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**Weekly seminar (01/30/2008)**

**Abstract**

**Forms of Transmission of Anatomical Knowledge in the Age of Leonardo,  
Michelangelo and Vesalius**

My research aims to reconstruct the forms of transmission of anatomical knowledge through various generations of artists and among artists and scientists during the 16th century, a time in which both artists and doctors shared a deep interest in anatomy. From an art-historical point of view I am examining mainly drawings and three-dimensional models, two sources that are rarely considered in the rich literature on anatomy in the Renaissance. From a scientific-historical point of view I will analyze, among other topics, the still unsolved problem of the authorship of figures in important anatomical treatises printed in the 16th century.

In the 16<sup>th</sup> century artists not only studied anatomy for their own art, but also helped scientists in designing the images for their treatises. And in both cases they expressed the results of their work mainly in the form of drawings.

These drawings constitute a field largely unexplored by scholars, maybe because they are too scientific for art historians and too artistic for science historians.

They are now the main concern of my research in progress. Previously I studied different aspects of Leonardo's work (anatomy, physiognomy, art, and his studies for the flying machine). I then studied anatomy in the Renaissance from a more scientific-historical point of view. Now I'm studying anatomical drawings for different reasons. First, as a Leonardo scholar I want to reconstruct his legacy on the history of anatomy, and, at least at first glance, his impact among the artists of the 16th century was greater than that among the scientists. Second, a closer examination of these drawings can help to solve problems relevant to the history of science such as the concrete way in which scientists realized their illustrated treatises, the name of the artists who designed the plates, who remain often unknown.

My research develops along two lines.

From the point of view of the history of art I am attempting to reconstruct two main traditions of study: the studies influenced by Michelangelo (relatively more known) and the ones influenced by Leonardo (almost completely unknown). I'm trying to reconstruct sets of drawings that are

thematically connected, analyzing the different forms of transmission: copies from other drawings, copies from three-dimensional models, variations, etc.

Up till now I reconstructed the influence of Leonardo's studies on three artists from the 16<sup>th</sup> century: Raphael, Ambrogio Figino and Rubens. In particular I considered two underestimated subjects: the link between anatomy and a more theoretical field such as the statics and dynamics of the human figure (which would be developed later on in the famous Cartesian treatise by Giovan Alfonso Borelli, *De motu animalium*, published in the 17th century) and the importance of anatomical sculptures. A close examination of some drawings by these artists (most of them from New York collections) enabled me to discover unknown aspects such as preparatory patterns with static and dynamic meaning, connections among drawings usually considered unrelated and instead based upon the same anatomical sculpture, etc.

I'm now working to refine these results, for example by considering other drawings, from various New York collections, dealing with the study of the kinematical of the human body. I will also open other paths of research, such as a more precise reconstruction of the Michelangiolesque tradition of anatomical drawings during the 16<sup>th</sup> century, the relationship between artists and scientists, the way in which artists elaborated particular forms of transmission of anatomical contents based on the treatises of the scientists, etc.