

---

# Drawing Reality

Matthew Gream<sup>1</sup>

February, 2000

---

## Protestations

For the Renaissance artist, drawing was an important activity to study and develop technique. By investigating the drawings of several key figures in the period, it is hoped to obtain an increased understanding about the artists and their goals. From this, some general conclusions can be drawn, and further studies can be proposed to broaden the inquiry.

## Preparations

The renaissance occupies a high profile in the continuing developments of art, as the creative powers in Florence brought about a new direction after the stagnation of the middle ages. It is a period notable for the works of universally creative men, the powers of Giotto, Brunelleschi, Donatello, Masaccio, Leonardo, Michelangelo and Raphael. They furthered the mastery of reality, to set art on a new path forward.

Although Giotto and Masaccio started the road to reality, it is Brunelleschi and Leonardo that are remembered. Brunelleschi developed perspective, and Leonardo incessantly investigated all aspects of nature to hone his creative processes.

It is interesting to consider the way in which these creative processes and developments occurred, and one legacy of the period is the body of available drawings and sketches. This material should provide further information about the artist's creative processes and artistic objectives. This information should be generalisable to the work of many other artists and creative individuals.

There are many renaissance artists, and I have chosen to cover Giotto, Masaccio,

Brunelleschi, Donatello, Leonardo, Michelangelo and Raphael. Only the latter three are investigated in detail, and in particular, Leonardo who left an astonishingly large cachet of material.

The role of drawings has been widely investigated [2] [3], and it is known as a well-established way to prepare and to refine technique. Various materials may be used, and artists may investigate lighting and tonal values (e.g. Seurat), or emphasis linear aspects, such as the relationship between lines (e.g. Mondrian), or movement expressed in linear terms (e.g. Van Gogh). The goal may be to create a drama of light and shade (e.g. Rembrandt), or an atmospheric quality of distant mountains (e.g. Claude). It is clear that each artist reflects their primary artistic goals through their drawings.

## Investigations

### Giotto

Giotto made great advances in naturalism [1], by developing a rational understanding of certain principles [5]. He had an original vision of the natural world, and a genius in communicating it [6]. Gombrich suggests that a new epoch of art started with him, because he rediscovered the art of creating the illusion of depth on a flat surface [4].

### Brunelleschi

Brunelleschi is known for devising the dome for the cathedral of Florence, based upon his travels to Rome and use of classical architecture to create new modes of harmony and beauty [4], and, he discovered the mathematical basis of perspective. Alberti describes Brunelleschi as 'devising a method for representing objects in depth on a flat surface by means of using a single vanishing point' [1].

### Donatello

Donatello excelled in emotional force, and was very concerned with the optical effects of his works [1]. His wanted to 'replace gentle refinement by new and vigorous observation of nature', something that was independent from traditional models [4], and so he can be seen to continue the development of reality.

---

<sup>1</sup> matthew.gream@pobox.com

## **Masaccio**

It is known that Masaccio brought a new scientific rigour to the problems of representation [1]. He grappled with and solved 'the problem of creating a completely coherent and consistent sense of three dimensions on a two-dimensional surface' [1], i.e. 'perspective' [4]. Later artists believed that one had to 'grasp the precepts and rules demonstrated by Masaccio for the correct representation of figures'.

## **Leonardo**

Leonardo da Vinci is regarded as a man of universal genius, who made wide ranging & outstanding contributions to art, science and engineering.

He is described as 'disturbingly intellectual' [1], and his writings emphasise a belief that 'the art of painting had to rest on knowledge' [12]. To uncover this knowledge, he studied many various natural objects in a continual quest for form and behaviour. Ultimately, his concern is for universal principles in nature [12].

An intellectual and rational approach to the construction of water is visible in his 'Deluge over a Rocky Landscape' [A], and similarly in the stylised hair of 'Study for the Head of Leda' [B] and even his own 'Self Portrait' [C]. They are clear evidence of a stylised approach, and further example of investigations into water, flows and dynamical systems are found in other studies.

