With the splintering of geography into multiple sub-disciplines during the last thirty years, geographical writing that attempts to analyse the landscape from an inclusive, interdisciplinary perspective has become increasingly rare. However, in the burgeoning field of environmental geography, where the actions of humans and their impact on the physical environment must be taken into account, there has been a renewed interest in developing closer ties between physical and human geography. This is the approach of Lydie Goldner-Gianella in *L’Allemagne et ses polders: Conquête et renaissance des marais maritimes*. Goldner-Gianella superbly blends together physical and human geography in explaining the morphology and management of the German coastal environment of the Wadden Sea over the last two millennia of human history.

The author demonstrates that no understanding of the present coastal German landscape can be understood apart from the long history of humans as agents of landscape morphology. Over the last millennia, more than 8000 km² of coastal Germany were diked and physically transformed, leaving little of the original marine landscape that once dominated that coast. How, why and when this morphology took place, and the impact of those changes on the environment, are the subject of this study. Goeldner-Gianella explains that as far back as early Palaeolithic and Mesolithic hunters and gatherers, humans were attracted to the coastal environment of the Wadden Sea. As early as 100 AD, local diking of the landscape began to promote agricultural expansion on the rich marine clays of the coast, and to protect nearby land from the transgressions of rising sea levels. Early Roman accounts of this coastal environment described the life of the coastal marsh dwellers as a miserable amphibian affair. But, this was by no means a territorial perspective of the true human relationship with the coastal environment. As Goeldner-Gianella relates, by the year 1000 an exceptionally dense population had been reached on much of the coasts of the Wadden Sea as a result of their high agricultural utility.

After the year 1000, the size and intensity of coastal diking increased due to the lay and religious promotion of agricultural colonisation of the coastal marshlands. However, between 1100 and 1300 increasing sea level rise slowed and even reversed earlier conquests. Not until the sixteenth century, and the diffusion of new Dutch technology throughout Europe, was it possible for larger dikes and better drainage to be achieved. From the late Middle Ages until the 1970s, the author continues, the
exceptional fertility of the marine clay lands underlying the coastal marshes provided the overarching motivation for increased exploitation of the coasts of the Wadden Sea. Agricultural returns on the diked coastal lands were among the highest in Germany, and the coastal inhabitants of that region attempted to exploit that potential to the maximum.

However, in the 1950s and 1960s, as a result of rising sea levels and flooding, a major shift in the perception of coastal diking took place, away from the economic utility of the “polders” for their agricultural potential, and towards the social benefits of diking to protect human life from the devastating affects of flooding. At the same time, in the late 1960s and 1970s, ecologists began to note the injurious effects of diking on the marine and intertidal environment. During the 1970s and 1980s, ecologists attempted to halt new dike construction, in the process battling against a thousand-year-old mentality concerning the value of coastal diking for its economic value, and for its social benefits as a means of protection against flooding. As a result of the activities of ecologists, a number of large-scale diking projects were abandoned in the 1980s. However, upon deeper investigation, the author argues that the reversal in marsh diking came not necessarily because of an increased environmental sensitivity among the coastal population, but as a result of the conjuncture of agricultural surpluses in the European Union and the government-sponsored programs to take land out of production.

At the same time, the coastal population of the Wadden Sea has continued to regard diking as an important means of protection against flooding and rising sea levels, placing the protection of human life before that of the environment. However, in the last decade an important compromise has been reached. Losses of coastal environments due to diking to prevent flooding of populated areas are being compensated by the breaching of less vital dikes and the restoration of intertidal marsh environments. While such restoration has not been without problem, it is, in the words of the author, the renaissance of the marine environment of the past. The story of how that marine landscape has come “full circle” in the long history of human occupation, exploitation, alteration and restoration of the coastal environment is a fascinating account, and an example of the exceptional possibilities that exist for combining human and physical geography in the study of landscape morphology and environmental change.

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