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Two Heads
Foam, yarn, and wood

My research focused on the science and myths around two-headed animals. I discovered a two-headed baby stillborn deer, which then became the inspiration and reference for my artwork. My interest in the weird and abnormal within nature was a major inspiration for this piece. I wanted to create a work about something I found intensely interesting and abnormal.

My piece *Two Heads* is a large sculpture of a two-headed baby deer. It is constructed from yarn and basic materials. I carved a large piece of foam into a two-headed deer body. Then, I cut small strands from different shades of yarn. I then proceed to poke the one-inch pieces of yarn into the foam, creating fur. Each piece is individually hand-poked by me. To make the base I glued different shades of green yarn into shapes on the face of a wood plank. My choice to use yarn to cover the entire piece was essential in producing my final piece. The yarn gives the piece an abstract like look and creates a more striking image.

My piece causes the observer to question the inspiration, topic, and idea behind it. Because of the randomness of the actual sculpture, the observer can add whatever meaning they feel like it represents. All I ask is that anyone who is observing my piece keeps an open mind. Try and create your meaning and if you can not, just enjoy the beauty of the weird and abnormal.

Two-Heads



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OS46

Writers Note: The science, myths, and my own personal connection to two-headed animals are all discussed within this paper. If discussion of dissociation and depersonalization is uncomfortable or triggering I recommend avoiding the 11, 12, and 13 paragraphs as both these topics occur and are discussed.

Orthos, the two-headed dog that guarded the red cattle of Geryon on the island of Erytheia. The Hydra that Hercules fought and slaughtered, wielding nine heads (Hydra). Both of these ancient mythical creatures are examples of polycephaly in Greek mythology. Polycephaly, or creatures with more than one head, have fascinated humans for centuries, and they don't just exist in books and legends. Records of polycephalic fossils and descriptions go back more than 150 million years (Francisco). The most common version of polycephalic is bicephaly, or animals with two heads (Steffen); this is the focus of my writing. Equipped with two heads, polycephalic animals have trouble moving through their environment, always fighting for control. Within my life I often have this same issue, struggling for control and stability. Because of my anxiety, I often enter periods of depersonalization and dissociation. During these times I feel as if I have two heads, fighting for control. Polycephalic animals are the visual representation of how my depersonalization and dissociation fight with my control.

There are two ways that polycephalic animals are created. One of these is called axial bifurcation. This is when two heads result from the incompletion of an embryo splitting. Because the embryo did not completely split, there are still two separate creatures but they are conjoined into one body (Salleh, 2018). The other cause of polycephaly is called Albeit Incomplete; This is when two embryos incompletely fuse creating a two-headed animal. During Albeit Incomplete, the embryos were originally separate, because of this, there are two creatures, but because the

embryos did not fuse completely, they share a body (Francisco, 2020). These malformations of embryos can be caused by both genetic and environmental factors. Environmental factors include chemical toxicity, temperature, and radiation (Salleh, 2018). An example of genetic malformation is inbreeding; which many times also causes health issues (Salleh, 2018). Polycephaly can be inherited but is very unlikely. This is due to the fact that most polycephalic animals don't make it to adulthood, and therefore never reproduce (AZ Animals, 2021).

Scientists don't have a clear answer for why but the most common animals with polycephaly are amphibians and reptiles (Bionity). There are two theories that scientists have produced. The first is simply because of numbers; the more offspring, the more likely one or two is going to have polycephaly; and reptiles and amphibians have considerably more offspring than other animals. The second reason is that they lay eggs. Due to the fact that eggs are incubated within their natural environment and not their mother they are at risk for exposure to environmental factors such as temperature, chemical toxicity, and radiation (Salleh, 2018). The eggs simply existing within the environment increase the chances of polycephaly in itself. Any severe temperature or climate change can have a huge impact on the embryo's development. To become healthy normal creatures, the embryos have to be developed in a certain environment, away from danger and unexpected changes. When the environment is compromised, the embryos can mutate and change, adapting to the environment (Salleh, 2018). Within the amphibian and reptile communities, snakes and tortoises are the most common two-headed creatures (Bionity).

