NOTE XXXV.

ON THE "DIANA" AND THE "ROLOWAY"

ВY

Dr. F. A. JENTINK.

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Since more than a century the >Diana" has become such a well known Monkey that every child can show it you in every Zoological Garden. Therefore it may be called somewhat hazardously to move the supposition that although it seems to be so familiar an animal to children it has always been misunderstood by naturalists and scientific authors.

In our collection there are 9 specimens (among them 2 from the Gold-coast and 4 from Liberia) all labeled *Cercopithecus diana*. Some weeks ago Mr. Oscar Neumann, the excellent German Africa-traveller, told me that he had observed some differences between our Liberia- and Gold-coast-specimens, differences sufficiently striking to regard upon them as two distinct species. I now have studied the thing and believe to be able to explain the question exactly.

The Gold-coast-specimens have a long white beard and the inner side of thighs white or whitish; the Liberiaspecimens, however, present a short white beard and the inner side of thighs is bright red-bay. There are still more differences as I will show furtheron. Now the question rises, which of the two species is the true » Diana"?

In Gray's Catalogue of Monkeys, Lemurs and Fruit-eating Bats, 1870, p. 22, we see that he separated a specimen with back edge and inner side of thighs bright red-bay from the \rightarrow Diana" under the variety-name *ignita*; his example has been followed in 1893 (P. Z. S. L. p. 255) by Dr. Sclater: he proposed to designate this subspecies *Cercopithecus diana ignitus*, and the other *C. d. typicus*. The locality of *ignitus* is the Congo, from where the specimen, brought before the Zoological Society's meeting, had been received from Col. Wethered of Great Marlow. So plain as this is looking however the thing is not.

The Diana has been described by Linnaeus, in a paper entitled »Markattan Diana" and published in the Kongliga Svenska Vetenscaps Academiens Handlingar of the year 1754, p.p. 210-217, after a living specimen, of which a woodcut is represented on plate 6, showing a short bearded Monkey. The name »Diana" was given by Linnaeus from the fancied resemblance of the white on the forehead to the crescent worn by the Roman Goddess. In 1756 a German Professor, named Abraham Gotthelf Kässner, published a translation of the »Handlingar" entitled »Der Königl. Schwedischen Akademie der Wissenschaften Abhandlungen aus der Naturlehre, Haushaltungskunst und Mechanik". On p.p. 215 and 216 the animal has been described in the following terms: »die Haare am innern der Schenkel, vom Schwanze an bis an den Bug der Knie, sind von rother Rostfarbe, welches aussieht, als wäre das Thier blutig..... Die Fronte oder die Augenbraunen, gehen mit langen weissen, aufgerichteten, und zurücke gebogenen Haaren zusammen, völlig, wie die neumodischen Toupees, wodurch auf der Stirne ein weisser Mond vorgestellet wird, weil die Haare an der Spitze weiss sind. Wenn er aber auf der Stirne ein Toupee nach der neuen Mode hat, so hat er auch am Kinne einen Bart nach der alten Mode, Dieser Bart befindet sich an einer fetteren Spitze des Kinnes, ist schmahl, kurz, und am Ende abgestutzet, oder gleichsam queer abgeschnitten; er liegt

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auch mit seinen Haaren so gleich, als wäre es gekämmt. Aber darinnen hat der Bart etwas besonders, dass er an der Vorderseite schwarz, wie das Gesicht ist, aber an der untern Seite ist er länger und ganz weiss wie das Kinn"'). This description of the color of the thighs, of the white crescent on the forehead and of the beard and of the animal furtheron indeed, is so exactly a description of our Liberia-monkeys, that one could hardly produce a better one. In the 10th edition of his Systema naturae Linnaeus described the animal under the title Simia diana, so that we have to name it Cercopithecus diana (Linné). It appears therefore that the animals which have been called by Dr. Gray var. ignitus or ignitus-species by Sclater were true Cercopithecus diana-specimens, having bright red-bay inner side of thighs, a short white beard and a white crescent on the forehead, contrary to what always has been accepted, so that what has been called in all books C. diana²), viz. the Monkey with white inner side of thighs, a long white beard and a white band or diadem on the forehead, requires an other specific title. And there has been described and figured a species presenting all the named characteristics: this is the »Roloway" of Allamand.

