

ANATOMICAL ERRORS IN THE LAPIDARY OF THE CO-CATHEDRAL OF ST. JOHN AT VALLETTA

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The co-Cathedral of St. John of Valletta was the Conventual Church of the Knights of St. John of Jerusalem from 1573 till the end of their domination of Malta in 1798. During this period the pavement of the church became covered with inlaid marble funereal slabs under which were buried highly placed personages of that order of chivalry.

These memorial slabs — numbering 375 (Sciicluna, 1955 a) — are richly decorated with coats-of-arms, incriptions, trophies, sailing ships and symbols of death such as skulls and skeletons. Some of these mosaic tablets are exquisite works of baroque art — such as that of Fra Don Francesco Carafa in the nave near the high

altar (no. 220*) — but the medically discerning eye detects a lack of exact knowledge of human anatomy in the skeletal representations.

This paper is a review of sixty slabs bearing skulls and skeletons covering a period of over two hundred years from 1602 to 1814. Its aim is to call attention to the more conspicuous osteological errors in this funereal iconography and to relate this to the wider medical and artistic milieu of Malta from the seventeenth

* The numbers of the slabs correspond to those shown on the plan of the location of tombs in H. Sciicluna, *The Church of St. John in Valletta*, Rome, 1955, facing p. 382.

to the early nineteenth centuries. The greatest number (40) of the slabs are from the eighteenth century; four of them (nos. 17, 22, 97 and 238) seem to have been stock designs by the same hand or from the same workshop. Only a small number belong to the seventeenth and the early nineteenth centuries (17 and 3 respectively).

Apart from the supine position, the skeletons are portrayed in various "living" postures — emerging from a tomb, standing, sitting and half-kneeling. A few of them have wings and are seen flying. They hold a scythe, hour-glass, book or quill. They grasp inscriptions, brandish axes and lances, blow a trumpet, carry a coffin and point to words on an epitaph. Some of them are clothed with a mantle or shroud dropping from the shoulders or from the waist.

The errors consist of:-

(a) ill formed skulls and cross bones. The

zygomatic arch is either missing or just hinted at, the aperture of the nasal cavity has no septum and the roof, floor and lateral walls of the orbital cavities are not shown, the eye sockets being filled in black. The cross bones do not correspond to any of the long bones of the human frame. (Fig. 1a) Their two ends are of the same shape recalling the condyles of the lower end of the femur sometimes with an added lateral spur above one of the condyles as in the slab of the painter Mattia Preti (no. 198)

- (b) sternum composed of several small parts up to six at times). (Fig. 1b)
- (c) mis-shaped clavicles.
- (d) ill-shaped ribs that are wrongly articulated to the sternum.
- (e) ill-shaped upper and lower ends of the long bones especially the humerus and the femur.
- (f) the elbow and the knee joints are



Fig I. (a) Anatomically incorrect skull and cross bones. (b) Tombstone of Knight S. Basurto Xera who died in 1797 showing various anatomical errors (clavicle, elbow and knee joint, sternum, etc.)

shown with a circular small bone inside them.

- (g) absent or ill formed carpal and tarsal bones.
- (h) absence of the patella.
- (i) distorted pelvic bones.

Incidentally, identical and similar inaccuracies are displayed in another crude representation of a skeleton appearing on an anonymous and undated tombstone in another major temple — the Cathedral at Mdina (chapel of St. Luke on entering the right aisle). This skeleton is the only one to be found in the lapidary of this Cathedral.

The presence of the inaccuracies in the lapidary of St. John, sponsored and commissioned by outstanding members of a hospitaller Order, baffles the medical observer especially when one considers that a School of Anatomy and Surgery had been active at their Holy Infirmary since 1676 and that the bulk of the slabs was produced when the study of anatomy and surgery was at its most flourishing period.

The names of the designers and of the artisans who executed the slabs have not been recorded. It has been observed that the style of the funerary mosaics of these "local artisans" did not change for the space of two hundred years but that the colours and symbols of the heraldic bearings are accurately reproduced (Engel, 1964). However whatever their artistic skill these artisans do not seem to have received any theoretical or practical lessons in human anatomy during their formative years as their draughtsmanship of the bony system of the body is based on formalism rather than on naturalism; in fact their familiarity with the skeleton was obviously superficial and not based on the direct examination and handling of human bones.

