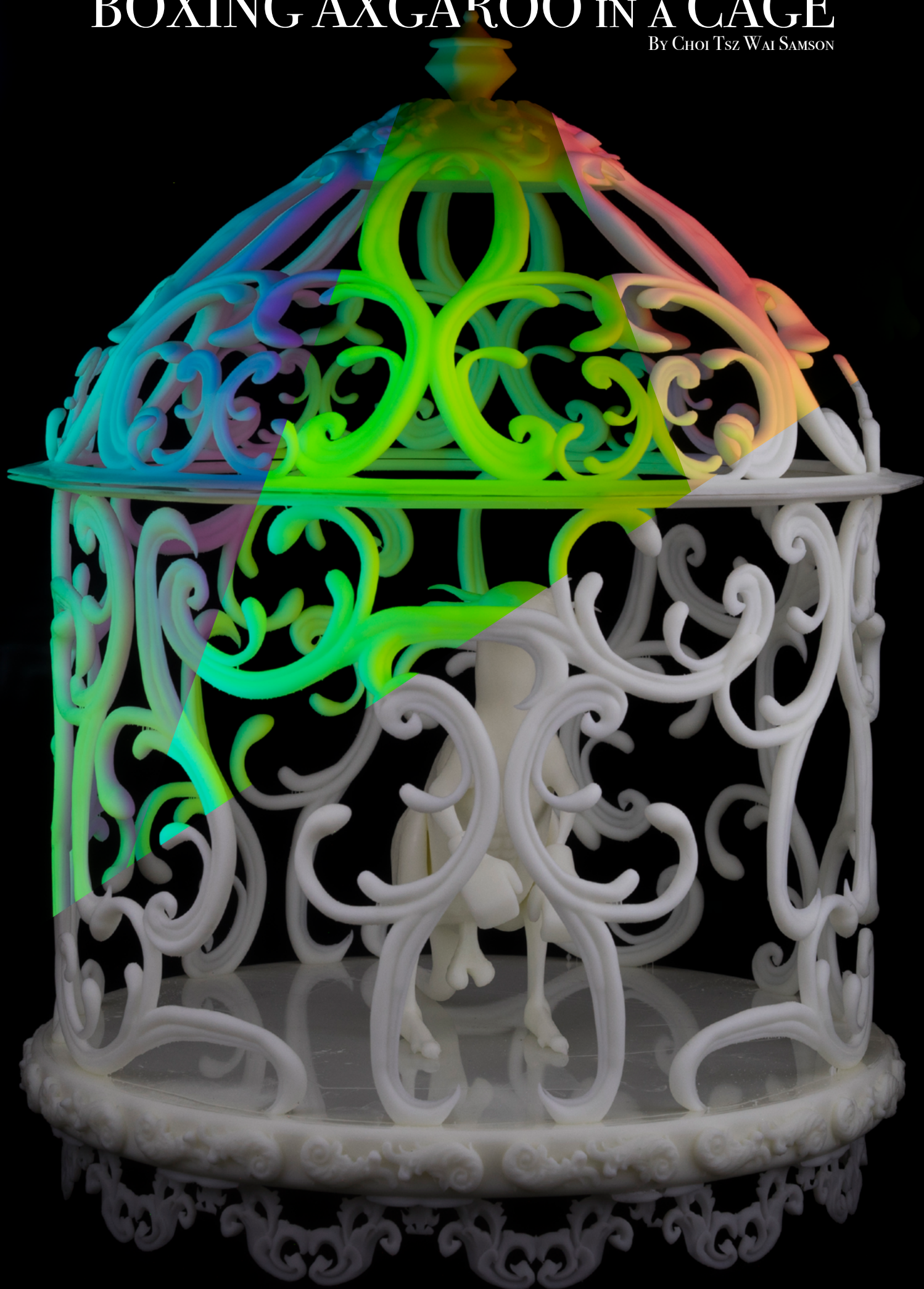


BOXING AXGAROO IN A CAGE

BY CHOI Tsz Wai SAMSON



. TABLE OF CONTENT

. HISTORICAL REFERENCE

. DEVELOPMENT PROCESS

. CONCEPT

. MODELING

. DOCUMENTATION OF SHOW & OBJECT

. OUTLOOK (RENDERED IMAGE & MATERIAL NARRATIVE)

. ABOUT ARTIST



FOR NOW, MUSEUM AS WUNDERKAMMER IN THE PAST. WUNDERKAMMER (WONDER-ROOM) IS A ROOM COLLECTED MANY OBJECTS WHICH ARE EUROPEAN BLUE BLOOD'S COLLECTIONS, INCLUDED NATURAL HISTORY, GEOLOGY, ETHNOGRAPHY, ARCHAEOLOGY, RELIGIOUS OR HISTORICAL RELICS, WORKS OF ART AND ANTIQUITIES. THOSE OF COLLECTIONS ARE CATEGORICAL BOUNDARIES ARE IN RENAISSANCE. WUNDERKAMMERS EXIST IN THE 15TH TO 18 CENTURY EUROPE.

