

Art Book (sheet and Ward)

Use of art —

Physics of art —

Heathcote 1920.

Plates —

PHYSICS →

geometric skeleton
(black & gray)

translations —

colour composition

Cardinal greys

Bach's Vermeer

Chinese (maple tree)

values —

x. but these are painter's books and not intended for the layman —

metaphysics →

x to excuse its existence, to explain its reason to be
we must leave the physical and go to the spiritual.
The very ^{composition} existence of a painting is ^{unimpaired} the same in the dark room, yet it cannot be said to function. For the layman, a painting is not as much the canvas and colour, but the optical residue that it leaves in the eye and the subsequent connotations on the nerves and brain —

decorative

Art and the art object —
The art object (picture) is a material thing — canvas — oil or lime — color — it obeys to physical laws — is subject to recipes — as much as carpenter's or plumber's work — In this sense books can be written on the making of art in the same sense that books of recipes — And the artist — in this sense — is primarily a good artisan — mastering the laws of his material to obtain permanent results — The choice of canvas, ^{dynamical} properties of color, mixing — are well soundly made the subject of treatises. Yet the use of the art object is not quite as simple as that of a chair or a table — to sit in comfort — to have things at elbow height and hand reach — A wall, painted al fresco or not is as good a protection — An easel picture is indeed negative object — takes dust or traces square chess on wall — paper — unsound — So that the physical art object ^{is not its end} is ^{physically unsound} physical only in its composition. Its ends are not of the physical kind — Yet being of universal existence, it must indeed answer a need as real (as if it was physical) — On the quality of this need there is disagreement. Some say that the art obj. is a pleasant addition — luxury — a kind of glorified decoration, but not different in principle, only in intensity — from rugs and wall-paper designs — There is no denying that and it is to be expected — colour laid flat in both cases — and whatever the intentions of the artist and craftsman, the colours on

The plane carry their own qualities - The
lines and colours do their stuff in the eye
of the onlooker, irrelevant of the desires of their
ordamator. This decorative angle on
painting is all entangled with the optical
nerves of the spectator. Though immaterial -
it can be appreciated without - is very nearly
physical - is subject to laws that can be made
into recipes - is as material as a quality of painting
as is the weight of the paint or its chemical reality -
It affects ~~though~~ equally the emotional capacity
of the onlooker - lines and colours per se are moving
At this meeting point between body and mind
we may start our study of painting - We may
be thus able to define more securely its scope and
its aims than if we did start with a spiritual dogma -
see Art treatise 1920 -

~~If we~~ ^{let us} make a brush stroke ~~and observe~~
the results in our cognition -
This is of course ~~in this~~ ^{an} example as primary
as is in biology a cell but in the same way
the cell illustrates the principles of life -
growth - reproduction - This brush stroke may
help understand the mechanism of paint -
The thing that is evident is that the two components,
black and white do not exist any more in their
integrity but as a new quantity that we could
call contrast - There is an exasperation of
the quality white and the quality black that
becomes more important (though a spiritual
quantity) than either of the physical analysable
facts - Thus it is made clear that, though
painting be made of physical anal. facts, it nevertheless
deals with spiritual quantities - That
such spir. quant. are not directly traceable
to any single component but rather a new
resultant of their promiscuity -
not to be fingered on the canvas

