

Art’s Unconscious Accuracy.  
A Review of Leonardo Da Vinci: Anatomist  
The Queen’s Gallery, Buckingham Palace, London

One of the most striking images from the Queen’s Gallery exhibition of Leonardo Da Vinci: Anatomist is from c.1511, a drawing of the foetus in the womb, in pen and ink over red chalk. Leonardo is sketching how a foetus inhabits the womb before birth, how it looks, how it manages to curl into such a tight space. In the drawing the foetus sits with legs crossed, hands resting on the knees: an elegant pose. It looks more like a small child, its arms exhibiting a muscular tension we do not associate with foetuses, our minds accustomed to modern, moon-landing-esque scans of an alien being, suspended in amniotic fluid. There is an atmosphere of despair to this figure, sketched by Leonardo in the ‘complete breech’ position, umbilical cord wrapped around its legs. This figure of the curled-up foetus haunts some of his later anatomical drawings, as if an ageing Leonardo is reaching back to the primary stages of life as he himself reaches the final ones.

What is most powerful about this image is the fact that, whilst we can all recognise it, we all know that this is not *exactly* how it is. We know, through
scans and photographs, how a foetus looks, and we recognise that Leonardo has got the proportions slightly wrong, that the womb is not, in fact, shaped like a nut, nor covered in delicate concentric layers like the sepals of a petal. But there is no denying that this image, for all its scientific inaccuracies, is one of the most arresting of the exhibition, precisely because of the imaginative space it occupies. It shows a mind that was not content simply to record what it saw, but also wanted to draw connections, hypotheses and summations, to extend logic or knowledge beyond what was perhaps taken for granted at the time, to construct an inner layer of artistic meaning beyond the scientific superficialities—one that draws not just what a foetus looks like but which acts out a desire for the foetus to look like that. It marks a point in the journey of uncovering for Leonardo as anatomist, a journey that owes as much to his own unconscious as to his visual studies.

It is these mental leaps, these artistic imaginings, which it can be argued lie at the core of the Da Vincian myth, and which play as much part in Leonardo’s scientific explorations as they do in his artistic output. As Charles Nicholl writes in his biography *Leonardo Da Vinci: Flights of the Mind*, “Leonardo’s anatomical studies belong under the heading ‘Leonardo the scientist,’ but are also vitally connected with Leonardo the artist: they bridge the gap between those roles, or show that it is not really a gap at all” (2005, p.241).

This exhibition, whilst displaying an exhaustive knowledge of its subject, seems to falter at this clinching step, this bridging of Leonardo’s inner, artistic world with the outward scientific nature of his undertaking (and, of course, the paradoxes and collapsings of this flawed binary). Visitors are instead presented with a straightforward chronology, charting Leonardo’s desire to create an anatomical study for publication, as if this were his single driving force for creating these works.

Within the modestly-sized Queen’s Gallery the exhibition rooms are grouped thematically: skulls, reproduction, animal dissections, the skeleton, and so on. Leonardo had two major periods of undertaking dissection work: the late 1480s, and his most prolific period from 1508 until about 1513, six years before his death. In this final period he created what are undoubtedly the foremost works of anatomical study of the Renaissance. Copied into
notebooks, they have been disbound and are presented to the visitor as stand-alone sketches, in itself a problematic display device but the only way for many visitors to fully appreciate the works.

The accompanying catalogue by Martin Clayton and Ron Philo is a beautiful, essential book for any Leonardo scholar or enthusiast. It also, by ‘re-binding’ the works, shows us what might have been, had Leonardo had the time to complete his epic undertaking. The introductory essay also does much to contextualise Leonardo's anatomical studies within the wider body of his work, something the exhibition does not achieve as successfully.

The rooms themselves give a sense of the contradictory superficiality of the exhibition. Aesthetically the dark wall colours of blue, green and red do little service to these delicately formed yet vital works. There is, ironically, a lack of bodily immersion, of physicality, something intrinsic to these works' content and process. The colours should have been richer: vein purple, blood red, bone white, liver umber. These drawings almost demand flicks of blood up the walls, bloodied sand on the floor. This would have been a populist approach, perhaps, but one that could have jolted visitors into a visceral connection with these works, rather than simply artistic appreciation, jolted them into a sense of Leonardo's own working environment, processes, sounds and smells.

The fragile notebook pages are immaculately presented and conserved in simple gilt frames with cream mounts; and in the case of double-sided sheets, exquisitely mounted with both sides on view, revealing the transparency of the pages but also going some way towards helping the visitor imagine the intensity of leafing through these pages as a bound notebook—what must have been a profoundly powerful experience.