NOWADAYS, THOSE OF THESE OBJECTS MOVE INTO THE MUSEUM. BUT SOME CATEGORIES STILL KEEP ON THE MUSEUM. FOR INSTANCE, ARTWORKS ARE STORED IN ART MUSEUM (E.G., LOUVRE, COLLECTED MORE THAN 35K OF SCULPTURE, PAINTING, ANCIENT ARTWORK, ETC), ETHNOGRAPHY MUSEUM (E.G., ETHNOGRAPHY MUSEUM OF GENEVA, COLLECTED SAMURAI CIVILISATION AND BUDDHISM (INCLUDING TIBETAN THANGKA,

JAPANESE OFUDA FROM ANDRÉ LEROI-GOURHAN'S COLLECTION, ETC), HISTORICAL AND GEOLOGY MUSEUM (E.G., HONG KONG MUSEUM OF HISTORY, COLLECTION FROM THE HOW HONG KONG REGION MADE FROM 0.4 BILLION AGO TO THE CONTEMPORARY HISTORICAL OF HONG KONG, FOR EXAMPLE JAPANESE OCCUPATION AND RETURN TO CHINA).

RECENTLY, I AM SEEKING IN A CATEGORY, HYBRID BIOLOGICAL, IT'S NOT LIMIT IN ARTEFACT, ON NATURE BIOLOGY ALSO APPEAR. IN NATURE, MULE AND LIGER ARE THE GOOD EXAMPLES. MULE IS A HOUSE AND DONKEY MIXED; LIGER IS A LION AND TIGER MIXED. IN TAXONOMY, THIS KIND OF HYBRID SEXUAL REPRODUCTION IS IN THE SAME GENUS BUT NOT THE SAME OF SPECIES. ACTUALLY, PLANT HYBRID IS NOT LIMITED IN THE SAME GENUS, FAMILY (RARELY) ALSO FEASIBLE. SOME KINDS OF SPECIAL INTERSPECIFIC HYBRID SEEM LIKE HUMAN MADE. ZORSE (FIG. 1 & 2) IS A GOOD EXAMPLE, IT IS PRODUCED BY HUMAN DELIBERATE MATING. IN FIG. 1 AND 2, THEIR LOOK LIKE THE ARTEFACT, NOT A NATURE PRODUCT. IN THE ART WORLD, SOME ARTWORKS ARE SIMILAR TO ZORSE (TWO SPECIES MIXED, FIG. 3, 4 & 5) OR AS SAME AS NATURAL AS MULE AND LIGER (SEEMS LIKE A NEW SPECIES, ALSO UNICORN). FIG. 6 & 7 ARE THE ARTWORKS BY PATRICIA



PICCININI, WHO IS AN AUSTRALIAN ARTIST. MOST OF HER SCULPTURES ARE HUMAN-ANIMAL HYBRIDS. THOSE OF REFERENCES ARE THE INSPIRATION THAT I DEVELOP THE 3D PRINTED ARTWORK "BOXING AXCAROO IN A CAGE".