Treatise

new qualities
in compound

space

volume, the
sculptor's space

representational

Abstract art -

in materialistic approach
to paint

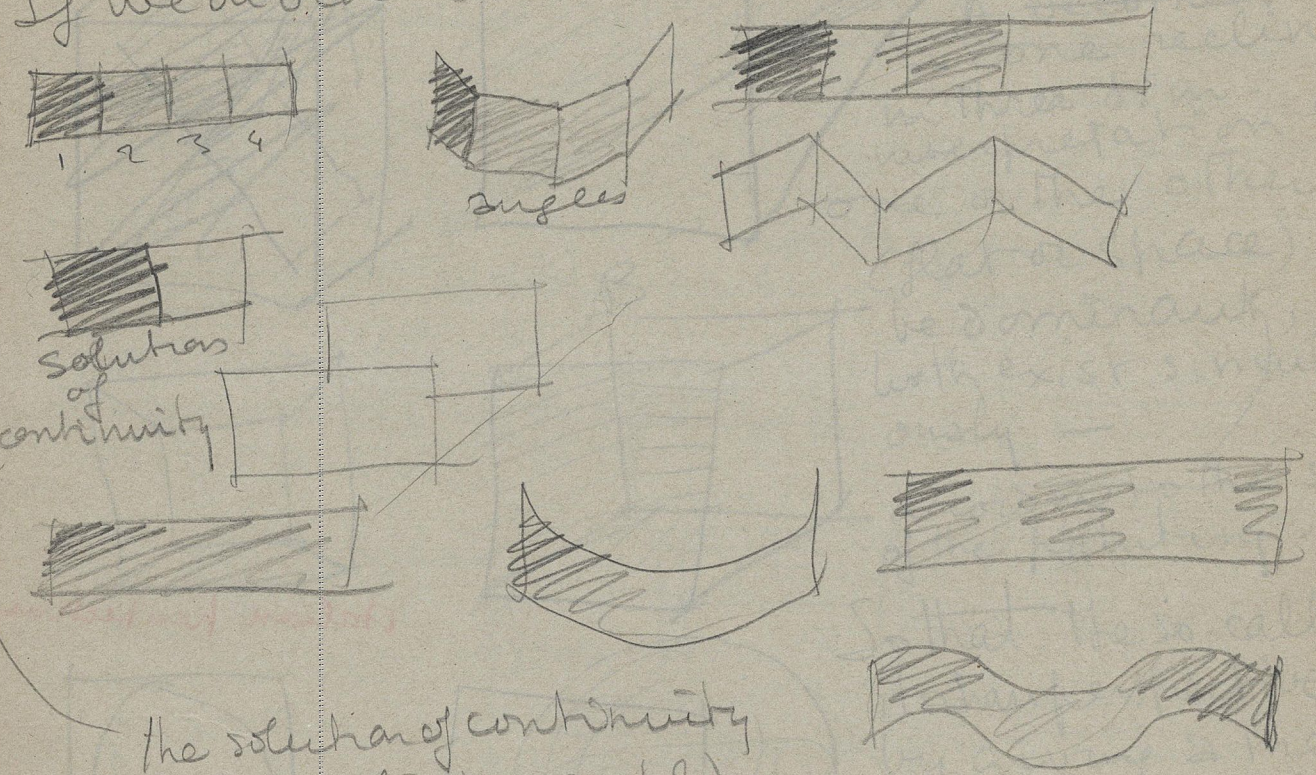
Another quality created by the brush-stroke 3
is ~~roughly~~ and not specially evident in
the definition of painting - by colours on a plane
is a rough but effective ~~great~~ illusion of space
There is a break at the edge where black meets
white - and be it interpreted as a tear in the
sheet of paper - with space showing through, or
as an object lying on the sheet, space and volume
are created - ~~for space~~ volume is not only a cubing
of the inside bulk of bodies but the aerial volume
around bodies and between sculptor fashion
planes, called space, is more properly the painter's concern
Indeed to even the slightest change of value or
scribbled line does the human mind attach
qualities of volume and space and echoes of the
visible world - so that though one is justified in
trying to learn the laws of line and colour =
with no reference to the outside world of the such an
attitude is artificial and like all dishumanism
presense - somewhat dangerous -

It is a system of lines - it is also a chair
the sea | a tree or a pole -

Even more wickedness would be needed to consider
only a system of lines such a sign as
this + At this early stage of our inquiry
it appears already evident that whatever
be our efforts to isolate line and colour and study
art ~~in the abstract~~ ^{in the abstract} ~~we~~ ^{we} moderns put it quaintly, the outside
world by some wicked, but inescapable process of
our imagination will get all mixed with
our diagrams - It is not representational art
which is difficult, but, if one insists on
calling painting so, abstract art - which of course
And again the label ~~was~~ is wrong, for if we

try to define, abstract art would mean an art where colours and lines are taken ~~in~~ ^{at} their strict reality ⁽⁴⁾ shunning all imaginative connotation - so that "abstract" art, if it was possible pure, would be the only art that would take seriously the physical paint - that is ~~as opposed to the abstract wanderings of objective~~ ^{as opposed to the cerebral meanderings necessary to interpret the} so-called representational art -

To come back to our bunch-sketches and go to more complex -
If we divide black to white in 4 values -



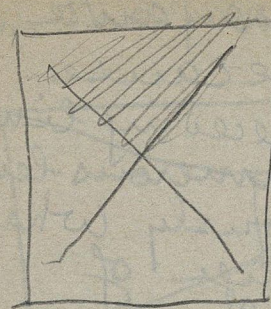
the solution of continuity
(as seen in the first example)
more than volume creates space - that is by suggesting the distance between two planes -
All painting will then have a kind of double existence, or each element a double meaning - There is first the actual surface, which is a single plane, on which lines and colours have their formal existence in two dimensions - ^{emotional} properties resulting from

values create space

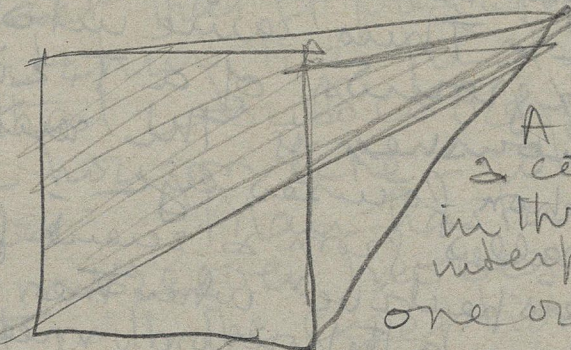
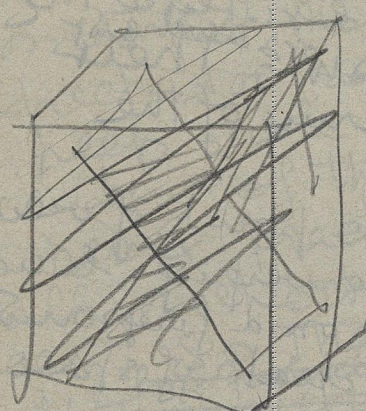
simultaneous existence of flat and space