In the »Histoire naturelle, générale et particulière avec

1) The text in the Handlingar, p. 212, runs as follows: "Håren på inra sidorna "af låren alt infrån svansen bårt til knävecken äro af en röd rost-färg, som "set ut liksom han här vore blodig..... Fronten eller ögenbrynerna gå til-"sammans med längre, hvita, uprätta och tilbaka bögda hår, aldeles som de "nymodige Tupeer, hvarigenom en hvit måne föreställes i pannan, emedan "desse håren äro hvita på spitsen; men om hon har efter nya modet Toupée "i pannan, så har hon ock på hakan skägg efser gamla modet. Detta skägget, "sitter på en mera fet haktipp, är smalt, kårt och studsat eller liksom tvärt "afklipt, på ändan, samt ligger jämnt med sina hår, som vore det kammat. "Men skägget är synnerligt deruti, at det på främre sidan är svart, såsom "ansigtet, men på undra sidan längre och helt hvitt, såsom hakan."

2) The "Diane, femelle" figured and described in 1824 by Geoffroy St. Hilaire and Cuvier was a Monkey quite different from "Diana" and "Roloway." *La Diane* of Audebert (Histoire naturelle des Singes et des Makis) was a true *C. roloway*.

la description du Cabinet du Roi. Par Mrs. de Buffon et Daubenton, Tome quinzième. Nouvelle édition. Amsterdam, 1771" Professor Allamand figured and described (p. 77) »la Palatine, ou le Roloway" after a living specimen. He relates as follows: »La Guenon, qui est représentée dans la »Planche XIII, n'a point encore été décrite. Elle est »actuellement vivante à Amsterdam, chez le Sr. Berg-»meyer¹)..... Cette Guenon lui a été envoyée des Côtes »de Guinée, sous le nom de Roloway, que j'ai cru devoir »lui conserver..... Les poils qui couvrent la poitrine, »le ventre, le contour des fesses et la partie intérieure des »bras et des cuisses sont blancs..... Un circle de poils »blanchâtres leur²) environne le sommet de la tête »Elles ont au menton une barbe blanche, longue de trois »ou quatre pouces".

The reason why he called the animal >la Palatine" is the following: »ces animaux vus à une certaine distance »paroissent avoir autour du cou une *Palatine*, semblable Ȉ celles que les dames portent en hiver; et même je »leur en ai d'abord donné le nom, qui se trouve encore »seul sur la Planche.... avant que je sçusse celui qu'elles »portent en Guinée".

1) Mr. Bergmeyer at that time was the owner of the celebrated Zoological Garden at Amsterdam, know under the name of *"Blaauwe Jan*". This clever director had brought together all rare animals which he could procure. So we find that Vosmaer saw in that garden a specimen of *Ateles paniscus*, the *Coita* of Buffon, described by Vosmaer under the name *Singe américain à longue queue* or *Quatto*. Bergmeyer had a living *Hyrax capensis*, which he presented to Mr. Vosmaer and the stuffed skin of which has been preserved in the Cabinet of the Prince d'Orange, like the above named specimen of *Ateles paniscus*, both at that time great rarities. As to the *"Roloway*" it is very likely that the original specimen after its death has passed in the collection of Mr. Joan Raye de Breukelerwaert: on the auction of that Museum in 1827 the Leyden Museum of Natural History procured the specimen at the price of 45 dutch guilders: it is $n^{\circ} \delta$ of my Catalogue systématique etc. 1892. So that it is probably that the latter specimen is the type-specimen described by Allamand.

2) Allamand tells that Mr. Bergmeyer some months later received a second specimen, "dont la partie interne des cuisses est entièrement jaune."

I think that there will be not in the least any doubt whether the Monkey here described in fact was a specimen exactly agreeing with our individuals from the Gold-coast as well as with all specimens called *Cercopithecus diana* in the other Musea. Allamand's »*Roloway*" has in 1772 been taken by Schreber as specific title, s. n. *Simia Roloway* (vide Schreber, Säugethiere, Tafel XXV), so that its correct name is *Cercopithecus roloway* (Schreber).