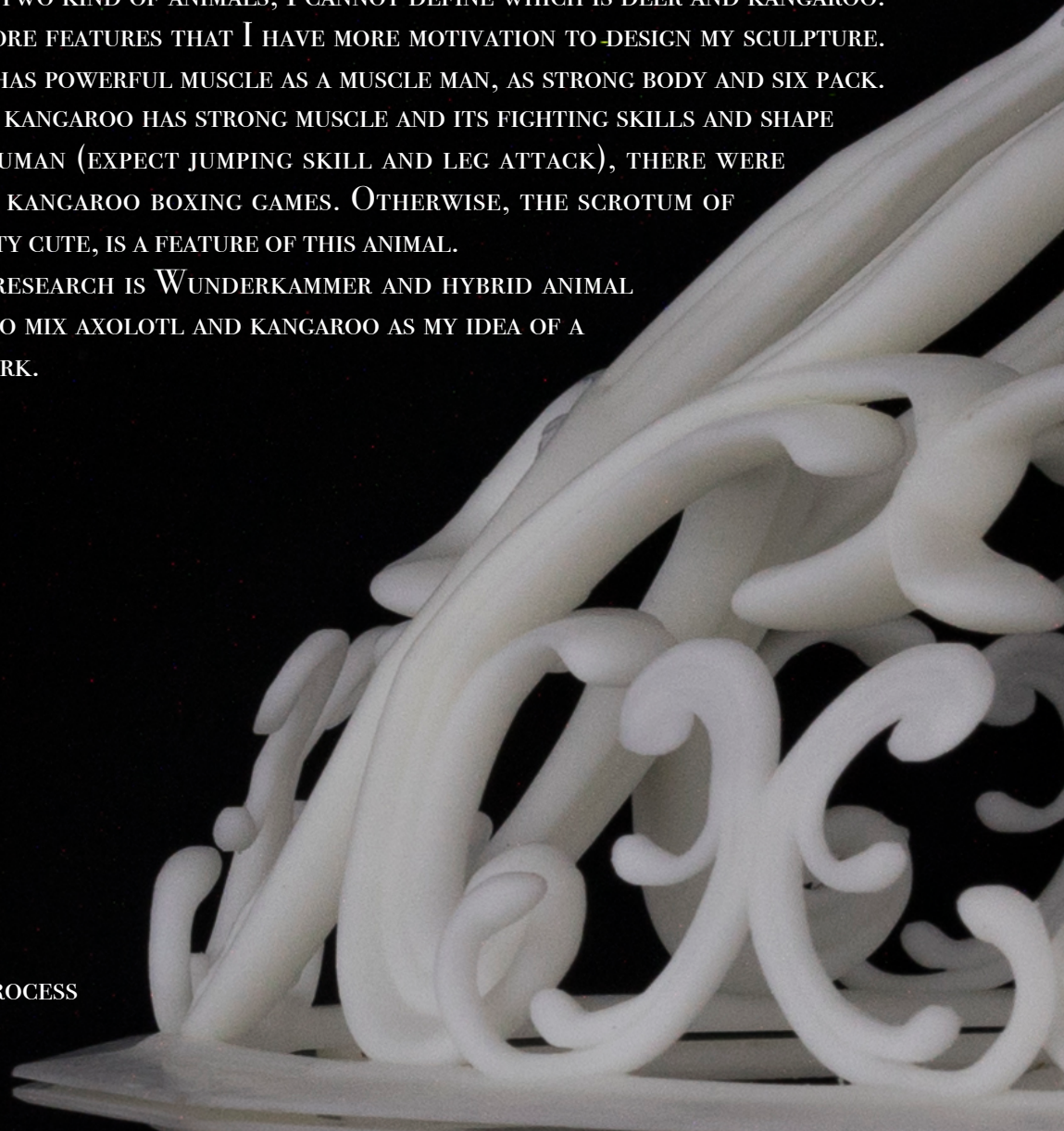


I BRAINSTORM WHAT KIND OF BIOLOGY CAN I MAKE THEM AS MY 3D PRINTING ARTWORK. I START FROM WHAT MY LOVE, THEN DEER IS MY MOST FAVOURITE ANIMAL. I TRAVEL TO JAPAN EVERY YEAR AND GO TO DIFFERENT PLACES THAT HAVE DEER AND TAKE PHOTOS AND SELFIE WITH THEM AS A PHOTOGRAPHY PROJECT. THEN, ANOTHER KIND OF ANIMAL I THINK OUT IS AXOLOTL. I HAVE THREE AXOLOTLS IN MY HOME AS MY PETS. TWO WHITE AND ONE GOLDEN. AXOLOTL IS BELONGS TO THE CLASS OF SALAMANDER. IT IS A SPECIES ONLY FROM MEXICAN, LAKE XOCHIMILCO AND LAKE CHALCO. IS A CRITICALLY ENDANGER SPECIES IN THE WILD. BUT THEY ARE COMMON AS PETS IN FOREIGN COUNTRIES. THEY ORIGINALLY ARE JUST BLACK COLOUR. BUT ARTIFICIAL BREEDING MADE THEM TO MANY COLOUR, SUCH AS MY WHITES ARE LEUCISM OR ALBINISM, GOLDEN IS MIXED FROM TWO DIFFERENT COLOUR OF PARENTS (E.G. WHITE BODY WITH BLACK EYES OR WHITE BODY AND EYES MIXED BROWN SPOT AXOLOTL.) ALSO, AXOLOTL IS A KIND OF SALAMANDER THAT HAS NEOTENY, AND HAS HIGH SELF-HEALING FEATURE.

ONCE I THINK OUT DEER, KANGAROO ALSO IN MY MIND. BECAUSE IN PREVIOUS CHRISTMAS AND NEW YEAR BREAK, I WENT TO AUSTRALIA TO MET THEM AND OBSERVED KANGAROO. KANGAROO AND DEER'S HEADS ARE VERY SIMILAR, JUST WITHOUT ANTLERS, NOT ONLY MY OBSERVATION, ON THE INTERNET ALSO HAVE MANY OF THIS KIND OF DISCUSSIONS. MAYBE IT IS BECAUSE THEIR HABITS AND EATS ARE SIMILAR. IF THERE ARE TWO EXTREMELY CLOSE-UP OF THE HEAD OF THIS TWO KIND OF ANIMALS, I CANNOT DEFINE WHICH IS DEER AND KANGAROO. KANGAROO HAS MORE FEATURES THAT I HAVE MORE MOTIVATION TO DESIGN MY SCULPTURE. FOR INSTANCE, IT HAS POWERFUL MUSCLE AS A MUSCLE MAN, AS STRONG BODY AND SIX PACK. ALSO, BECAUSE OF KANGAROO HAS STRONG MUSCLE AND ITS FIGHTING SKILLS AND SHAPE ARE SIMILAR TO HUMAN (EXPECT JUMPING SKILL AND LEG ATTACK), THERE WERE MANY HUMAN AND KANGAROO BOXING GAMES. OTHERWISE, THE SCROTUM OF KANGAROO IS PRETTY CUTE, IS A FEATURE OF THIS ANIMAL.

BECAUSE OF THE RESEARCH IS WUNDERKAMMER AND HYBRID ANIMAL CATEGORY, I TRY TO MIX AXOLOTL AND KANGAROO AS MY IDEA OF A PART OF MY ARTWORK.