He wrote as if he hoped and intended to encompass all knowledge and to fathom the secrets of nature [12]. This knowledge allowed him to construct 'sublime basic conceptions' [1] that had an 'appropriate balance between nature and style' [12]. So his universal principles allowed him to idealise nature.

His aircraft designs are based on principles of flight derived from studies of birds [D], and in another study he takes on 'A Comparison between the Legs of Man and Horse' [E] to understand muscle similarities. His 'Lifting Device' [F] exploits engineering principles similar to those used in the human bodies 'Muscles of the Ribs and Upper Spine' [G]. He even writes about the similarity between the human body and architecture.

Clearly, his drawings served as a way to understand all manner of natural objects and develop a stylised approach. With his, he was able to invent by analogy, and idealise reality.

## **Michelangelo**

Michelangelo was primarily a sculptor, and regarded himself so [1]. He was fascinated by the beauty of the body and the face [11], and his central act in art was to 'merge and separate' the body: to bring the figures close together, but otherwise separated [7]. Something that would result from the technical limitations imposed by the implementation of his ideas in blocks of sculptural material. He 'conceived his figures already within the block, and sought merely to 'free' them from the excess marble that imprisoned them' [16].

Andre Chastel (in [7]) suggests Michelangelo's tendency to abstraction, as opposed to Leonardo's excessively analytical approach. Michelangelo is known to have made his own research into human anatomy, by dissecting bodies and drawing from models [4]. He was interested in aesthetical anatomy, and was essentially a poet [16], so his purposes are seen as more artistic than Leonardo's.

Michelangelo's 'Crucifixion' [H] portrays the religious theme in such a manner that the figures are compacted organised, but by arranging the lower figures, and the depth between the figures and the central figure, he constructs a sense of distance.

## **Raphael**

Raphael has his own sense of well-being that comes through in his constructions of splendid healthy human beings [1]. It is suggested that he embodied the transitions during his time: linear to painterly, separation to continuity, local hue to tonal homogeneity and flatness to volume [15]. These are, after all, developments towards increasing reality.

His drawings find simplicity and harmony [4], and he aims towards perfect design and balanced composition, and rather than copy, looked towards 'a certain idea' in his mind, so he looked towards ingrained beauty [4]. He draws to make functional preparations for painting, to produce the right shapes, tones, volumes and textures. His 'Studies for the Madonna of the

Meadow' [G] show the attempt to develop the idealised form.

## Extrapolations

Primarily, the investigation illuminates the way in which artists' drawings illustrate the nature of their creative processes, and their primary artistic goals. Leonardo draws to discover general rules in nature, Michelangelo seeks to overcome implementation limitations, and Raphael pursues ideal forms from the mind's eye. Perhaps these are part of a larger picture.

The broader trend of art and science is partially the desire to overcome reality, and the renaissance is an epoch in this continuing development. The drawings allow Leonardo to understand reality in greater depth, or allow Michelangelo overcome the reality of the sculptural media, or Raphael to pursue the reality of his ideas. In themselves, the drawings are a path for each artist towards their own ideal of the reality of their work.

Evidence can be found to support the argument that artists use drawings for similar purposes. Seurat's preparations show a concern for the primacy of colour arrangement. For instance, the preparation for one work has a colour blotch, which becomes a 'dog' in the completed work. Other artists may start with the desire to have a 'dog', and then in choose appropriate colouring for the completed work. This would illustrate their primacy towards narration.

In other creative fields, museums continue to refine technique, architects continue to practice designs, engineers master the process of problem solving, philosophers master the view of truth, and writers master an understanding of life and people. An even broader study could investigate the idea of drawing and sketching in a universal sense.

By broadening into psychology, it may be interesting to consider the relationship of these processes to the meditative process, or the way in which the mind seeks to find balance, harmony and rest. It should be remembered that perhaps each mind has its own particular idea of balance, harmony and rest.

