

that the ass aids in giving, through the power of reversion, this character to its hybrid offspring.

The quagga is banded over the whole front part of its body like a zebra, but has no stripes on its legs, or mere traces of them. But in the famous hybrid bred by Lord Morton,<sup>35</sup> from a chestnut, nearly purely-bred, Arabian mare, by a male quagga, the stripes were "more strongly defined and darker than those on the legs of the quagga." The mare was subsequently put to a black Arabian horse, and bore two colts, both of which, as formerly stated, were plainly striped on the legs, and one of them likewise had stripes on the neck and body.

The *Equus indicus*<sup>36</sup> is characterised by a spinal stripe, without shoulder or leg stripes; but traces of these latter stripes may occasionally be seen even in the adult;<sup>37</sup> and Colonel S. Poole, who has had ample opportunities for observation, informs me that in the foal, when first born, the head and legs are often striped, but the shoulder-stripe is not so distinct as in the domestic ass; all these stripes, excepting that along the spine, soon disappear. Now a hybrid, raised at Knowsley<sup>38</sup> from a female of this species by a male domestic ass, had all four legs transversely and conspicuously striped, had three short stripes on each shoulder and had even some zebra-like stripes on its face! Dr. Gray informs me that he has seen a second hybrid of the same parentage similarly striped.

From these facts we see that the crossing of the several equine species tends in a marked manner to cause stripes to appear on various parts of the body, especially on the legs. As we do not know whether the parent-form of the genus was striped, the appearance of the stripes can only hypothetically be attributed to reversion. But most persons, after considering the many undoubted cases of variously coloured marks reappearing by reversion in my experiments on crossed pigeons and fowls, will come to the same conclusion with respect to the horse-genus; and if so, we must admit that the progenitor of the group was striped on the legs, shoulders, face, and probably over the whole body, like a zebra.

Lastly, Professor Jaeger has given<sup>39</sup> a good case with pigs. He

<sup>35</sup> 'Philosoph. Transact.,' 1821, p. 20.

<sup>36</sup> Sclater, in 'Proc. Zoolog. Soc.,' 1862, p. 163: this species is the Ghor-Khur of N.W. India, and has often been called the Hemionus of Pallas. See, also, Mr. Blyth's excellent paper in 'Journal of Asiatic Soc. of Bengal,' vol. xxviii., 1860, p. 229.

<sup>37</sup> Another species of wild ass, the true *E. hemionus* or *Kiang*, which ordinarily has no shoulder-stripes, is said occasionally to have them; and

these, as with the horse and ass, are sometimes double: see Mr. Blyth, in the paper just quoted, and in 'Indian Sporting Review,' 1856, p. 320: and Col. Hamilton Smith, in 'Nat. Library, Horses,' p. 318; and 'Dict. Class. d'Hist. Nat.,' tom. iii. p. 563.

<sup>38</sup> Figured in the 'Gleanings from the Knowsley Menageries,' by Dr. J. E. Gray.

<sup>39</sup> 'Darwin'sche Theorie und ihre Stellung zu Moral und Religion,' p. 85.