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Source: *Proceedings of the Royal Geographical Society and Monthly Record of Geography*, New Monthly Series, Vol. 4, No. 4 (Apr., 1882), pp. 193-213

Published by: [Wiley](#) on behalf of [The Royal Geographical Society \(with the Institute of British Geographers\)](#)

Stable URL: <http://www.jstor.org/stable/1800041>

Accessed: 10/06/2014 17:00

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PROCEEDINGS
OF THE
ROYAL GEOGRAPHICAL SOCIETY
AND MONTHLY RECORD OF GEOGRAPHY.

A Three Months' Journey in the Makua and Lomwe Countries.

By H. E. O'NEILL, H.B.M. Consul, Mozambique.

(Read at the Evening Meeting, March 13th, 1882.)

Map, p. 256.

ON the 19th of August, 1881, I left the island of Mozambique in the small schooner attached to the Consulate, with twenty-seven natives engaged to act as carriers, for a journey westward into the Makua and Lomwe countries. My equipment consisted of two small tents and about 50*l.* worth of cloth, powder, and beads, with a few flint-lock guns intended as presents to chiefs. On the 21st I arrived at Kivolani, and on the 23rd landed my party on the inner shore of Mokambo Bay, encamping at Mdigwidi, a village about two miles from the coast. Here I was delayed four days, subject to the usual vexations incidental to a departure for the interior, when the country to be passed through is almost unknown. Within a week of leaving Mozambique I lost six men by desertion, their hearts failing them on the threshold of the journey. The places of these had to be filled, additional carriers engaged, packs rearranged, guides obtained, and many minor details settled.

At length I got away, on the afternoon of the 26th, and after three hours' march over a level and fairly populated country, encamped at Emwawalo, the hamlet of a petty chief of that name. A short march the next day brought me to Mlobwe, the village of the first chief of any importance on my route. I remained here two days waiting for my guide, Hambari, an Ajawa trader in the Makua country, who had refused to leave the coast with me on the 26th, that being the last day but one of the Ramazan month. On the 29th he joined us, and on the same day I proceeded to Nyiga, the centre of a district ruled over by a drunken young savage of that name, the worst specimen of a Makua chief I have met. He was drunk and bumptious when I met him, shouting in my ears the information that he was "Nyiga-mnu," or "the great Nyiga," who ruled over the whole country from this point to the

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shore ; and after asking if the English were not a people who refused to allow slavery, indulged in such silly antics as striking his spear into the nearest tree, in illustration of the manner in which he treated all who displeased him. The next morning I found his majesty very shaky and nervous, a state that was greatly aggravated by the sight of my pocket compass, the quivering needle of which he refused, after a momentary glance, to look at again. I took advantage of his condition to insist on proceeding on my way by the village of Bwebwe, which he had expressly forbidden me to do the day before. Taking a sheet of paper from my writing-case, I read aloud a list of stages from the coast into the Makua country, simply saying "njia imekwisha ku andikwa siwezi kuiwacha"—"the road is written, I cannot alter it." The fact that a road into the heart of Makuani was known and written was too much for him, and shortly after he beat a quick retreat, glaring at me as if at something uncanny, and promising a guide to Bwebwe, apparently only anxious that I should be gone.

On the 31st the village of Bwebwe was reached, after crossing the rivers Rendeni and Natovi, flowing north-east, both tributaries of the Mromonio, which empties itself into Mokambo Bay. The chief of Bwebwe, a man of fine stature, but quite blind, received me in his *baraza*, surrounded by stakes topped with human skulls, relics of the intertribal wars not unfrequent in this country.

From this point the first hills, called Namtitari, are seen, their peaks apparently of granite bearing north-west, with abrupt precipitous sides and bold shapes, but of no great altitude. This range is reached about the forty-eighth mile, by a very gentle ascent, and from this to the hundred and forty-second mile, the country assumes a character different from the level, well-wooded, populous, and fairly cultivated country of the coast. Granite slabs and boulders begin to appear about the path ; the hills which successively come into view increase in size and boldness of form ; bamboo cane takes the place of the vegetation of the lower country, and some brown rocky beds show the course of mountain torrents in the rainy season.

It would be tedious to enumerate each hill passed and river forded, as we trudged along for six days, preserving a steady W.N.W. direction, over the next 100 miles of our route between Bwebwe and the plain of Shalawe. The names were obtained and bearings taken of all the most conspicuous of the hills, and their approximate positions may be seen in the map that accompanies this paper.

Three of these hills, called Nipagani, Tugwi, and Nabalaka, especially attract the notice of the wayfarer, the path winding closely round the foot of their smooth inaccessible sides, which rise sheer to a height of 400 and 500 feet ; but the most important are the hills of Ndimwe, Kugue, and Erewe, to the north, and the peaks of Mukitu and Misudi to the south, which are of more than double that altitude.

Of the rivers crossed, the Njeka, Nipagani, and Kutugula flow south, and are tributaries of the Mji Mkwali; but all three are small, and in this, the dry season, little more than mere rivulets. Very different was the Ngambo, which twice cut up our path with its broad rocky bed, shallow and easily fordable now, but evidently in the rains a rushing mountain torrent, unnavigable and, I am told, quite impassable at the points crossed by us. Its banks, beautifully clothed with vegetation of the freshest green, clearly marked its course through a country parched and tinted yellow by the burning sun. I had heard from native traders much of this river, which discharges itself at Ufugu and Jasa, in the sandy promontory of Sancoul, and therefore was not surprised to find it so clearly marked even more than 100 miles from the coast.

At the one hundred and first mile a descent is made into a pretty little basin, between two and three miles in diameter, completely surrounded by hills, called Kutugula, fertile and inhabited, out of which flows to the southward the river of the same name.

The severe sickness from fever of one of my headmen, who had to be carried the last 25 miles of this stage, compelled me to rest on the 6th and 7th, and it was not until the morning of the 9th of September, at the hundred and forty-second mile from the coast, that we gained our first view of Shalawe, and the magnificent hills visible from it. Chiga and Mubwi are the most marked of these, rising to a height of between 2000 and 3000 feet above the plain, which rolls away to the north-west, west, and south, to a distance varying from 20 to 40 miles, as the view is left open or cut off by the hills that rise up from and seem to surround it. A slight descent brought us within an hour to the town of Shalawe, consisting of a number of scattered groups of houses, and ruled over by a chief named Gavala.

We had now reached the outskirts of the country of the Lomwe or Upper Makua. For the past five days we had been crossing a belt of broken or sparsely populated country, which forms the geographical division, at this parallel, between these two sections of the Makua race, and although trade and contact with the coast natives have reduced the natural distinctions between the people of the plain of Shalawe and the Lower Makua, placing them, as it were, midway between the latter and the Lomwe, I do not think any other than this can be laid down as the line of demarcation between them.