Humans have been fascinated with two-headed animals since ancient times. There are records and myths of polycephalic monsters, animals, and gods going back centuries. Ancient stories tell of multi-headed monsters that were fought by Hercules, Precious, and others. In an ancient Egyptian myth, there is a two-headed serpent called Nehebkau that guarded the entrance

to the underworld (Skinner, 2021). Nehebkau was seen as powerful but not good nor bad. Guarding the underworld is an important task and in multiple cultures is a job for a strong monster. This example is one where humans have a polycephalic creature with neither good nor bad representation. In Ghanian mythology, a two-headed crocodile with a shared stomach is used to represent the unity between diverse people. It also is used to represent how people can fall into conflict even if cooperation is the best solution and in their best interest (Skinner, 2021). This creature is a good example of a polycephalic animal used to represent good intentions and a lesson. In many cultures, a two-headed dog can symbolize the nature of life both physical and spiritual along with the ability to see in all directions (Skinner, 2021). In ancient and modern Mayan art there can be found two-headed dragons and in Chinese mythology, there is a two-headed creature that resembles a dragon named the Hong or Jiang (Skinner, 2021). Two-headed eagles are common symbols of the Holy Roman Empire, Russian Empire, and Byzantine Empire. The two heads of the eagle represent a country or empire ruled by two powers (Skinner, 2021). This is an example of a polycephalic animal used in ancient times and modern day. The two-headed eagle is prominent all over the world. In Hindu mythology, there is a two-headed bird called the Gandaberunda or Borunda. Gandaberunda is often shown in human form as well and represents the most destructive forms of the god Vishnu/Narasimha. It appears on many official crests and temple sculptures (Skinner, 2021). Gandaberunda represents power and strength but is seen in a more negative light. This example shows the different way humans have interpreted polycephalic animals. A twoheaded lion is often depicted in decorative art and heraldry, for example in the architectural decoration inside the George Washington Masonic National Memorial. A two-headed lion does not have a particular meaning or depiction (Skinner, 2021). In Greek mythology, a two-headed hound named Orthus, or Kyon Orthros, is said to watch over the cattle of a giant named Geryon.

This hound is also said to be the father of the Sphinx, Nemean Lion, and older brother to Cerberus the three-headed dog of the Hades (Skinner, 2021).

The history of polycephalic animals goes back millions of years and fossils are still being discovered to this day. In 2006, fossils of an ancient reptile were discovered in northeastern China. The creature is part of a group of aquatic reptiles and dates from the time of dinosaurs. The creature was named choristodera and eventually became extinct. It is most well recognized for its dimensions, reaching the length of a meter when fully grown. It had a long neck and a snake-like structure. This specific fossil had a "spinal column divided in two at the point where the neck emerges from the body. This formed two long necks that ended in two skulls" (BBC News, 2006). Dr. Buffetaut, director of research at the Centre National de la Recherche Scientifique (CNRS) in Paris, France stated when asked about the fossil: "Living animals like this are known. But if you compare the number of reptiles born with two heads with the total number of reptiles born, it is very small. So the chances of finding a fossil like this are extremely low" (BBC News, 2006).

There are numerous examples of polycephalic snakes within modern history. In summer of 2018, a woman strolled through her garden in Woodbridge, Virginia (Mallonee, 2019). She soon came across an unusual snake, one with two heads. She quickly recognized it as an eastern copperhead snake, which was not common in the area. Understanding how special this snake was she called Animal Control; then she proceeded to post her find all over the internet. Because of access to social media and the internet, it did not take long for the two-headed snake to go viral. The snake was quickly picked up and taken to a local zoo where scientists were eager to keep it alive and healthy. State herpetologist John D. Kleopfer and Cooper Sallade, a viper specialist, worked together to raise and care for the snake. Unfortunately a month or two later Sallade opened the enclosure that the snake was kept in and found it dead. Sallade spoke on the experience in an

interview; saying "Honestly, I would probably have euthanized it myself, because it was so hard for the snake, just being alive." Sallade also mentioned his reasoning for not euthanizing, saying "Since the snake had such an incomprehensible amount of media attention, there was a lot of pressure on me to keep that thing alive" (Mallonee, 2019).

Even snakes, the most common animals with polycephaly and most likely to survive are commonly put down. Not because they are any more dangerous, but because many scientists and professionals see it as mercy. This is the reality of polycephalic animals' lives. The health issues that come with being born with two heads are numerous and severe. Studies have found that only one in 50,000 to 100,000 turtle births are polycephalic and of those births, not many survive long(Maguire, 2022). This is true for all two-headed animals. With two heads come two separate brains. Each fights for control, making it extremely difficult for the animals to hide from predators and find/catch food. When born in captivity polycephalic animals do tend to do better. Because of the ability to control the environment and access to medical care, polycephalic animals' chances of survival increase exponentially (Salleh, 2018). Even though the survival rate and health issues make it extremely difficult for polycephalic to survive, there are exceptions.

A two-headed turtle named Mary-Kate and Ashley was found in Barnstable, Massachusetts in 2022 (Maguire, 2022). The diamondback terrapin back turtle was found by the Barnstable Department of Natural Resources after hatching in early fall. These turtles were unusual even for polycephalic turtles. Usually, polycephalic turtles have four legs with two heads, but these turtles have a full six legs and two whole functioning heads. The gender of the turtles is unknown and they are slightly underweight. Their legs move together but scientists have yet to determine which turtle is in control of the movement at any given time. Because the turtles are in excellent health

and under the care of professionals, scientists expect Mary-Kate and Ashley to survive for the time being (Maguire, 2022).