With the availability of advanced computing tools, it may eventually be possible to scan in these historical artifacts, and investigate how they relate to

each other, and further the process of understanding the minds of these artists. These models could also be used to develop and verify an electronic fingerprint for artists' work. The drawings would provide further evidence.

## Summations

The result of this investigation is a greater understanding of the role of drawings and their relationship to the renaissance artists, tending to illustrate and the general themes occurring in art during the renaissance period. There are some suggestions about the possibility of extending the study to greater breadth, to develop a universal understanding.

## References

- [1] *The Oxford Dictionary of Art*. Ian Chilvers (ed), 1997. Oxford University Press, ISBN 0-19-860084-4.
- [2] *Drawing Ideas of the Masters: Artists' Techniques Compared and Contrasted*. Phaidon Press, 1981. ISBN 0-7148-2123-3.
- [3] *Drawing Lessons from the Great Masters*. Robert Beverly Hale, 1985. Watson-Guption Publications, Inc.
- [4] *The Story of Art*. E.H. Gombrich, 1995. Phaidon Press, ISBN 0-7148-3247-2.
- [5] *Giotto and the Language of Gesture*. Moshe Barasch, 1987. Cambridge University Press, ISBN 0-521-32454-8.
- [6] *The Thames and Hudson Dictionary of Art and Artists*. Herbert Read (ed), 1994. Thames and Hudson, ISBN 0-500-20274-5.
- [7] *Art and Life: Aspects of Michelangelo*. Nathan Leites, 1986. New York University.
- [8] *Drawing in Early Renaissance Italy*. Francis Ames-Lewis, 1981. Yale University Press, ISBN 0-300-02551-3.
- [9] *Dictionary of Italian Painting*. Methuen, 1964. Methuen & Co, Paris.
- [10] *The Dictionary of Art*. Jane Turner (ed), 1996. Macmillan Publishers Ltd, ISBN 1-884446-00-0.
- [11] *Michelangelo 1465-1564*. Gilles Neret (ed), 1998. Taschen, ISBN 3-8228-8272-0
- [12] *Leonardo da Vinci*. Hayward Gallery London, 1989. ISBN 1-85332-026-9.

[13] *Leonardo da Vinci: The Marvellous Works of Nature and Man*. Martin Kemp, 1981. Tien Wah Press, ISBN 0-460-04354-4.

[14] *Master Drawings, from Cave Art to Picasso*. Teriio Pignatti, 1964. Evens Bros.

[15] *The Drawings of Raphael*. Paul Joannides, 1983. Phaidon Press, ISBN 0-7148-2282-5.

[16] *Michelangelo, A Lesson in Anatomy*. James Beck, 1975. Phaidon Press, ISBN 0-7148-1684-1.

[17] *Leonardo, Michelangelo and the Century of Genius: Master Drawings from the British Museum*. British Museum, 1980. Griffin Press, ISBN 0-7243-3480-7.

[18] *Roman Drawings of the Sixteenth Century from the Mus'ee du Louvre Paris*. The Art Institute of Chicago, 1979. Congress Printing Co. LCCN 79-90234.

[19] *Encyclopedia of Aesthetics*. Michael Kelly (ed), 1998. Oxford University Press, ISBN 0-19-511307-1.

Figure A.  
'Deluge over a Rocky Landscape' -Leonardo  
c. 1513-15. Black chalk on white Paper.  
157 x 203 mm  
[Hayward Gallery]

