LEON BATTISTA ALBERTI: EXCERPTS FROM ON PAINTING

From the Prologue

I used to marvel and at the same time to grieve that so many excellent and superior arts and sciences from our most vigorous antique past could now seem lacking and almost wholly lost. We know from [remaining] works and through references to them that they were once widespread. Painters, sculptors, architects, musicians, geometricians, seers and similar noble and amazing intellects are very rarely found today and there are few to praise them. Thus I believed, as many said, that Nature, the mistress of things, had grown old and tired. She no longer produced either geniuses or giants which in her more youthful and more glorious days she had produced so marvelously and abundantly.

Since then, I have been brought back here [to Florence] from the long exile in which we Alberti have grown old into this our city, adorned above all others. I have come to understand that in many men, but especially in you, Filippo, and in our close friend Donato the sculptor and in others like Nencio, Luca and Masaccio, there is a genius for accomplishing every praiseworthy thing. For this they should not be slighted in favor of anyone famous in antiquity in these arts. Therefore, I believe the power of acquiring wide fame in any art or science lies in our industry and diligence more than in the times or in the gifts of nature. It must be admitted that it was less difficult for the Ancients--because they had models to imitate and from which they could learn to come to a knowledge of those supreme arts which today are most difficult for us. Our fame ought to be much greater, then, if we discover unheard-of and never-before-seen arts and sciences without teachers or without any model whatsoever.

From Book One

The triangle of vision

…it is said that vision makes a triangle. The base of [this triangle] is the quantity seen and the sides are those rays which are extended from the quantity to the eye. It is, therefore, very certain that no quantity can be seen without the triangle. The angles in this visual triangle are first, the two points of the quantity, the third, that which is opposite the base and located within the eye.

The visual pyramid

…extrinsic rays, thus encircling the plane--one touching the other--enclose all the plane like the willow wands of a basket-cage, and make, as is said, this visual pyramid. It is time for me to describe what this pyramid is and how it is constructed by these rays. I will describe it in my own way. The pyramid is a figure of a body from whose base straight lines are drawn upward, terminating in a single point. The base of this pyramid is a plane which is seen. The sides of the pyramid are those rays which I have called extrinsic. The cuspid, that is the point of the pyramid, is located within the eye where the angle of the quantity is.

The picture plane

…I think every painter, if he wishes to be a great master, ought to understand clearly the similarities and the distinctions of the planes, a thing known to very few….They should know that they circumscribe the plane with their lines. When they fill the circumscribed places with colors, they should only seek to present the forms of things seen on this plane as if it were of transparent glass. Thus the visual pyramid could pass through it, placed at a definite distance with definite lights and a definite position of center in space and in a definite place in respect to the observer. Each painter, endowed with his natural instinct, demonstrates this when, in painting this plane, he places himself at a distance as if
Searching the point and angle of the pyramid from which point he understands the thing painted is best seen.

Where this is a single plane, either a wall or a panel on which the painter attempts to depict several planes comprised in the visual pyramid, it would be useful to cut through this pyramid in some definite place, so the painter would be able to express in painting similar outlines and colors with his lines. He who looks at a picture, done as I have described [above], will see a certain cross-section of a visual pyramid, artificially represented with lines and colors on a certain plane according to a given distance, center and lights. Now, since we have said that the picture is a cross-section of the pyramid we ought to investigate what importance this cross-section has for us. Since we have these knowns, we now have new principles with which to reason about the plane from which we have said the pyramid issues.

*Linear perspective*

First of all about where I draw. I inscribe a quadrangle of right angles, as large as I wish, which is considered to be an open window through which I see what I want to paint. Here I determine as it pleases me the size of the men in my picture. I divide the length of this man in three parts. These parts to me are proportional to that measurement called a *braccio*, for, in measuring the average man it is seen that he is about three *braccia*. With these *braccia* I divide the base line of the rectangle into as many parts as it will receive. To me this base line of the quadrangle is proportional to the nearest transverse and equidistant quantity seen on the pavement. Then, within this quadrangle, where it seems best to me, I make a point which occupies that place where the central ray strikes. For this it is called the centric point. This point is properly placed when it is no higher from the base line of the quadrangle than the height of the man that I have to paint there. Thus both the beholder and the painted things he sees will appear to be on the same plane.

