

Paleocolor: What did dinosaurs look like? Shining a light on their true colors could illuminate behavior

Long thought an impossible dream, the emerging field of [palaeocolour](#) is revolutionising our view of the prehistoric world, turning it from black-and-white into glorious technicolour.

...

Finding evidence of colour in the fossil record will do much more than simply tell us what hue to paint a T-Rex. Bones can fossilise but behaviour does not. “When we look at the animals and plants we see in the world around us we see striking colours and colour patterns,” says [Maria McNamara from the University of Cork](#). “Animals use colour for camouflage, for avoiding predators, for mating signals and also for signalling within their social group. So evidence of colour in animals has the potential to tell us about this very enigmatic aspect of the biology of ancient organisms.”

...

Pigments produce colour by the selective absorption of certain wavelengths of visible light. Typical pigments include melanins, carotenoids (bright reds and yellows) and porphyrins (greens, reds and blues).

...

Combinations of these melanins alongside absence of pigment create grey, brown and white colours. If pigments had been preserved in the ink sacs [of fossilized squid, researcher Jakob] Vinther reasoned, then melanin – or the melanin-bearing melanosomes – might also be found in fossilised skin and feathers.

...

For McNamara, a key point is that melanin itself is not yet properly understood. “We need to learn more about melanin in modern animals before we go near fossils.

Read full, original post: [Everything you thought you knew about dinosaur colours is wrong](#)