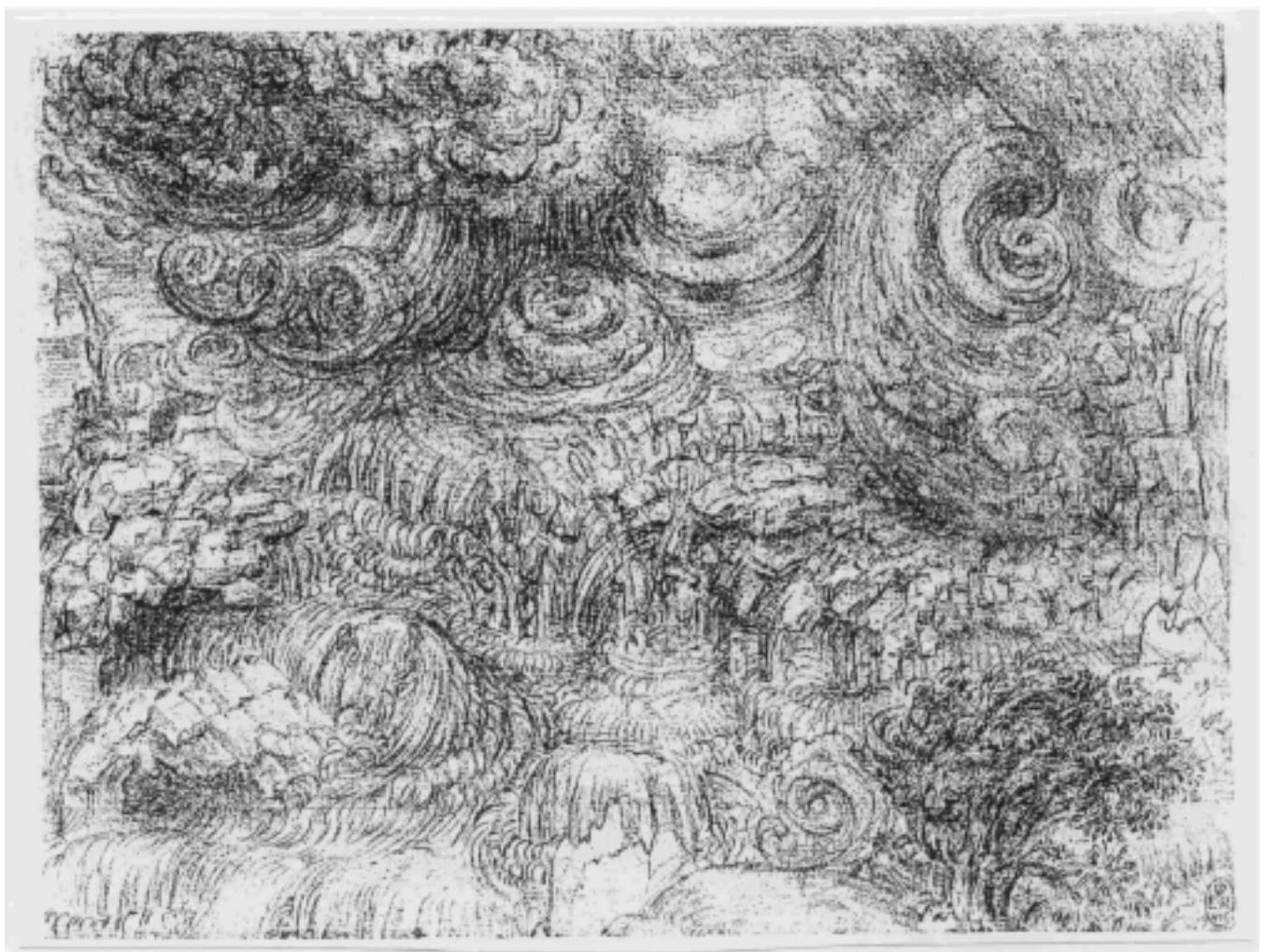


Figure B.  
'Study for the Head of Leda' - Leonardo  
c. 1505-07. Pen and ink over black chalk.  
198 x 166 mm  
[Hayward Gallery]



Figure C.  
'Flying Machine' – Leonardo  
c. 1486-90.