Besides the mentioned characteristics there are other ones which distinguish the *Roloway* from the *Diana*, as will be clearly shown in the following short description of both species.

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Cercopithecus roloway (Schreber).

Beard long (in adult specimens about 8 c.m.), white, a few short black hairs on the chin; a white diadem or band on the forehead above the eyes; ears untufted; a small white or yellowish white streak across the haunches; inside and back of thighs white to light orange; grizzled upperparts of body and of fore legs lighter than in the *Diana*.

Cercopithecus Diana (Linnaeus).

Beard short (in adult specimens about 2 c.m.), the foremost hairs black and shorter than the other white ones; a white or whitish crescent on the forehead above the eyes; ears with a white tuft from the inside of the upperpart of the conch; a broad white to reddish brown streak across the haunches; inside and back of thighs bright red-bay; the grizzled upperparts of body and of fore legs darker than in the *Roloway*.

Geographical distribution. Linnaeus said that the habitat of the Diana was Guinea; this statement he based upon Notes from the Leyden Museum, Vol. XX.

a phrase in Marcgrave's Historia naturalis¹), where the latter described a Monkey from Guinea, which Monkey was according to the view of Linnaeus a specimen agreeing with his *Diana*: the figure of that Monkey in Marcgrave's book, however, represents certainly not a Diana, as it is black throughout, with exception of the white beard, and moreover has a prehensile tail. This may be so or not, the fact remains that the locality of Linnaeus-type-specimen of Diana was unknown. Buffon's Roloway was from the coast of Guinea. Gray's diana var. ignita was from West-Africa, therefore of no value for our purpose²). Dr. Sclater (P. Z. S. L. 1893, p. 254) names among the habitat of C. diana, Niger (Fraser) and Delta of the Niger (Fraser): »I see (P. Z. S. L. 1841, p. 97) that Fraser »wrote to the Zoological Society, that at Bassa he saw » some skins of Cercopithecus diana, said to be common in » that district and that skins of that species were extremely »plentiful at Accra." Bassa however is in Liberia and Accra is on the Gold-Coast, both localities having nothing to do with the Niger. Dr. Sclater wrote to me d.d. Nov. 8, »I cannot at present find my authority for giving Niger »(Fraser) as locality for C. diana." In every case Fraser procured no specimens, he only saw them, so his statement has no scientific signification at all. I know no other

1) Georgi Marcgravi de Liebstad, Misnici germani, Historiae rerum naturalium brasiliae, libri octo. 1648, p. 227. Linnaeus wrote Margrave instead of Marcgrave and said, p. 213 of Handlingar: "Hans ord pag. 227 äro desse: hon kallas *Icongo Exquima*," a very nonsensical translation of Marcgrave's writing, for on p. 227 Marcgrave wrote: "in Congo vocatur *Exquima*." Both capital mistakes of Linnaeus have been verbatim transscribed by Professor Kästner without any remark, nay he added another incorrectness by citing p. 277 instead of p. 227.

2) In P. Z. S. L. 1832, p. 123, there have been described some animals exhibited on the meeting of the Zoological Society and obtained by Mr. Gould from Algoa Bay and at that very meeting also several specimens were exhibited of imperfect skins of *Cercopithecus Diana*, obtained from the same locality. For the *Diana* this locality is *very suspect* and it may be asked where all those specimens have been preserved after the exhibition in the mentioned meeting?

authorities! Indeed the harvest is extremely small! The only true localities to trust upon are those of the specimens in the Leyden Museum. Three of our 5 *C. diana*specimens are from Liberia collected by Mrs. Büttikofer and Sala at Banana, Bavia and Soforé-place, St. Paul's river, the other two have been living in the Rotterdam Zoological Garden, one is from Liberia, the other without exact locality; two of our 4 *C. roloway* are from the Gold-Coast, collected by Mr. Pel, meanwhile the locality of the other two is uncertain (Côte d'Or written on the stand). So that it at present is a matter of course that *Cercopithecus diana* (Linné) is living in Liberia and *Cercopithecus roloway* (Schreber) is to be found on the Gold-Coast, the latter probably too more southward.