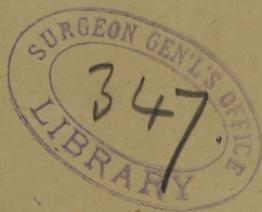


HARLAN. (RICH'D.)

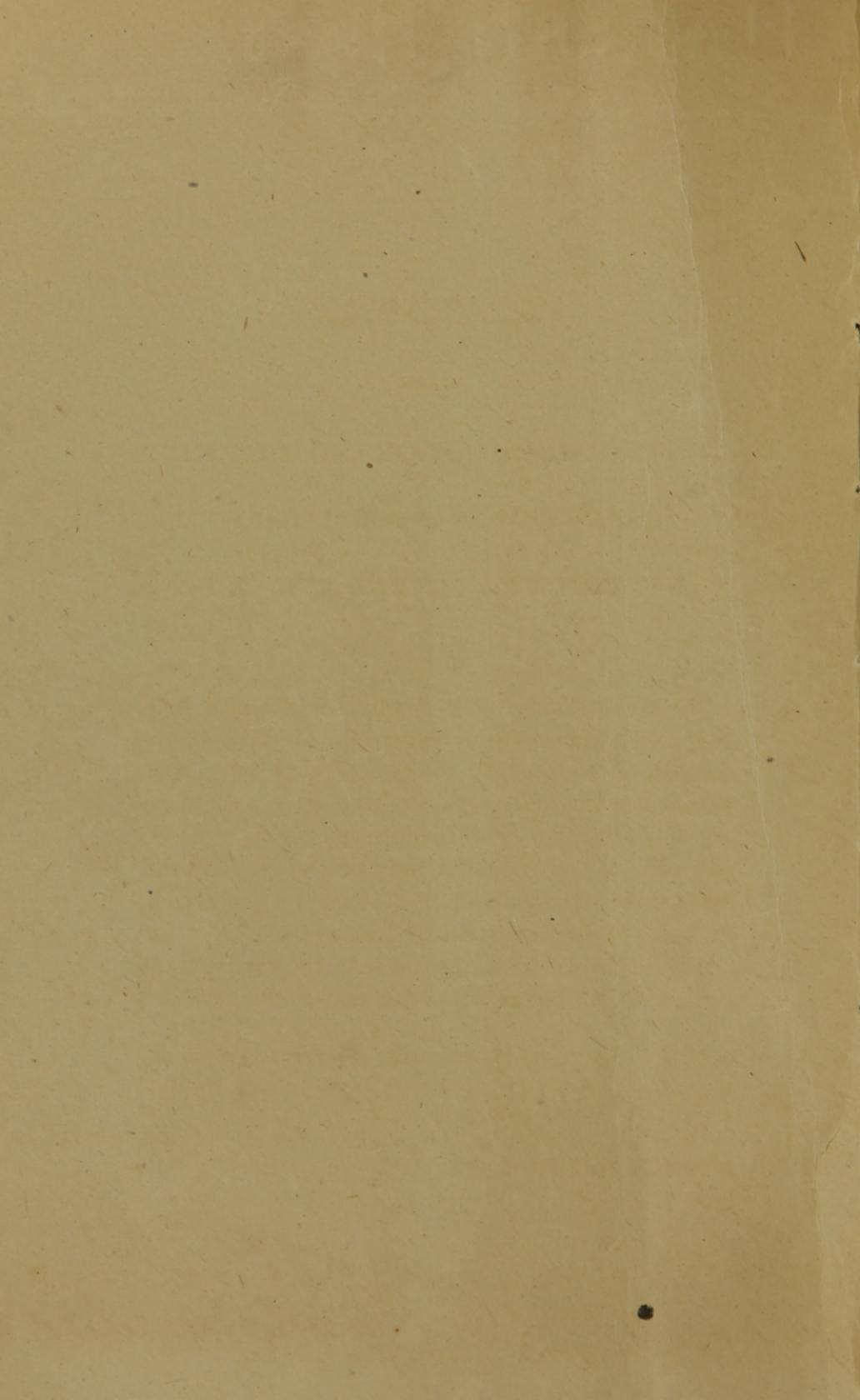
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Description of an  
Hermaphrodite Orang  
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# DESCRIPTION

OF AN

## HERMAPHRODITE ORANG OUTANG.

LATELY LIVING IN PHILADELPHIA.