Rare exceptions, evincing a close approximation to the osseous system, are the representations of the skeleton on the tombstones of Fra Anselme de Cays (1710) (No. 164), Fra Etienne de Ricard (1716) (No. 36) and Fra Don Emanuel Almeida de Vasconcellos (1725) (No. 243). The de Ricard slab (Fig. 3) must be singled out for its superior design for it shows a

"lamenting skeleton", bent over a plinth, that is a mirror image of the second skeleton figure (Fig. 2) in the first book of Andreas vesalius's *De humani corporis fabrica* (Vesalius, 1543). This plagiarism is evidence that at least one of the designers of these tombstones was familiar with the most outstanding anatomical textbook of his time. The only departures from Vesalius's figure are the absence of the cranium and mandible on the plinth and of the letters of the alphabet indicating the bones of the skeleton; the substitution of the words VIVITUR INGENIO . . . by DA PAUPERIBUS . . . ; and the addition of the coat of arms of de Ricard.

It may be contended that the quality of the material idiom (marble) with which these artisans were working did not lend itself easily to the reproduction of exact and clear-cut structural details. One would be prepared to grant that this difficulty would apply to such technical devices as undershadowing or castshadowing to produce a three dimensional effect, but one expects a skilful craftsman to reproduce objects — bones in this case — in their natural shapes and contours. As an example of the excellent results that can be achieved in mosaic by an expert artist, one may cite the portrait in mosaic of Grand Master Emanuel Pinto, in the same church, which is indistinguishable from a portrait in oils (Sciocluna, 1955 b). It may also be argued that these artisans were unassuming craftsmen who did not think of themselves as artists and that their aim was not the creation of faithful pictorial plates as didactic aids in the teaching of anatomy but were only concerned with the delineation of the symbolism conveying the message of death; but this argument is untenable when one reflects that art and naturalism are far from being mutually exclusive; on the contrary it has been stated that knowledge of anatomy "is particularly necessary to the artist as there is no exact beauty in his representations unless there be truth also" (Fairholt, 1903). In fact, since the sixteenth century, artists that have excelled in the portrayal of the human form took an active interest