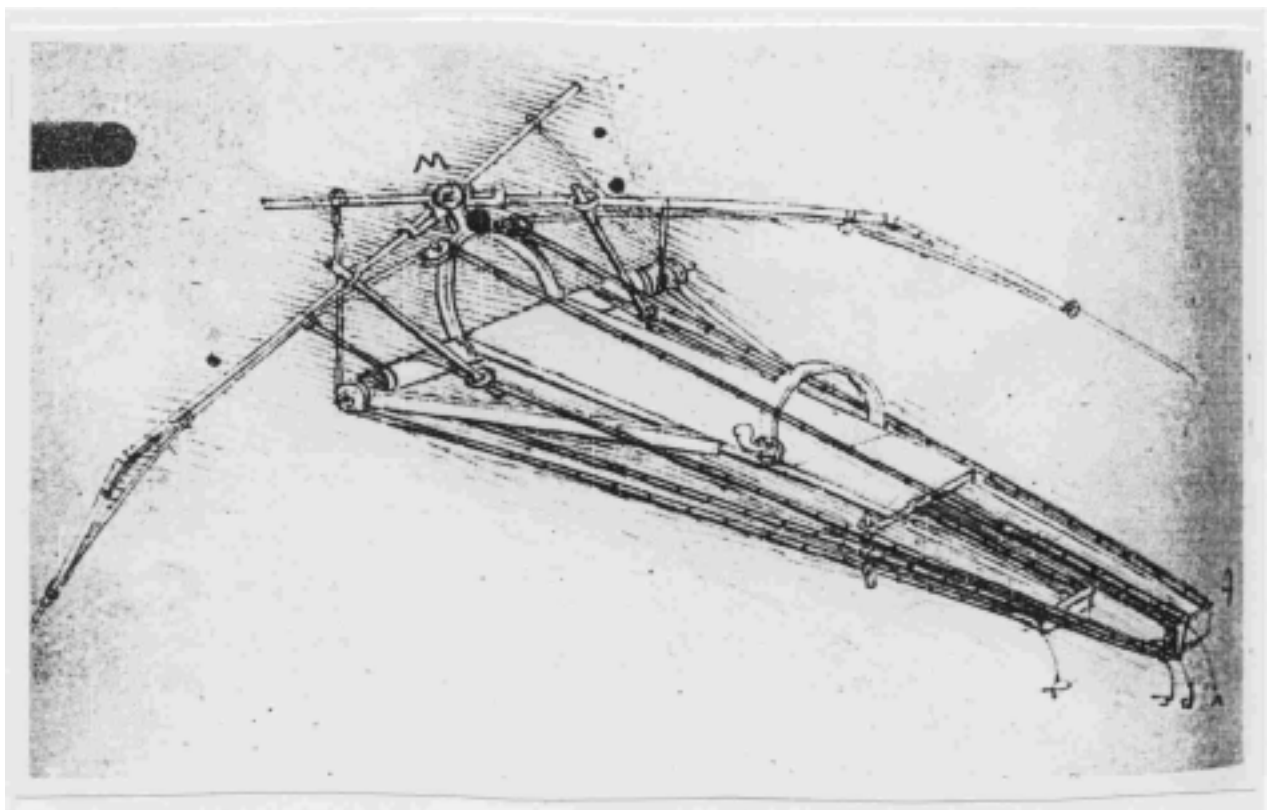


Figure D.  
"A Comparison between the Legs of a Man and Horse" - Leonardo  
c. 1506-7. Pen and ink over red chalk on paper coated with a red  
preparation.  
281 x 205 mm  
[Hayward Gallery]

