

# Skin & Bones

(and horns and wings and feathers and spots and scales and teeth)

### Methodology and Goals:

Chris has been studying paleontology for the past few years. His intent is to become a professional in the field of dinosaur aesthetics. To this end, he set up an experiment, which he carried out at the *Community/Performance* conference at Bryant College in June. He had a series of tables laid out with pictures of dinosaur skeletons, tracing paper, and a number of drawing implements. He asked passersby to trace over the skeletons and draw the dinosaurs' exteriors. Dinosaurs, of course, were extinct long before any human ever saw one, so we have no idea what they looked like--even our ideas about how their skeletons are arranged have changed over time. Despite all this, their hold on our imagination has led to innumerable portrayals in popular culture and scientific sources, their exteriors interpreted by amateurs and professionals alike. This experiment was designed to see what normal people think dinosaurs looked like, and to start to question why--are they influenced by biology, movies, whimsy? The feedback gained from this experiment will be used to create a context for Chris' future dinosaur aesthetics research.

### Analysis of the Experiment's Data Pool:

**Description of the participant pool:**

- Almost all were adults. ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐
- Many held advanced degrees in various art fields. ☐ ☐
- Almost all knew the goals of the project. ☐ ☐ ☐ ☐ ☐ ☐
- At least half were women. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
- Most were middle class. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
- None had seen a live dinosaur.
- Almost all were at college educated.
- Several held advanced degrees in biology.
- Most spent ten minutes or more on their drawing.
- There were few ethnic minorities.
- Many had radical or leftist political leanings.

## Number of Drawings Made, per Species:

Pteranodon: 9	<input type="checkbox"/>	Stegosaur: 4
Dimetrodon: 8	<input type="checkbox"/>	Anklyosaur: 3
Supersaur: 6	<input type="checkbox"/>	Tryannosaur: 3
Velociraptor: 5	<input type="checkbox"/>	Duckbill: 3
Ichthyosaur: 5	<input type="checkbox"/>	Plesiosaur: 1
Triceratops: 5	<input type="checkbox"/>	Compsognathus: 1

Comments: I expected Tyrannosaurs, the perennial villain of dinosaur movies, as well as the prototype for Godzilla, grandfather of all monster movie stars, to be the runaway favorite, but instead it tied for second to last place, with only 3. Velociraptors, the breakout stars of Jurassic Park, did better but were still not quite as popular as I expected. Ichthyosaurs did much better than Plesiosaurs, the only other sea-faring animal. I had been unsure whether more people would choose aggressive predators or herbivores with interesting defensive mechanisms, but meat eaters (of which there were 7 examples) and plant eaters (of which there were 5 options) were chosen 32 to 21, which is almost exactly proportional to the number of available species.

**Media:**

Marker: 25  
Pencil: 22  
Crayon: 15

Comments: I was interested in whether adults would prefer to use crayons, usually associated with childhood, when coloring in dinosaurs, also often considered a primarily childhood interest. The different media offer different levels of precision and color availability, and I wondered whether how that would affect drawing styles. Cross-referencing media with the intensity of color (see the next category), specifically those who used either all bright or all dull colors, one finds that people who used markers made more dull than bright dinosaurs (11 to 8), while crayon and pencil users made more bright than dull dinosaurs (7 to 2 and 8 to 5, respectively). I thought this was interesting; I had assumed markers would be the brightest of all.

**Colors:**

Mix: 22  
Bright: 17  
Dull: 14

*Comments:* Contemporary theory believes that dinosaurs' closest living relatives are birds, which may indicate that they had much more brightly-colored and complexly-patterned skin coverings than, say, an alligator or an iguana. I often mentioned this fact to the participants during the drawing sessions. I was interested in whether newer, brighter versions of dinosaurs would win out over older, duller models of dinosaur coloring. The two paradigms seemed to have about equal influence.