. DEVELOPMENT PROCESS



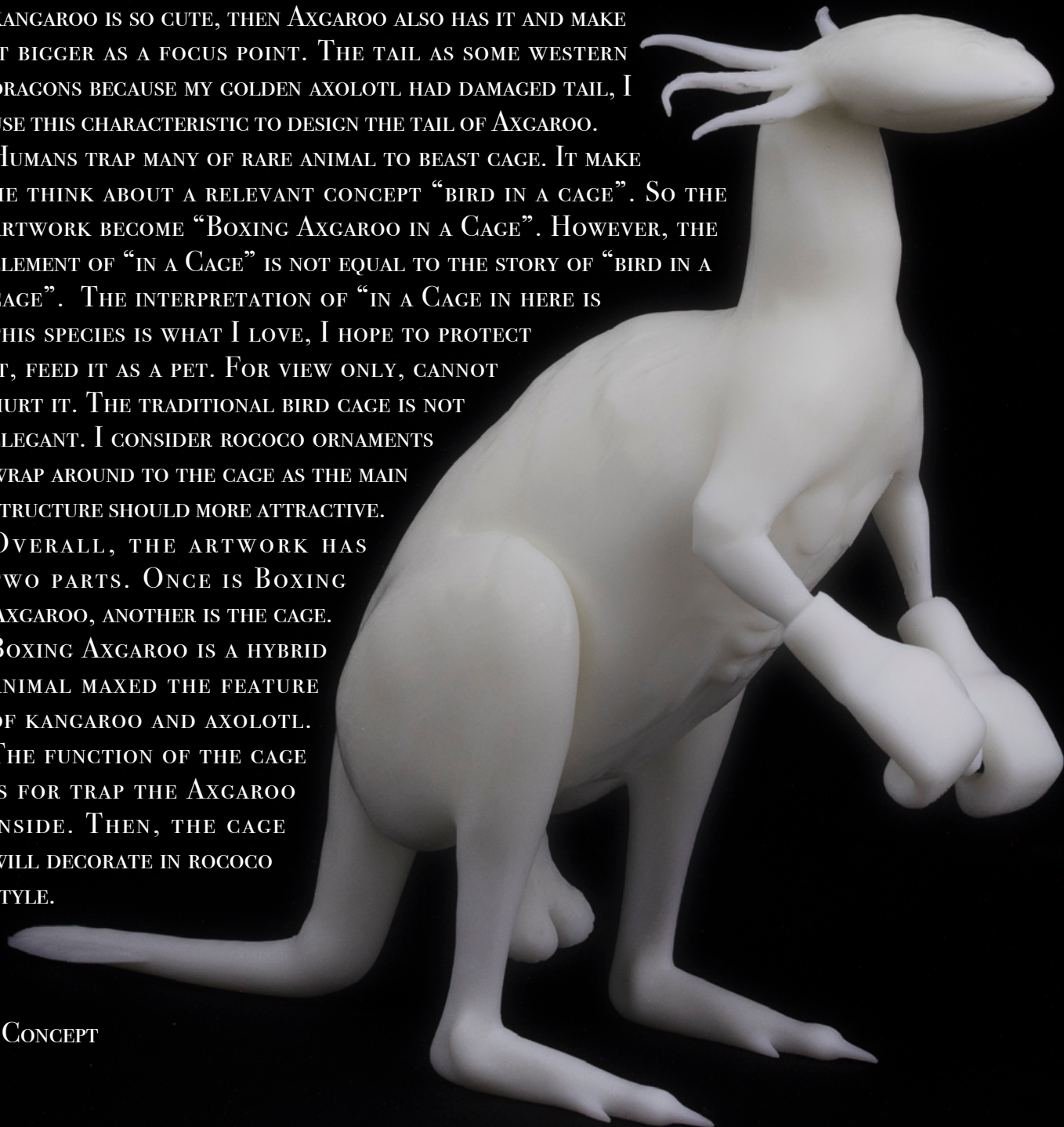
JUST A HYBRID ANIMAL IS A SO BORING, I KEEP IN RESEARCH THE FEATURE OF AXOLOTL AND KANGAROO. THEY HAVE AN COMMON FEATURE, WHICH IS RARE. I NAMED THE HYBRID MIXED OF AXOLOTL AND KANGAROO AS "AXCAROO", COMBINED BY "AX" FROM AXOLOTL, "CAROO" FROM KANGAROO. AXOLOTL ONE IS ABOUT THE SPECIES UNIQUE, AXOLOTL IS A CRITICALLY ENDANGER SPECIES, NEED TO PROTECT IT, THAT'S MEAN A SPECIAL SPECIES JUST FOR WATCH; KANGAROO ONE IS ABOUT AUSTRALIA, THE AUSTRALIAN CONTINENT IS AWAY FROM THE OTHER LARGE CONTINENTS, SO THE BIOLOGICAL CHAIN AND DEVELOPMENT ARE TOTALLY DIFFERENT FROM OTHER CONTINENTS, AUSTRALIA HAS RIGOROUS RULES ON IMPORTS TO PROTECT THE UNIQUE AUSTRALIA BIOLOGICAL NOT BE DESTROYED BY OTHER STUFFS.

IN CHINESE PRONUNCIATION, AXOLOTL NICK NAME IS 六角恐龍, MEANS SIX OUTER GILLS AS SIX HORNS OF A DINOSAUR. THE SHAPE OF AXCAROO LIKE A DINOSAUR. AS I SAID KANGAROO'S MUSCLE ARE POWERFUL, SO AXCAROO HAS STRONG MUSCLE AND SIX PACK. THEN, BECAUSE OF THE FIGHTING SKILL, SO AXCAROO WEAR BOXING GLOVES. THE SCROTUM OF KANGAROO IS SO CUTE, THEN AXCAROO ALSO HAS IT AND MAKE IT BIGGER AS A FOCUS POINT. THE TAIL AS SOME WESTERN DRAGONS BECAUSE MY GOLDEN AXOLOTL HAD DAMAGED TAIL, I USE THIS CHARACTERISTIC TO DESIGN THE TAIL OF AXCAROO.