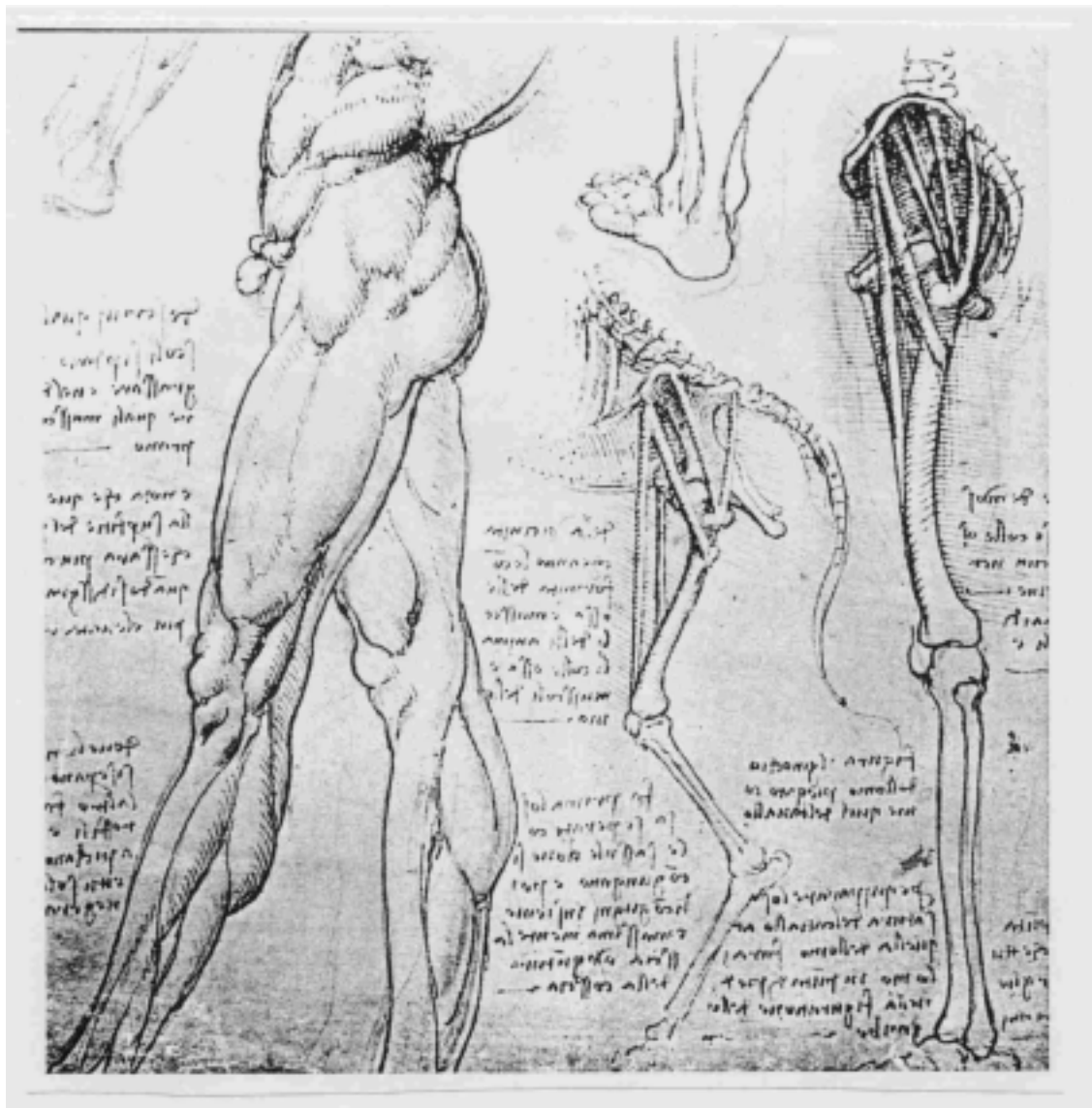




Figure E.  
'A Lifting Device' - Leonardo  
c. 1493. Red chalk.  
93 x 68 mm  
[Victoria and Albert Museum, London]



Figure F.  
'Muscles of the Ribs and Upper Spine' -Leonardo  
c. 1510. Pen and ink.  
285 x 1 95 mm  
[Hayward Gallery]

