Reception of Harvey’s theory of blood circulation

John Aubrey in "Brief lives, chiefly of contemporaries, set down by John Aubrey, between the years 1669 & 1696 related:

I have heard him say, that after his book of the circulation of the Blood came out, that he fell mightily in his practice, and that ‘twas believed by the vulgar that he was crack brained; and all the physicians were against his opinion, and envied him; many wrote against him. With much ado at last, in about 20 or 30 years time, it was received in all the universities in the world . . . he is the only man perhaps that ever lived to see his own doctrine established in his own lifetime. [quoted in Andrew Gregory, 2001, Harvey’s Heart: The Discovery of Blood Circulation, Cambridge: Icon Books, pp. 113-14.]

The first positive reception was from Robert Fludd, 1629, Medicina Catholica, in which he accepted the motion for its ties to his alchemical interpretation of the transformation of venous and arterial blood – that is, he appreciated the argument for one system, not two kinds/systems of blood. He also accepted the macrocosm/microcosm circularity as a strong argument.

First attack came in 1630 from James Primerose, in Exercitationes, et animadversiones in librum, De motu cordis, et circulatione sanguinis. It was a standard Galenic response in theory, but also was notable in that he recognized the power of the quantitative experiments and so attacked them with his own. He claimed in re-measuring the amount of blood flow that Harvey had vastly over-estimated the quantity. Primerose’s quantity was small enough to believe that the two Galenic blood systems indeed could be produced.

From the Thoemmes Continuum History of Ideas:

The immediate impact of Harvey’s discovery was as great and as controversial in its time as Charles Darwin’s theory of evolution was to be in the nineteenth century. Among the reactions from physicians and natural philosophers across Europe was the familiar response of academics to novelties of which they disapprove – viz. that the claim was not true, and anyway, it was already known – and this led some to assert, quite falsely, that Hippocrates and other ancient and early modern physicians had already discovered the circulation. . . .

The horror of other physicians at Harvey’s discovery is understandable. If Harvey was right – if the blood was in only one system and it was pushed around the body constantly by the action of the heart, from the arteries to the veins – then the whole of medicine was threatened. In particular, all the detailed logic of bleeding as a cure (where you bleed, how much, how frequently, whether away from or towards a diseased part), a logic built up over many centuries, was rendered useless. This was the basis of the objections of James Primrose, an English doctor who wrote against Harvey in 1630. In France, Pierre Gassendi objected to Harvey’s denial of the pores in the septum. Some objectors could also offer experimental evidence which seemed to point against the existence of the
circulation, or alternative explanations of Harvey’s experiments. In general, those who opposed Harvey were concerned exclusively with the consequences of the circulation for man, whereas Harvey himself always studied anatomical phenomena in all animals (or ‘the animal’).

The most important person who wrote against the circulation was Jean Riolan the younger, and he was the only one to whom Harvey wrote a public reply (1649). Riolan, like his father before him, was Dean of the Paris Medical Faculty, and a very accomplished anatomist in his own right. In Harvey’s view, Riolan was simply defending Galen’s medicine out of duty and thus had ‘accordingly acted the part of the orator rather than that of the skilled anatomist’. Although Riolan was prepared to acknowledge certain aspects of the circulation, he could not agree that the blood goes from the right side of the heart to the left via the lungs. Harvey suggested experiments for Riolan to perform which he believed would convert him to the circulation. But Riolan was not to be converted.

However, many physicians and academic teachers of medicine did accept the circulation, some immediately, some after doubts and hesitations. Amongst the strongest supporters were Herman Conring in Helmsted, Franciscus Sylvius and Johannes Walaeus of Leiden, and Paul Schlegel of Hamburg, who had been a pupil of Riolan.

But there was one Frenchman who embraced the doctrine of the circulation from the moment he first heard of it, in a way which was to be particularly influential. This was René Descartes. He did not so much adopt the circulation as Harvey taught it, as co-opt it for his own purposes. . . .

We can see that, as so often with a new doctrine in anatomy or other branch of natural philosophy in the early modern period, the fate of the doctrine of the circulation of the blood was in the hands of other people. Some refused to listen, others listened and adopted, others co-opted it. What is particularly striking about this discovery, one of the most famous of the so-called ‘scientific revolution’, is that it was made by someone who was looking always backwards – to antiquity, to Aristotle – for his inspiration.

[http://www.thoemmes.com/encyclopedia/harvey.htm]

A standard source on reception is