

Leonardo da Vinci Society Newsletter

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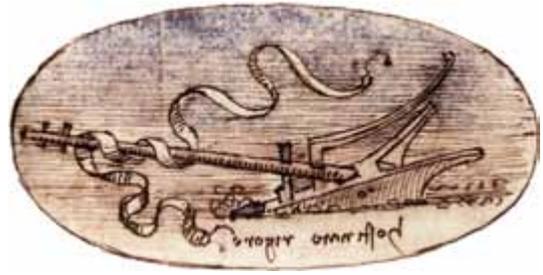
Recent and forthcoming events

The Annual General Meeting and Annual Lecture 2013

On Friday, 10 May 2013, Dr Alexander Marr will offer the Annual Lecture at our traditional venue, the Kenneth Clark Lecture Theatre of the Courtauld Institute of Art. The lecture starts at the 6:00 pm, preceded by the AGM, which will start at 5:30 pm. The lecture, entitled, *Disingenuous Ingenuity in Renaissance Germany: The Case of Walther Hermann Ryff*, will address the work of Walther Ryff and the *imago contrafacta* in relation to treatises on anatomy, medicine and the mechanical arts. Especially at issue will be Ryff's 'disingenuous ingenuity' in his pillaging and reworking of others' verbal and visual matter, with additional interest in his appropriation of the legacy of Dürer in 1540s Nuremberg. The AGM and Annual Lecture will be free and open to the public.

A conference on Anatomy in the Renaissance

The Leonardo da Vinci Society and the Royal Collection Trust, along with the Wellcome Collection, hosted a conference at the Queen's Gallery, Buckingham Palace, on 7 September 2012, addressing 'Anatomy in the Renaissance.' This was a study day combined with an evening view of the exhibition, 'Leonardo da Vinci: Anatomist' (4 May-7 October). The conference was an important opportunity for specialists on Leonardo's anatomical drawings to discuss the relevant state of the research at a venue with the largest selection of these drawings ever assembled for an exhibition. Generally at issue was the way in which Leonardo was a pioneer in the understanding of human anatomy, with consideration of range of topics on his accuracy and the contexts of his approaches. Links to information about the meeting and exhibition are at the Society Website and are located here:



www.royalcollection.org.uk/event/study-day-and-evening-view-anatomy-in-the-renaissance

A review of the exhibition is in the May 2012 Leonardo da Vinci Society Newsletter. The exhibition catalogue is available as a hard-back book as well as an iPad App. The latter, 'Leonardo da Vinci: Anatomy', is an impressive 1.82 GB App, available via the iTunes App Store. It has 268 pinch-zoomable high-resolution images, and seven chapters written by Martin Clayton (Royal Library) on seventy selected drawings. An exceptional example of the usefulness of the App format, this is a ground breaking use of software for a high quality exhibition catalogue. This catalogue is an important contribution to the other books on Leonardo's anatomical studies that have been published and co-published by Martin Clayton. Scans of the Windsor Castle Royal Collection drawings are also available online.

The meeting was introduced by Martin Clayton and concluded with his presentation on 'What we don't know about Leonardo's anatomical work.' Professor John Henderson (Birkbeck, University of London) discussed 'Anatomising hospital medicine in Italy at time of Leonardo da Vinci.' He states that:

'The aim of this paper was to examine the context for Leonardo's anatomy in relation to the evidence which has survived concerning this practice within three major hospitals of renaissance Italy. The focus was on the three main urban centres associated with Leonardo's anatomical investigations: Florence and the Hospital of Santa Maria Nuova; Milan and the Ospedale Maggiore and the Brolo; Rome and Santo Spirito and the Consolazione.

This is a topic that is often mentioned by scholars in relation to Leonardo, but the picture has remained extremely vague reflecting the vagueness of the surviving information. This stems from two main problems, the first is the elliptical and incomplete nature of Leonardo's own notes about the institutional context in which he did his dissections. The second is that in this period the practice of anatomy within Italian hospitals

appears to have been in an early stage of development and is therefore poorly documented.'

