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Mr. Von Wurmb

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- I. *Description of the Island of Celebes or Macassar; with an Account of its Gold Mines, and the Manner of working them.* By Mr. VON WURMB*.

THE island of Celebes, called also Macassar, is of great importance to the Dutch † for the spice trade, on account of its situation, as it has on the north the Philippines, on the west the Sunda isles, on the east the Moluccas, and on the south Timor and Java. It extends from the third degree of north to the fifth of south latitude, and lies nearly under the 136th degree of longitude. It is about a hundred and twenty miles in length from north to south, and forty-five in breadth from east to west. Raynal says its diameter amounts to about a hundred and thirty miles, by which, in all probability, he understood its length from north to south. Properly the eastern side of the island is called Celebes, and the western Macassar; but in general the former name is given to the whole island, particularly by the Dutch.

As this island lies under the line, the air is exceedingly hot; but the heat is moderated by frequent rains and cooling breezes, and in most places the air is not prejudicial to the health of the inhabitants. It abounds with moun-

* From *Merkwürdigkeiten aus Ostindien*, published by his brother.

† This island, since the author wrote, has fallen into the hands of the English.

tains, but the soil, taken in general, is fertile. Rice, coconut trees, mangoes, bananas, melons, and oranges, grow here exceedingly well, and are cultivated in abundance, together with the cotton shrub, *uby*, and *batta* *. There are here also plenty of horses, oxen, buffaloes, deer, wild swine, and birds of all kinds, and in particular a variety of beautiful parrots. Abundance of fish are caught on the sea-coasts as well as in the rivers and lakes.

The Dutch carry hither opium, spirits, lack, coarse and fine cloths, &c. and receive in exchange rice, wax, slaves, and gold. Here, as well as in many parts on the coast of Africa, the unfortunate beings doomed to slavery are not prisoners taken in war, or criminals, but people in general who have been kidnapped for the purpose of being sold; and it often happens that relations do not hesitate, for the sake of gain, to deprive their fellow-creatures of liberty, the greatest blessing which mankind enjoy in the present life. The island is well peopled: on the coast of Celebes alone there are said to be fifty-six thousand inhabitants, seventeen thousand of whom are capable of bearing arms.

In this island there is a multitude of small kingdoms and states, the greater part of which, however, depend on the two great kingdoms of Macassar and Bony. The king of Ternate, also, has extensive possessions, which occupy almost the whole of the northern and eastern part of Celebes. The two most powerful kings, whom the Dutch, by the preponderance of their arms, obtained as allies, are the kings of Macassar and Bony. The kings of Tello and Sandrabony are in alliance with the king of Macassar; and those of Soping, Luhu, and Tanette, with that of Bony. Some small states, such as Wadjo, Mandhaar, &c. are independent. Though the kings of Macassar and Bony are allies of the Dutch, they are always sworn enemies to each other; and this is not unfavourable to the policy of the Dutch, who in their Indian possessions still keep in view the maxim *divide et impera*, and

* *Uyy* is a root used as food, and *batta* is a kind of buck-wheat, which formerly was the chief food of the Javanese before they were acquainted with the use of rice.

who derive great advantage from the discord of the eastern princes.

The kingdom of Macassar or Goach lies on the western side of the island, of which it occupies the greater part. The king of Goach and that of Tello both bear the title of Macassar, though each has a distinct kingdom: they assume the titles of Goach and Tello from their places of residence. According to an ancient tradition, the Macassars, like many other nations, deduce the origin of their princes immediately from the gods. Once, say they, after the death of the first sovereign of the kingdom, a beautiful female descended from heaven suspended by a golden chain. This celestial beauty, named Tumanurong-a, was immediately chosen by the Macassars to be their queen. She afterwards married a king of Bonthain, and, after being pregnant three years, brought forth a wonderful child, 'capable of speaking and walking as soon as it was born, but exceedingly ugly and deformed. This young prince was named Tuma-Salingabeerang. When he attained to manhood he broke the golden chain which his mother had brought with her from heaven, and the mother and her husband instantly disappeared, and left to their son the kingdom, together with one half of the chain. This chain, which, it is asserted, was sometimes light and sometimes heavy, and sometimes appeared of a pale colour, was long preserved as a valuable part of the regalia of the crown, until it was lost, with various other rarities, during the warlike commotions which took place in this kingdom about the middle of the present century. This Tuma-Salingabeerang is considered as the chief of the family of all the kings of Goach.