HUMANS TRAP MANY OF RARE ANIMAL TO BEAST CAGE. IT MAKE ME THINK ABOUT A RELEVANT CONCEPT "BIRD IN A CAGE". SO THE ARTWORK BECOME "BOXING AXCAROO IN A CAGE". HOWEVER, THE ELEMENT OF "IN A CAGE" IS NOT EQUAL TO THE STORY OF "BIRD IN A CAGE". THE INTERPRETATION OF "IN A CAGE IN HERE IS THIS SPECIES IS WHAT I LOVE, I HOPE TO PROTECT IT, FEED IT AS A PET. FOR VIEW ONLY, CANNOT HURT IT. THE TRADITIONAL BIRD CAGE IS NOT ELEGANT. I CONSIDER ROCOCO ORNAMENTS WRAP AROUND TO THE CAGE AS THE MAIN STRUCTURE SHOULD MORE ATTRACTIVE.

OVERALL, THE ARTWORK HAS TWO PARTS. ONCE IS BOXING AXCAROO, ANOTHER IS THE CAGE. BOXING AXCAROO IS A HYBRID ANIMAL MAXED THE FEATURE OF KANGAROO AND AXOLOTL. THE FUNCTION OF THE CAGE IS FOR TRAP THE AXCAROO INSIDE. THEN, THE CAGE WILL DECORATE IN ROCOCO STYLE.

. CONCEPT

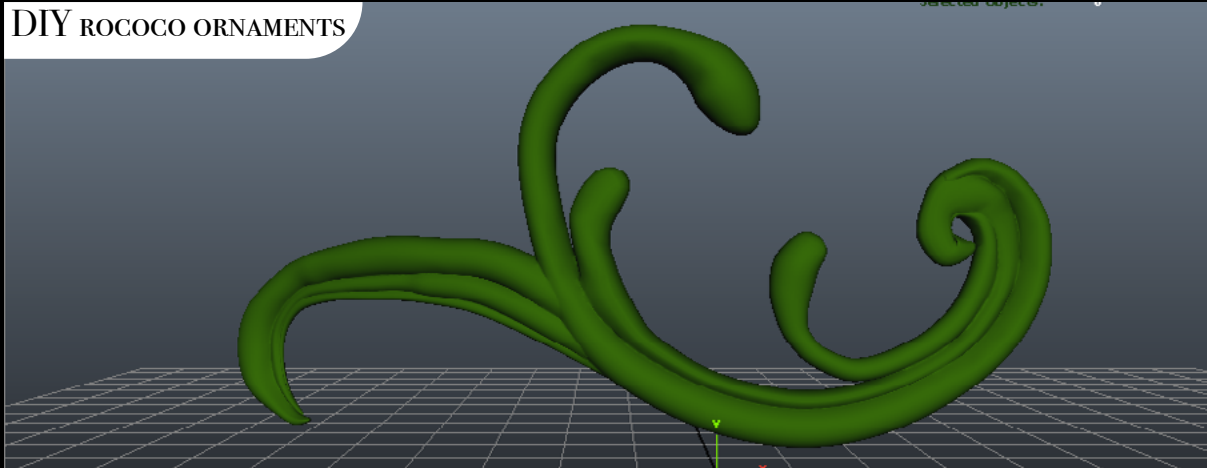


MY MODELLING WORKFLOW HAS SEPARATED INTO THREE PARTS. I SHOULD START DESIGN AND TRACE THE ROCOCO PATTERNS FIRST. THEN, USE THE PATTERNS TO BUILD UP THE CAGE. THE ROCOCO ORNAMENTS WILL WRAP AROUND THE CAGE, THAT'S MEAN THE BODY OF THE CAGE WILL NOT LIKELY TO A NORMAL CAGE, NOT USING PILLAR OR CYLINDER AS THE MAIN PART OF THE BODY. THE PART OF THE BODY WILL REPLACE BY ROCOCO ORNAMENTS. AFTER BUILD UP THE CAGE, THEN IS TIME TO MODEL THE BOXING AXCAROO.