Unlike snakes and turtles, polycephalic mammals don't tend to make it to birth. Usually, they die as a fetus and are stillborn. But just like anything else, there are exceptions. A two-headed black rat snake with two separate throats and stomachs survived for 20 years (Bionity). A two-headed albino rat snake, survived in captivity for 8 years before dying (Bionity). Multiple two-headed cats have been discovered but most die soon after birth. In 2000 in Philadelphia, Pennsylvania a two-headed kitten was born and ended up passing away later that year. On March eighth, 2005, another two-headed kitten was discovered in Lake City, Florida. The owner named it Duece and it was later euthanized because it developed pneumonia. In terms of cattle, only one Polycephalic calf has had documented survival. It lived for only 10 days (Bionity). An important thing to note is that all of the mammals described above were born in captivity which increased their chances of survival. If they had been born in the wild and not discovered they most likely would have died shortly.

A specific case that captured my attention while researching was a polycephalic fawn. Walking along a Mississippi river trail in 2018, a woman silently searched for fungi. She was a friendly mushroom hunter who frequented the trail; except this time she found something unusual, a two-headed baby deer (Davis, 2019). The mushroom hunter was called Animal Control and it was shortly picked up and taken into a lab to be studied (Steffen). This deer was special because it was in perfect physical condition. Because the body was in excellent condition, fully formed and untouched scientists were able to run numerous tests. They did a CT scan, dissection, and full necropsy. Through these tests, they discovered that both the deer twins were female. They shared one liver and had extra spleens and gastrointestinal tracts. They also had two separate hearts. There

were two separate heads and necks that converged about halfway down the rib cage. Their fur, heads, and legs were completely normal. The tests also showed that the twins had never breathed air, meaning they were stillborn (Steffen). There have only been five documented cases of polycephalic deer and never one reported alive. This polycephalic deer body is prolific not only because of the condition of the body, but also because it was carried to term and birthed completely normally (Steffen).

(Davis, 2019)

I was drawn to the deer at first because of the image of it lying dead on the floor. Its legs curled under it, limp, both heads resting on the ground, eyes closed and mouths the slightest bit open. They are clearly dead and it triggers the feeling of sadness. They were never supposed to have been created in the first place, but they were. With everything against them they were still born and should have been alive. They look as if they were once alive. In the end though, they never even breathed air. They made it so far to only fail in the end. Their fur is still clean and soft and their feet have not known what it is to walk. They look as if they are on the brink of death.

During the research of this project and the discovery of polycephalic animals, I forged a



connection between them and myself. Connecting my personal struggles and hardships with outside objects is something I do quite a lot. Having a visual representation of what's going on inside my brain is a helpful tool to describe what I am

feeling. Because of anxiety I often enter into periods of depersonalization and dissociation. During

these periods I feel as if I am watching myself be a part of the world. I feel as if I am only an observer. It is the feeling of two heads on my neck fighting for control. This is where I drew the connection between myself and polycephalic creatures. In polycephalic animals, the heads fight for control, sometimes even getting violent. They have even been known to bite the other head clean off its body(Bionity). In my head when I enter into these short periods I have to fight for the control of my mind and consciousness. Most polycephalic animals die before they can be born. I feel like the tragedy within that statement is true for me. All the depersonalization and dissociation are trapped within my head, never going anywhere. The periods of depersonalization and dissociation are birthed there and die there.

This is also why I have decided to look deeper into the polycephalic stillborn fawn. This specific animal is the best visual representation of my periods of depersonalization and dissociation. The fact that it was stillborn has meaning in itself. It had never been able to breathe air, never walked, and never made a sound; it had barely existed in the world. When I depersonalize and dissociate it's stuck in my head, also never entering the world; except through how my eyes are viewing the world at that given moment. I was also drawn to the fawn specifically because of how it looked. It evoked heartbreak, numbness, and curiosity all at once. I was fascinated with it and eventually, my struggles began to take their form.

Polycephalic animals are weird creatures that have somehow made their way into humans' lives and stories. Myths of polycephalic monsters and animals have been passed down and told for centuries. A cute special two-headed snake that popped up on your phone is just a modern day two-headed serpent fought by Hercules. Polycephalic creatures have followed humans through evolution taking on powers and representing great gods. Humans love and study these creatures; pulling at the emotions they represent. I do the same, assigning hardships within my head to a real

world visual. My struggles with depersonalisation and dissociation take the form of the polycephalic baby deer. Two-headed animals are fascinating worky creations that will make a commotion whenever they come into the world. We might as well appreciate their differences and admire their persistence to continue to sprout.

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