At this point in my journey I had to contend with many obstacles, only with difficulty overcome. My guide, a thorough Ajawa, far superior in intelligence to the Makua, and with an extraordinary influence over their chiefs, possessed here a house and women, and was by no means to be forced forward on his way. My small stock of cloth, powder, and beads began to dwindle dangerously from the constant necessity of buying food for the party. In order to eke out what remained I gave the order for one of my tents to be cut up, so that the

canvas might be bartered for food. Five of my coast men, engaged for the whole journey, took advantage of the departure of a small caravan for the coast, to desert me here. And although, after eight days' delay, I insisted upon going forward, and in fact did push on one stage further to Nabitera, I was compelled, after five days' stay there, to return to Shalawe, to await the convalescence of my guide who now declared himself sick and unable to proceed.

I was delayed by these accidents three weeks at this point between the first and second greater stages of my journey, and I will profit by the break to make some remarks on the habits and customs of the Makua people, from information collected, not only during this period, but also upon five previous journeys near the coast, and a residence of nearly three years at Mozambique.

It will be seen from the map that I divide the Makua race, who occupy a tract of country, stated roughly, larger than England, into four great divisions, the Low Makua, the Lomwe or Upper Makua, the Maua, and the Medo.

Of the two latter nothing, as yet, is clearly known, but I do not think that in any very essential points they will be found to differ from the two first, when we learn more of them. A difference, chiefly dialectic, in the language spoken by them, such as the annexed table shows to exist between the Makua and the Lomwe, and some distinctive features in their tribal marks and characteristics, will, I have little doubt, be found to be the main points of difference. The succeeding remarks, however, only apply to the Low Makua and Lomwe through whose country I have passed.

The tattoo or distinctive tribal marks of the Makua vary considerably amongst the different divisions of the race. They are deepest and most marked in the Low Makua, whose forehead is generally broadly gashed with a crescent, having its points on each temple, and again at the corners of the mouth are deep upright gashes of nearly an inch in length. Groups of spots and short thick lines upon the arms, stomach, and back, complete this strange adornment. This crescent on the brow is wholly confined to the men, and the marks upon the women are lighter in character and less numerous. Amongst both sexes, however, the tattoo becomes scarcer and less marked as you penetrate westward, and many of the Lomwe are to be seen with faces almost free from it.

The young Makua dandy collects and ties his hair tightly to the thickness of a quarter of an inch in diameter, with fine string, made from the roots of a tree called *mlamba*, so stiffly that it stands out from the head like so many short rods, pivoting only at the base. The ends of these are then passed through a bunch of large red beads. Others shave broad furrows upon their heads which intersect each other at right angles and leave the hair in oblong patches upon the scalp.

The front teeth of the Makua are, as a rule, filed to a point, and the women bore the upper lip to insert a disc or cylinder, made from a large sea shell, which sometimes reaches the nose.

With regard to dress it is difficult to say much where so little is worn, and the fashion of wearing it so uniform and simple. Where cloth is obtainable, the men wear a strip brought up to a string round the loins, with flaps 10 or 12 inches in length, before and behind, and a single piece wound once round the body below the waist and reaching to the knees, constitutes the most complete dress of a woman. But as you get westward the skins of animals take the place of cloth, and both sexes arrange them in flaps such as I have described. Sometimes these are cut into curious shapes; the arm of a Maltese cross, the extremity downwards, being common for the hinder one.

Brass rings upon the arms and legs are the distinctive ornaments of a Makua chief and his wives, and are worn by no one else. But amongst the common people women may often be seen with a circle of beads upon the brow, and the younger ones with a heavy roll, generally pink and black, around the neck. One point of resemblance I notice between the Lomwe lady and her civilised sister. Both prefer the fashions and manufactures of other countries to the customs and products of their own. Thus when the choice of a Makua damsel lies between the skin of a gazelle and a bunch of beads, she invariably throws aside the former and displays herself adorned purely and simply with the latter.

In saluting his chief or any person to whom he wishes to show respect, the Makua stoops forward and stretching his arms to their full extent at an acute angle with the body, gives two, three, or more distinct claps with the hands, the number of claps signifying the proportion of respect to be shown. At Nyiga I was witness of a curious spectacle; the morning salutation of a Makua chief by his wives. About forty women, I counted over thirty, were on their knees in front of the verandah in which was seated the chief. Erect in this posture they were slowly and softly clapping their hands, taking time from one of the party. Whilst this went on, and it lasted several minutes, we were kept waiting on the outskirts of the enclosure, and not until the women had risen and left were we motioned to approach. The effect was not at all displeasing even to a stranger. Though the attitude was a little servile, there was nothing like fear evident in the faces of the performers, and as a salutation it was respectful, even natural with such surroundings, and not unmusical.

The Makua chief lives only amongst his women; and the enclosure which contains his and their huts none but a privileged few dare approach. His *baraza* for official interviews is always outside this. They cook his food, make his "pombe" (a native liquor brewed from Indian corn), which he drinks from a calabash held by the hands of one of his favourites, and are his constant attendants, administering to all

his wants and pleasures. When making a call upon a stranger, he is often attended by several, and I have even seen the office of sword-bearer discharged by one of them.

Many keep a great number of women; Nyiga and Bwebwe had about 100 each, Gavala and Namürola over 200; and the enclosures, crowded with their huts, would readily have held that number. If one of my guides wished to give me a great notion of the importance of a chief, he generally said, "He does not know in what hut he sleeps." Perhaps it is with a view of keeping some record of his whereabouts that the huts of his women are divided into blocks, in each of which live some thirty or forty, four or five in each hut. At periodical intervals he departs from one to the other, and this change is celebrated by a great *ngoma*, or beating of drums, amongst those of the batch to which he is the incomer. The separation between these divisions is not apparent to the eye of a stranger, but I have everywhere been assured that it exists. Nor does his departure from one to the other imply an actual change of residence, as his own hut is always distinct from those of his wives, but only denotes a change in the direction of his marital visits.

The Makua is passionately fond of public speaking, and around the camp fire, when the coast native would sing and dance, the Makua rises to address his companions in a speech. The chief peculiarity of this habit lies in his invariably being accompanied by a second or assistant, who rises with him, and after first calling attention, in high falsetto tone, with a "high-ho-ah-heh," continues this, with variations, through every pause in the speaker's address. The object seems to be partly to avoid any gaps or "awkward pauses" in the speech, and it appears partly to be prompted by a musical instinct. If the orator, in the excitement of debate, unduly raises his voice, his second at once modulates the accompaniment, as if in deprecation of the harshness of the orator's tones, or perhaps to strengthen by contrast the force of his delivery. If, as is not uncommon amongst European speakers, he thunders his peroration, the final accompaniment is lengthened in declining cadence, until it dies away in the faintest possible tones. The speaker and his second follow each other in quick succession, and the sentences are invariably short. The varied and singular tones of this accompaniment, resounding through the forest in the stillness of the night, at times more like the call of a strange, unknown bird, than that of a human being, have a strikingly weird effect.

