

The Shape of the Heart

by Pierre J. Vinken

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REVIEWED BY CRAIG T. BASSON

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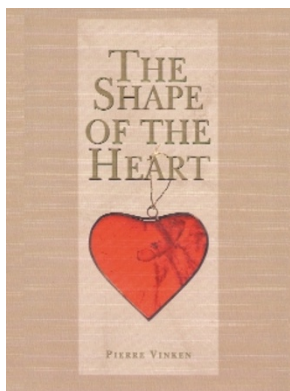
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The scalloped-shaped “Valentine’s” heart is a ubiquitous icon in Western culture. This unavoidable emblem of love and well-being is used by spiritual and commercial institutions alike. Even the most technically fastidious scientist has succumbed to its lure and every physician, at some point, has been seduced by its shorthand symbolism. Most of us recognize though, that despite its beguiling infiltration into multiple facets of our daily lives, the scalloped representation imprecisely portrays the true structure of the human, or any other species’, heart. Yet, few of us pause to ponder the origin of this inaccurate image.

In his book, *The Shape of the Heart*, Pierre Vinken takes us back through history to explore the etiology of the scalloped heart and its enduring, pervasive presence for centuries. Organized as a loosely connected series of discursive essays, the book first outlines a timeline of evolving depictions of the heart by artists, writers and anatomists over the past three millennia. Although some have suggested that the earliest drawings of the heart can be seen in prehistoric cave paintings, Vinken sheds doubt on these observations. He cogently argues that a structure seen within a Spanish cave painting of an elephant is as likely to be an ear as a heart. Instead, Vinken shows us that the earliest known rendering of a heart is a Mesoamerican human effigy vessel, circa 1000 B.C. A photographic plate of this ceramic container in the book intrigues the reader with the accuracy of this ancient sculpture. We can almost decipher a four-chambered structure divided by a central sulcus and atrioventricular groove, and associated with emanating left- and right-sided great vessels. The many such figures in *The Shape of the Heart* that beautifully



display prehistoric to modern representations of the human heart are the book’s most entrancing features.

Given the impressive details in ancient representations of the heart, Vinken convinces us that it would be erroneous to believe that the scalloped heart shape arose out of uninterest in the subtleties of cardiac anatomy. In fact, Vinken artfully hypothesizes that the scalloped shape derives not from a deficit in knowledge of overall cardiac structure but rather in the ancient interpretation of the relationships between the components of cardiac anatomy. He suggests that the true origin of the scalloped shape resides with Aristotle. In his *History of Animals*, Aristotle writes that “the heart has three cavities....The rounded end of the heart is at the top. The pointed end is very largely fleshy and firm in texture....It has three

cavities, the largest being on the righthand side, the smallest on the left, and the medium-sized one in the middle.” Galen termed Aristotle’s middle chamber a *fovea* and recognized that it was, in fact, a portion of the right-sided chamber; modern authors have eventually suggested that Aristotle’s middle cavity was actually the infundibulum of the right

ventricular outflow tract. Vinken proposes that the scalloped-shape of the heart arose out of thirteenth century illustrators’ efforts to reconcile the written descriptions of Aristotle’s middle cavity and Galen’s *fovea* by representing this structure as a concavity in the base of the heart. In a culmination of his artistic sleuthing, Vinken traces the first scalloped heart to a drawing in a thirteenth century text by Vigevano that was subsequently reproduced in a variety of forms by authors over the next three centuries.

Finally, Vinken turns his attention to the question of why, even in the face of improved understanding of cardiac anatomy and physiology, the scalloped shape has persisted. Here, he entrances us with an intricate stream-of-consciousness critique of art, religion and philosophy. He concludes that the enduring nature of the symbol relates to a religious connotation of man’s cleaved heart as a creation of God, and to the spiritual connotation of the heart as an empty vessel to be filled with love. Ultimately, if Vinken is right,

the persistence of the scalloped-shape heart symbol, despite its omnipresent modern commercial attachment, may actually represent an ironic triumph of ancient spirituality over modern materialism and cynicism.

Although *The Shape of the Heart* is somewhat disorganized and rambling, Vinken’s insights and commentary and the book’s remarkable figures make for a bewitching maze in which the reader will lose himself for a time. In the end, each reader’s exploration may not find the same exit portal as Vinken. However, Vinken offers a fascinating journey for the reader that cannot but prod each of us to marvel at the scientific insights of our forbears and to reflect on our own individual faith and philosophy.

The Methuselah Gene: A Science Fiction Adventure Thriller

by Sal DeStefano

Bainbridge Books, 340 pp, \$24.95

ISBN: 1891696106

REVIEWED BY HENRY GEE

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There is great literature, there are mere books, and then there are the things that help alleviate the tedium of long distance travel. Into this last category falls *The Methuselah Gene* by Sal DeStefano, dubbed a “science fiction adventure thriller.”

It takes a book as average as this one to make you appreciate what we usually take for granted: departure lounge thrillers (whether they include science or not) are, on the whole, really rather good.

The key is relentless page-turning pace, with the aim of making the reading experience as effortless as possible. Character development is subservient to plot and action. A dash of sex and violence (or even violent sex) and a splattering of horror jumpstart the jaded juices of the traveler jammed into cattle class. The author has to have the knack of summarizing a scene in a single sentence, and then moving on. Pace is achieved, first and foremost, by peerless writing so that dialogue, narrative and exposition are seamlessly welded together.

At the convoluted heart of *The Methuselah Gene* is the hunt for a set of