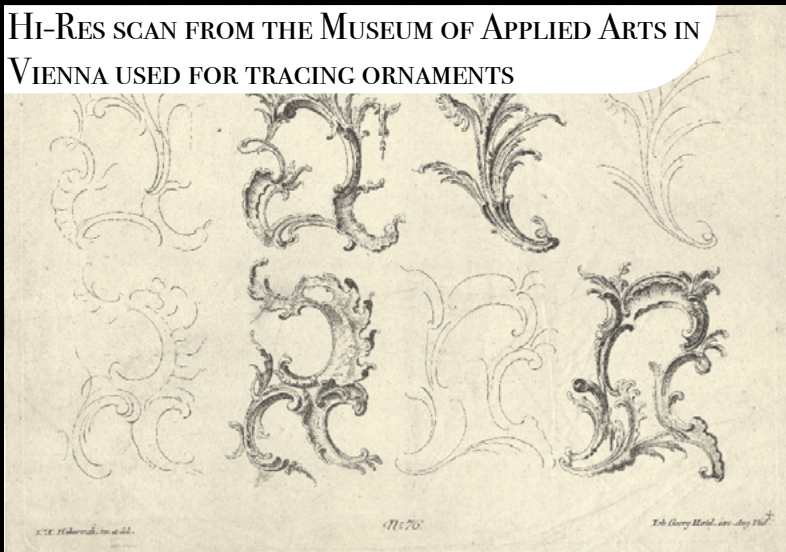
I HAVE THREE WAYS TO GET THE 3D ROCOCO PATTERNS. FIRST, IS FOUND THEM OUT FROM ONLINE RESOURCES; SECOND, IS TRACE BY AUTODESK MAYA AND USING THE CURVE TO NURBS, OR THE FINAL ONE IS TRADITIONAL ONE BOX MODELLING SKILL ON AUTODESK MAYA. BECAUSE OF ANY 3D MODELLING SOFTWARE HAVE THEIR FILE FORMAT STANDARD, IF THE 3D MODEL I WOULD LIKE TO USE IT AND IT IS NOT MY SKILFUL 3D SOFTWARE, I NEED TO CONVERT IT TO .OBJ OR .FBX TO MAKE SURE I CAN READ THE FILE. FOR ME, I AM A MAC USER, AND I DON'T HAVE WINDOWS SO I USE MAYA SINCE THREE YEARS AGO. AND MAYA IS MY MOST SKILFUL 3D SOFTWARE. MANY OF 3D MODELS I GET FROM ONLINE ARE .STL, .OBJ AND .MAX. THEREFORE, SOME OF THEM ARE NOT WATERTIGHT SOLIDS OR SEPARATED POLYGONS. IN 3D PRINT, WE NEED A WATERTIGHT, THOSE 3D MODEL NEED TO FIX AS WATERTIGHT. THE SIMPLE WAY TO FIX IT IS TO RELY TO A PLUG-IN "MESH: 3D PRINT TOOLBOX" ON BLENDER. I FIRSTLY IMPORT THE MODEL TO BLENDER TO CHECK THE MODEL AND FIX IT IF THE MODEL HAS PROBLEMS, TO BE A SUITABLE SOLID FOR 3D PRINT. THE SECOND METHOD TO GET THE 3D ROCOCO PATTERN HAS TRACED THE CURVE ON MAYA. TO TRACE THE ROCOCO PATTERN, IMPORT AN IMAGE PLANE, FROM PROF. TOBIAS'S HIGH-RESOLUTION ROCOCO SCAN PICTURE. THEN, USE THE BV CURVE TOOL TO DRAW THE LINE FROM THE REFERENCE IMAGE PLANE. AND USE THE LOFT, PLANE OR SWEEP FUNCTION TO CREATE SURFACES. AFTER MODIFY, THIS CREATION WAY BY THE CURVE IS NURBS, I CONVERT NURBS TO A POLYGON MESH. THE THIRD WAY IS ONE BOX MODELLING. I MODEL THE PATTERN ON MAYA BY A CUBE FIRST, THEN USE INSERT EDGE LOOP, CUT FACE, SLIDE EDGE TOOLS, ETC TO MAKE THE MORE COMPLEX, THEN MOVE, SCALES OR ROTATE THE VERTEX, EDGE OR FACE TO MODIFY THE FORM. EXTRUDE, ADD SUBDIVISION TO MAKE THE SOLID SMOOTH. OR USE DEFORMATION TOOLS TO RE-SHAPE THE FORM, SUCH AS FFD, WRAP, NON-LINEAR BEND, TWIST, ETC.



DIY ROCOCO ORNAMENTS



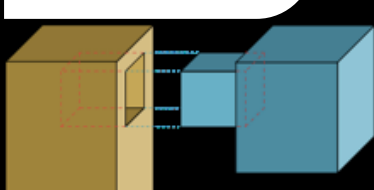
HI-RES SCAN FROM THE MUSEUM OF APPLIED ARTS IN VIENNA USED FOR TRACING ORNAMENTS



HI-RES SCAN FROM THE MUSEUM OF APPLIED ARTS IN VIENNA USED FOR TRACING ORNAMENTS



“MORTISE AND TENON”



“MORTISE AND TENON”