their arrangement - and their relation to the sides of the painted surface

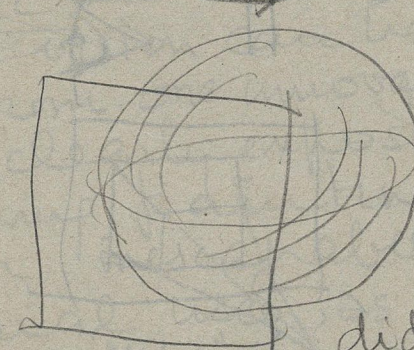
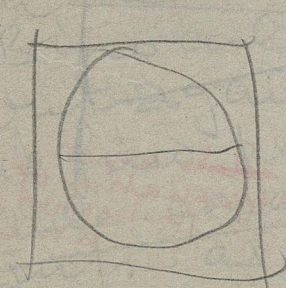
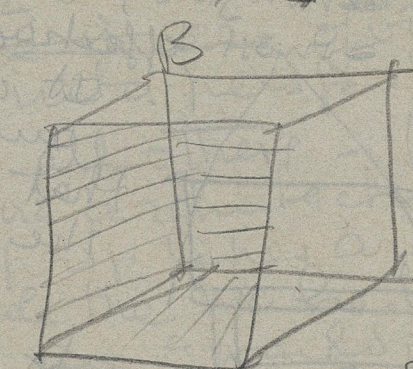
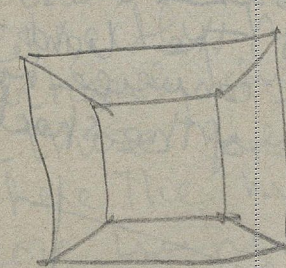
(5)



There is also, Through the illusion of space which colors do carry to the human mind, an illusory existence in space, where the painted surface becomes an opening on space, & it was a glass pane on a show case.



The diagonal in two dimensions A become mean a cone reclining in three dim-interpretation B = one or the other (flat or space) may be dominant, but both exist simultaneously - according to the style of the painting.

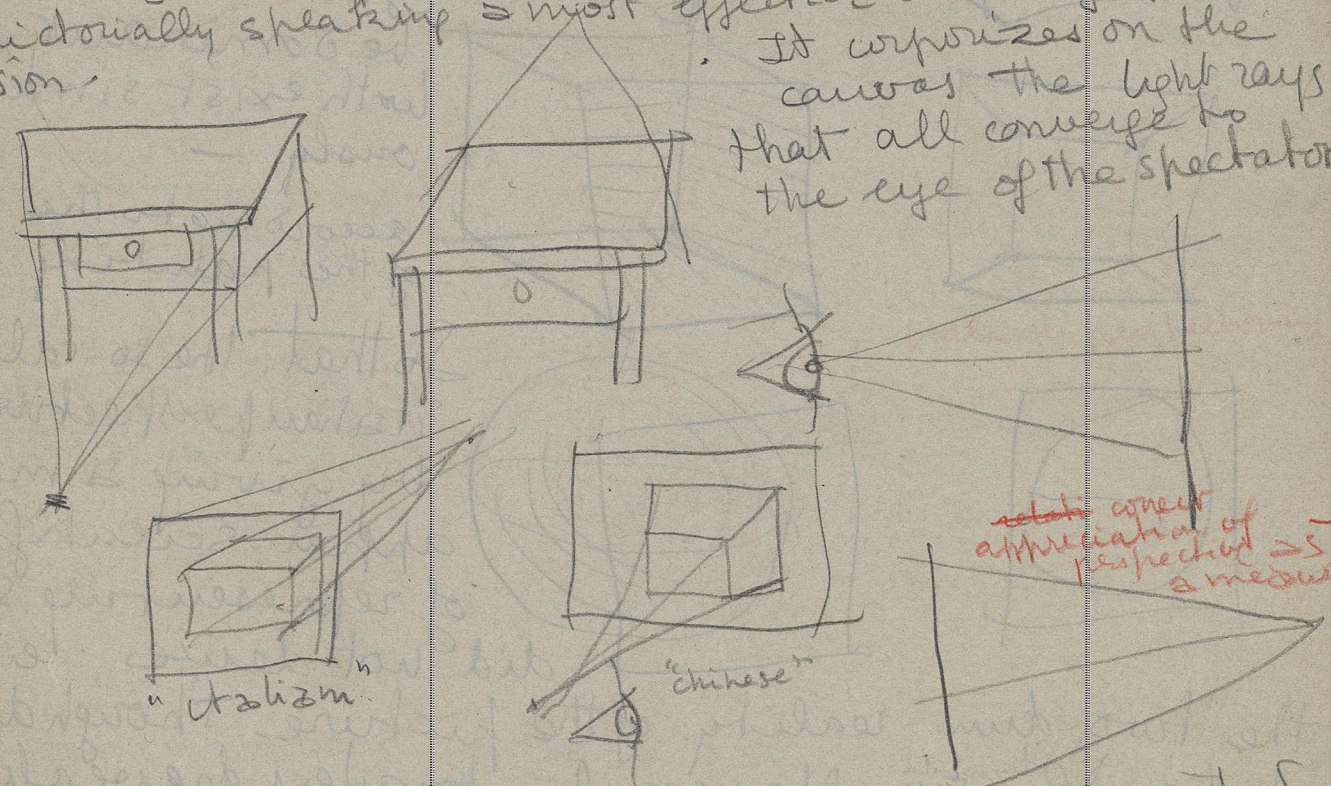


So that the so-called Italian perspective by giving a means appar. scientific of representing space did not deny either the two-dim-reality of the picture. Though difficult to handle simultaneously, masters draw away the perspective lines a diagrammatic "italienne" exist on the plane as diagonals grouping themselves naturally in fan-formations.

italian perspective

① Indeed the "naïve" perspective of the so-called primitives is a much sounder performance than more scientific renderings. Because it is a series of ~~partially exact~~ ^{its receding lines} meeting in many points and on numerous levels of horizons ~~at~~ ^{plastic} simultaneously what happens to the onlooker in ~~movement~~ ^{change} of point of view, both horiz. and vertical.