The centric point being located as I said, I draw straight lines from it to each division placed on the base line of the quadrangle. These drawn lines, [extended] as if to infinity, demonstrate to me how each transverse quantity is altered visually.

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...In all things proceed as I have said, placing the centric point, drawing the lines from it to the divisions of the base line of the quadrangle. In transverse quantities where one recedes behind the other I proceed in this fashion. I take a small space in which I draw a straight line and this I divide into parts similar to those in which I divided the base line of the quadrangle. Then, placing a point at a height equal to the height of the centric point from the base line, I draw lines from this point to each division scribed on the first line. Then I establish, as I wish, the distance from the eye to the picture. Here I draw, as the mathematicians say, a perpendicular cutting whatever lines it finds. A perpendicular line is a straight line which, cutting another straight line, makes equal right angles all about it. The intersection of this perpendicular line with the others gives me the succession of the transverse quantities. In this fashion I find described all the parallels, that is, the square[d] *braccia* of the pavement in the painting. If one straight line contains the diagonal of several quadrangles described in the picture, it is an indication to me whether they are drawn correctly or not. Mathematicians call the diagonal of a quadrangle a straight line [drawn] from one angle to another. [This line] divides the quadrangle into two parts in such a manner that only two triangles can be made from one quadrangle.

This being done, I draw transversely in the quadrangle of the picture a straight line parallel to the base line, which passes through the centric point from one side to the other and divides the quadrangle. Because this line passes through the centric, point, I call it the centric line. For me this line is a limit above which no visible quantity is allowed unless it is higher than the eye of the beholder. Because of this, depicted men placed in the last squared *braccia* of the painting are smaller than the others. Nature
herself demonstrates to us that this is so. In temples the heads of men are seen to be almost all on the same level but the feet of the farthest correspond to the knees of the nearest.

From Book Two

*The nobility of painting*

Because this [process of] learning may perhaps appear a fatiguing thing to young people, I ought to prove here that painting is not unworthy of consuming all our time and study.

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The extent to which painting contributes to the most honorable delights of the soul and to the dignified beauty of things can be clearly seen not only from other things but especially from this: you can conceive of almost nothing so precious which is not made far richer and much more beautiful by association with painting. Ivory, gems and similar expensive things become more precious when worked by the hand of the painter. Gold worked by the art of painting outweighs an equal amount of unworked gold. If figures were made by the hand of Phidias or Praxiteles from lead itself--the lowest of metals--they would be valued more highly than silver. The painter, Zeuxis, began to give away his things because, as he said, they could not be bought. He did not think it possible to come to a just price which would be satisfactory to the painter. 

...It is scarcely possible to find any superior art which is not concerned with painting, so that whatever beauty is found can be said to be born of painting. Moreover, painting was given the highest honor by our ancestors. For, although almost all other artists were called craftsmen, the painter alone was not considered in that category.

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The incredible esteem in which painted panels have been held has been recorded. Aristides the Theban sold a single picture for one hundred talents. They say that Rhodes was not burned by King Demetrius for fear that a painting of Protogenes should perish. It could be said that the city of Rhodes was ransomed from the enemy by a single painting. Pliny collected many other such things in which you can see that good painters have always been greatly honored by all. The most noble citizens, philosophers and quite a few kings not only enjoyed painted things but also painted with their own hands. Lucius Manilius, Roman citizen, and Fabius, a most noble man, were painters. Turpilius, a Roman knight, painted at Verona. Sitedius, praetor and proconsul, acquired renown as a painter. Pacuvius, tragic poet and nephew of the poet Ennius, painted Hercules in the Roman forum. Socrates, Plato, Metrodorus, Pyrrho were connoisseurs of painting. The emperors Nero, Valentinian, and Alexander Severus were most devoted to painting. It would be too long, however, to recount here how many princes and kings were pleased by painting. 