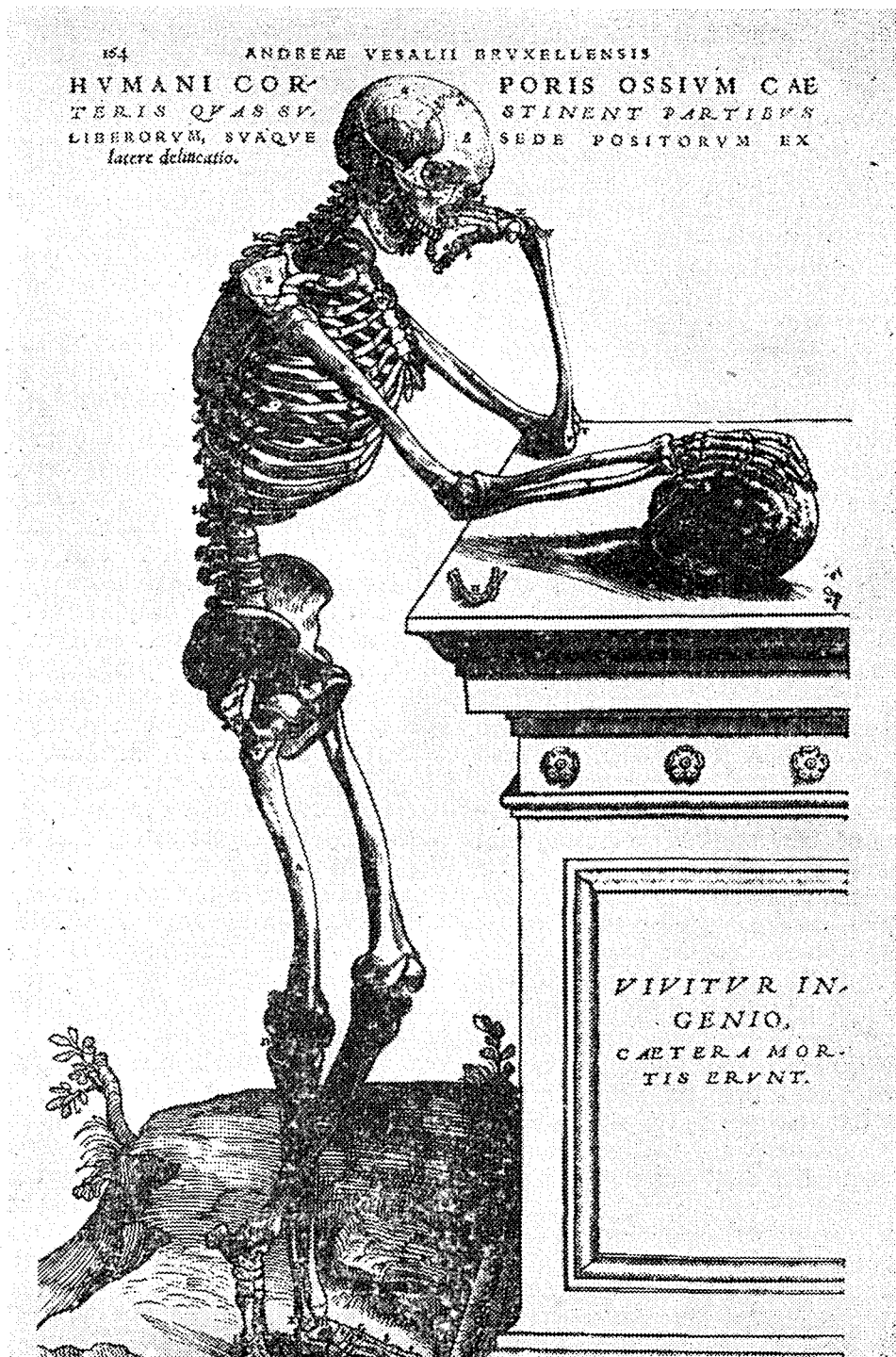


Fig. 2. Skeleton from Andreas Vesalius's "De humani corporis fabrica"
 (Basilea, 1543, p. 164)