The dances common amongst the people are neither graceful nor delicate in character, and it is impossible not to see that some of the motions are intentionally suggestive. I was once at Nabitera serenaded by some wives of the chief, who were sent by him to dance before my tent in my especial honour. The dancers, whose arms and legs were adorned with brass rings, wore the usual strip of calico tied round the stomach, reaching to the knees, and carried in one hand a zebra's tail.

The body was then inclined slightly forward, and the tail waved slowly from side to side. In this attitude the muscles of the upper half of the trunk were kept as lax as possible, evidently to display with greater effect a quick side to side motion that was given to the hips and buttocks, whilst the legs were kept a little apart, and the dancers waddled alternately backwards and forwards a few paces. One deep-toned drum was beaten with the hand by the oldest hag of the party, who with shrill voice and quickening beat incited the dancers to their utmost exertions, until they pretended to fall exhausted. Two smaller drums beaten with sticks, and a shrill, discordant chorus, in which all the women joined, added to the general din and excitement. This dance is not peculiar to the Makua. I have myself seen one very similar to it, at a wedding in the Wazaramu country abreast of Zanzibar.

It is difficult to discover with any exactness the ideas of a primitive people upon such subjects as the existence of a Supreme Being, life, death, and the future, for they are necessarily most dim and undefined. Some sort of shadowy belief the Makua seems to have in the presence of an all-powerful deity, and he has a word in his language, "Mlugu," to express that Being. Strange to say, that whilst acknowledging the existence of a God, he does not connect Him with any of the evils or blessings of this life, and he renders neither Him, nor any representative image, adoration or worship. In the existence of harmful spirits who roam amongst the living he has a fixed belief, and to their presence he seems to attribute all evils, such as sickness, drought, and even death itself. His helper is the "medicine man," or witch doctor; his remedies, some preparations of roots and bark, also food and clothing to be hung on the branches of trees, in the hope of appeasing the spirit whose anger has been roused. But these spirits are in his belief only evil and unnatural ones, and he has no conception of a spiritual existence in the human being, separate from the corporeal and undying. His idea of the future is rather that of the French Republican of the reign of Robespierre, that "death is an eternal sleep"; and his dead are, with the exception of the chiefs, buried in a reclining posture. I must confess that the practice of burying their chiefs seated seems rather to conflict with this statement of their idea of death; also the fact that in some cases, such as the decease of a powerful chief, the living are sometimes buried with the dead, as if to accompany them in some future state. I was told whilst at Shalawe that the predecessor of Gavala had five or six of his favourite women buried with him; that the chief was placed in his grave in the usual sitting posture; that the women, dressed in their finest clothes and heavily adorned with anklets and bracelets, were placed in the grave standing beside him, and that the earth was then thrown in, and they were buried alive.

The government of the country consists of a number of petty despotisms, and the word of each chief is law throughout the tract over

which he rules. The more powerful are assisted by a few headmen, who settle minor disputes, the parties having always right of appeal to the chief. The position of some of these chiefs is no sinecure, and I found the most powerful constantly engaged in settling complaints and punishing crime. These primitive law courts are all of similar construction. That at Shalawe was a large umbrella-shaped edifice, of bamboo thatched with grass, the interior adorned with leopard skins hung from the roof. On one side was a dais, with a low seat for the chief, and, conveniently placed outside, a forked stake was driven into the ground to which delinquents were bound.

But amongst the majority of Makua and Lomwe chiefs I saw no evidence of savagery or wilful cruelty, such as is not uncommon amongst African chiefs who rule over large tracts of country. Their great number and relative independence in Makuani exercises a wholesome restraint upon those whose dispositions, like Nyiga and Mudia, incline them to be arbitrary and unjust. If by despotic dealing one makes himself objectionable to his people, their remedy is simple: they desert him for one milder and more just.

Though separately and distinctly independent, there is a commonalty of interests along the lines of the trade routes, binding most of these petty chiefdoms, which I found to be most useful to me in penetrating the country. The coast traders in Makuani being comparatively few in number, parties from the interior are constantly passing to and from the coast, carrying indiarubber, ivory, rice, sometimes slaves, with which to trade on their own account. To secure for those parties safe-conduct and good treatment, it is clearly necessary that friendly relations be preserved between all the chiefs along the line of route. Thus, starting from the shore with guides obtained from two coast chiefs, who were instructed to say that I was "Mgeni zas," or "their stranger," I found myself armed with an escort stronger than a hundred Sniders, and this friendly escort was strengthened at Shalawe by the son of Gavala. Where legitimate trade has not penetrated, as, for instance, amongst the Lomwe west of the Malema, and even amongst such hill tribes as Nbadua, this peaceful commercial influence is absent, and the consequence is shown in the relations that exist between many of these hill chiefs and their neighbours.

To settle the guilt or innocence of an accused person, or, indeed, any doubtful point, the practice of giving *muavi* or the poisonous concoction of the bark of a tree, common to the natives of the Nyassa and Zambesi valley, is carried out. Where no person is concerned it is here given to a dog. At Shalawe I had to submit the settlement of a question, as to whether I should proceed by a certain road, to this form of decision. The dog was shut up overnight in the house of a "doctor," whose special duty it was to mix the poison, and ensure its being taken upon an empty stomach in the morning. Before the dose was prepared,

I assisted at a solemn consultation, which was attended by two *muavi* dispensers, two of my headmen, and presided over by the chief. The desired road was then named by the chief, and the head "doctor" enjoined to discover by means of his craft, whether it was clean and passable. As I was in the position of an interested party, I was not allowed to see the operation, but my two headmen attended to report proceedings. If the poison was vomited, the road was clear, or in the case of an accused the person was innocent. If the dog or person died, the road was blocked, or the accused guilty. In this particular case the dog died, and a slight change had therefore to be made in the route. Before performing the operation, the "doctor," a fat and flourishing looking personage, did not forget to hold out his hand for the fee, which consisted of a yard and a half of calico, "for the purchase," as he delicately put it, "of the dog."

Circumcision is often, but not invariably practised, and it appears to be a matter of choice.

At length, after nine days' absence, our messengers returned from Mâtuga, Mudia, Mazua, and Namùrola, with favourable answers to my request to pass, and without further delay we left Shalawe on the 3rd of October for the first of these chiefs. On the same evening we camped upon the left bank of the Uchinai, a small tributary of the Mkubure.

