

by Professor Owen, in his great work upon Comparative Anatomy, in the heart of the Kangaroo and of the Wombat (p. 518, figs. 401 and 402, *a.a*).

Aorta.

In all the animals examined, the aorta describes a very perfect and uniform curve over the root of the left lung. It reaches the spine opposite the lower border of the fourth dorsal vertebra, and then turns backwards.

Except in the case of the *Thylacine* and *Phascogale*, the other animals differ considerably in the manner in which the great vessels arise from the summit of the aortic arch. They all agree, however, in so far that the left subclavian artery has a separate and independent origin from the aortic arch before it turns upwards and backwards to

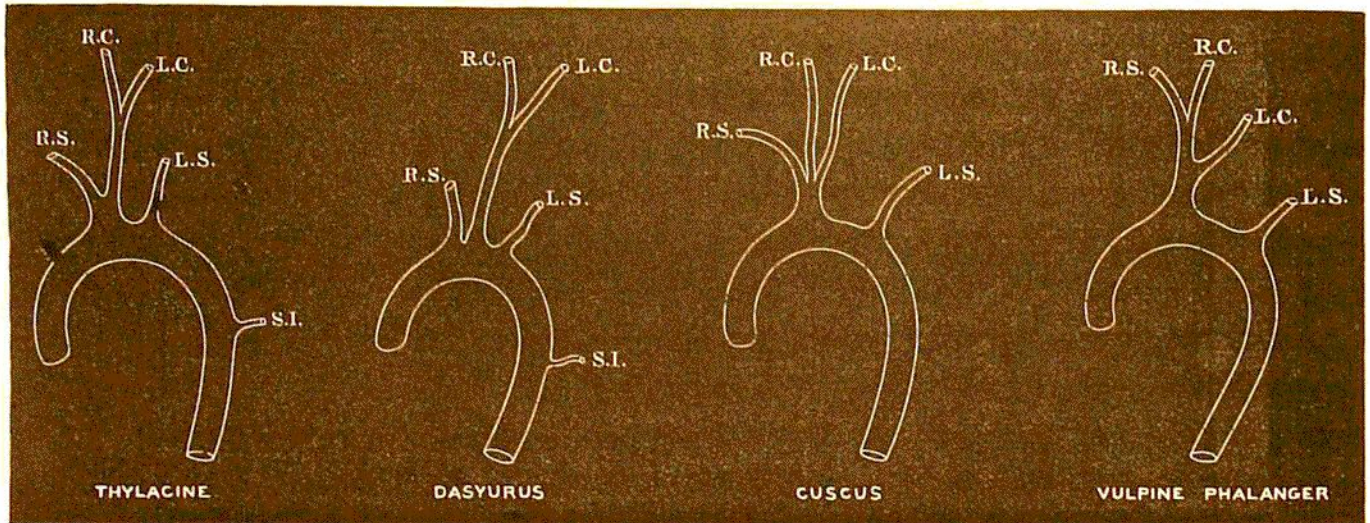


FIG. 4.—Aortic Arch in *Thylacine*, *Dasyurus*, *Cuscus*, and *Vulpine phalanger*.

R.S. Right subclavian.
R.C. Right common carotid.

S.I. Superior intercostal.

L.C. Left common carotid.
L.S. Left subclavian.

reach the spine. In *Thylacine* and *Phascogale*, the other vessels spring by a short wide trunk from the arch. This very soon gives off the right subclavian artery, and then, continuing forwards for some distance upon the trachea, it finally divides into the two common carotid arteries. In the *Dasyurus* the two subclavian arteries come off separately and between them a trunk takes origin, which, after passing forwards upon the trachea for nearly an inch, divides into the two carotids. In the *Dasyurus macrurus*, the great vessels of the aortic arch come off in the same manner as in the *Thylacine*.¹ In the *Cuscus* two vessels proceed from the summit of the aortic arch, viz., the left subclavian and a short wide trunk which very soon breaks up into the two common carotids and the right subclavian. In the *Vulpine phalanger* the same primary vessels

¹ Professor Owen, Notes of a Dissection of a Long-tailed *Dasyurus*, Proc. Zool. Soc., 1835, p. 7.