However, this object-worship that such an exhibition lends itself to is not, in the end, curatorially balanced by a wider discussion of Leonardo's other works, drawing out some of the tensions inherent to these works being not-quite-science, not-quite-art, and what that might mean for a modern visitor's understanding of Leonardo, the archetypal ‘Renaissance Man’. When opportunities to discuss this more widely are presented, the curatorial notes shun them in favour of a much safer, ultimately frustrating tone, one which is more concerned in locating Leonardo within the history of science, or rather the commerce of science. By not publishing his anatomical treatise Leonardo does not become what this exhibition wants him to be, the ‘founding father’ of
anatomy. He falls outside the canon, or must be retrospectively reclaimed by it, because to exist outside of it is not just unthinkable, it goes against the desire to capitalise (or commodify) these works within a larger neoliberal historical framework. By this I mean that if the book had been published this ratification within capital would have occurred, and his status as the founding father of anatomy would have been de facto. That this was not the case points towards the uncertainties that lie within this exhibition, echoing something of our unease with Leonardo himself: a man who still defies categorisation, who chose, even in his own time, to confound artistic and commercial expectations. It is a shame that none of these complexities are teased out for the visitor.

Leonardo began his anatomical drawings of skulls in 1489 to not only find out how the human head worked, but to find out how humans worked. This factor, although described in the exhibition notes when they list Leonardo's goals for human dissection (including sections on Attitudes, Ethics and Senses), is not connected to the anatomical sketches as being part of a wider body of exploratory thinking, not just a means to an end for Leonardo to publish an anatomical treatise. As Charles Nicholl writes:

- The chief interest [of Da Vinci], as shown in the accompanying notes, is less scientific than metaphysical. One of the studies shows the skull squared for proportion, and beside it Leonardo writes, 'Where the line a-m is intersected by the line c-b, there will be the confluence of all the senses'.... Taking this at face value, one arrives at the extraordinary notion that...Leonardo furnishes an actual grid-reference for the site of a man's soul. This would of course be over-literal. Leonardo is inquiring rather than assuming; he refers the theory to 'ancient speculators', mainly Aristotle.... Nonetheless this is a typical Leonardian leap – a measure of thrilling investigative potential. It will surely be possible...to find the inner secrets of a man's mind. If there is a 'common sense' we can surely locate it; if there is a soul it surely resides there (2005, pp.242-43).

Compare this with an extract from the curatorial notes for the same drawing:

- Both drawings give the location of the senso commune, the confluence of the senses within the brain...at the front of the orbit is the fossa for the lacrimal sac, and Leonardo’s attention to detail can be seen in the inclusion of the small zygomaticofacial foramen on the zygomatic arch... (2012, p.54).
I could have picked any of the anatomical drawings to compare, but this early work of dissection exemplifies the problem this exhibition has. To try to focus Leonardo in this way is to in some way reduce him, as these passages show. The fact that he himself would not have had the vocabulary to describe his own drawings in these terms also seems an interesting problem of interpretation, one which is never addressed. The merits of laying modern parlance over an historical artist’s work, when that artist themselves would not have used that vocabulary, is a curious curatorial device, and not always to be recommended. These curatorial notes suffer from this same problem: by trapping Leonardo into modern concerns of representation or accuracy, the curators fail to discuss Leonardo’s motivation for drawing the skull, beyond simply creating a faithful copy that we may judge, in the twenty-first century, as being ‘accurate’.

What the curatorial notation misses is picked up on by Nicholl, who strives in his biography (with some success) to capture a mind that was obsessed with connections. To Leonardo, attests Nicholl, anatomical dissection was just part of everything else: it was a field of enormous power and interest to him, but it was not the only thing he undertook.

This broader perspective is even more important in such a focused show, because there is a danger in becoming so fixated on these delicate, intricate works—in themselves fragments depicting fragments—that it is all too easy to lose any sense of a bigger picture, beyond the history of anatomy. Although it is undisputed that Leonardo’s forays into anatomy are the most important investigative works of his career (more so than his architectural studies, engineering work or inventions), key moments where curatorial notes could have pointed outwards towards other facets of his work became too easily focused on descriptions of the works themselves. This is a trope that, whilst it is useful to the viewer, especially with anatomical sketches, becomes a purely descriptive exercise, lacking in interpretation or further insight, something good curation should always strive towards.

