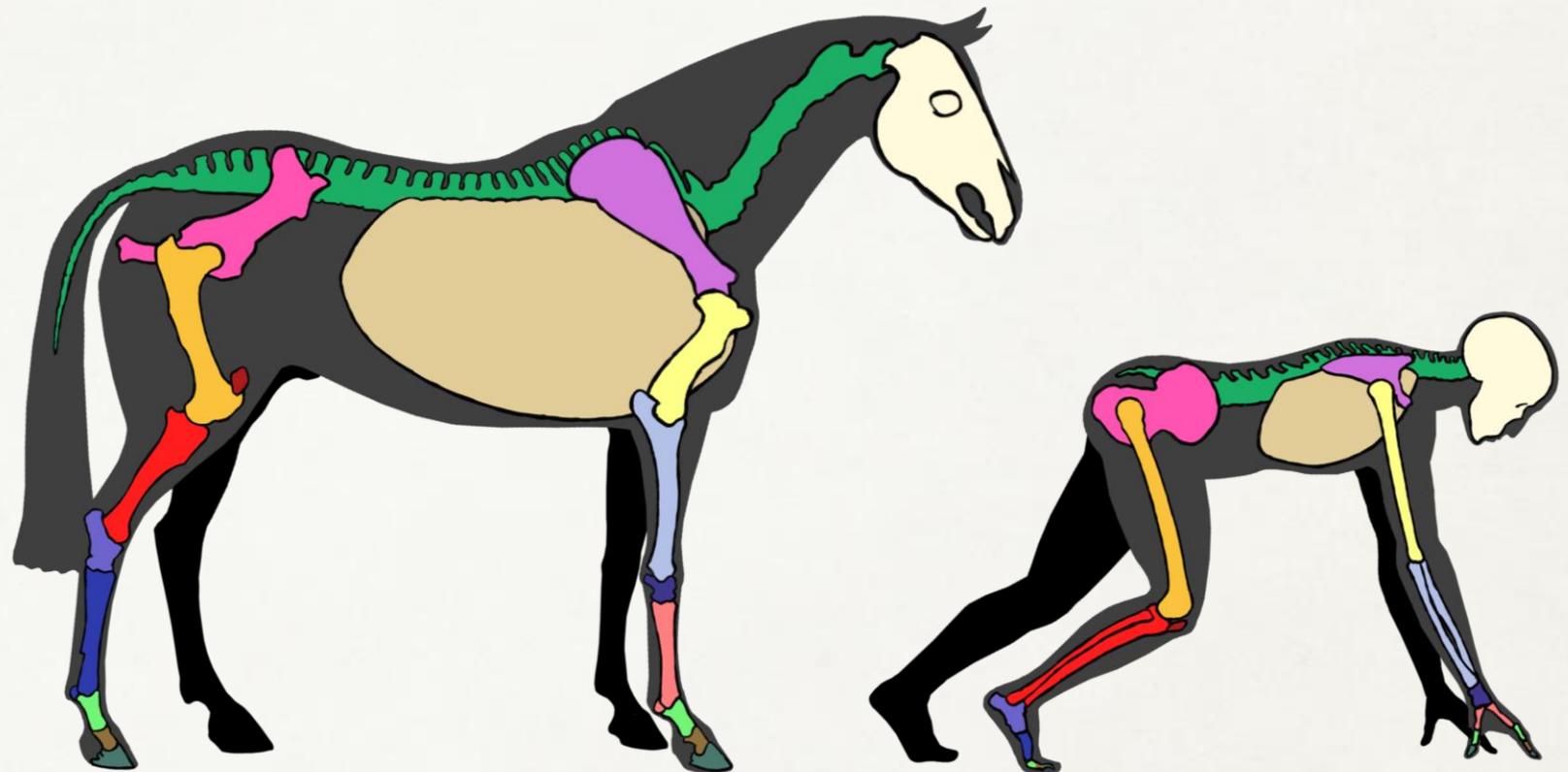
Anatomical studies made by Andrei Bradu, Character Art Director.

# Artistic Anatomy

Once we study and understand the human locomotor system, we can also observe and understand other terrestrial mammals. We can see the correspondence between the bone system of the human and other mammals.

When the knowledge of human artistic anatomy cannot be applied, extra time must be allocated for a detailed case study.

Here is a comparison between human and horse proportions. Once we understand the resemblances of the bone structures, we can extrapolate to muscle structure.



# Artistic Anatomy

Below is an example of an asset we created for RIFT. A few references (right) were gathered in order to create a credible and realistic creature. In order to build on the given concept, we had to analyse different crustacean structures, such as crab legs and claws and their joints. We also had to ensure that the legs were long, thick and strong enough to sustain a human torso.



# Our Standards of Artistic Excellence

## Final reflections

Although it may be appealing to dig right into small details, the order of the geometry steps helps ensure an efficient process. Going from large shapes to small details and anything in between is how you end up with a cool looking model.

And speaking of cool models, it's a good idea to adjust things as you go along, rather than leaving things for later. This means you won't have to fix a broken model after it has been finished. However, don't spend too much time on something that can be improved later and risk running out of time to finish the entire asset.

If you get stuck and no solution comes to mind, take a step back, detach yourself from the project for a little bit and come back to it with a new perspective. And never be afraid to ask for help if you need it!