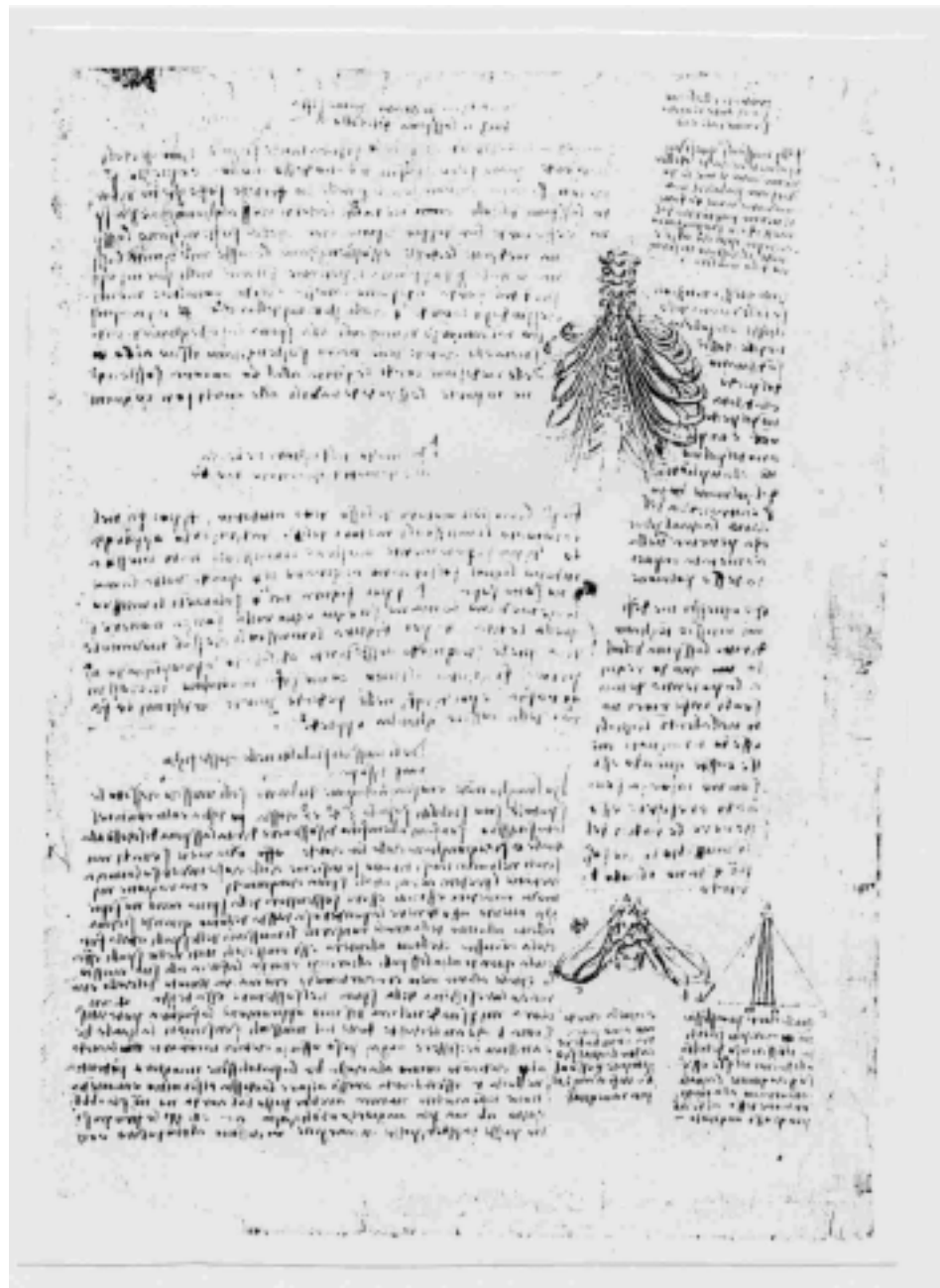


Figure G.  
'Crucifixion' - Michelangelo  
c. 1550-5. Black chalk and opaque white-  
lead pigment.  
412 x 279 mm  
[British Museum, London]