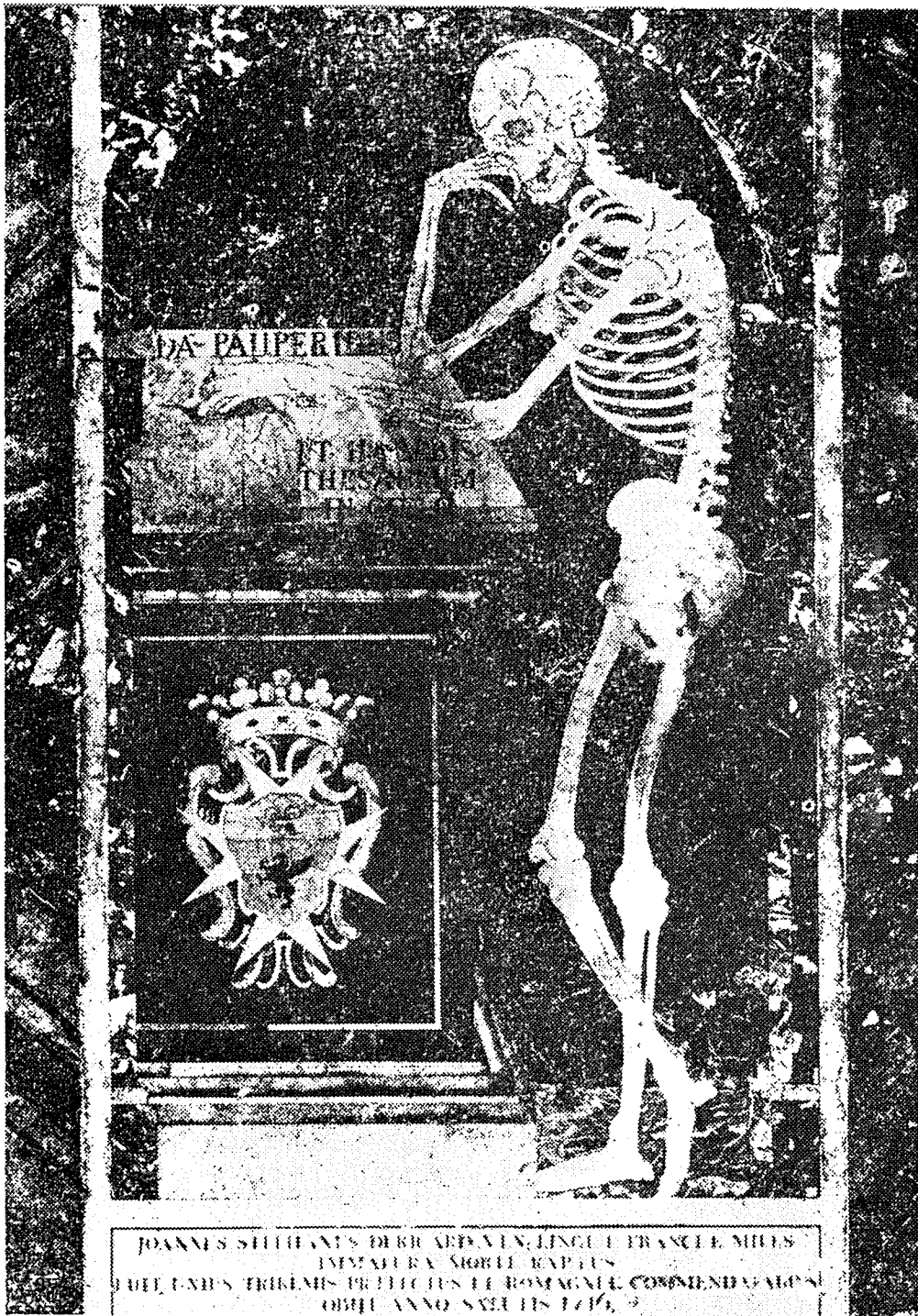


Fig. 3. The skeleton on the slab of Fra Etienne de Ricard (1716) is a mirror image of the Vesalius skeleton except for the hand resting on a cranium.

in anatomy. Several of them in their endeavours to create accurate representations of the human body are known to have been involved in the performance of human dissection. Among the pioneers who established this tradition were Leonardo da Vinci (1452-1519), Michelangelo Buonarroti (1475-1564), Albrecht Dürer (1471-1528) and Tiziano Vecellio (1477-1576) (Lassek, 1958 a). In Malta the French painter Antoine Favray (1706-98) did not fail to grasp the opportunity in 1749 of obtaining the severed head of a hanged slave as a model (Ms. 142 E a R.M.L.).

Apart from dissecting the human body, Leonardo also prepared a series of accurate anatomical illustrations at the beginning of the sixteenth century; however, none of these drawings could have influenced the slab-designers as they were not published until the close of the nineteenth century (Herrlinger, 1970 a).

The anatomist Jacopo Berengario da Carpi published an anatomical textbook in 1523 — the *Isagogae breves* — with figures of the skeleton; and Charles Estienne and Estienne de la Riviere issued, in 1545, their *De dissectione* with illustrations of the skeleton (Herrlinger, 1970 b).

In 1543 Andreas Vesalius published his superbly illustrated and scientifically accurate work on human anatomy, *De humani corporis fabrica* (Lassek, 1958 b; Herrlinger, 1970 c); and in 1572 Volcher Coiter published his *Tabulae* — including skeletons — with a number of improvements in anatomical detail (Herrlinger, 1970 d).

We do not know whether books on anatomy were easily available in Malta by the 17th and 18th centuries. Dr. Joseph Zammit, the first teacher at the School of Anatomy and Surgery founded by Grand Master Nicola Cottoner, donated his books to the Holy Infirmary in 1687 but we have not, so far, traced a list of them. A few books on anatomy such as *Les oeuvres d'Ambroise Pare* (Paris, 1614), dealing with anatomy and surgery, and the *Manuel anatomique* by Jean Riolan (Lyon, 1672), formed part of the private libraries of

Chev. Joseph de Fassion de Saint-Jay (1714) and of the Bailli de Tencin (1756) (Lib. 510 and Lib. 265, R.M.L.). The latter collection came to form the nucleus of a public library founded in Valletta in 1760. Other knights donated their books but not many of those that have survived deal with medicine or the visual arts (Engel, 1968). However, even in the absence or scarcity of such works there still existed the opportunity for the lapidary designers to view the skulls and other bones preserved in a room attached to Nibbia's Chapel in the cemetery of the Holy Infirmary at Valletta. An eighteenth century diarist states that throughout the whole year skeletons were disinterred from this cemetery to make room for fresh burials and that their skulls were neatly ranged "in four large windows walled up on the outside" (Ms. 142 E b R.M.L.). It appears however, that these facilities were not availed of and there was no diffusion of knowledge from the medical to the artistic sphere.