A long day's march on the 4th brought us at sunset to Mtina, a chief subject to Mâtuga, but wealthier and more powerful, from the accident of his living near the trade route, and claiming the lion's share of the tribute exacted from passing traders. One of the chief employments of the inhabitants of this place and of Mâtuga, is the smelting and working of iron, the ore of which is procured from the neighbouring hills of Chiga. I had several opportunities of inspecting one of these Makua smithies. The manner of working is very similar to that described by Livingstone as common to the Ajawa or Yao tribe. The charcoal furnace is blown to a white heat by four separate blowers worked by hand, consisting of skins of a small deer, into each of which is bound a retort made of clay, the mouth leading into the fire. The anvil is a slab of granite; the hammer a heavy cube of stone, slung with fibre-cord let into grooves at its sides. I saw hoes and knives, and axes of tomahawk shape, deftly worked by these people, and what will seem strange to the English manufacturer, I met with hoes being carried for sale to the shore from this district, a distance of over 150 miles. Labour is so cheap that they undersold those imported.*

Leaving Mtina I turned aside to the southward to visit the chief Mâtuga, who lives at the foot of Chiga hill; but without delaying

* Mr. O'Neill has sent some specimens of Makua workmanship in iron and other articles, which are now on view in the Map Room of the Society.—ED.

longer than an interchange of presents rendered necessary, pushed on in the afternoon and encamped at night on the left bank of the Mkubure river.

From this point we could see that Chiga was not a separate or detached hill, but the extremity of a range of considerable altitude, that stretched away as far as the eye could reach, in a south-westerly direction, the ridge of which forms the watershed of the Mluli and Mkubure river systems. The latter, which discharges itself at Mwendazi in Mwemba Bay, has its source in the numerous streams that drain the western slope of this range, and even at this point carries a considerable volume of water during the greater part of the year.

In the rivers that drain its eastern slope the Mluli has its origin, and this river is said to form, with the Liconya, that which is marked in our charts as the "Angoche or Angoxa" river. In support of this I may say here, that when at Angoche a short time since, I visited a district upon the banks of a river, flowing into the Angoche arm of the sea, called Mluli by the natives of that part of the coast. This I think is more than a coincidence, and may be accepted as fair proof of the truth of the native report, connecting Angoche river with the Mluli of Chiga.

Two days' march further westward, in which we slightly descended into another of those plains or terraces, which lie between these successive ranges, brought us to the villages of Mudia and Mazua, within half-an-hour's walk of each other. The former, a very unfavourable specimen of a Makua chief, had within the past year left Nachere in the plain of Shalawe, on account of the growing power of Gavala, whom he had reason to fear. A turbulent bully, he was again earning for himself here the worst reputation amongst traders and his brother chiefs. Only a few months back a native trader was robbed by him of all his goods, some of his men wounded, and he himself only rescued by the intervention of a neighbouring chief. For nearly two days I was kept wrangling with this savage, reducing the exorbitant demands made by him. Simply the fact that a more powerful chief than he, Namùrola, had expressed a wish to see me, prevented, I think, my being turned back at this point; and only the superstitious dread that attaches itself to the presence of the first white man, hindered the chief from violently enforcing his demands.

It is curious what trifles assist the first white traveller in such a country. I do not exaggerate when I say that my eye-glass added greatly to this feeling of fear. Whilst in the country I used it with discretion, for when I put it in my eye men averted their faces, and women, horror-stricken, turned and fled. "He does it to draw people from a distance to his feet," was the remark of a terrified Makua, as translated to me.

The chief Mudia was with difficulty persuaded to enter my tent,

and when there he was so disturbed at the sight of a book that lay open before him, that he refused to keep his seat unless it was removed. When this cloak of dread shall have dropped off, it may be more difficult for the traveller in the Lomwe country, unless well armed and equipped, for man to man they are a bold race and inclined to take by force what they cannot obtain by suasion.

A messenger from Namùrola inquiring into the cause of my delay, hastened my release, and on the 10th we resumed our march, arriving the same evening at the village of this chief, pleasantly situated in the valley of the river Kaule. We are now at, or very close to, the point furthest west reached during this journey. My stay here was prolonged to eight days, but I do not think the time was altogether lost, for I was enabled to gain by close inquiry from those who had a personal knowledge of the districts, a good deal of information respecting the rivers to the southward of this, and to lay down, I trust pretty accurately, the road to be taken to the Nyassa.

The river Mulugu, which takes its source in the hills of the same name, about thirty miles to the southward of this, joins with the Mlela to form the Maravoni or Quizungu rivers. I found opinions divided between these two, and it is not surprising that there should be some uncertainty, so far from the mouths of two rivers which empty themselves very close to each other. There was no hesitation, however, with respect to the Likungu, of which the Lomakura is said to be the main branch, uniting with the Likugu, as it is here called, to form the Likungu of the coast.

The road to the Nyassa from this point is said to occupy only six or seven days, and very possibly it may be performed in that time by the natives. I prefer, however, to call it nine or ten by the following route, which appears to be the most direct, and provides convenient stages for the purchase of food, &c.

From Namùrola to Mohemela is between two and three days' journey; two more days brings you to Mwedederi, the last of the Lomwe; thence to Mnaremba, a chief in the Ajawa country, occupies two days, and the lake is about three days' distance west of that. There is, however, no regularly frequented, caravan traversed road from this district to the Nyassa. Parties of Ajawa are frequently to be met with in this country, and parties of Makua also cross over into the Ajawa country to procure the salt that is found there. But coast traders to the Nyassa do not now take this route, preferring that which passes through Mwalia in the Medo country. This only confirms the information given us by our Nyassa missionaries, respecting the caravan road to the Mozambique coast. I am told that formerly the road I have sketched out was constantly traversed by traders. Its disuse now appears to be owing to the ravages of the Maviti, who reside in its neighbourhood, and who four years ago descended eastward carrying

desolation as far even as Nachere, in the plain of Shalawe, until a combination of Makua chiefs drove them back to their hill fastnesses. At many points on the march west of Shalawe, chiefly from Namùrola to Nbadua, I was shown spots which had been occupied by them during this raid into Makuani.