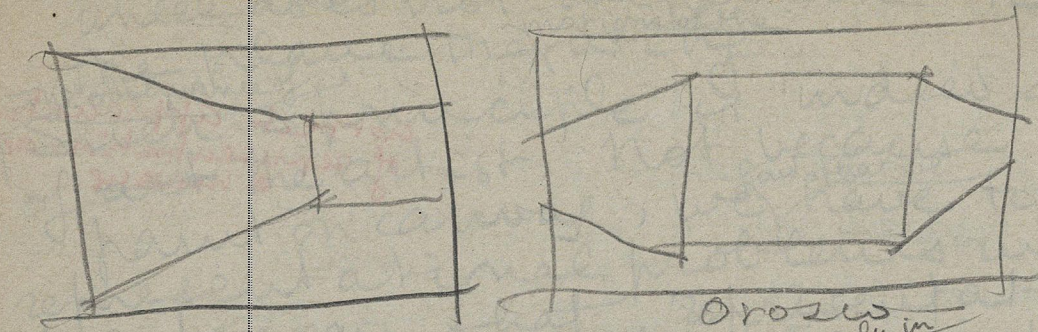
Another thing that incapacitates scientific rendering is of course the fact that the eye cannot focus near and far at once. Thus came into existence the "neutral" backgrounds of a Tizian ^{or a Rembrandt}. Their ~~neutral~~ ^{vacuousness} is the rendering of the vision with the non focused eye. What can be called from a scientific point of view "counter-perspective" where the converging lines instead of meeting on the horizon, meet on a foreground is, pictorially speaking, a most effective creator of space-illusion. It corporizes on the canvas the light rays that all converge to the eye of the spectator.



Its creation of space in front of the canvas instead of in back is as powerful a means of interposing atmosphere between the onlooker and the object, ~~also suggests~~ ^{which is used by Cezanne}

1898

and can be effective under both in space and on the painted plane



That italian perspective is ~~not~~ ^{only in} scientific comes from the fact that it presupposes the spectator watching the picture from a peep-hole that would correspond to the center of the horizon line - which of course is never practice. Man has two eyes, is tall or short, moreover moves while he sees, so that with the exception of one single point ~~from which~~ ^{from which} a picture is correctly put into persp. is artificial from arbitrarily chosen all others - Which can be verified in those mediocre architectural theater sets where the more persp lines are in use, the more impossible the make believe for the man in the aisle or in "paradise". Binoocular vision can be scientific constructed but again from one unmovable point of view. We find here clearly exposed an ^{important} ~~unimportant~~ rule concerning painting = Space exists in p. as an inescapable corollary of the optics of the material used, as illustrated before - But if we want to increase this sense of space by copying the scientific ~~rule~~ ^{optics}, then far from helping the space sensation we destroy it to a great extent. ③ In painting, natural effect of volume and space may be obtained, but not ^{can} ~~as inherent to~~ ^{material}

6

correct appreciation
of representation or
a means.

in the realm of
optics as in
the plan of
chemistry
its structure

qualifications of
complexes

be ^{increased} by attempting to duplicate natural
appearances — As in mechanics — the wheel does not duplicate the ^{motions of the} eggs, nor
the plane the ^{the observed} wing.
Such a principle is indeed a touchstone
of art the artist. Not because by applying
paint on canvas, we have to include
representational problems into painting,
does it mean that representation is the
aim of art. In fact it happens simply
to be one of the qualities of the material
used as natural to it ~~as it~~ its gravity,
its ^{indefinite} elasticity, etc. — and as such, has
to be considered if one wants to attain
a proper handling of the knowledge of
the trade. But, on the same foot
as the other attributes, as a means —
Supposing we could give a perfect
duplicate of space, which we must
be thankful cannot be done — and
in this space set life like objects or persons,
this would come under the warning of
the Genesis (?) — Thou shalt not carve
paint idols — The more lifelike the
painting, the more repulsive ^{is} the making of
God —

Each line, each colour has an optical reality
a) in two dim; b) in three dimens. c) as

a representational sign —
But as soon as we deal with a set of lines or
masses — another quality appears — as the one
of contrast that resulted from the ^{super}brush-stroke,
which ~~is~~ all important to consider —
a segment considered in itself
cannot be said to have any be either big or
small — It is only itself —
As soon as we add another, it can be qualified

0 ~~There~~ ^{to be} come certain master added to a certain figure =
 e.g. - Renoir to the sphere grew to the ellipse - ~~Acella~~
 to the polyhedron - But the most common
 and painter conscious of this fact will use as theme
 of each painting a dominant that corresponds to the
 key in music - It may be the triangle (pyramid
 in space) the sphere circle (sphere in space) the
 rectangle (— in space) - Other dissimilar figures
 are of course used in the same picture, but only
 as a foil to accentuate the major theme - 0