Dr Domenico Laurenza (bgC3 Seattle/Kirkland and Museo Galileo, Florence), discussed 'Aspects and problems of Leonardo's anatomical studies: an overview', offering an update to his earlier research on aspects and problems of Leonardo's anatomical studies. He provides this summary of some of his main points:

'An early date proposed for Leonardo's famous drawing with the 'tree of the vessels' (RL 12626r) anticipates his interest in scientific anatomy during his early Florentine period. At the same time, in general, the Florentine context seemed to stimulate above all Leonardo's artistic-anatomical studies, which are less evident when he was in Milan. Among the philosophical aspects of Leonardo's anatomical research – long underestimated by scholars – one would include his research on the seat of the intellective soul in the skull studies. This is his early 'Aristotelian' tendency to study man while starting 'from below' or from the animal world, whereas in his late embryological studies, questions such as those concerning the relationship between the souls of mother and foetus have allowed a possible explanation of the difficulties he had conducting dissections in a Roman hospital during the years he spent in Rome (c. 1513-16). The examination of the contexts in which Leonardo made dissections, thereby coming into contact with representatives of medical culture, included two recently discovered works by Marcantonio della Torre and a new proposal for the Roman hospital in which Leonardo made dissections, namely the hospital of Santa Maria della Consolazione.'

Professor Helen King (Open University), addressed 'Leonardo and the female body.' She notes that 'Leonardo's images of the female body need to be set within his time; this is true not only of his early imagined representation of coitus, but also of the famous images of the womb and of the female body as a whole. At the end of the fifteenth century, there was some interest in the beliefs of Galen, 'On the Affected Parts,' according to which men and women shared the same organs but outside or inside according to body heat. However, contrary to Thomas Laqueur's book *Making Sex* (1990), this was not the only image of sexual difference which the Renaissance inherited from the ancient world. In some treatises of the Hippocratic corpus, the dominant model was

one of complete difference between the male and the female body, in every part of the flesh. Less than a decade after Leonardo's death, in 1525, this model re-entered the Western tradition as the work of Marco Fabio Calvi made available in full Latin translations the Hippocratic treatises on difference. In 1543 Vesalius showed the womb in a way that modern interpreters have taken to be Galenic - the 'womb as penis'. However, this reading ignores the caption, and the supporting comments in the main body of his text, which make it clear that this is the womb and its 'neck' (in our terms, the vagina), and that the main point of the image is the emptiness of the womb. This relates to the quest – shared by Leonardo – to reveal the secrets of the deceptive interior of the female body.'

Francis Wells (Papworth Hospital, Cambridge), on the subject of 'Leonardo's study of the lungs, diaphragm and gastro-intestinal tract,' provides the following summary of his talk:

'The commentary of the polymath genius that was Leonardo da Vinci on human anatomy rewards very careful inspection. Having spent a considerable and rewarding time reviewing his anatomy, and indeed physiology, of the heart the veracity of this work compelled me to study other areas of visceral anatomy in the same detail.'

His ability to look and see and learn by personal experience allowed him to develop an understanding of anatomy and physiology that withstands modern critical inspection and interpretation. Whilst remaining heavily influenced (at least by the evidence from his notes) by the teaching of Galen, his unbridled passion for the truth allowed him to challenge some of the Galenic precepts and to look for his own explanations.

An example is his disputation of the Galenic postulate that air from the trachea should enter the heart, which through the churning of the blood became subtilized and enriched with the vital spirits or *anima*. Leonardo could not demonstrate any such communication by his own experiments and said so.

Another example is his rhetorical argument in relation to the necessity of the separate pulmonary and bronchial arterial blood supply to the lungs is seminal work. Whilst the rationale was wrong ('...it must be so in order to prevent the sometimes violent movement of the lungs causing the vessels to shear from the airway and therefore to bleed,' Windsor folio 19071 recto) the description of the arrangement was very accu-

rate. Moreover the demonstration of these vessels in the dissection room is difficult even when the dissector knows that they are there. To discover them anew and then to correctly ascribe to them their function is extraordinary; but that is what the student of Leonardo comes to expect of this extraordinary genius!

Kenneth Wise (Wycombe and Stoke Hospitals, Oxford Region), discussed ‘The mistakes in the anatomy of the back by Leonardo, and others, explained’, addressing the following issues: ‘Leonardo was familiar with most of the musculature of the body, but not that of the back. The lower part of the trapezius and the posterior part of the latissimus dorsi were represented notably inaccurately. The posterior parts of serratus anterior, and external oblique were also misunderstood. He did not find the rhomboidius major.

Other artists who had some knowledge of dissection, such as Pollaiuolo, Michelangelo, and Rosso Fiorentino, also misrepresent the back. Anatomists, too, were guilty; Berengario da Carpi produced a very inaccurate illustration of the back. An explanation for this lies in Mundino’s method of dissection described in his *Anathomia* of 1316. His method became embedded in the statutes of European universities.