Whilst at Namùrola I also ascended a hill 500 or 600 feet high, and had a fair view of the mountain range which rises up west of the valley of the Malema, culminating in the Inagu Hills and Namuli Peak, and forming, if native accounts be correct, the watershed of the rivers of the Mozambique coast, and those that on its western side help to feed the Lake Kilwa and its outlet, the Lujende, or Liendi.* I wish, however, distinctly to say, that although the position of Namuli Peak was pointed out to me, I could not clearly distinguish it. A magnificent range of hills was visible, running apparently north-east and south-west, but the summits of its peaks and many of the hills themselves, were totally lost in the mass of cloud and mist, which the southerly winds had been drifting up during the past week, and which were, even now, descending as the first of the rains. I have concluded that this peak is snow-clad from the repeated accounts I have received, not only from coast men who have traded in the Malema valley, but also from chiefs and others who live comparatively near the spot. The usual description of it is, "Its top is always white," and "Mnwisho zake huwezi kuma," or, "Its summit is invisible."

It was with a feeling of bitter disappointment that I saw myself compelled to turn, when almost at its very foot. But a quarrel of some months' standing between Namùrola and Mohemela, in which people had been killed and ivory seized on both sides, had broken the direct westerly road, and my messengers to Mriba, a chief living in a south-westerly direction, returned with very unsatisfactory answers. My supplies were also running miserably short. Under these circumstances, I had no alternative but to consider the best way to return to the coast.

The road by which I came I determined to avoid, and hearing that at times parties left Namùrola and the Mohemela district for Kissanga and the Lurio, viâ Mwalia, I resolved to push northwards and try and reach the coast by one of these routes. This resolution cost me the loss of the Ajawa who had been my guide from the coast, a loss for which I cannot say I felt the smallest regret, as he had been a constant source of trouble and vexation to me.

Seven guides and carriers were very kindly provided me by Namùrola,

* The information that I have before given of the origin of the Lujende in the Lake Kilwa, is, I notice, indirectly borne out by that obtained by the Rev. Chauncy Maples, at its junction with the Rovuma, who states that natives report it "to flow out of a lake which would be reached by following the stream for twenty days beyond Mtarika's."

[According to a recent communication from the Rev. W. P. Johnson, of the Universities' Mission, who traced the Lujende upwards into a lake, Lake Kilwa is probably identical with the Lake Shirwa of Livingstone and Kirk. *Vide* 'Proceedings' R. G. S., 1882, p. 47.—Ed.]

and with them I started on the 18th for Nbadua, a hill chief, four days' journey to the northward.

A short march in a north-north-westerly direction brought us to Nagulue, which was actually the point reached furthest westward. The next day we rounded the Matari Hills, on the west of which the Nalawa, an affluent of the Bwibwi, takes its source, and fairly entered the hilly district marked on the accompanying map. We were, on this stage, skirting an enemy's country, and our road passed a point where a couple of months back a party of Namürola's men had been waylaid by those of Mohemela, several killed, and the remainder captured and sold into slavery. Our guides therefore kept a sharp look-out, and at night when camping on the Mgwasi, a stockade was skilfully thrown across a neck of ground jutting into the river, consisting of bamboo cane backed up by branch and bush, which gave us perfect protection against man or beast. The latter, I think, was the only real danger, as these hills abound in large game, and at night we heard the roaring of the lion and the cry of the leopard not far from our encampment.

The third day's journey on this stage led through a very fine gorge in the hills, with Ribawe as its eastern extremity. Two cone-shaped hills, shooting up independently at its entrance, as if as its portals, form a peculiar and distinctive feature of this pass. Passing round the southernmost of these, we turned our faces to the northward, and entered the valley of the Bwibwi, camping on the right bank of the river, a few hours' march from Nbadua. The next morning we arrived in a couple of hours at the village of the chief.

Here I remained four days, and I think I may say it was the only place I felt sorry to leave. To an eye surfeited with the flats of the coast, the Bwibwi valley at Nbadua seemed one of the pleasant spots of the earth in which to dwell. On one side the river ran, clear and sparkling as a Westmoreland trout stream, the Mtobe Hills rising abruptly at this point to form an almost overhanging bank; whilst from the opposite bank the valley, fresh and fertile, sloped up gently to the foot of the Erigoli Hills, which flanked it to the eastward. At one extremity and about 10 miles distant, the bold outlines and sharply cut faces of Ribawe shut out the view, and to the N.N.E. was a curious double-peaked hill called Elutu. It seemed a spot by nature intended for the peaceful and industrious amongst men.

But I found myself here in the hands of the Ishmaelites, whose hands were against all, and the hands of all against them. The chief Nbadua, a fine old veteran, deeply scarred on the scalp and different parts of the body, and pruned with an axe or sword cut of three fingers of the left hand, still retained warm his fighting spirit. In the constant indulgence of this he had succeeded in blocking or rendering dangerous almost all the roads from his district. That to Kissanga and the Lurio district was unsafe through the enmity of Mbebe, the most powerful chief on

the road; an enmity which, as he laughingly confessed, had been roused in the first instance by his entrapping a party of Mbebe's men passing through his district. The Mwendazi or Mkubure road had been made impassable for his people by his capture of a son of the chief Rainya, who lives close to that river. And the only alternative to returning to Shalawe that he was able to offer me was, that his people could guide me until within sight of Mwima Hill, at the foot of which resided the chief Nabawa. Beyond this they durst not go, for with this chief also he had quarrelled. Without being actually at open warfare with any of these chiefs, he was upon what I must call man-trapping terms with all. Everything, my instructions first, considered, I thought it best to strike again south-eastward, and trust to Gavala to guide me to the coast by a road different from that by which I had come.

Accordingly, on the 25th of October, I again turned to the south-east, and journeyed the first day through the hills that bound Shalawe Plain to the northward, by a pass which winds close round the foot of Keha Hill. I have, therefore, called it the Keha Pass. In no part of the world have I felt the heat so intense as in passing through these hills, entirely bereft at this season of vegetation, in which the path leads over slabs of rock intensely heated by the rays of a perpendicular sun, the effect of which was greatly increased by the glare from the bare and abrupt faces of the hills on both sides. A very exhausting tramp of 20 miles opened out the plain of Shalawe, and at night I pitched my tent upon a small tributary of the Mkubure river, having crossed this day the water-parting of the Mkubure and Bwibwi rivers. We struck our old road at the foot of Pooso Hill, and took up our quarters again at Shalawe on the 28th, the last 10 miles of the stage being over ground we had already traversed.

That bit, however, I am glad to be able to say, was the only piece of ground we twice passed over. Without much difficulty I succeeded in obtaining guides for Karoa, a village about 60 miles E.N.E. of Shalawe, and almost equidistant from Mwemba and Mozambique Bays. On the second day of this stage, the river Mikati, which is said to connect with Calombo creek or Ampapa in Mozambique Bay, was crossed, and on the following day two of its affluents, called the Maririmwe and Kati. Next day we sighted some fine hills to the eastward, the last range between us and the coast. The most conspicuous of these were Eradi, Mwaja, and Nipoogo, all between 2000 and 3000 feet in height. In this stage we again crossed the belt I have spoken of as dividing the Low from the Upper Makua, and on the 3rd of November arrived at Karoa.