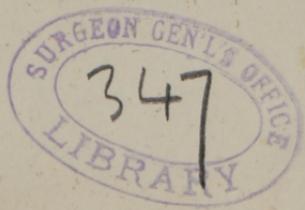
BY RICHARD HARLAN, M. D. &c.

### SIMIA.

S.—With black, thick, woolly, and frizzled hair, covering all parts of the body, with the exception of the palms, the face, and the ears. Skin black. Nails on all the fingers. Orbits of the eyes prominent. Arms very long. No cheek-pouches: no tail: no guttural sac: a rudiment only of callous buttocks. Nose more prominent, and facial angle more elevated, than in the *SIMIA satyrus* of Linnæus.\*

*Dimensions.*—Total length, from the vertex to the heel, 2 feet 2 inches: superior extremities, 1 foot 6

\* Corpore pilis nigris oblecto; facie, palmis, et auriculis nudis; cute nigro; palmis pentunguibus; brachiis longissimis; cauda, et sacculis buccarum et gutturis omnino carentibus; natibus leviter callosis; naso prominentiore, et angulo faciali plus elevato quam in *Simia Satyro* Linnæi.



inches : arms, 6 inches 6 tenths : fore-arm 9 inches 1 tenth : hand and fingers, 5 inches 5 tenths : lower extremities, 11 inches : thighs, 5 inches 4 tenths : legs, 6 inches 2 tenths : foot, 4 inches 6 tenths : body, 10 inches 5 tenths : head and neck, 11 inches 3 tenths : length of the bare-face, 3 inches : circumference of the thorax, 11 inches 3 tenths : circumference of the head, 10 inches.

*Observations.*—This interesting animal was imported into New York, from the island of Borneo, in the month of May, 1826 ; and at its death, was said to be rather less than two years of age. Each jaw contained twelve teeth ; three molars, one canine, and two incisors, on each side.

When standing erect, the fingers of the fore-hand nearly touched the ground ; advancing on a plane surface, he voluntarily assumed the erect attitude ; balancing himself with his long arms, on the slack rope, and climbing with the greatest agility : when he retired to sleep, assuming a recumbent posture ; displaying great fondness for fruits of all descriptions, but particularly for grapes ; possessing all the docility and intelligence characteristic of the oranges. He died of a diarrhœa, from excessive indulgence in fruits.

Distinctive characters of the species.

The Orang genus has already been increased from one to six species. The present specimen differs from all the others hitherto described ; it evidently pertains to the *Gibbon* family, or the Long-armed Orangs, the type of which is the *Simia lar* (Linn.) to

which are added, 1st, the Little Gibbon, or *Orang varié* of Cuvier. 2nd, the Siamang, or *S. syndactylus* of Raffles; and 3d, the Active Gibbon, or *Wou-wou* of Duvancel and F. Cuvier. From all these our specimen differs, in being of a universal black colour, in the facial line being less inclined, in the absence of the circle of gray hairs around the face, in the rudimentary state of the ischiatic callosities, and, with the exception of the Active Gibbon, in the absence of the guttural sacs.

Should I be right in supposing the above details to offer *specific* differences, the animal may be properly named *Simia concolor*.

*Habitat*.—Island of Borneo; climbing trees, feeding on fruit and insects. The present specimen, caught and devoured all the flies within his reach.

*Dissection*.—General adhesions of the peritoneum, omentum and intestines; glands of the mesentery very much enlarged; white eruptions, or rather ulcerated tubercles on the peritoneum, such as are observed occasionally in scrophulous subjects, and inflammation of the mucous coat of the stomach and intestinum rectum.