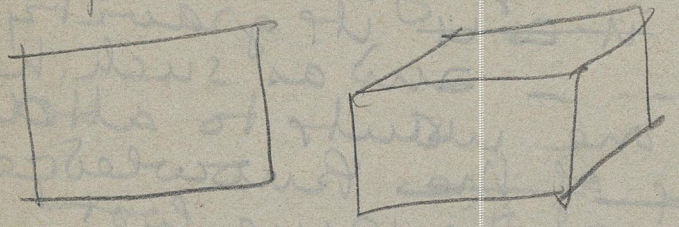


figure is of course the rectangle
 that cubes to
 or to the cylinder.
 (by rotation)
 measuring of
 canvas edge.

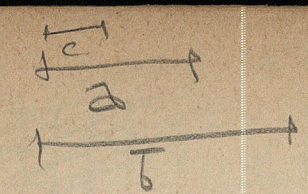
geometrical properties

0 or such relation simple to appreciate as the A = to the diagonal
 of the square that has B for side



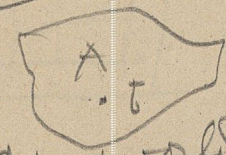
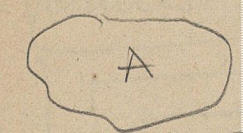
figures of a kind
 create shape by apparent
 translation

* geometric construction in appendix



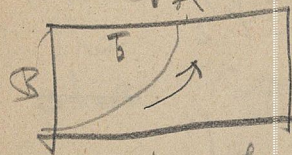
we can now saw that a is small, that b
 smaller than b -
 or big, that is bigger than c - 8

The same is true of masses -



A is ~~nothing~~ not qualifiable until
 for ex. we put in it a dot b - which
 makes A very large -

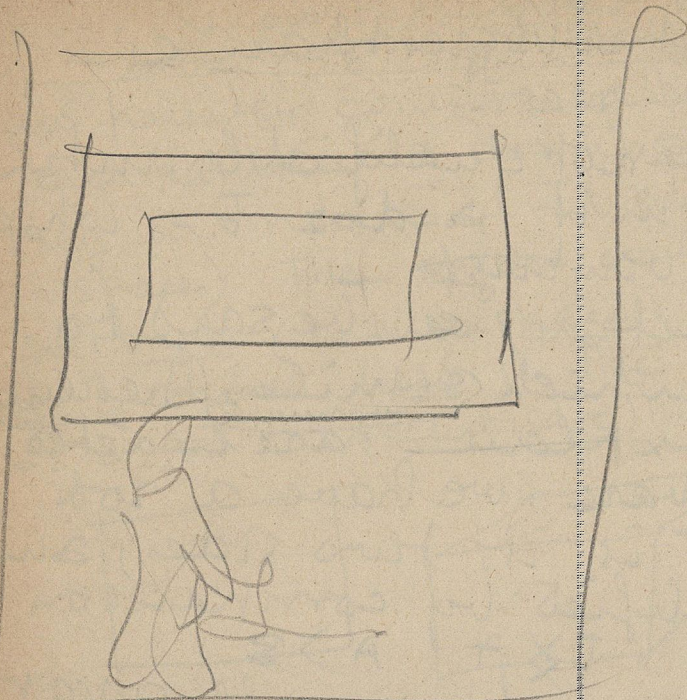
Each picture can be said to
 be a world apart in which similar ^{in principle} theorems
 though on a more complex plan, are enacted.
 Given if the canvas is bare, we have a rod
 to measure with, that is its two sides, and
 already qualified by comparison
 with each other $B = b$. $T \times A$ $A > B$



Which explains why in all great
 periods of art the limits of the painting, sometimes
 a rectangle, sometimes more complex figures
 as happens in architectural murals, is always
 the starting point for the module, for
 the inner lines that will constitute the painting
 proper ^{see page 10} rather well

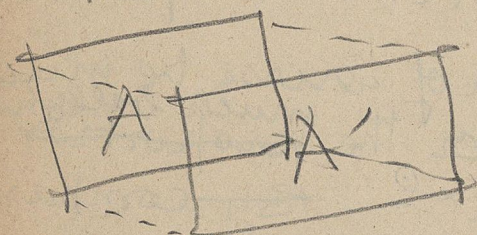
The comparison $>$ or $<$ can of course be much
 refined by consider $\frac{1}{2}$ or $\frac{1}{4}$ or the ^{much ballyhooed} ~~proportion~~
~~known as~~ the "golden section" - By comparing
 two segments of line or two surfaces and
 finding such proportion is a very real esthetic
 pleasure, as if the eye rejoiced in its measure
 - and in the exact balance of the portions -

Comparisons are ^{possible only} simpler between similar
 figures - ~~and~~ ^{prevalency of the} the rectangular shape of the ^{is a result of} ~~more common~~ ^{shape}
 of the canvas or wall - This no doubt responsible for
 the dominance of horizontals and verticals
 under the guise of architectural settings to be
 found in most of the masters
 Parallels and especially 11 segments of diverse length



Van Meer -

Translations - All figures of similar placed on the picture suggest also actual movement. That is - the sliding of A to A'.

