

HOW THE “LOVE” SYMBOL CAME TO BE

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It is commonly thought that the symbol that so popularly displays “Love” and appears on valentines is derived from the shape of the human heart, but this is not so. The image is derived not from the shape of the heart, but rather from the arrangements of vessels that are symmetrically formed in the early embryonic development of mammals, including humans.

The symmetrical pattern of vessels is shown on a 1988 Denmark stamp (Figure 1) that commemorates the 40th Anniversary of the World Health Organization (WHO). This pattern develops in all animals with backbones: fish through mammals.

This stamp illustrates the distribution of the blood vessels in the human **embryo** that leave the heart to supply the rest of the body with food and oxygen.

Although the heart is not included in this image, it would be positioned where the letters WHO are found. The red and blue lines together represent the arrangement of vessels that provide blood to the body as viewed from below and make up the popular valentine shape that represents the “LOVE” symbol.



Fig. 1. Embryo Vessels
Denmark, 1988, Sc#852

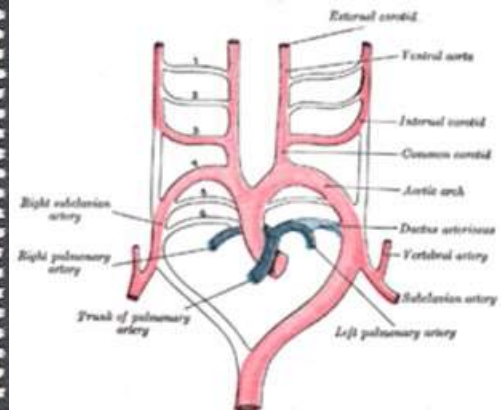


Fig. 2. Adult Blood Vessel Pattern

In mammals, parts of some vessels—those colored blue on the stamp—are lost as development continues to the adult condition. The large red arch on the right side of this view becomes what we call the aortic artery, the main vessel carrying blood to the lower part of the body.

The part of the corresponding arch on the left on the stamp, colored blue, is lost in adults. Compare with Figure 2, the arrangement of vessels in the **adult** human. The uncolored lines in Figure 2 represent parts of the vessels that are lost in the adult condition during subsequent development in humans.

The “heart shape” that is so popular in many cultures around the world is not the shape of the heart at all, but is the form of two major blood vessels that loop around the actual pumping heart in embryos, although in humans and other mammals one of the paired vessels is eventually lost as development proceeds.



Love Stamp
USA, 1992, Sc#2618



Love Stamp
USA, 1990, Sc#2441



Love Stamp
USA, 2014, Sc#4847