The parts were dissected in the order of putrefaction: day 1, the abdomen (lower venter); day 2, thorax (middle venter); day 3, head and neck (upper venter); day 4, arm and leg. The un-preserved corpse was lying on its back, and the back muscles, under pressure, liquefied rapidly. In order to investigate the back muscles, Vesalius showed that the back should be dissected first. It is recorded that the muscles of the dorsum and loins were found to be putrefied at the dissection attempted by Vesalius on the first day of his appointment at Padua. He learned that in order to display the muscles of the back, that they should be exposed at the outset.

During his anatomy demonstration in Bologna in 1540 he announced that the artists of his day were unable to represent these muscles, but that the ancient Greeks did so. It is likely that Vesalius was referring to such sculptures as the Belvedere Torso and the Laocoön, with their eloquent and accurate musculature. Where did these ancient Greek sculptors learn their anatomy? The only recorded human dissection of their period was in Alexandria, where Herophilus and Era-

stratus were dissecting the condemned criminals from the gaols of the first Ptolemy rulers.

In an attempt to inject drama into the ill-understood back, certain artists created a ‘sack of nuts’, in which excessive bumps and hollows took the place of an accurate muscle pattern. Michelangelo in his *Last Judgement* and, more so, Goltzius in his print of the *Farnese Hercules*, were guilty of this. Goltzius’ sacks of nuts should make us grateful for the supremacy of Leonardo and Vesalius, and for the glorious symbiosis of Anatomy and Art.’

Dr Sachiko Kusukawa (Trinity College, Cambridge) offered a presentation on ‘Vesalian images and their relationship to his text and to the human body.’ This is an abstract of the talk: ‘Andreas Vesalius (1514-64) is often hailed, after Leonardo, as a pioneer of modern observational dissection, and indeed the illustrations in his magnum opus, *On the fabric of the human body* (1543), appear to vindicate such an evaluation. Yet, the woodcut images in Vesalius’s book have a rather complex and problematic relationship with the human body; furthermore, when taken alongside the printed text, Vesalius’ images turn out to fulfil a variety of functions that were central to his arguments. Vesalius ingeniously harnessed the medium of print in order to present his view of the body to the mind of his readers.’

Leonardesque News

A conference on ‘Leonardo on Nature’

The Kunsthistorisches Institut in Florenz and the Max-Planck-Institut will hold a conference at the Palazzo Grifoni Budini Gattai (Florence) on 1-3 March 2013. Fabio Frosini and Alessandro Nova organized the meeting that will include thirteen presentations in three days, and will address the points that they provide here:

‘Ever since Giovanni Gentile’s influential essay ‘Leonardo filosofo’ was published in 1919, numerous attempts have been made to explain in a consistent manner various aspects of Leonardo’s mind that might appear, at first glance, sharply contradictory. The mixture of ‘Naturalism’ and ‘Platonism’ postulated by Gentile as the main feature of Leonardo’s thought has been taken up again by a number of scholars; yet, especially

over the last thirty years, there has been an increasing diversification and specialisation in the research on Leonardo's intellectual output. Unfortunately, these contributions have concentrated only on particular areas of Leonardo's multifarious interests, arbitrarily separating them from the rest of his thinking. This strategy makes a general reconstruction of Leonardo's peculiar 'philosophical thought' ever more difficult because it obscures any possible homogeneous thread that runs through the whole of his work.

In recent years, however, the publication of 'Leonardo da Vinci. Natur im Übergang' (Munich 2002), edited by Frank Fehrenbach, and the exhibition 'The Mind of Leonardo. The Universal Genius at Work' (Galleria degli Uffizi, 2006), organized by Paolo Galluzzi have marked a welcome turning point in this matter. They show that research in this field can no longer be assigned to single scholars and that, on the contrary, it must be transformed into a collaborative project. The findings gathered in the catalogue of the Uffizi exhibition, for example, illustrate the remarkable results that such an approach makes possible, and this is particularly evident in the studies concerning Leonardo's persistent attention to 'Nature'. The artist referred to Nature not only as an object of study, but as source of technical and artistic inspiration, as a model of creativity which although unattainable was in any case limited. Nature provided a permanent challenge for the arts, it constitutes also an impersonal logic of infinite transformations, the cause of the periodical annihilation of every form, including the laborious and precarious realization of civilization itself. Nature was also the model of absolute beauty, a representative of the Necessity but also full of miracles, the source of constant amazement as well as dismay: "d'alcuni [animali] pietosa e benigna madre, ad altri crudelissima e dispietata matrigna" (Codex Atlanticus folio 393r; this ambivalence and complexity of the concept is already discussed by Paolo Galluzzi in his 'La natura di Leonardo: "più tosto crudele matrigna che madre",' in *Natura*, ed. by D. Giovannozzi and M. Veneziani, Florence 2008, pp. 215-242).