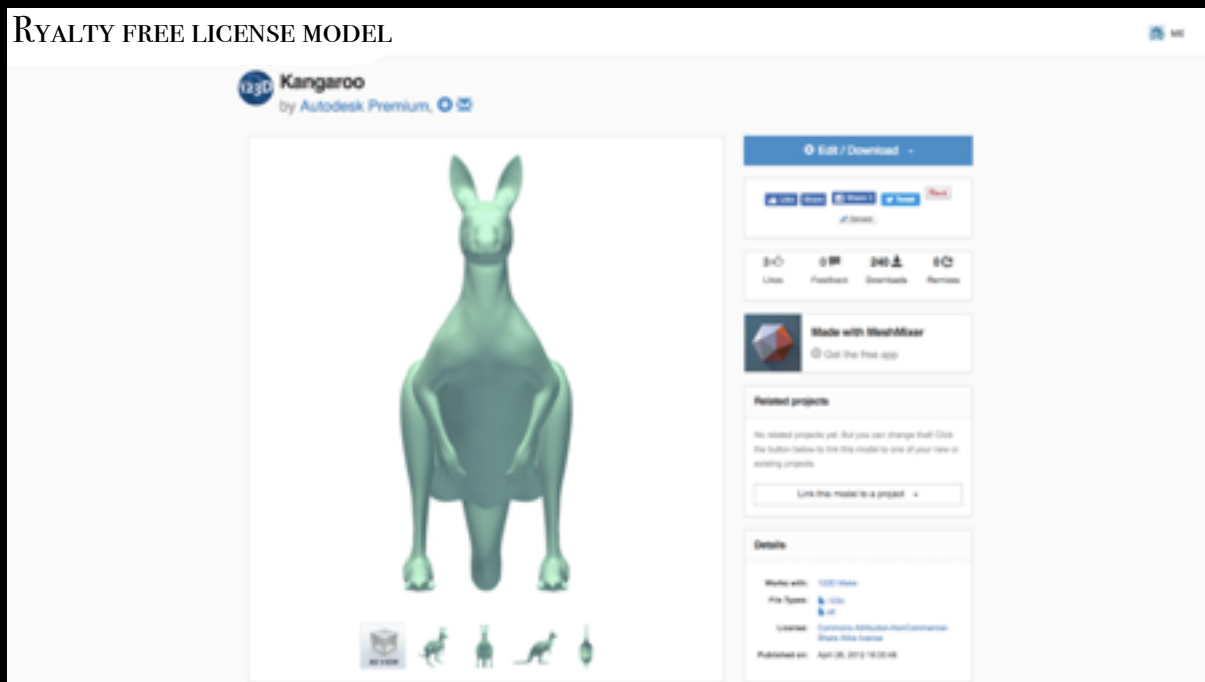
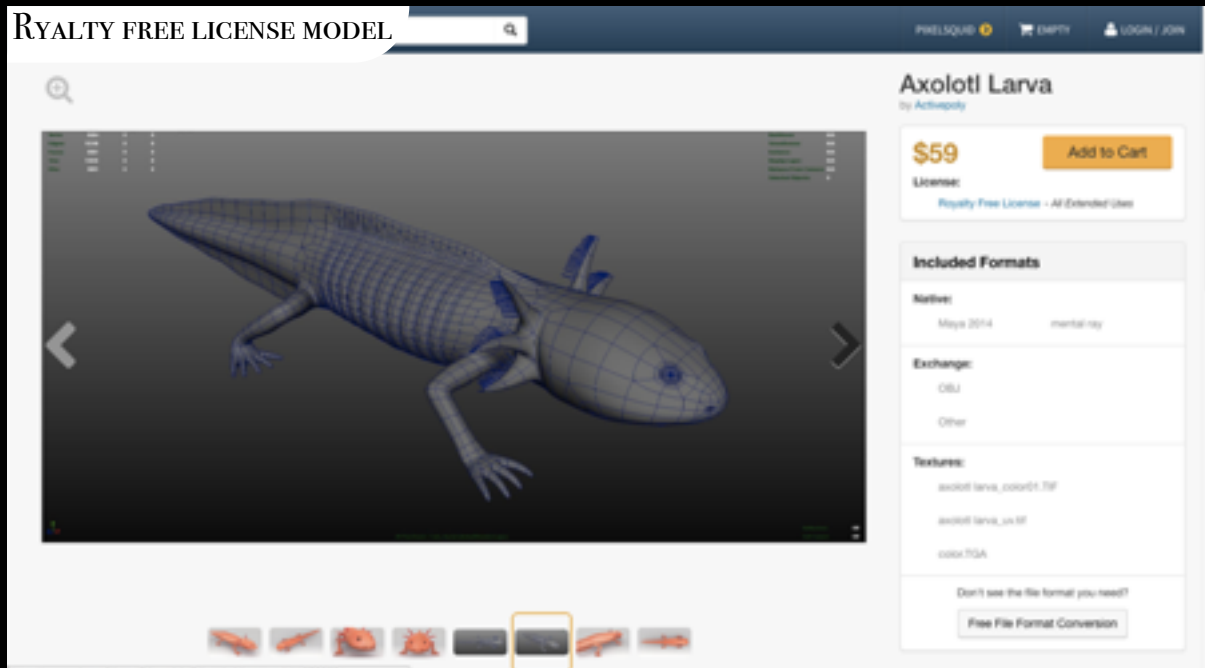


. MODELING

THE CAGE HAS MANY OF SEPARATE PARTS, FOR INSTANCE, THE ROCOCO ORNAMENTS, THE BASE OF THE CAGE, ETC ARE INDIVIDUAL SOLIDS. BUT IT CAN DEFINE AS TWO PARTS, BODY AND BASE ARE A SINGLE PART, THE CAP AS THE HEAD OF THE CAGE IS ANOTHER PART. THEREFORE, I FINALLY OUT TWO SOLIDS, THAT'S MEAN TWO WATERTIGHT POLYGON MESH. BUT THESE TWO PARTS CAN JOIN TOGETHER, I WILL USE THE “MORTISE AND TENON” JOINT TO MAKE THEM JOIN TOGETHER. TO MAKE THIS, I USE THE BOOLEAN FUNCTION, DIFFERENCE AND INTERSECTION TO MAKE A CONCAVE AND CONVEX PART ON THE TOUCHING SURFACE OF CAP AND BASE. FOR EXAMPLE, LEGO AND BOX JOINT.

BOXING AXCAROO IS THE LAST PART I NEED TO MODEL. I WILL MAKE IT ON MAYA

BY BOX MODELLING SKILL. ALSO, I HAVE PURCHASED KANGAROO AND AXOLOTL 3D MODEL WITH ROYALTY FREE LICENSE. THOSE HAVE THE 3D MODEL ON THE INTERNET, ONLINE 3D MODEL DATABASE. ALSO, THE BOXING GLOVES FOUND THEM OUT ONLINE WITH ROYALTY FREE LICENSE. THE SCROTUM AND THE SPECIAL TAIL I DID IT MYSELF FROM ZERO BY BOX MODELLING SKILL BECAUSE THERE ARE NO SIMILAR MODEL ON INTERNET. THE SIX PACK ON THE AXCAROO, USED SCULPT GEOMETRY TOOL TO PUSH, PULL, SMOOTH, RELAX, PINCH AND SLIDE THE SIX PACK MUSCLES BY GRAPHIC TABLET BRUSH.



