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## **Did The Physical and Metaphorical Border of the Sea Surface force Geomorphology as a Land-Driven Discipline?**

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The morphology of the emergent and submerged landscape reflects the processes and times that are involved in the shaping of the respective environments. The border between these landscapes is represented by the sea surface. It is highly variable insomuch that the current sea level is far from being an average level in relation to the Earth's surface and to the geological history of Earth. The continuous change in altitude of the sea surface produces a transitional zone, roughly between a few meters above the current sea level and 150 meters deep. Below the transitional zone, that corresponds to the uppermost part of the continental shelf, the processes are almost totally marine, while above it they are almost totally continental. In the middle, it is possible to find landforms of mixed origins.

Until less than a century ago, the emergent landscape was already well-known with respect to the submerged one that was almost totally unknown. Therefore, the sea surface clearly distinguishes two separate worlds, the emerged one and the submerged one, the former being easily accessible, the latter much less. For this reason, geomorphology, like geology, was basically born as an Earth-driven discipline, and only later it also focussed below the sea surface. Geomorphological theories have been deeply affected by this border because until one century ago, little information was available on the sea bottom. Geomorphologists could not produce really data-based global theories until few decades ago. The base-level represented generally the lower limit of geomorphological theories. Even today the submerged lands continue to be much less accessible and certainly not directly available to the classic geological field surveys, apart from limited shallow areas where it is possible to use snorkel or scuba equipment.