A closer look at the lemma 'Nature', therefore, can be the occasion for a renewed attempt to confront Leonardo's thought from a more coherent perspective. In fact, the extraordinary breadth of its meanings (much wider than, e.g., 'Mathematics', 'Experience', and 'Reason') more

adequately encompasses the vast assortment of interests cultivated by Leonardo. Furthermore, the concept of 'Nature' allows us to focus the whole of Leonardo's activity, both as a scholar and as an artist, from a synthetic point of view because it always leads back to the question of 'the end of all things', and more precisely to the 'endpoint' both of mankind and the constant mixing of the elements (air, fire, water, and earth). Understood in this way, the topic of 'Nature' in Leonardo's work allows us to confront a series of productive dichotomies, such as 'nature and art, nature and the world, natural and accidental', as well as, in more general terms, 'life and death, eternity and transience, necessity and contingency, past and future', all of them continually articulated and evaluated in Leonardo's ever-changing ways of thinking.

The investigation of this topic seems more accessible today, in the light of the recent revival of studies on heterodoxy and misbelief in the Renaissance. Following in the footsteps of Erwin Panofsky's essay on the primitivism of Piero di Cosimo, this research has led to a reconsideration of the role of atomism in 15th-Century Florence as a result of the diffusion and impact of Lucretius' 'De rerum natura' (in this context see the work of Alison Brown and Stephen Greenblatt). Considering these premises - which are reviving and updating an approach that was commonly accepted in 19th and early 20th century studies on 'libertinage', from E. Renan to J.-R. Charbonnel - a whole world of diverse interests, cultural references, and philosophical conceptions can be re-examined against the magical-hermetic and religious culture propagated by Lorenzo de' Medici's intellectual circle.

In light of these current flourishing research perspectives, studying the concept of 'Nature' in Leonardo's works will contribute, in a wholly transdisciplinary way (literary, artistic, philosophical, technical-scientific) to the re-evaluation of questions that place Leonardo squarely at some of the most important intellectual crossroads of his time. Such an approach also serves to dispel recurring myths and misconceptions, giving a solid basis for research on this topic and making it possible to resume, in a renewed and critical way, the study of 'Leonardo's philosophy', his sources and, ultimately, also his 'naturalism'.

These are the speakers and their topics:

Alison Brown: 'Natura, idest?' Leonardo, Lucretius and Their Views of Nature

Francesca Borgo: The Impetus of Battle. Visualizing Antagonism in Leonardo

Romano Nanni: Catastrofi e armonie

Domenico Laurenza: Leonardo's Theory of the Earth. Some Unexplored Issues from the 'Codex Leicester'

Michael Cole: Leonardo against Nature

Roberto Bellucci and Marco Ciatti: Opificio delle Pietre Dure, 'Adorazione dei Magi' and 'Tavola Doria'

Fabio Frosini: 'Mistioni' e 'termini', ovvero dell' 'accidentale' in natura

Leslie Geddes: Infinite Slowness and Infinite Velocity in Leonardo's Water Studies

Carlo Vecce: 'Le forme mutate in nuovi corpi.' Leonardo e la metamorfosi della natura

Stéphane Toussaint: La natura e le lettere: Leonardo e Michelangelo 'in contrapposto'

Frank Fehrenbach: Painting in Nature

Francesca Fiorani: Leonardo's Atmosphere

Alessandro Nova: Il '5 d'agosto 1473': l'oggetto e le sue interpretazioni

The website for the conference: <http://www.khi.fi.it/en/aktuelles/veranstaltungen/veranstaltungen/veranstaltung420/index.html>

The *Lettura Vinciana* LIII, 13 April 2013

Marco Biffi delivered the fifty-third *Lettura Vinciana* on Saturday, 13 April 2013 at the Biblioteca leonardiana in Vinci. He discussed 'Ingegneria linguistica tra Francesco di Giorgio e Leonardo' ('Linguistic engineering from Francesco di Giorgio to Leonardo').

The Leonardo da Vinci Society

The Secretary is very grateful for the comments and suggestions made by members and very much regrets that he has not had time to reply to them individually.

We would always be grateful for suggestions of material, such as forthcoming conferences, symposia and other events, exhibitions, publications and so on, that would be of interest to members of the Society for inclusion in this *Newsletter* or on the webpage, which can be visited at the following address:

< <http://www.bbk.ac.uk/hosted/leonardo> >

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