The Dutch were involved in violent disputes with these sovereigns before they were able to establish themselves in their kingdom. In the year 1778 Goach, the capital, was taken by storm and destroyed; and in 1781 the present king Punduca Siri, sultan Abdal Hadja, was placed on the throne by the government of Batavia. The king of Goach does not enjoy unlimited power, but is subject to certain laws, which he is obliged strictly to observe. He can undertake no measure of importance without the consent of his council, nor

can he inflict arbitrary punishment on criminals, who must be punished according to the laws. He has a privy council called *Tonulalangs*, and every village is under the direction of a particular governor distinguished by the title of *Galarang*.

The Portuguese visited this island about the beginning of the sixteenth century, and obtained from the sovereign then on the throne permission to form an establishment. The successors of this prince introduced the weights and measures now in use, fixed the prices of merchandize, manufactured gunpowder, and planted the first cannon on the walls of Goach. He gave permission also to the Malays not only to reside in his kingdom, but to erect a Mahometan temple. This religion made such progress here, that about the year 1588 deputies were sent to Mecca to bring from thence a hadja or priest to instruct the Macassars in the doctrine of Mahometanism, which in 1603 was established throughout the whole kingdom under the sultan Allahudier.

The kingdom of Bony, which lies on the western side of a bay, called on that account the Bay of Bony, is the second kingdom in point of importance in the island. It is in close alliance with the two small kingdoms of Soping and Luhu. The natives of Bony, that they may not appear inferior to the Macassars, deduce their origin in the like manner from the gods. The first king, they say, descended from heaven, and was known by the name of Matta-Solompo-e, that is, the all-seeing. This sovereign, after reigning forty years, resigned the kingdom to his son, and with his wife ascended again to heaven: but, notwithstanding this common descent of their rulers from the race of the gods, the Macassars and people of Bony are sworn enemies, and their incessant quarrels greatly contributed to enable the Dutch, who, according as their interest required, favoured sometimes the one party and sometimes the other, to make themselves masters of the island. At present the Bouginefe, or people of Bony, are the most powerful, as the Macassars were about a century ago.

The Bouginefe are of a middle stature, and have a brown complexion, but not dark. Among the female sex, in particular, some are found almost entirely fair. Their features in general are agreeable, only that the nose is a little flattened.

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The Macassars, on the other hand, are of large stature, have a manly warlike appearance, are of a more open disposition, and at the same time detest treachery; while their opponents, the Bouginese, never attack openly, but endeavour to fall upon their enemies by surprise. Those even who never did them an injury are not secure from being murdered by them when they can do it with privacy; and they often commit such actions for no other reason, as they say, than to try the goodness of their daggers. Many Macassars, as well as Europeans, have fallen a sacrifice to this thirst for blood. Their daggers and aslagays are for the most part poisoned, as well as their small darts, which they can shoot at their enemies to a considerable distance by blowing them through a tube.

Their clothing consists of a piece of red or blue cotton cloth wrapped round the body, and drawn through between the legs. The upper part of the body is quite naked. On the head they wear a piece of cotton cloth in the form of a handkerchief, with which they cover their hair, which is as black as pitch, and exceedingly long. On the other parts of the body neither the men nor the women suffer any hair to grow; they pull it out by the roots, in the same manner as the Mahometans and Indians, as soon as it appears. They feed for the most part on rice, fish, and pifangs; and their beverage is water, though they are not destitute of *sagueer*, or palm wine. The Bouginese women are in general much handsomer than those of the other Indian tribes; some of them, had their complexion the same mixture of red and white as our females, would be accounted beauties in Europe. They are naturally of an amorous disposition, and are capable of undertaking any thing to gratify their inclinations.

The Mahometan religion, which has here become general, permits the Bouginese to have four lawful wives, provided the husband can maintain them. If the parties, however, are not satisfied with each other, they may separate with as little trouble as they were united. Their funerals are attended with very little ceremony. The body is wrapped up in a piece of white cotton cloth and deposited in the grave, over which some sweet-scented flowers are strewed, and two stones are erected, one at the head and another at the feet. The
Bouginese

Bouginefe have a sort of game at cards, which in all probability they learned from the Portuguese. It has a great similarity to that called *tarocco*, though the twenty-two tarocs are not among their cards. The four colours are called *spada*, *datudyens casu stokke*, *copas-coufel*, and *boelang-rofy*.