It is a noticeable fact that only amongst the Low Makua is to be seen the public exhibition of human skulls. This parade of killing is entirely absent amongst the Lomwe. From the day I left Bwebwe to the day I arrived at Karoa, I had not seen the house of a single chief adorned in this manner. Here again they met my eye, though only in small

numbers. In Makuani the usual rule that the highland races are the most savage seems to be reversed.

From Karoa I travelled for four days in an east-south-easterly direction to Mshilibo, crossing the dry bed of the Nikutushe, an affluent of the Mkubure. Upon this and the last stage we experienced great discomfort from the absence of water, and on several occasions travelled over 30 miles without meeting a drop.

Mshilibo was left on the 10th of November, and upon the following day the dry beds of the Tereni and Mariri, both tributaries of the Mkubure, were crossed. On the evening of the 11th, we camped upon the ridge which parts the Mkubure system from the rivers of the coast, and at midnight commenced a long and gradual descent to the shore. It was here that I witnessed a scene grand and picturesque in the extreme—a forest fire by night. The embers of the neglected fire of some encampment had been carried by the breeze amongst the surrounding grasses and thick undergrowth, now dry and withered by the burning sun. This once alight had rapidly spread, and crossing our path, was extending its ravages on our right. Looking southward, the stems and branches of every forest tree and thick twining creeper could be seen with perfect distinctness, lit up by a fire which ran in an unbroken line for more than a mile at their base. Many of these were clothed with fire, and taking motion from the leaping, quivering flame, seemed literally to dance against the lurid sky. Added to this, the ceaseless crackling of burning grasses and the crash of falling branch and heavier timber raised a din which was quite in conformity with the tragic grandeur of the picture.

The after effects of such a fire are almost as striking, but in a reverse way. A stillness as of complete death falls upon the scene, and the very breeze is unable to raise a murmur amongst the few charred and unyielding stems that alone are left standing. Animal life of every shape and form, unable to find sustenance from the barren ground, has fled. Of all the countless forms of vegetable life, from which a tropical forest derives its chief wealth and beauty, nothing remains but leafless branch, lifeless stem, and blackened ash-strewn ground. Through this our path of sand gleamed like a snow-white thread, and quickly and in silence we passed over it, glad to escape from a scene of apparent annihilation, upon which our presence seemed only to intrude.

At sunrise the Nihegehe, which flows into Fernando Veloso Bay, was crossed, and later on, on the same day, the Mukato, which, joining first the Sinyudi, discharges itself in Conducia Bay. During these last two days I made a hard push to try and catch the homeward mail, and walked 63 miles, not a bad "finish," I think, when the heat of a Mozambique November sun is considered.

At noon of Sunday the 13th we sighted the palms of Moosuril, a

joyful sight to my Mozambique boys, who had been absent from the sea for three months, and most of whom had never before lost sight of it for as many days. To my great pleasure I met at Moosuril His Excellency the Governor-General Visconde de Paço e d'Arcos, by whom I was most kindly received, given food and drink, in both of which I was greatly in need, and provided with a boat, without further trouble or delay, for conveyance to Mozambique.

I may be expected to say something of the prospects of trade in Makuani. There can be no doubt there is here a populous country comparatively untouched by the trader. To illustrate this I need only say that I met many parties of Makua proceeding to the coast from districts as far inland as Mohemela, a distance of over 250 miles, each man carrying a small bag, containing generally rice and sometimes a little indiarubber, with which to purchase a few yards of calico and perhaps a coloured cloth for his favourite wife, these articles being unobtainable in his country. Imagine a Highlander crossing the border and walking to London annually to purchase his winter's kilt, and you have an example of scarcity similar to this. Those Arabs and coast natives that do the work of traders usually deal directly with the chiefs, and the mass can only obtain their supplies in this manner. The profits made by these traders must be considerable, as I found calico realising at Namùrola twenty times its value in indiarubber at the Mozambique quoted price.

On the other hand the products of the country, in its present unworked state, are few. Ivory, the most valuable of all, is by no means abundant, and year by year is getting rarer, and I am told that which brings the greatest profit is yet the slave, the restrictions placed upon this trade on the coast having considerably enhanced his value.

Iron there appears to be in plenty, but I am unable to express an opinion upon the prospects of success that a working of it would offer.

The collection of indiarubber might no doubt be greatly extended, but I know nothing else that, worked by the natives, would repay the cost of transport with the present means of communication.

A decided obstacle to successful trading in the country will be found to be the number, independence, and rapacity of the Makua chiefs. All traders have to pay a proportion of their stock to the chief, according to the amount of trade they do in his district.

The European trader will find that he himself is an excisable article, subject to heavy duty. My guides always carefully explained that I was no trader, that I sought no profit in their country, and asked only permission to pass; but, nevertheless, a heavy *in transitu* duty was always demanded. The tribute payable by a white for the privilege of trading in the country would be much heavier.

This paper would be incomplete if I were to say nothing of the journey of the intrepid Portuguese traveller Silva Porto to this coast in

1853 and 1854. I have not seen the record of his journey, which I believe is only preserved to us in the writings of some Jesuit fathers, but in a map by Dr. Petermann I see Silva Porto's track is marked between two lakes situated upon a tributary of the Lurio, one of which is placed in the heart of Makuani. I made careful and constant inquiries with respect to these lakes, and was everywhere assured that no such existed in the Makua country, or upon any tributary of the Lurio. The only lake that I can hear of is that of Kilwa, in the Ajawa country, which, as I have before said, is reported to be the source of the Liendi. It seems not improbable that there has been some confusion between these lakes. This probability is strengthened by the native statement that the Lake Kilwa is situated in a district called Muongoje, which name I find upon the shore of the easternmost lake in Petermann's map. Also I could, at no place I visited, discover any tradition of the passing of a white man through the interior of the Makua country, and I nearly reached its western limits.

I have added to the map which accompanies this paper the native names of places visited by me upon the coast between Ibo and Angoche; and have put in some few additions to the existing charts, all of which are marked in red. The great advantage of the native names over those given by Europeans, is I think recognised now by all surveyors, and the practice of collecting them has been followed out by the later English surveyors upon this coast.

I also append a short table of Makua and Lomwe words in order to show the difference between them; a difference that appears part dialectic, part radical, the latter I suspect owing to an admixture of Ajawa words that have naturally come into use amongst the adjacent Lomwe. The spelling and rule for pronunciation is that laid down by Bishop Steere, and generally adopted in later works on East African languages of this family, in which the vowels are pronounced as in Italian, the consonants as in English. The accent is as a rule on the penultimate, but where it is not so, the particular syllable is accented.