There is nothing at all wrong with contextualising the densely written notebook pages in this way. They are complex artefacts, the interaction of image and text impossible to decipher in an exhibition setting, particularly behind glass. And unless you are familiar with anatomy, many of the objects the sketches represent would be lost to you. In this way, curatorial...
intervention, being told what we are looking at, is important to prevent a complete visual disconnect. On the other hand, the visitor isn’t taken any further with these images. The visitor is set upon this exhibition to marvel, to consume as product these magnificent works, but beyond that is told nothing more, encouraged to think no deeper, other than to be told when one of these beautiful drawings is ‘inaccurate’. This aesthetic impasse comes to then dominate this exhibition: the often inaccurate, always rendered exquisitely. All of which leaves a certain unease about how to approach these works: are we meant to be marvelling at their representative qualities, or their interpretative ones? Do we gasp at how well a bone is drawn, or the accuracy of its representation? Does a wildly fanciful and inaccurate portrayal of the female reproductive and cardiovascular systems ‘redeem itself’ by being one of the most exciting works on paper produced during the Renaissance?

This question of ‘accuracy’ would be less of a problem if the exhibition hadn’t foregrounded it, by including vitrines of contemporary representations of the human body (plastic sculptures of the torso cut away, of the kind used in school science labs) placed alongside reproductions of some of the drawings. The visitor is meant to stop, presumably, and notice the similarities or differences between Leonardo’s drawing of a liver and another, presumably more accurate representation of the liver. This takes us no closer to a real liver, or a discussion about how we represent anything in art, and what that purpose of representation might be. The only sensible conclusion that may be drawn from these pairings is that there exists more than one artistic representation of the liver.

The curators here are doing something lazy, something that entirely misses the point of why we should be viewing these drawings. The point of appreciating Leonardo’s anatomical drawings is not entirely founded in their scientific accuracy. For example, The cardiovascular system and principal organs of a woman [c.1509-10], still one of his most challenging and enthralling works, depicts the womb as something almost out of science-fiction. By that I mean that it is occupying a figurative space somewhere between a physical truth and an imagined reality. The womb hangs suspended, a sphere, dangling from tapered tendons like a balloon within a web of veins and arteries. This (to a modern viewer) alien-like representation of female
anatomy is thrilling in its complete ‘inaccuracy’ from what we are told is the ‘true’ interpretation. But what Leonardo has drawn, whilst being scientifically ‘inaccurate,’ is drawn with such precision, such imaginative vigour, that it is possible to feel Leonardo’s mind searching for an answer he knows is there, underneath the skin of every woman that he sees, but which he cannot fully access. Here may be seen a way of looking beyond the ‘anatomical accuracy’ of these sketches, to see them not as purely scientific products but as markers of Leonardo’s own unconscious workings. In that sense, the ‘unconscious accuracy’ of these drawings is always correct, reflecting as they do Leonardo’s interests and moods at a particular point (or page) in his conscious development. Like all art, these works should be treated as manifestations as much as representations.

This concept of art as a ‘knowable-unknown’ predates psychoanalytic discourse by many centuries, and it is not the place here to go into a detailed psychoanalytic reading of Leonardo’s anatomical sketches. But psychoanalysis points us towards how we might appreciate the imaginative space of creation present in these works. The drawings themselves, in their engraving-friendly pen strokes, conjure up this potential space of interpretation, being neither from the body nor made up from parts of it: they are phantom bodies which represent something that we carry round, or that carries us round, all the time, that we know intimately but may never see, never really know. The artist, like the psychoanalyst, must ‘draw’ this space for us.

Nicholl provides us, again, with an explicit context for this approach, as shown in his analysis of *Female genitalia and studies of the anal sphincter* [c.1508-9]:

> Also from this time [1508-9] is the famous drawing showing the distended vulva of a woman, the genitalia unrealistically cavernous even if the drawing represents a multiparous or post-partum woman. I am tempted to connect this strange exaggeration with Leonardo’s earlier text about the ‘cavern’, and to suggest that the fear he expressed about looking into that ‘threatening dark cave’ was in part an unconscious confrontation with the disturbing mysteries of female sexuality. Within that Freudian sort of interpretation, the ‘marvellous thing’ that might be glimpsed within the cave might be the mystery of generation and birth. Here, however, in his notes below the drawing, Leonardo is content with a more laconic metaphor: ‘The wrinkles or ridges in the folds of the vulva have indicated to us the location of the gatekeeper of the castle.’ The image of a woman’s sex as a
defended ‘castle’ or ‘fortress’, to be besieged and breached by the insistent male, is a commonplace of amorous poetry (2005, p.421).