As the Dutch readily saw the great importance of this island, particularly in regard to their spice trade, they did every thing in their power to form a settlement in it, and even at an annual expense, which considerably exceeded the income arising from their trade: the abbé Raynal makes it to be 165,000 livres. The castle of Rotterdam, which is the principal residence of their East India company in the kingdom of Macassar, lies in the latitude of $5^{\circ} 7'$ south, and the longitude of $136^{\circ} 50'$. It was constructed by the Portuguese with the assistance of the Macassars, and was afterwards beautified by the Dutch, who increased its fortifications. Some years ago a neat church was erected here capable of containing two hundred persons. The walls of the fortress, which are strong, and of considerable height, are built entirely of stone hewn from the rock. On coming out by the land-gate you arrive at a large plain, on the north side of which lies the village of Blaardingen, where the principal part of the Europeans reside. The streets, which are broad, and ornamented with beautiful buildings, intersect each other at right angles in the direction of the four points of the compass. At the end of one of them is a large edifice set apart for an orphan-house. The Chinese all live together in one street, called for that reason the Chinese street. Blaardingen is surrounded with palisades, and is furnished with gates, which are shut in the night-time. Without the palisades, towards the south, there is a row of buildings, one of which is the habitation of the governor, and at a little distance there are some places called *campongs* inhabited by natives and Europeans.

The road of Macassar is one of the most beautiful in India, and at the same time safe for ships at every season of the year. The district around it is exceedingly pleasant. It consists of a large plain several miles in extent, in which, as far as the eye can reach, nothing is to be seen but ricc-

fields

fields and meadows watered by small streams. The picturesque appearance of this scene is heightened by groves and scattered clumps of shady trees loaded with fruit. Towards the east it is bounded by lofty mountains, called the mountains of Bonthain, which divide this part of Celebes towards the west from Bony, and towards the south from the gulph of Tomini into two parts.

The seasons are here the same as in Java. The south-east monsoon continues from May till November, and is called the favourable monsoon: the north-west, called the bad monsoon, continues from November till May. During the former the sky is serene and the weather dry; but continual winds and violent rain prevail during the latter. It is very singular, that on the east side of the before-mentioned mountains of Bonthain the contrary takes place: for, when fine weather in the south-east monsoon prevails on the west side of the mountains, there is nothing but hurricanes and rain on the east side; so that the boundaries of summer and winter are only a few miles distant from each other. The principal productions here are rice and cotton. The rice, however, is inferior in quality to that of Java, but the cotton is the best in India.

The Dutch East India company possesses the castle of Rotterdam, called in the language of the country Adjong Pandang, together with the surrounding district, in consequence of a treaty which they entered into with the prince of Celebes. But as the boundaries of their possessions were perhaps not accurately defined, the company always endeavoured to enlarge, and the Macassars on the other hand to confine them. The company possesses also a peninsula extending from this place towards the north, and a large flat district, which, on account of its fertility, is considered as the granary of Celebes, together with several places lying between this plain and the mountains, and likewise a great many villages among the mountains. These places border on each other, and are bounded on the west by the sea, on the north by the kingdoms of Tanette and Maros, on the east by Tamari, and on the south by the kingdom of Macassar. The inhabitants
of

of them, after various revolts, were at last reduced to complete obedience in 1738.

I shall omit saying any thing of the other small kingdoms in the island of Celebes, and proceed to a description of its gold mines, and the method in which the gold is collected. Mining and the art of metallurgy are conducted in a very careless manner in India; which is owing partly to the ignorance of the natives, and partly to their indolence. In general it needs excite little surprise, that people who live in a mild climate, and who have few wants, should be little inclined to penetrate into the bowels of the earth to procure metals, which are immediately extorted from them by the avaricious Europeans, or of which they are in a great measure deprived by their own princes. If an Indian here and there be compelled by force or necessity to dig for or collect gold, he never goes to work with sufficient intelligence and activity, but contents himself with what he can procure to satisfy his wants in the easiest and speediest manner. This is exactly the case with the Indians who inhabit those parts of Celebes which produce gold.

They obtain that metal by collecting the small particles which have been carried down by the streams, or by washing the sand which they dig up, rather than by working the mines in a regular manner. The auriferous mines in the island of Celebes commence on the southern side of Bulang and the northern side of Kotta-Buna or Mogondo, and proceed thence to Dondo on the south-west, and Tamperana on the north-west side, at the Bay of Tomini. Every where between these two districts gold is found in a greater or less quantity. Where the land of Celebes becomes so narrow, and the mountains so low, that a person can with ease pass from the one coast to the other in a few hours, the auriferous mountains end; and on the whole coast on the other side, as far as Macassar, a single gold mine is not to be found.