However, let us return to our work. Certainly the number of sculptors and painters was great in those times when princes and plebeians, learned and unlearned enjoyed painting, and when painted panels and portraits, considered the choicest booty from the provinces, were set up in the theatres. Finally L. Paulus Aemilius and not a few other Roman citizens taught their sons painting along with the fine arts and the art of living piously and well. This excellent custom was frequently observed among the Greeks who, because they wished their sons to be well educated, taught them painting along with geometry and music. It was also an honor among women to know how to paint. Martia, daughter of Varro, is praised by the writers because she knew how to paint. Painting had such reputation and honor among the Greeks that laws and edicts were passed forbidding slaves to learn painting. It was certainly well that they did this, for the art of painting has always been most worthy of liberal minds and noble souls.
As for me, I certainly consider a great appreciation of painting to be the best indication of a most perfect mind, even though it happens that this art is pleasing to the uneducated as well as to the educated. It occurs rarely in any other art that what delights the experienced also moves the inexperienced. In the same way you will find that many greatly desire to be well versed in painting. Thus this art gives pleasure and praise to whoever is skilled in it; riches and perpetual fame to one who is master of it. Since these things are so, since painting is the best and most ancient ornament of things, worthy of free men, pleasing to learned and unlearned, I greatly encourage our studious youth to exert themselves as much as possible in painting.

The three parts of painting

Let us return to our subject. Painting is divided into three parts; these divisions we have taken from nature.

Since painting strives to represent things seen, let us note in what way things are seen. First, in seeing a thing, we say it occupies a place. Here the painter, in describing this space, will say this, his guiding an outline with a line, is circumscription. Then, looking at it again, we understand that several planes of the observed body belong together, and here the painter drawing them in their places will say that he is making a composition. Finally, we determine more clearly the colors and qualities of the planes. Since every difference in them is born from light, we can properly call their representation the reception of light. Therefore, painting is composed of circumscription, composition and reception of light.

Circumscription

...Circumscription describes the turning of the outline in the painting. I say that in this circumscription one ought to take great pains to make these lines so fine that they can scarcely be seen....Because circumscription is nothing but the drawing of the outline, which when done with too apparent a line does not indicate a margin of the plane but a neat cleavage, I should desire that only the movement of the outline be inscribed. To this, I insist, one must devote a great amount of practice. No composition and no reception of light can be praised where there is not also a good circumscription. It is not unusual, however, to see only a good circumscription--that is, a good drawing--which is most pleasant in itself....

Composition

...Composition is that rule of painting by which the parts of the things seen fit together in the painting. The greatest work of the painter is not a colossus, but an istoria. Istoria gives greater renown to the intellect than any colossus. Bodies are part of the istoria, members are parts of the bodies, planes part of the members. The primary parts of painting, therefore, are the planes. That grace in bodies which we call beauty is born from the composition of the planes....

Therefore, in this composition of planes grace and beauty of things should be intensely sought for. It seems to me that there is no more certain and fitting way for one who wishes to pursue this than to take them from nature, keeping in mind what way nature, marvelous artificer of things, has composed the planes in beautiful bodies....

Proper istoria

The istoria which merits both praise and admiration will be so agreeably and pleasantly attractive that it will capture the eye of whatever learned or unlearned person is looking at it and will move his soul. That which first gives pleasure in the istoria comes from copiousness and variety of things....However, I prefer this copiousness to be embellished with a certain variety, yet moderate and grave with dignity and truth. I blame those painters who, where they wish to appear copious, leave nothing vacant. It is not composition but dissolute confusion which they disseminate....
Perhaps solitude will be pleasing for one who greatly desires dignity in his istoria. The majesty of princes is said to be contained in the paucity of words with which they make their wishes known. Thus in the istoria a certain suitable number of bodies gives not a little dignity. Solitude displeases me in istorie; nor can I praise any copiousness which is without dignity. I dislike solitude in istorie nevertheless I do not at all praise that copiousness which shrinks from dignity. I strongly approve in an istoria that which I see observed by tragic and comic poets. They tell a story with as few characters as possible. In my judgement no picture will be filled with so great a variety of things that nine or ten men are not able to act with dignity. I think pertinent to this the statement of Varro who admitted no more than nine guests to a banquet in order to avoid confusion.