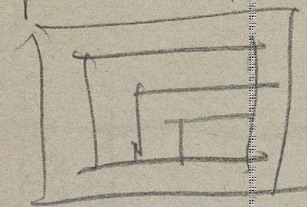
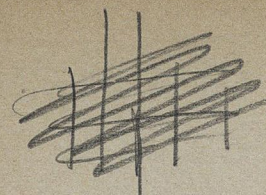


Two segments = rotation around axis O. Two similar figures of diff. sizes will suggest translation in space = (A) (a) a being A on a further plane.

In the Vermeer we have a complex of both - rotation of the rectangle to 90°, so that the lower side becomes horizontal and recession in space twice repeated.

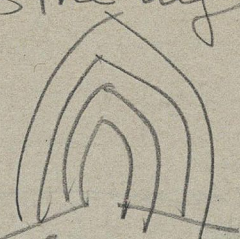


Aside the translation on the plane we have translation in space that result in three dimensional figures - (see cover page before this)



are to infinite. Moreover any system of || to the sides of the rect. creates an illusion of receding planes, and thus space to the infinite. (9)

the repeated ogives of the gothic porch



Perhaps also the rect. of the frame with its 4 right angles calls for right angles in a picture to that echoes them. Aside the || with its supp. of similars the right angle is the strongest clash between lines. Any rotation of the line tending to diminish the strength of compromise with a curve in obtuse angle.

or just the lines into one - || and right angles are the backbone of all sets of line construction. In many paintings we are taken by the beauty, attribute it to the action, or expression on the figures - Yet it is in the geometrical construction, architectural background that this beauty resides and the figures - the emotional center of the story - are really ex-centric, used only as a foil to the architectonic scheme that "makes" the picture - thus the Vermeer illustrated which emphasizes both the use of the rectangles issued of the rectangle of the canvas itself - and the plastic subordination of figures to Bones, as the Chinese call the minor construction -

translation of flat figures in space
creates voluminous solids

And thus the use of geometrical solids in space become one of the authentic means of the painter's trade.

is space
painter's volume and
sculptor's volume

Illustration

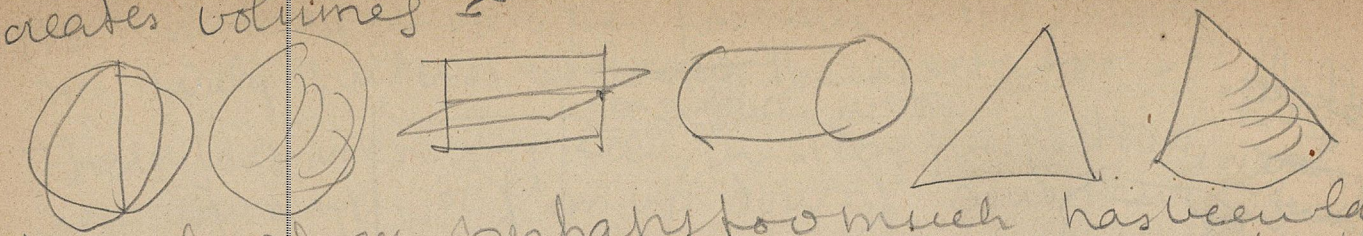
find a good example of space seen from simult. point of view.

pictorial means to
represent space

horizontal movement

x suggestive of time and space, and

The translation in space of flat figures ~~can~~ does
create volumes x



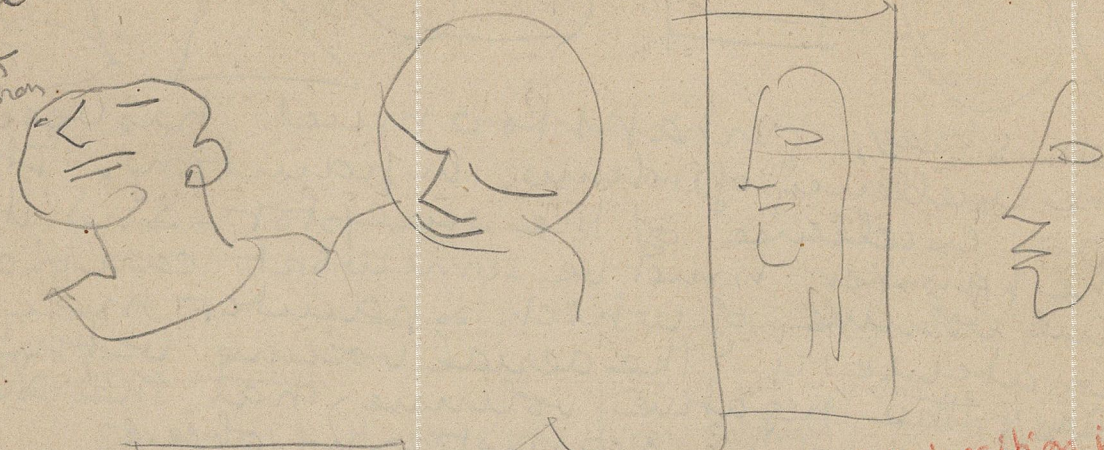
Much stress, perhaps too much has been laid on the excellence of volume in painting. It is the tool par excellence of the sculptor - and its use by the painter must be somewhat cautious - The true volume of which a painter may make legitimate use is the aerial volume between planes, the negative volume, that the air makes by pressing against an object.