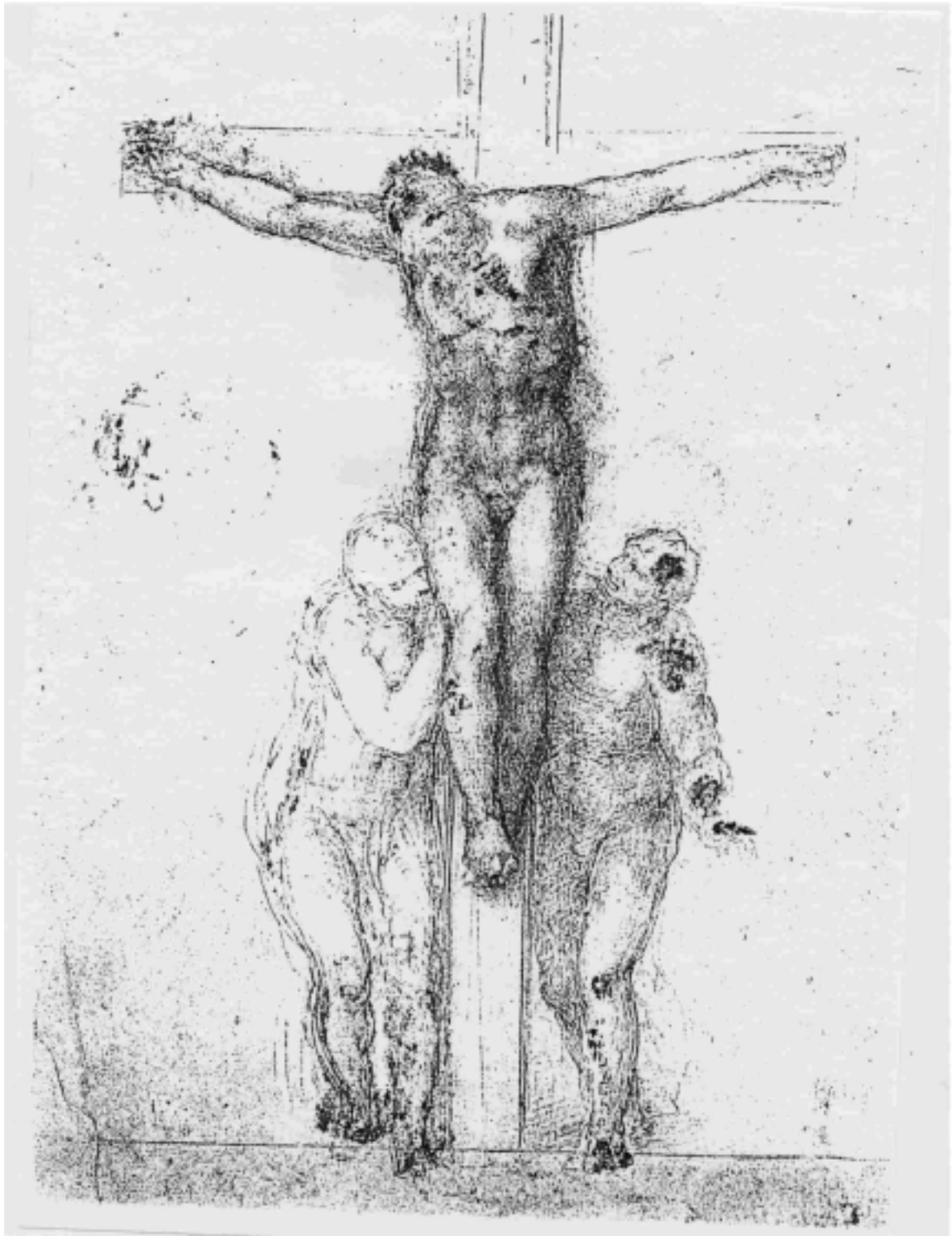


Figure H.  
'Studies for the Madonna of the Meadow' Raphael  
c. 1505-06. Pen over stylus.  
362 x 245 mm  
[Kunsthistorisches Museum, Vienna]