SHORT TABLE OF MAKUA AND LOMWE WORDS.

English.				Makua.				Lomwe.
Water	..	..	..	Masi	..	..	..	Mahi
Fire	..	..	..	Moro	..	..	..	Moro
Rain	..	..	..	Ebula	..	..	..	Ebula
Wind	..	..	..	Epeo	..	..	..	Etako
Road	..	..	..	Epiro	..	..	..	Empito, Medalla
River	..	..	..	Muro	..	..	..	Olusi
Place	..	..	..	Mahala	..	..	..	Niburu
Well	..	..	..	Welhime	..	..	..	Ehime
Head	..	..	..	Muru	..	..	..	Muru
Arm	..	..	..	Mono	..	..	..	Muono
Foot	..	..	..	Medo	..	..	..	Medo
Lion	..	..	..	Karamu	..	..	..	Mwato

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English.			Makua.			Lomwe.
Leopard	..	..	Havara	..	..	Keregege
Goat	..	..	Eburi	..	..	Eburi
Fowl	..	..	Ekù	..	..	Ekù
Lake or swamp	..	..	Nrata	..	..	Antia
Hill	..	..	Mwago	..	..	Namwago
House	..	..	Emumba	..	..	Emba
“Baraza,” or place of public audience			Ebaru	..	..	Mtego
Stone	..	..	Malugu	..	..	Matagaliwe
Earth, clay	..	..	Mitaga	..	..	Mihava (black), Ekotokwa (red)
Food	..	..	Yolya	..	..	Mrogwe
Cold	..	..	Uriria	..	..	Nakutu
Cooking pot	..	..	Nkariku	..	..	Eduo
Gun	..	..	Kaputi	..	..	Mtapiko, Mbila
Spear	..	..	Nivaka	..	..	Mkuluba
Knife	..	..	Mwalo	..	..	Benyago
A male	..	..	Mlobwana	..	..	Mwaluku (before the age of puberty), Mtogweni (an adult male), Oluvala (an old man)
A female	..	..	Mtiana	..	..	Mtiana
Many	..	..	Njeni	..	..	Ncheni
Few	..	..	Vakani	..	..	Mwananchu
Good, pretty	..	..	Rera	..	..	Ohapa
Bad	..	..	Othakala	..	..	Owarara
To buy	..	..	Utuma	..	..	Utuma
To sell	..	..	Utumiha	..	..	Utumiha
To eat	..	..	Olya	..	..	Olya
I want	..	..	Ginātuma	..	..	Ginamkwela
I don't want	..	..	Hagintuna	..	..	Ginòkwela
He does not want	..	..	Gantuna	..	..	Kanòkwela
I see	..	..	Ginàona	..	..	Gibali
I am coming	..	..	Ginàroa	..	..	Ginakoka
He has gone	..	..	Oroa	..	..	Okoka

Previous to the reading of the foregoing paper—

The PRESIDENT informed the Meeting that it contained an account of a journey of three months' duration inland from Mozambique by Her Majesty's Consul at the latter place. They had not the advantage of the presence of Mr. O'Neill himself, as he was still at his post, and the paper would therefore be read by the Secretary, Mr. Douglas Freshfield. Mr. O'Neill had been an officer of the Navy, serving on board H.M.S. *London* off Zanzibar. Whilst there he profited by his opportunities to learn the *lingua-franca* of the East Coast, the common medium of intercourse in the country opposite Zanzibar and further south to Mozambique. Subsequently he left the Navy, and on the death of the late Consul of Mozambique, the well-known traveller Captain Elton, he was appointed to the vacant post. After his appointment he executed several journeys along the coast until he became well acquainted with it; and then he determined on the longer expedition which would be described in the paper. A remarkable fact in connection with the subject was that the vast territory of Mozambique for the last 200 years had been in the possession of the Portuguese, and yet so far as could be ascertained no Portuguese of unmixed blood had ever been more than 20 miles inland. Mr. O'Neill, however, had travelled 200 miles inland in the direction of Lake Nyassa. The whole of his journey in that

direction covered 500 miles. The country was practically unknown to Europeans, and this was the first account that had been given of it. Another interesting circumstance was that Mr. O'Neill performed his journey at the same time that Mr. Thomson was proceeding with his expedition up the Rovuma, and the Rev. Chauncy Maples was also travelling at that time over a district a little south of the Rovuma.

After the paper—

Mr. JOSEPH THOMSON said that having just returned from the region adjoining that which Mr. O'Neill had travelled through, he had listened with particular pleasure to his interesting narrative. He made Mr. O'Neill's acquaintance four years ago, when that gentleman was a lieutenant on board the *London*; and there could be but little doubt that the enthusiasm which he had since developed for African exploration was first kindled under the inspiration of Sir John Kirk, who was so successful in inoculating others with his own enthusiasm. It was a very interesting and suggestive fact that three Englishmen should have been travelling in the same country at the same time without any knowledge of each other's movements, and yet not infringing on each other's districts. Thus, Mr. O'Neill kept to the south of the Upper Makua country, the Rev. Chauncy Maples to the middle part, and he (Mr. Thomson) along the northern boundary up the river Rovuma and the Lujende. From the reports of those travellers, together with the accounts given by Bishop Steere and Von der Decken further north, it was very evident that the same natural features extended from the Rufigi to the Zambesi, viz. a slightly undulating and irregular country, at one time spreading out in a great plain, at another forming a narrow valley; while small ridges of hills and isolated picturesque peaks diversified the scenery. Geologically the country consisted of metamorphic schists, gneiss, and granite. The schists had been worn away and washed down, forming the plains in the valleys; while the bosses of hard, compact rock had remained as the ridges of hills and isolated peaks. Of course the most interesting part of Mr. O'Neill's journey was the neighbourhood of the mountain range in Makua, and the strange peak Namuli. That range evidently marked the commencement of the central plateau; and as to the peak Namuli, there could be little doubt that it was snow-clad, because Mr. Maples obtained his information about it from sources quite independent of Mr. O'Neill, and the reports of the two travellers were exactly identical. Considering its position, it must be over 16,000 feet high to be snow-clad. He had no doubt that it would prove to be volcanic; and if so, it would form another link in the chain from the Red Sea to the Cape, which had given rise to the volcanic deposits in Abyssinia, at Kilimanjaro, and the enormous series of tufas and lavas which he (Mr. Thomson) discovered round the north end of Nyassa. That line of volcanoes coincided with the line of weakness and dislocation along which the eastern side of the continent had been upheaved. The areas of depression, Nyassa and Tanganyika, were also approximately parallel to the line of dislocation. With regard to the customs of the Makua, there appeared to be considerable differences in the various sections of the tribes. Mr. O'Neill described the tribal mark as a crescent-formed gash on the forehead, with a gash on either side of the mouth. The peculiar mark of those with whom he (Mr. Thomson) came in contact was a horseshoe-shaped mark in relief over the bridge of the nose, and not at all in the form of a gash, while he had never observed the lateral gashes near the mouth. He was not sure that Mr. O'Neill had referred to the use of that peculiar ornament in the upper lip known as the *pelele*. Near the Lujende, the women wore such an ornament, causing the lips to stick out like a duck's bill straight from the mouth, and giving a most hideous aspect to the face. With regard to the belief of the Makua that death is an eternal sleep, if such was the case it was very evident that they differed from almost all the other tribes of