The emphasis laid by certain (as is that of a plaster) painters on a sculptural volume that can compete with that of sculpture results in stripping the subject of its atmospheric envelope, in losing space, the painter's volume privilege - what ever illusion paint may be capable of, it is unwise to force the material into unnatural channels - Soon it takes its revenge - In the case of sculptural illusion for example, the effect, as that of scientific perspective is possible only from one point of view and under one focus of light. ~~Paint~~ This does not take in account true conditions.

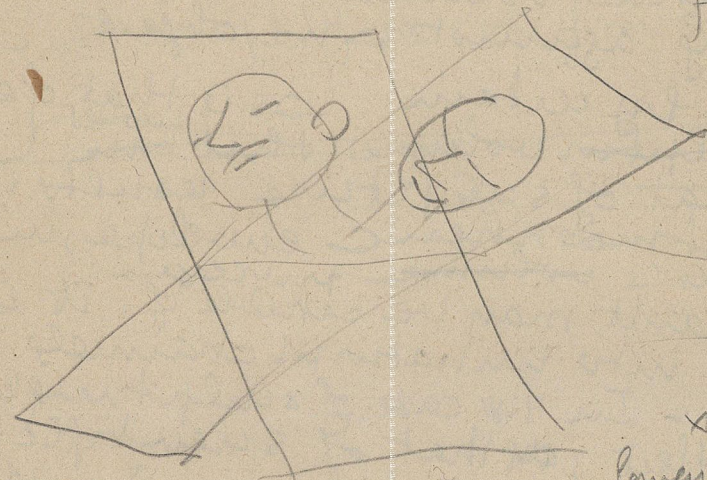
The multiplicity of points of view being an essential of good painting is taken into account as we have seen by the so-called erroneous persp. of the Primitives - It is well known that Veronese in his "Noce de Cana" adopted for the same reason multiple perspectives - 3 distinct simultaneous horizons - One of the most beautiful In the drawing of figure Men

The same thing happens as in architecture - like Cranach or Ingres ^{are realistic enough to} accept the natural movement of both model and artist; ^{the drawing} describes at once the model a gentle arc of circle, ~~then~~ their drawing being thus much richer in content than a "peep-hole" snapshot - The result following is that the spectator, as does the artist, feels free to move without losing the impact of their work.

~~parallels~~
~~hiperon~~
oct 2 edron



composition in space



space needs a
theme too

× They cannot be used as
dictates - Each picture
of one of them alone

see verso
next page

must be an illustration of the properties of one of these alone. See verso next page.

Titian's saying

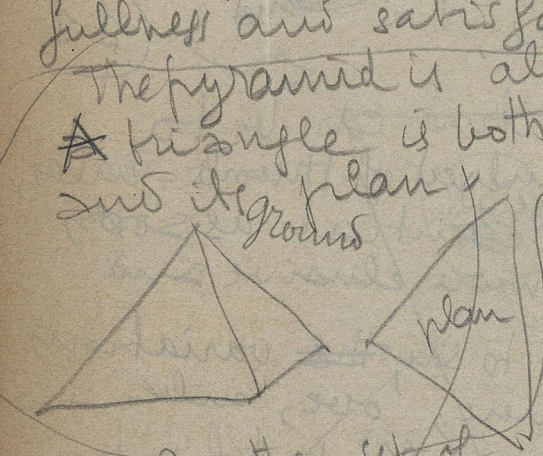
Most beautiful of all, perhaps, is the solution used
that Watteau goes up to the problem - His personages
are rarely pictures as facing the spectator - ^{on a level with} (12)
Their faces are mostly seen in strong perspectives, made
from down up, or from up down, and thus, and would
communicate a sensation of vertical movement, ^{god's}
the spectator feeling ^{the illusion of} ~~alternatively~~ shifting
his position in relation to the painted horizon ^{make-believe}
gaining this ~~by~~ pictorial means ^{could be} (11)
~~side~~ although a definition of the subject, ~~that obtains~~
by turning around the ~~sculpture~~ model,

If composition on the surface of the picture can be to some extent defined, made the subject of thumb-rules, composition in space, ^{whose knowledge} ~~which~~ becomes essential as soon as the artist treats volumes is a more elusive and difficult subject.

25 the artist's least difficult subject -
 The rule of using a ^{theme} ~~that~~ that is to say the variations
 on a given shape, remains - sphere, oval, cube -
 pyramid $\pm$ Titian gave an excellent definition
 of space composition, though in such an elliptic
 phrase as to make it puzzling, when he said
 that a painting must be like a bunch of grapes.
 The ~~bunch~~ ^{cluster} itself is spherical - and corresponds to
 the total space represented in the painting -
 Each grape participates of its spherical quality,
 yet each is ~~def~~ particularised by its position in
 space in relation to all the others - Established logically
 around the ^{the main arteries} stem and its derivations, the grapes do ^{not} ~~not~~ ^{not necessarily}
 Such main directions ^{as the flag does the loops} so as to make ~~them~~ ^{not necessarily} invisible,
 so Titian did not miss that