With regard to the pictorial rendering of the skull they had for their enlightenment the anatomically detailed cranium depicted by Michelangelo Merisi da Caravaggio in the striking canvas of *St. Jerome* that hung in St. John's Church itself since the beginning of the seventeenth century (1608) and the accurate renderings of the skull, in marble and in bronze by various Italian sculptors, on the monuments of Grand Masters Antoine de Paule (1623-36), Raphael Cottoner (1660-63), Gregorio Caraffa (1680-90) and Ramon Perellos (1697-1720) in the same church. While, therefore, we cannot regard the slabs as a faithful image of the knowledge of anatomy in Malta in their time, we cannot escape the inference that the Order made no provision for the study of artistic anatomy among Maltese artists and for encouraging the inquiring spirit among them. This state of affairs in the cultural field is not excusable for various reasons:- (a) these errors are prominently displayed in one of the main edifices where the Knights — from the Grand Master to the novices — congregated frequently for religious services and cere-

monies and where, therefore, they had ample opportunities to notice them; (b) a number of these knights — such as the Grand Hospitaller, the Infirmarian and the Armourer — had direct connexions with the Holy Infirmary and might have had occasion to be present during actual dissections of cadavers and anatomical demonstrations held by the teachers of the School of Anatomy and Surgery at the Holy Infirmary; (c) these teachers themselves must have become aware of these inaccuracies during their visits to the Conventual Church. How did these medical men react to this faulty osteology? (d) Three eminent painters — all Knights of the Order — contributed to the decoration of the Church of St. John. Michelangelo Merisi da Caravaggio (1573-1610) died early in the seventeenth century when none of the slabs with skeletons had yet been executed. Mattia Preti (1613-1699) and Antoine Favray (1706-98) span the period of two centuries during which the tombstones under review were produced. These two painters, who had studied abroad (Rome, Venice, etc.), were quite mature and at the pinnacle of their fame by the time they came to Malta. What was their response to the uniformly low standard of anatomical iconography displayed in the lapidary of their Conventual Church? Did they ever take any steps to counteract these skeletal misconceptions? It has been remarked by a historian who made a special study of the Order that in the seventeenth and eighteenth centuries education in Malta was “faible et personne n'est tres cultivè” and that the knights themselves were “rarement des erudites” (Engel, 1968; Engel, 1957). The most devastating criticism, however, on this score comes from one of the knights themselves, the Bailli de Tencin, who declared in 1756:- “I have deplored all my life the ignorance that reigns equally in all the ranks of the Religion (the Order of St. John). It seems that they have made it a maxim not to learn and that they regard study as being incompatible with the profession of arms” (Libr. 265, RML). On the credit side, however, we must note that they fostered the study

of anatomy in their surgical school. Yet we must deplore the fact that they did not match these endeavours where the artistic field was concerned, as they failed to appreciate the importance of providing formal classes in human anatomy for art students and apprentices; so much so that when these became artisans, owing to their lack of familiarity with the bones of the human frame, they became, through the lapidary of St. John, the propagators of erroneous anatomical representations which influenced successive generations of craftsmen. This tradition of ineptitude outlived the end of the Order's rule over Malta into the early nineteenth century.

While, therefore, the memorial slabs of the Conventual Church of St. John provide spectacular evidence of the pomposity and extravagance that surrounded the life of the Knights of Malta, they also furnish the most glaring testimony of the Order's neglect in promoting the most elementary knowledge of anatomy in the artistic field.

Acknowledgements

I wish to thank Mr. F. Mallia, Director of the National Museum, and Mr. J. Scerri, photographer, Medical School, for photographic assistance.

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