Best Practice Commentary #3 – Frank Muzio

Map

Description automatically generated

**Figure 1: Dorsal view of TMP 2011.033.0001, showing both photocomposite and schematic line drawing.**

Photocomposite dorsal view of TMP 2011.033.0001. (B) Schematic line drawing of (A) showing osteoderm regions by color. (C) Inset showing constituent blocks of TMP 2011.033.0001, and their relative position within a body outline in dorsal view. Photocomposite (A), created using separate, orthogonal images of blocks A–C, D, E, F–I, and J and combined digitally to reduce parallax. Blocks F, G, H, and I represent reflected counterpart.

For the morphology/paleontology realm, I guess figures like this aren’t “unusual” but overall, this figure unique in its ease of understanding. A lot of the morphology-based papers have some kind of figure that shows a scan the structure/fossil in question, those are often difficult to understand what exactly you are looking at. I like this figure because it starts off with an image of the actual fossil specimen. This allows you to get a good view of what they are discussing in the paper. Next, they include a drawing of the fossil and color code different regions to further explain what you are looking at. Finally, they overlay the fossil on top of an outline of what the rest of the body would look like, giving you an even clearer picture of the specimen. What really stands out to me is the part B), mainly because I have no idea how one would go about doing something like this. It does not seem like it is something that can easily be done in R, perhaps photoshop or some other image editing software? My interests are rooted in morphology, especially in birds and mammals, and would love to be able to create a figure like this one day.