*Orangs* have been occasionally dissected, and minute and laboured descriptions of their anatomy are published. The present individual displayed remarkable peculiarities: the ligamentum rotundum very strong; liver resembling the human, having the same number of lobes, &c. Appendicula vermiformis very large; contents of the thorax displaying close analogy to the human; ventricles of Morgagni rather

large, though not communicating with a sac in the throat, as in the *Simia satyrus* and some monkeys; sternum composed of only two pieces, like that bone in man, in which it differs from the *Simiæ* with tails. Twenty-five rings to the trachea, fourteen ribs on each side, fourteen dorsal vertebræ, seven cervical, five lumbar, five sacral, and five coccygeal: but the most remarkable peculiarity remains to be noticed; the subject proved to be a complete *Hermaphrodite*.

Hermaphrodisism, that is to say, individuals uniting in themselves the means of reproduction, without the concurrence of other individuals of their own species, appears to be, in some sort, a vegetable attribute; as among plants, the class *Dioëcia* (Linn.) is the only one not hermaphrodite. The nearer the animal approaches the vegetable kingdom, the more frequent and complete are the instances of hermaphrodisism. This is of two distinct kinds: in the one, it is absolute, the animal possessing within itself the powers of reproduction, as is instanced in the Bivalve shells, as the Oyster, in some of the Multivalves, as the Chiton, and in Zoophites, Holothuria, &c.; whilst in Univalve shells, on the contrary, such as the Helix, Limnea, Planorbis, &c. although they unite the two sexes, yet the union of two individuals is necessary to fecundation. The common garden snail, is a familiar example: animals of this description are properly termed "Androgynous." The disposition, then, to hermaphrodisism, is more rare, as we advance in the scale of perfection, or rather to a more complex organization. Those cases said to have occurred in the

higher orders of animals, may, with few exceptions, be attributed to mal-conformation of the genital organs, and to a mixture of the two sexes; which, according to the observations of Sir E. Home,\* and Mr. John Hunter,† are of more frequent occurrence in the bull, than in any other of the mammifera: but in no instance have these authors found the assemblage of the organs of both sexes complete; some or other of the organs being absent, or existing in a rudimentary state.

The case which most nearly approaches in perfection the subject of the present description, is that detailed by Mascagni in the "Bulletin de la faculté de Medecine for 1811, p. 176," where he describes a bull with all the male organs, and with ovaries, uterus, and vagina; but in place of a vulva, the vagina had its orifice in the urethra. There is also another case, somewhat similar, described in the "Med. Repository, No. XLV," of a human individual in Lisbon, uniting both sexes in apparently great perfection. The subject was 21 years of age, was twice pregnant, and aborted at the third and fifth months. It is true, that though the penis and testicles existed, the latter, with their excretory ducts, were not examined anatomically. For a more detailed account of this individual, vide Dictionnaire des Sciences Medicales, art. "*Cas rares.*"

The above observations will at least demonstrate the possibility of the occurrence of complete hermaphrodites, even in the highest class of animals. The specimen which forms the subject of the present de-

\* Philosoph. Trans. 1799.

† Obs. on certain parts of the animal economy, Lond. 1792.

scription, will furnish us, perhaps, with the nearest approach to a complete union of the sexes in the same individual, which has been detailed; and is the only instance, as far as we have observed, of a circumstance of this kind occurring in the monkey race.