FOR THE POSE OF THE AXCAROO, I USED FFD, WRAP, NON-LINEAR BEND, TWIST AND JOINT TOOLS TO DEFORM WHOLE OF THE MODEL.

. MODELING

“BOXING AXCAROO IN A CAGE” IS A 3D PRINTED ARTWORK PRINTED BY NYLON. THE COLOUR OF THE PRINTED MATERIAL IS IVORY WHITE. IVORY WHITE IS A VERY ELEGANT AND HIGH COLOUR PLASTICITY MATERIAL, THE COLOUR CAN EASY AFFECTED BY LIGHT.

SIZE (ROUND UP TO THE NEAREST INTEGER),

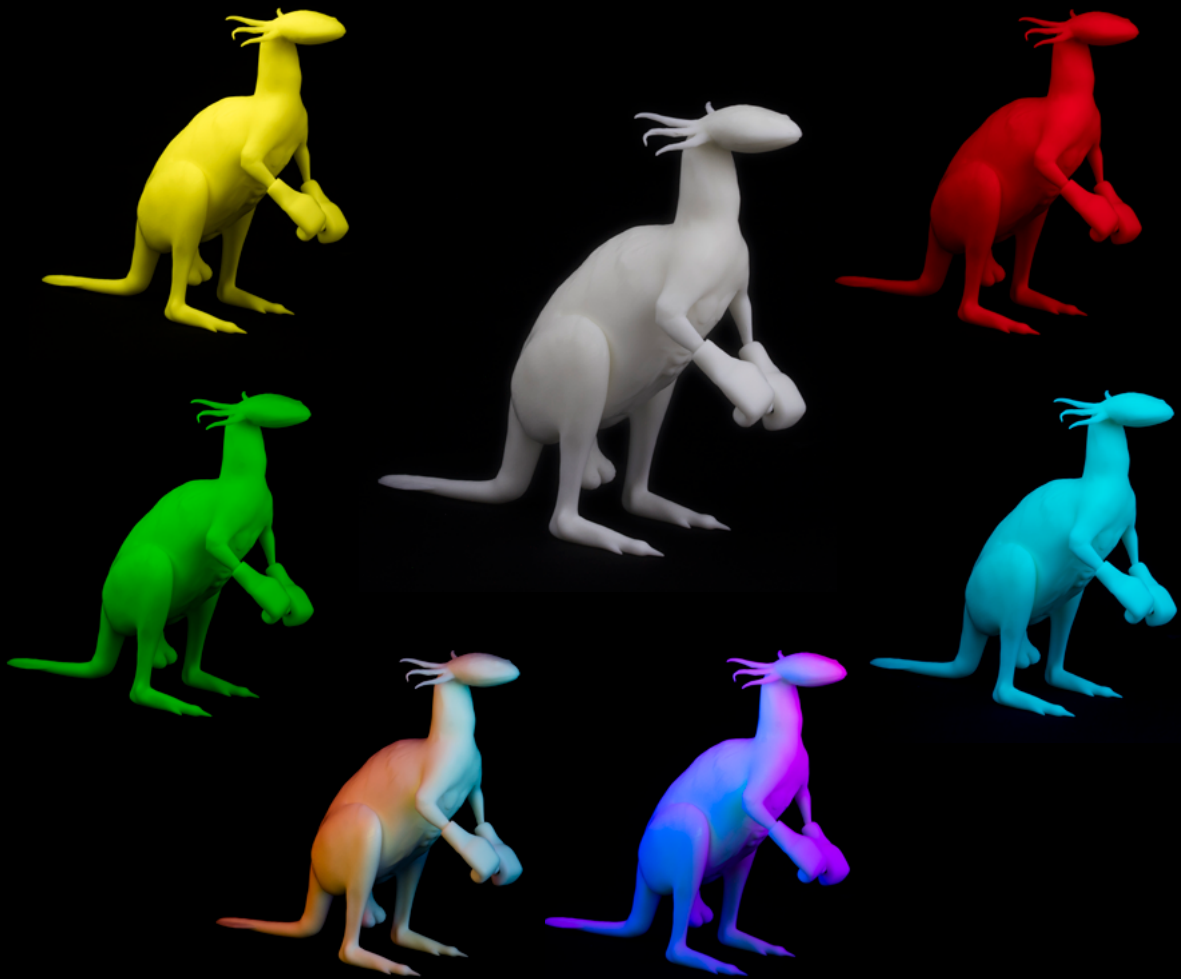
WHOLE WORK: W: 30CM H: 45CM D: 30CM

CAGE: W: 30CM H: 45CM D: 30CM

BOXING AXCAROO: W: 7CM H: 16CM D: 19CM



. DOCUMENTATION OF SHOW & OBJECT



. DOCUMENTATION OF SHOW & OBJECT



FOR MY ORIGINAL INTENTION, I HOPE TO PRINT IT AS METAL,
SUCH AS CHROME. BUT NYLON IS MORE ELEGANT AND MATCH
ON THE THEME “NEW WUNDERKAMMER OF ROCOCO”.

SO I USE 3D SOFTWARE TO SIMULATE THE METAL TEXTURE AS
A VIDEO.

CHROME, COPPER, IRON, ETC, WITH COLOUR...

[HTTP://SAMSONCHOI.HK/ART/AXCAROO/ARTWORK_MATERIAL_CHANGE.MP4](http://samsonchoi.hk/art/axcaroo/artwork_material_change.mp4)



. OUTLOOK (RENDERED IMAGE & MATERIAL NARRATIVE)



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. ABOUT ARTIST

//END