Eastern Africa, whose ideas of a future life were connected with material things, and could hardly be called spiritual. After death a person was supposed to feel pain, hunger, disease, just the same as before; he only took a new material existence, which differed from the present in that, like the wind, it could not be seen, though it was known to exist. They had not as yet grasped the idea of a pure spirit. With regard to their ideas of a God, they admitted that there was a Supreme Being; but they attached no special attributes to it, and did not trouble themselves about it. If anything, they considered that His influences were entirely evil. He had been much amused with the story of the eye-glass. It might appear very absurd to people who were not accustomed to savages, but those who had been amongst them and mixed with them knew that such things frequently had a very extraordinary influence upon them. He himself had found that by judiciously manipulating an artificial tooth he could produce astonishing results. He was looked upon as some sort of an astrologer directing the stars when he was seen to use the sextant; but the most powerful instrument was the photographic camera. He found it almost impossible to get them to stand still for their portraits. They would stand altogether for a time, but the moment he put the cloth over his head they fled, and all bribes and entreaties were in vain. When he attempted to explain the nature of the instrument to them, he found that he only made matters worse; for several of them, from his explanation, got the idea that he was going to take some essence of life out of them, so that he might afterwards be able to do what he pleased with them. By leaving a camera standing alone he had kept a whole village totally deserted for a day. The natives would not approach it at all. The Portuguese spirit of research, until perhaps the quite recent revival, showed a surprising decline. When they were imbued with a belief in the existence of enormous riches and great kingdoms inland, they were unceasing in their inquiries into the state of the interior, producing that very accurate idea of the geography of Inner Africa which was delineated in the maps of the fifteenth and sixteenth centuries. Since then, instead of advancing, they had retrograded, and now it had been reserved for an enterprising Englishman to call attention to the existence of this peculiar peak, Namuli.

The PRESIDENT in moving a vote of thanks to the author of the paper and to Mr. Thomson for his interesting address, said they owed the presence of the latter gentleman at the meeting that evening to his own short-sightedness in not foreseeing that his honest and truthful report about the prospects of coal up the river Rovuma would be unfavourably received by a semi-barbarous sovereign. Instead of prophesying smooth things about the prospects of expected wealth, Mr. Thomson informed the Sultan that that which was stated to be coal was nothing but a sort of bituminous shale of no value at all. Those who knew something about Eastern politics predicted that he would not long remain in favour with the Sultan of Zanzibar, and the result proved that they were correct. However, they had had the pleasure of listening to him, and it was not improbable that they would ere long hear of Mr. Thomson's being engaged in works of still wider research than those which he had already accomplished. It was very satisfactory to hear that a man of such enterprise and evident powers of observation as Mr. O'Neill was still occupied with the exploration of that unknown country. Part of the business of the Council of the Geographical Society that day was to vote a number of instruments for his use, in order to enable him to make more accurate observations in the future than he had been able to in the past. In doing so they not only assisted a very enterprising traveller, but also a very economical one; because Mr. O'Neill appeared to have this point of resemblance to Mr. Thomson, that he contrived to make very important investigations on very economical principles—a great contrast to some explorers. He was informed that Mr. O'Neill's journey of three months' duration, which had

just been described, cost only some 200*l.*; therefore a very considerable addition to our knowledge of the district might fairly be expected from him at the smallest possible outlay. It was satisfactory to them that this region, which had long been nominally possessed by a European race, had been opened up by an Englishman, and that three concurrent attempts to make known the district had been conducted by our countrymen, and by men who had never sullied the career of honourable enterprise by one harsh act or one deed of which their countrymen need be ashamed. The acts of such men as Mr. O'Neill, Mr. Maples, and Mr. Thomson were likely to add to the honour and credit which the English name enjoyed along the whole of that coast.

The New Russo-Persian Frontier east of the Caspian Sea.

AN important Parliamentary Paper (Central Asia, No. 1, 1882) has just been published, containing despatches from Sir Edward Thornton, Her Majesty's Ambassador at St. Petersburg, and Mr. Ronald P. Thomson, Her Majesty's Minister at Teheran, on the subjects of the Trans-Caspian railway and the Treaty defining the Russo-Persian boundary line which was signed at Teheran on December 21st, 1881. These documents contain matters of much geographical interest.

After the annexation to Russia of the Tekke Oasis, a precise delimitation of the frontier in Khorassan was considered to be necessary, and M. Ivan Zinovief, Russian Minister at Teheran, was directed last autumn to open negotiations with the Persian Government on the subject. The Russians having somewhat moderated their pretensions in the course of these negotiations, a Treaty, defining the Akhal-Khorassan boundary, was signed as stated above.

By the first article of the Treaty the frontier-line is fixed as follows:—"Beginning at the Hasan Kuli Gulf, the course of the river Atrek serves as the frontier as far as Chat. From Chat the frontier-line follows in a north-easterly direction the ridges of the Songou Dagh and Sagirim ranges, thence extending northward to the Chandir river, reaching the bed of that river at Chakan Kala. From Chakan Kala it runs in a northerly direction to the ridge of the mountains dividing the Chandir and Sumbar valleys, and extends along the ridge of these mountains in an easterly direction, descending to the bed of the Sumbar at the spot where the Ak-Agayan stream falls into it. From this point eastward the bed of the Sumbar marks the frontier as far as the ruins of Meshjed Dameneh. Thence the road to Durrun [?] forms the frontier-line as far as the ridge of the Kopet Dagh, along the ridge of which the frontier extends south-eastward, but before reaching the upper part of the Germab Pass, turns to the south among the mountain heights dividing the valley of the Sumbar from the source of the Germab. Thence taking a south-easterly direction across the summits of the Misino and Chubest mountains, it reaches the road from Germab to Rabat, passing at a distance of one verst to the north of the latter spot. From this point the frontier-line runs along the

37°

38°

H. Sharbau, R.G.S., del.

Published for the Proceedings of the Royal