As mentioned in my previous document, the model that I have been analyzing seems to be a vinta style boat from Zamboanga City in the Philippines’ island of Mindanao, where the Moro, who were most likely the builders, reside. Although, the model seems to lack detailed construction techniques and was potentially a toy, the simplified structure of the model highlights many important features of the real-life vessel construction. The model of the vinta was carved out of one solid piece of wood to make it a dugout style. The model has one square sail about the length of the boat and two outriggers on either side. Outriggers are thin, long, solid hulls used to stabilize an inherently unstable main hull. The outrigger is positioned rigidly and parallel to the main hull so that the main hull is less likely to capsize.\textsuperscript{1} The main hull has intricate purple wooden fixtures added to it as if to make it taller for stability and possibly to add decoration. Along with the boat were a wooden plank inside (the usage is unknown), and one single wooden ore. The vinta, which is a real-life version of the model, is what this paper will

mostly analyze. (Picture above of a real life vinta boat)\(^2\) The construction techniques of the double outrigger vinta boat are used to maximize speed in transportation between islands, while also enduring quick lucrative fishing trips.

The real life vinta boat is a very narrow boat, which could be used to decrease drag and increase speed. H. Arlo Nimmo, in *The Boats of the Tawi-Tawi Bajau, Sulu Archipelago, Philippines*, discusses the construction of the *pilang*, which is another name for the vinta. Although the model seems to be a dugout of one piece of wood, some vintas that have been studied tend to have a u-shaped keel with five added planks to form a deep and rather narrow hull, which make it faster. The length, which varies from 4.5m to 10m, decides how many booms there will be (up to four), to support the bamboo out-riggers.\(^3\) Bamboo is used as the outriggers because bamboo floats and helps to stabilize the narrow hull in fast speeds and unstable waters. The wood that is used to usually make a vinta boat is from a local tree called red *lauan*, which is

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\(^3\) Nimmo, H. A., p. 71.
easy to handle. The fasteners that are used to hold the gunwale and the side planks to the keel are bakauan or mangrove, which is a tough/strong type of wood.\textsuperscript{4} The model shows a string to aid in fastening the wood together, which in real life could be the outer skin of the bamboo, which represents a rope-like material.\textsuperscript{5} As seen in the picture to the right\textsuperscript{6}, the added wooden fixtures to the bow and stern are called the prow and they represent an intricately carved mouth. The carvings are pieces of art, where the stern is simpler, and the bow takes more of the artwork. The reasoning for the carved wood varies from just decoration to increased airflow while sailing, which this pattern resembles the one found on the model.\textsuperscript{7} Due to the increased airflow, the vinta can travel at higher speeds than other vessels.

As I mentioned, these vessels were often used as fishing boats, therefore the wood and bamboo are very lightweight and make the vessel easy to move on to land and back into the water. The hull is hollowed out to hold cargo (fish) or even passengers while transporting to other local islands. The sails are usually made of cotton canvas or in older days, palm matting. Although the model does not seem to have a rudder, most real-life vinta boats were equipped with rudders fore and aft, for easier maneuvering in rougher waters.\textsuperscript{8} The vessels also came with one oar in which the sailor would use in a professional j-like row pattern, opposed to a double oar.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{image1.png}
\caption{Construction of a vinta by Doran, Edwin p.144-52.}
\end{figure}

\textsuperscript{4} Nimmo, H. A., p. 86.
\textsuperscript{5} McCarthy, Michael, p. 12.
\textsuperscript{6} Photo by author
\textsuperscript{7} Nimmo, H. A., p. 74.
\textsuperscript{8} Aurora Roxas-Lim, p. 222.
pattern.⁹ There are many different versions of this type of vessel, and although the model resembles the vinta boat almost exactly, the detailed construction techniques that help to define that vessels in real life are missing from the model. But because of the main structures and the known location of the model, it is plausible to identify this model as a vinta built by the Moro people. Although the Moro call this vessel the vinta, other locations have almost identical boats, just with different names, making research into the construction of this vessel relatively easier. After analyzing the construction techniques of the vinta, it makes sense that these double out rigging sailing vessels can reach up to maximum speed and handle rougher waters.

Works Cited


⁹ Doran, Edwin, p. 144-52.