### Statistical Breakdown of the Most Salient Choices Made by the Artists in Their Dinosaur Drawings

Dinosaur Type	Media			Colors			Pattern						Skin				Context										
	Marker	Crayon	Pencil	Bright	Dull	Mix	Solids	Stripes	Dots	Patches	Other	Follows Bone Structure	Scales	Fur	Feathers	Other	Background	Eating	Smoking	Pooping	Surreal/Graphic	Speech Balloon	Signed by Artist	Other Text	Clothes/Cosmetics	Firebreathing	
Plesiosaur 1		X		X			X						X				X										
Triceratops 1	X				X						X			X								X					
Triceratops 2			X	X							X			X													
Triceratops 3	X				X				X				X										X				
Triceratops 4	X				X		X						X				X			X							
Triceratops 5			X	X							X					X			X					X	X		
Anklyosaur 1		X		X					X				X	X									X				
Anklyosaur 2			X			X	X						X														
Anklyosaur 3	X			X				X	X	X			X		X	X											
Tryannosaur 1	X					X						X				X					X						
Tryannosaur 2		X				X			X					X			X										
Tryannosaur 3			X		X		X						X														
Dimetrodon 1	X		X	X								X				X					X						
Dimetrodon 2	X		X	X				X	X				X				X	X			X						
Dimetrodon 3	X					X		X		X			X														
Dimetrodon 4		X		X				X					X														
Dimetrodon 5	X			X			X		X				X			X	X								X		
Dimetrodon 6	X				X						X		X														
Dimetrodon 7			X			X	X	X				X	X		X												
Dimetrodon 8			X	X							X	X				X	X										
Duckbill 1		X		X			X						X	X							X						
Duckbill 2	X	X		X			X		X				X				X										
Duckbill 3	X					X			X		X					X					X				X		
Ichthyosaur 1	X					X	X	X					X			X			X						X		
Ichthyosaur 2	X					X	X		X				X				X										
Ichthyosaur 3	X					X	X	X					X								X						
Ichthyosaur 4		X			X		X	X					X				X						X				
Ichthyosaur 5		X			X		X	X					X				X										
Compsognathus 1			X	X				X						X									X				
Stegosaur 1	X		X	X					X				X				X			X	X				X	X	
Stegosaur 2			X			X	X						X				X		X	X	X		X		X		
Stegosaur 3			X			X	X	X					X				X		X		X				X		
Stegosaur 4		X				X	X		X				X				X						X				
Velociraptor 1	X				X						X		X				X	X									
Velociraptor 2			X			X				X			X					X			X						
Velociraptor 3	X	X		X			X						X		X												
Velociraptor 4	X				X		X						X				X										
Velociraptor 5			X			X	X	X					X														
Pteranodon 1	X	X				X	X				X		X			X	X				X			X			
Pteranodon 2	X		X		X		X	X			X	X				X					X						
Pteranodon 3		X	X			X	X			X			X		X		X						X				
Pteranodon 4			X		X						X	X				X								X			
Pteranodon 5		X		X			X						X		X												
Pteranodon 6	X					X		X	X							X					X			X			
Pteranodon 7			X		X		X	X					X											X			
Pteranodon 8		X				X					X				X	X	X										
Pteranodon 9			X		X		X						X										X				
Supersaur 1			X		X			X	X		X		X	X	X		X										
Supersaur 2		X				X	X	X		X			X								X			X			
Supersaur 3	X		X	X				X			X			X	X						X					X	
Supersaur 4	X					X	X						X	X													
Supersaur 5	X					X	X			X			X		X												
Supersaur 6			X			X	X	X					X				X								X	X	

**Pattern:**

Solids: 28  
Stripes: 17  
Other: 14  
Patches: 13  
Bones Structure: 8  
Dots: 6

*Comments:* Again, because of dinosaur's shared lineage with birds, it is quite possible that they had very complex surface patterns. Most people went with solid colors, however, with about half of the total samples. Eight people designed their dinosaur's exterior to follow the pattern of its interior bone structure, which is more likely an influence of the particular characteristics of the experiment than a real pattern to be found in nature.

**Skin:**

Scales: 39  
Feathers: 10  
Other: 13  
Fur: 9

*Comments:* The dinosaur/bird relationship has been considered close enough for there to be a possibility that dinosaurs had feathers as well as scales. While giving the dinosaurs scales was the number one choice out of any option among the entire experiment, a fair minority still opted for other possibilities, even fur.

**Context:**

Background: 20  
Surreal/Graphics: 15  
Signed by Artist: 8  
Clothes/Cosmetics: 7  
Other Text: 6  
Eating: 3  
Firebreathing: 3  
Pooping: 3  
Smoking: 2  
Speech Balloon: 2

*Comments:* I was interested in whether people would add more information to the dinosaurs than just their exteriors. Many people elaborated their work by adding some kind of background environment or graphic framing device, and often giving them active or anthropomorphic characteristics such as smoking or speaking. These elaborations were sometimes made in a spirit of cartoony amusement and sometimes in an attempt to create a more holistic world for their creation; some went to the extent of adding written information. A fairly large minority deemed the drawings worthwhile enough to sign, a sign that they were serious about their work and that it was not done without thought for the project's intent.