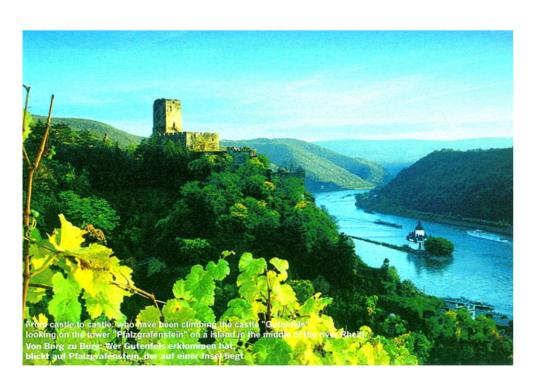
## The emergence of the Rhine Valley and the navigation

■ he prehistoric Rhine handed only from its source with Brohl until to Bonn, while the river was twice as long in the Saale ice age in such a way specified before 180,000 years, when powerful ice-describe from Scandinavia the far over North Sea to Central Europe were enough, like today, because it flowed not direction Rotterdam, but over Brügge and Cornwall only into Great Britain into the sea. Given its process is by sinking the area in the waiter Rhine digs and the down Rhine bay. Until the Rhine had found however its current bed, a long time should offence. After unfolding the alps by the one on the other drift the European and the African continental plates 100 million years ago the mountains first only over the Danube was drained. The Rhine had reached 17 million years ago only the emperors chair, in order to look for from there its source area in the Lorraine. Only 5 million years ago the river overcame the Kaiserstühler threshold and thus grey federations reached. Instead of accumulating itself with being gene, it ate by the volcanic landscape through, so that the Rhine took one before approximately one million years with today comparable process.

However it flowed 350 meters over its current level by a shallow-hilly landscape, in which it formed first a trough valley. Witnesses of this phase are about gravel and Stones occur when break living, where I live and fetched the stones for my pond in our garden. Before approximately 400,000 years then it formed the averaging race, on which high ones today still the castles and churches, for instance the Apollinaris church in Remagen were built, because one used there deposited Stones for the building. Last stages of the river bed formation were the down and Sump Terraces before approximately 10,000 years. From this main headers are enough yourself for instance the Unkeler Island out, on which the old part of town with sank Pantaleon church one built. The sanding east arm of the Rhine becomes visible today only with flood, if the Rhine von Erpel penetrates over Heister into Unkel. As traffic vein the Rhine was used naturally already of the Romans. Also in the Middle Ages it placed the favourable connection for the Unkeler to its national gentleman, who archbishop of Cologne and the pin Maria ad Gradus, which had established like the Domkustodie tenth yards in Unkel. Different ship types drove on the Rhine depending upon intended purpose, with which the river experiences of the upper countries and the sea experiences of the Dutchmen were used, and above all the Rhine navigation after completion of the blockage of the river by the Frenchmen only correctly in the entire length possible was. If the Rhine had been used before particularly as route of transportation for goods, then set in 19. Century strengthens the passenger traffic in. A report on a journey of a Prussian official, who travels to 1825 a desire from Mainz to Cologne undertook, confirmed this. It was with a post office yacht, a sailing boat, in addition, with a Nachen (old boot), which was rowing, on the way, until it should finally see a steam ship, which had driven the Rhine up from Rotterdam in Cologne.

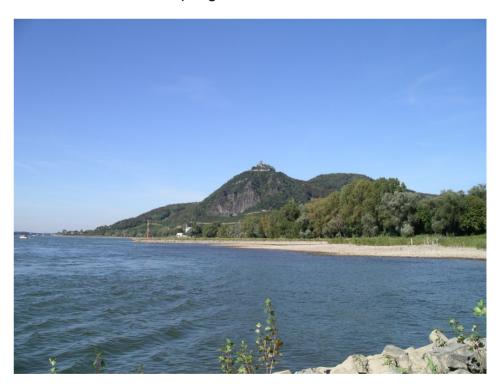


From Castle good rock shows on Pfalzgrafenstein.

On this way also Johannes Leutweiler must have travelled in 1742 of Basel over Rotterdam after Vlissingen. 1816 had itself the English government for a monopoly on the steam navigation on the Rhine

applied, at that time were already the economy already long to entire Europe adjusted and not like that narrow-minded like the policy it steered, unfortunately are not yet so far Switzerland, and in November 1817 the Caladonia had raised until Koblenz. The first steam navigation company created the Dutchmen in 1923, three years later Prussic. One the most important ship of engineers was the grandchild new again of the furniture carpenters Abraham Roentgen, Gerhard Moritz Roentgen.

By the heavy machines however the wood ships twisted themselves extremely, this problem was only solved by building of iron steamers starting from 1838. Nevertheless about 1829 were alone toward the south 14,000 passengers in the year on the Rhine on the way, a traffic, which let the poet Freiligraht complain, it would come so any longer to working, did not tell the adviser. While the steam navigation let the Trailed sails become almost insignificant, you arose starting from 1844 by the railway a large competition, which 1858 of Cologne over Rolandhit a corner until Koblenz drove. Nevertheless still 44 steamers were on the Rhine on the way, since 1890 also first with an explosion engine before the First World War. In addition innumerable smaller local motorboats came like the Christine, the earlier Unkeler ferry. They were predominantly built in the close king winter. After in the Second World War many steamers were destroyed, the Cologne Düsseldorfer and the Bonn navigation company built again many after, which are under constantly changing names on the Rhine on the way. Even motor ships such as Mobby thick, a Mississippi impeller steamer, in addition, futuristic ally seeming Space sails could be observed on the river. Even cruise cab ships from Switzerland and the Netherlands are on the river on the way, also many cargo ships drive continuously to the Rhine up and off. The last ratchet tractors were used after the war. One saw then thrust later sails, which were replaced from the couple federations in such a way specified. Today control the large containers sails the scene, which can transport up to 3.000 tons. Prominently are here again the Dutchmen, who carry 53 per cent of the freight tonnage. In Germany the portion of the pollution free navigation would amount to only 20 per cent at the transportation, while 45 per cent of the entire goods traffic rolls over the roads. Years 2003 and 2004 it were to drying, the level of the Rhine in the summer months for the navigation had become often so critical that the large ships will not load up could. Critical also the decrease of the glaciers is in the Alps, which feeds the Rhine continuous in the spring and summer with water.



The picture above shows the Rhine by the city Bad Honnef, which shows you of the Dragon Rock of the city Königswinter. Author: Frederik Luitwieler (2005)

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