Besides the mines already discovered, a great many others would no doubt be found, were there a sufficiency of labourers; for the villages in these auriferous mountains are exceedingly ill peopled. Another cause of these treasures being

so much neglected is the ignorant superstition of the natives. They never will venture to dig in any place where they suspect great riches to be concealed until they have sent thither a diviner, as he is called, to find out whether their labours will be attended with success. The whole art of these diviners, called in the language of the country *Talanga*, consists in their discovering, as they pretend, by the voice of a certain bird, whether abundance of gold is to be found in a certain place; whether the labourers will be attacked by sickness; whether there are in it many spirits to impede the labourers and conceal the gold from them, with other things of the like kind. If the bird gives a favourable answer to all these questions, the diviner must endeavour to secure the favour of the protecting spirits of the place by offerings of various kinds; after which a few workmen may begin digging, and continue their labour as many days or months as the bird has prescribed. If the bird, however, gives an unfavourable answer to only one question, no person will venture in such a place to dig a hole of only a few inches in depth. Many rich mines remain, therefore, unexplored, because the prophetic bird, or the *Talanga*, are not in good humour.

When the workmen have arrived at the place where, according to the permission of the *Talanga*, they may dig up gold, they hold serious counsel with the bird once more, and ask it in what particular spot they must begin. When this is done, they first conduct water to the spot; for without water they cannot proceed, as by its means they wash away the earth and clay from the pit, that the stones and fine sand, among which the gold is contained, may remain pure. If the situation of the ground will not admit of the water being conducted in furrows, they make a kind of gutters of hollow *wakka* trees, which they support with props. When they have brought the water to the place where the mine is to be worked, they make a pit of twenty, thirty, or forty feet in circumference, according to the number of workmen: sometimes there are eight, and sometimes ten or twelve. As long as the water has room to run off, they suffer it to carry with it the earth, which they keep continually turning and stirring in the pit; but when the pit becomes so deep that there is

no passage for the water, they must bale it out till they arrive at the stones. These they wash clean, and build them up regularly around the sides of the pit, but without lime or mortar, to prevent the earth from falling in. When the pit is carried to a very great depth, they secure these stones by means of boards and beams of wood. These poor miners find sometimes stones of from three to four and five hundred weight, which they are obliged to raise and remove from the pit without any other machines than a common wooden lever.

When all the earth, clay, dirt, and stones have been thrown from the pit, and a kind of black sand begins to appear, they are then sure that they shall find gold. This sand they take up in a kind of small shovels made for the purpose; and, having placed themselves in the water, they put one handful of the sand after another on small round wooden dishes named *dulang*s. These *dulang*s are about eighteen inches in diameter and somewhat hollow, and have a small cavity in the middle which can be closed with a wooden cover. When all the sand has been washed from the *dulang* by being continually stirred round with the hand, the gold, which is much heavier, remains in the above-mentioned cavity. When it can receive no more, they take the gold which has been collected, and hold it over the fire in a coco-nut shell till it is dry; after which they blow away the remaining sand as well as they can, and preserve the pure gold.

When they dig a hill or mountain which is situated close to a river, they employ another method to obtain the gold. In this case they make a pit at the edge of the river, conduct into it as much water as they have occasion for, throw into it the earth they have dug up, and wash it till nothing remains but the black sand mixed with gold; after which they wash it in their *dulang*s, as already described. This is the easiest method of procuring gold, provided it can be employed. They have, however, a third method; but it can be used only in mines newly discovered. They go into the river with a basket on their back, and a piece of iron resembling a thick chisel, which has a wooden handle, and search the fissures and crevices of the rocks, where they sometimes find lumps

of gold equal in weight to two or three rials. In other respects, the art of digging for gold is the same in all the mines and among all the people on this coast. The only difference is in regard to the depth of the pits. In many places it is scarcely necessary to go deeper than ten or twelve feet; but in others the pits must be carried to the depth of several fathoms, and the sides must be supported by means of boards and beams. The instruments used in these mines consist only of a piece of iron about a foot and a half long and two inches in thickness: it is pointed and sharp at the one extremity, and at the other is furnished with a socket, into which is stuck a wooden pole about six feet in length. Those who are able to procure it have also an iron hook, with a short wooden handle, which they employ for loosening and turning up the earth around stones. A mattock, with the above-mentioned *dulang*s, which each miner makes for himself, and a pair of gold scales, form all the rest of their apparatus.