In the present instance, the penis was about one inch in length, subject to erections: terminating as usual in a glans, but imperforate; a deep groove on the inferior surface, serving as a rudimentary urethra: this groove extended about two-thirds of the length of the penis, the remaining portion being covered with a thin, cuticular, diaphanous membrane, which also closed the external orifice of the vagina, being extended across the vulva. The vagina rather large, and displaying transverse striæ; remains of the nymphæ, and labia externa, visible; the meatus urinaris opening beneath the pubis into the vagina, the urine must have been directed along the groove of the penis, by the membrane obstructing the orifice of the vagina: the os tinæ was surrounded by small globular glands, the orifice and cervix admitting a large probe into the cavity of the uterus, which organ appeared perfect, with all its appendages; the round and broad ligaments, together with well-pronounced ovaries, all in situ.\* The scrotum was divided, consisting of a sac on each side of the labia externa, at the base of the penis, covered with hair; the testicles

\* The male and female organs of generation, were in this animal, as completely perfected as could have been anticipated in so young an individual, and resembled those of other individuals of a similar age: minute ova were visible in the ovaries.

lay beneath the skin of the groin, about two inches from the symphysis pubis, obliquely outwards and upwards; they appeared to be perfectly formed, with the epididymis, &c. The most accurate examination could not discover vesiculæ seminales; but an opening into the vagina, above the meatus urinarius, appeared to be the orifice of the vas deferens. The testicles were unfortunately separated from the body, during the process of skinning. Admitting what in reality appeared to be the fact, that all the essential organs of both sexes were perfect in this individual, had the subject lived to adult age, most interesting results might have been elicited. Could not the animal have been impregnated by the male individual, by rupturing the membrane closing the vulva? or by masturbation, might not the animal have impregnated itself? by this means exciting the testicles to discharge their seminal liquor into its own vagina. The imperfection of the urethra, most probably, would have prevented the animal from ejecting the semen into the vagina of another individual. The subject, whilst living, always passed for a male. Had an instance of a like nature occurred in the human subject, it might have occasioned great difficulties, viewed in the light of a case of Legal Medicine.

Drs. Charles Pickering and S. G. Morton assisted at this dissection. The accurate drawings of the anatomical parts, in a recent state, of the natural size, by Dr. Morton, and the figure of the animal, by Dr. R. M. Bird, have largely contributed to the value of this paper.

## EXPLANATION OF THE PLATES.

Plate IX.—From a drawing of the animal, taken after death.

Plate X. fig. 1st.—External organs of generation.

- A. Orifice from the vagina and urethra.
- b. Membrane covering the vulva.
- c. Prepuce.
- d. Raphe of the perineum.
- e. Penis with a groove on its inferior surface.
- f. Ischiatic nudities.
- g. Anus.

Fig. 2nd.—Internal organs of generation, viewed from behind; the uterus turned up, with its ligamentum latum, to show the ovaries, &c.

- A. Bladder.
- b. b. Ovaries.
- c. Uterus.
- d. d. Fallopian tubes.
- e. Rectum.
- f. f. Broad ligaments.



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of the late [Name], [Title], [Institution], [Location], [Date].

The University of Chicago, Chicago, Illinois, after death  
of the late [Name], [Title], [Institution], [Location], [Date].



*SIMIA CONCOLOR.* Harlan.



Fig. 1.

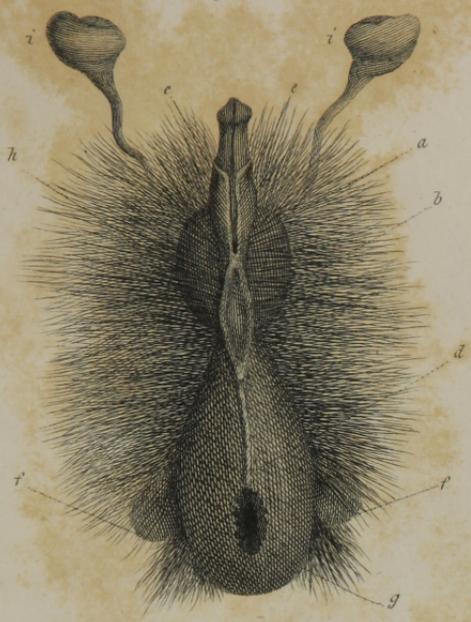


Fig. 2.