In every istoria variety is always pleasant. A painting in which there are bodies in many dissimilar poses is always especially pleasing. There some stand erect, planted on one foot, and show all the face with the hand high and the fingers joyous. In others the face is turned, the arms folded and the feet joined. And thus to each one is given his own action and flexion of members; some are seated, others on one knee, others lying. If it is allowed here, there ought to be some nude and others part nude and part clothed in the painting; but always make use of shame and modesty. The parts of the body which give little pleasure should be covered with draperies, with a few fronds or the hand....

Thus I desire, as I have said, that modesty and truth should be used in every istoria. For this reason be careful not to repeat the same gesture or pose. The istoria will move the soul of the beholder when each man painted there clearly shows the movement of his own soul. It happens in nature that nothing more than herself is found capable of things like herself; we weep with the weeping, laugh with the laughing, and grieve with the grieving. These movements of the soul are made known by movements of the body. Care and thought weigh so heavily that a sad person stands with his forces and feelings as if dulled, holding himself feebly and tiredly on his pallid and poorly sustained members. In the melancholy the forehead is wrinkled, the head drooping, all members fall as if tired and neglected. In the angry, because anger incites the soul, the eyes are swollen with ire and the face and all the members are burned with color, fury adds so much boldness there. In gay and happy men the movements are free and with certain pleasing inflections....

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But let me say something about these movements. Part of this I fabricate out of my own mind, part I have learned from nature. First of all I think that all the bodies ought to move according to what is ordered in the istoria. In an istoria I like to see someone who admonishes and points out to us what is happening there; or beckons with his hand to see; or menaces with an angry face and with flashing eyes, so that no one should come near; or shows some danger or marvelous thing there; or invites us to weep or to laugh together with them. Thus whatever the painted persons do among themselves or with the beholder, all is pointed toward ornamenting or teaching the istoria. Timantes of Cyprus is praised in his panel, the Immolation of Iphigenia, with which he conquered Kolotes. He painted Calchas sad, Ulysses more sad, and in Menelaos, then, he would have exhausted his art in showing him greatly grief stricken. Not having any way in which to show the grief of the father, he threw a drape over his head and let his most bitter grief be imagined, even though it was not seen. They praise the ship painted in Rome by our Tuscan painter Giotto. Eleven disciples [are portrayed], all moved by fear at seeing one of their companions passing over the water. Each one expresses with his face and gesture a clear indication of a disturbed soul in such a way that there are different movements and positions in each one.

Allow me to pass over the movements most briefly. Some movements of the soul are called affections, such as grief, joy and fear, desire and other similar ones. The following are movements of the body. Bodies themselves move in several ways, rising, descending, becoming ill, being cured and moving
from place to place. We painters who wish to show the movements of the soul by movements of the body are concerned solely with the movement of change of place.  

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…You will find that in expressing too violent movements…some think to be praised because they hear that figures appear most lively which most throw about all their members. For this reason their figures appear hackers and actors, without any dignity in the painting. Because of this they are not only without grace and sweetness but moreover they show the too fiery and turbulent imagination of the artist.

The painting ought to have pleasant and graceful movements, suitable to what is happening there. The movements and poses of virgins are airy, full of simplicity with sweetness of quiet rather than strength; even though to Homer, whom Zeuxis followed, robust forms were pleasing even in women. The movements of youths are light, gay, with a certain demonstration of great soul and good force. In men the movements are more adorned with firmness, with beautiful and artful poses. In the old the movements and poses are fatigued; the feet no longer support the body, and they even cling with their hands. Thus each one with dignity has his own movements to express whatever movements of the soul he wishes. For the greatest disturbance of the soul there are similar great movements of the members. This rule of common movements is observed in all animate beings.  

Light  

The reception of light remains to be treated. In the lessons above I have demonstrated at length how light has the power to vary colors. I have taught how the same color, according to the light and shade it receives, will alter its appearance. I have said that white and black express to the painter shade and light; all other colors for the painter are matter to which he adds more, or less shadow or light. Therefore, let us leave the other things. Here we must consider solely how the painter ought to use white and black.  

…But I should like the [highest level of attainment] in industry and art to rest, as the learned maintain, on knowing how to use black and white. It is worth all your study and diligence to know how to use these two well, because light and shade make things appear in relief. Thus white and black make painted things appear in relief and win that praise which was given to Nicias the Athenian painter. They say that Zeuxis, a most famous antique painter, was almost the leader of the others in knowing the force of light and shade; little such praise was given to the others. I almost always consider mediocre the painter who does not understand well the strength of every light and shade in each plane.  