When a gold mine is discovered, the workmen do not immediately begin to dig it, but first search the nearest river, in which they turn up the stones and drain off a part of the water. After they have turned up the sand to about the depth of a foot, they sometimes find large pieces of gold, which in all probability have been washed down by the streams from the mountains. It has been remarked that the rocks on the borders of rivers, and even the greater part of the stones which are taken up from pits where the ore is rich, have a blue, and sometimes yellow, colour, and are so soft that they may be used as paint. Where the gold is less rich, the stones are gray or white, and either of a hard texture, or soft like limestone. By these signs the produce in gold of any mine may be easily ascertained.

In all the gold mines, but particularly those which lie at a distance from the shore, it is exceedingly cold before sunrise and after sun-set. On this account the poor miners suffer a great deal. As they are obliged to sit in the water from morning till night, their bodies, when they cease from their labour, are almost rendered quite white by the saltpetre. When the mines are worked, the water of the river near which they are situated is muddy, and of a reddish-yellow

colour down to its mouth ; and those who are so imprudent as to drink of it are seized with a dangerous dysentery.

The labour of the miners is not always attended with the same success ; for it sometimes happens that they work a month and longer, during which they spend several dollars, without finding gold of the value of one. In that case they are obliged to dig in some other place, and to renew their labour. In newly discovered mines they are for the most part successful ; but in mines that have been worked for some time, they are often obliged to labour a whole month before they obtain any gold. The quantity and value of the gold which is found in any mine cannot be accurately ascertained. One workman, also, is often more fortunate than another. In newly discovered mines there are labourers who sometimes, in the course of fourteen days, find to the value of two hundred dollars ; whereas in other places the value of twenty dollars is scarcely found in the course of a year.

In the wide extended gold mines of the river Palella, which divides itself into several branches, there are places where gold is exceedingly abundant ; but in such places it is of less value, being scarcely eighteen carats fine. The best gold comes from the mines of Popajatu, Molispat, Ankahulu, Tolodinki, Lembuno, Sonffo and Tamperana ; also from the south and south-west side of Pogiana, Wongo, Tomollas Bevol, and Tontoly. The gold procured from all these mines is for the most part above twenty carats fine. Frederick Dühr, a servant of the Dutch East India company, who visited these mines a few years ago, is the only person who has given an authentic account of them. Those who travelled through these districts before him, never saw the gold mines, but only visited the habitations of the chief civil officers, which are at a considerable distance from the places where the gold is dug up ; and the chief men among the natives are too indolent to undertake journeys along those difficult and dangerous roads which conduct to the mines, and in which people are often in danger of breaking their necks.

Within the extent of the gold mines of Ankahulu there is a place called Longi, which produces a kind of gold that in
fineness

fineness exceeds even that of Popajatu and Ankahulu. This place, however, is little frequented, because the small river near which it is situated is not navigable, and the inhabitants are obliged to carry their provisions on their backs along a difficult and dangerous road. Besides, the miners often find in this place a great deal of copper, which, when they have no acid to put it to the test, often deceives them, as they at first take it to be gold. This is the only mine on the north or north-west side where copper is found. Near Bevoöl, on the south or south-west side, there is another where good copper is dug up in dust, which is as fine as the finest gold-dust. In the mines of Bombula, Batodulang, Ankahulu, and Palella, a great deal of rock-crystal is found, and likewise a kind of iron ore.

In almost all the mines which the before-mentioned Mr. Dühr visited, he observed, that the workmen, when they had dug to the depth of five, and in some places of twelve feet, came to a horizontal stratum of rock, which with their instruments they were not able to penetrate. They, however, frequently told him, that they firmly believed that they should find gold below these rocks, if they could break through them. He saw also at Ankahulu, where a stratum of such rock is found, at the depth of from twelve to fifteen feet, that there were fissures in it, two or three inches wide, which contained a blackish substance almost like rust of iron, mixed with a great many pieces of gold, and which the workmen, after they washed the rock perfectly clean, dug out to as great a depth as they could with their tools. In all the mines of Celebes, the gold, when separated from the sand, is of considerable fineness. At Pogiana and Palella alone gold ore is found here and there, mixed among other stones; but it is not rich, and the gold must be extracted by pounding the stone, which is not very hard.