Of course, this is an extrapolation of a concept, and I would not recommend it as a method of curating this exhibition. However, as a means of furthering the curatorial interpretation of some of these more ‘problematic’ sketches, beyond their fidelity to body parts, this approach would have helped engage the visitor more with perhaps why Leonardo undertook this work. This seat of mental production, if explored, could have given more emphasis to the circumstances of production, namely Leonardo’s dissection of human corpses.

It is in the process of obtaining and dissecting corpses that the material to bridge this gap could have been found; this loss which these works present us with, between body and page, interior and exterior, unconscious and conscious, artistic and scientific, even the process of the interior made to be exterior. In their sterile, immaculate frames and mounts these pages seem a world removed from cadavers of any kind, despite their subject matter. And in a world where the closest many of us get to a dead body is in the private, rather than the public realm (as would have been extremely common in Leonardo’s day), the imaginative leap to put ourselves in this more visceral world of life and death (and the ethics surrounding it) is almost impossible.

The stories surrounding these dissections are worth telling, and only add to our appreciation of the works, and Leonardo’s risks in obtaining the bodies to draw. The atmosphere of cities like Milan and Florence in the late fifteenth and early sixteenth centuries was not conducive to dissection, even in medical circles. Whilst the difficulties are touched upon in the exhibition, they are dealt with mostly on the practical level of where the bodies could have been obtained from, rather than the actual ramifications of obtaining, storing, dissecting and disposing of them:

More practical anatomical work may have been possible in the hospitals of Milan. The Ospedale Maggiore, one of the largest hospitals in Europe, was under the patronage of the Sforza rulers of Milan (and by the late 1480s Leonardo was court artist to Ludovico Sforza), and there were many other charitable hospitals in the city, run by religious houses and lay confraternities, where the right contacts could have allowed Leonardo access to an unclaimed corpse for dissection. This would not have been a unique case of a well-connected artist carrying out human dissection (2012, p.11).
Clayton & Philo do not expand upon the somewhat shady backstreet dealings involved in dissection at the time, or the negotiations Leonardo must have made with the Milanese and Florentine hospitals and almshouses. The nuts-and-bolts of such dissection work are largely glossed over, another example of process being sacrificed at the expense of a veneration of the object. Again, it feels that we could have been taken beyond these works to pondering what drove a successful artist, who could have spent the majority of his life painting society portraits or church commissions, to choose not only to explore human dissection, but to do so with a vigour and obsessiveness that far exceeded his contemporaries.

“In a few years of intense work he dissected around thirty human corpses, combining manual dexterity in dissection with an acute understanding of physical structure, great skill as a draughtsman and an eloquent literary style to produce some of the finest anatomical studies ever made” (2012, p.7). This sentence, although factually accurate, betrays no sense of the cost, physically, socially and politically, of these studies upon Leonardo the man, or Leonardo the public figure. Nicholl gives us more clues as to what Leonardo would have had to deal with:

There is a certain dogged courage in these investigations, which were beset by taboos and doctrinal doubts, and which depended on the stressful and repulsive procedures of post-mortem examination in pre-refrigeration circumstances. Leonardo’s anatomy exemplifies his belief in practical, empirical, hands-on investigation... (2005, p.240).

This kernel that Nicholl accesses, this extra layer of insightfulness and sensitive reading, is what is overall absent from this glossy, high-status exhibition. Insights such as Nicholl’s make these sketches even more appreciable, because of the extreme importance which Leonardo must have attached to them.

No more apt analogy can be drawn with this exhibition than that of the corpse, literally the corpus, of these anatomical drawings of Leonardo’s. What could and should have breathed new life into them, brought us marginally closer to the metaphorical blood-and-guts, instead presented the equivalent of a body in formaldehyde: visible, perfect, still untouchable.
Leonardo was not some provincial anatomist assiduously collecting corpses, devoting his entire career to uncovering the secrets of the human body. Here was a man who travelled the entirety of Northern Italy and Southern France, who drew complicated architectural structures, considered problems of engineering, devised inventions to make man fly, dissected corpses of animals and humans, covered great halls in murals, and, finally, conceived and painted some of the most famous and important sketches and paintings in the world. Even this very rudimentary list indicates a mind that is curious, a mind that is interested in many things, and that there is inherent to these creative and intellectual outputs the inner workings of that man’s mind; the unnamed, unconscious equivalents of veins, bones, arteries, nerves. It would have been thrilling, exciting, to be presented with an exhibition that both recognised and explored this factor, a Leonardo exhibition that helped us to appreciate the man who not only painted the *Mona Lisa*, but who wanted to know *why* she smiled, as well as how.
Bibliography