I prefer a good drawing with a good composition to be well colored. Therefore let us study first of all light and shade, and remember how one plane is brighter than another where the rays of light strike, and how, where the force of light is lacking, that same color becomes dusky. It should also be noted that the shadow will always correspond to the light in another part so that no part of a body is lighted without another part being dark.  

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Remember that on a flat plane the color remains uniform in every place; in the concave and spherical planes the color takes variations, because what is here light is there dark, in other places a median color. This alteration of colors deceives the stupid painters, who, as we have said, think the placing of the lights to be easy when they have well designed the outlines of the planes.  

From Book Three  

The painter and the liberal arts
The aim of painting: to give pleasure, good will and fame to the painter more than riches. If painters will follow this, their painting will hold the eyes and the soul of the observer. We have stated above how they could do this in the passages on composition and the reception of light. However, I would be delighted if the painter, in order to remember all these things well, should be a good man and learned in liberal arts.

It would please me if the painter were as learned as possible in all the liberal arts, but first of all I desire that he know geometry. I am pleased by the maxims of Pamphilos, the ancient and virtuous painter from whom the young nobles began to learn to paint. He thought that no painter could paint well who did not know much geometry. Our instruction in which all the perfect absolute art of painting is explained will be easily understood by a geometrician, but one who is ignorant in geometry will not understand these or any other rules of painting. Therefore, I assert that it is necessary for the painter to learn geometry.

For their own enjoyment artists should associate with poets and orators who have many embellishments in common with painters and who have a broad knowledge of many things. These could be very useful in beautifully composing the istoria whose greatest praise consists in the invention. A beautiful invention has such force, as will be seen, that even without painting it is pleasing in itself alone.

On nature and beauty

...Therefore I advise that each painter should make himself familiar with poets, rhetoricians and others equally well learned in letters. They will give new inventions or at least aid in beautifully composing the istoria through which the painter will surely acquire much praise and renown in his painting. Phidias, more famous than other painters, confessed that he had learned from Homer, the poet, how to paint Jove with much divine majesty. Thus we who are more eager to learn than to acquire wealth will learn from our poets more and more things useful to painting.

In order to make a painting which the citizens placed in the temple of Lucina near Croton, Zeuxis, the most excellent and most skilled painter of all, did not rely rashly on his own skills as every painter does today. He thought that he would not be able to find so much beauty as he was looking for in a single body, since it was not given to a single one by nature. He chose, therefore, the five most beautiful young girls from the youth of that land in order to draw from them whatever beauty is praised in a woman. He was a wise painter. Frequently when there is no example from nature which they can follow, painters
attempt to acquire by their own skill a reputation for beauty. Here it easily happens that the beauty which they search is never found even with much work. But they do acquire bad practices which, even when they wish, they will never be able to leave. He who dares take everything he fashions from nature will make his hand so skilled that whatever he does will always appear to be drawn from nature.

The following demonstrates what the painter should seek out in nature. Where the face of some well known and worthy man is put in the istoria--even though there are other figures of a much more perfect art and more pleasing than this one--that well known face will draw to itself first of all the eyes of one who looks at the istoria. So great is the force of anything drawn from nature. For this reason always take from nature that which you wish to paint, and always choose the most beautiful.

In conclusion

I have had these things to say of painting. If they are useful and helpful to painters, I ask only that as a reward for my pains they paint my face in their istoria in such a way that it seems pleasant and I may be seen a student of the art. If this work is less satisfactory than your expectations, do not censure me because I had the courage to undertake such great matters. If my intellect has not been able to finish what it was praiseworthy to try, perhaps only my will ought to be praised in these great and difficult things….

However, I was pleased to seize the glory of being the first to write of this most subtle art. If I have little been able to satisfy the reader, blame nature no less than me, for it imposes this law on things, that there is no art which has not had its beginnings in things full of errors. Nothing is at the same time both new born and perfect.

I believe that if my successor is more studious and more capable than I he will [be able to] make painting absolute and perfect.

Finished, praise be to God, the 17th day of the month of July, 1436.