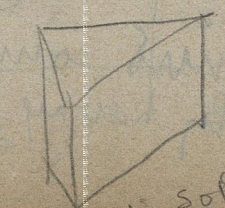
Of course Titian did not mean that objects must be clustered in a painting as thick as the grapes in a bunch - His painter's mind counted the space between objects as ~~truly~~ having its distinct existence as true plastic.

parallels
tension
octagon



Though all geometrical bodies may be made the theme of painting, ^{theoretically} practice, due mainly to the law of multiple points of view, reduces the number to very few - Most excellent is the sphere - equal to itself from all points of view. A sphere painted is as thoroughly described as a sphere sculptured, hence the sense of fullness and satisfaction attached to its representation. The pyramid is also very good, mainly because a triangle is both its profile and its elevation and its plan. ^{of his own use} Greek has used more often than other the egg-shape whose section is a circle, perhaps impressed through its connotation with birth, to which the canons give both solids that naturally give both its rectangle. The cube is those issues from the its rectangle. ^{the moderns} over of which much has been written in connection with cubism is of course important in that as in the pyramid, the cube is plane and its elevation - such full important rectangular solids feature the right angles of the painted surface, as translated into space and thus ^{superiorly} ~~very~~ ^{richly} are a painter's means, and because its ridges, ~~considered~~ are oriented segments converging or diverging, but always at work. The pyramid is the favorite means of composition for academic painters, one of the few remnants of a sound tradition.

All solids ~~that~~ whose elevation, ground-plan, ^{are dissimilar} if painted become static, that is to be believed in, the spectator must ~~not~~ accept the convention of the single point of view. ^{remain} solid who ~~are~~ equal to themselves under diverse angles are of course, better material for painting.



18.651

Cezanne wrote in very much the same terms when he said to Bernini - " (12)

This organization in space is the ultimate achievement of the painter - He creates and ordanates his own world, and what would be unholy if his world was a fac-simile of god's world, is truly great if it is not ~~at~~ ^a ~~not~~ ^{make believe} but a parallel construction, depending soundly not of imitation as an aim, but of the knowledge of optics, of the natural optical qualifications of the material used -

light is volume However abstract the geometrical genesis of volume in paint - volume ~~in space~~ will be illustrated in the painting by under the guise of "models" - objects readily recognisable transposed from the outside world into the painter's space. Poussin, in his esthetic testament has this puzzling phrase "Solids do not exist without light" - Painted solids, of course, and it is ^{chiaroscuro} the distribution of light and shadow that gives solids their pictorial birth. ^{optical} both in nature and in art while the sculptor can rely on

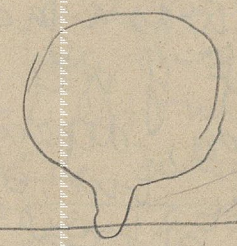
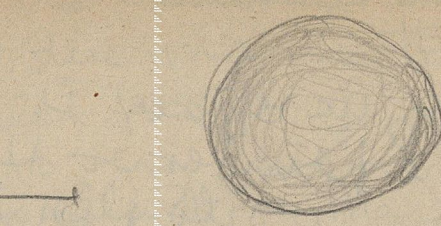
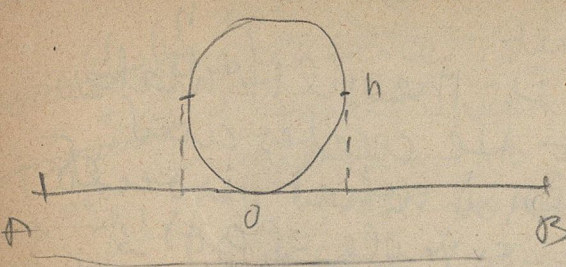
sculpture volume needs no light tactile confirmation; and seeing a sculpture is in fact only a substitute for touching it - so that light and shadow are not the subject of sculpture, only a skin-deep accident. And thus, pictorial sculptors, who use unlawful painter's means may be convicted easily by shifting the light source. (note) This actually happened to ~~who~~ ^{the} giant Lincoln was in -

An electric light stronger than the natural light had to be installed over the head of the statue!

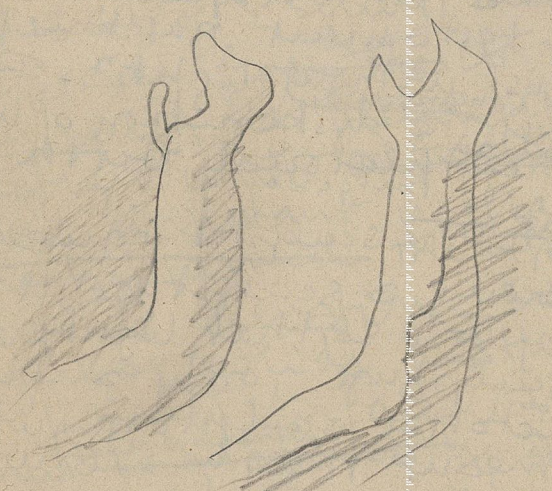
when volume is necessary even if they have been abused of in the 191. Painters who construct their pictures mainly in two dimensions, using the outlines of the bodies as the means are justly suspicious of what light and shadow when added to this original flat scheme may do

because they answer the law of multiple points of view.

18.651



"chemical"
light
convention



line comp.

space comp.

volume as an essential

A picture conceived flat is not enhanced by the addition of volume - and thus ~~perspective~~ or central miniaturist so keeps their whole design flat, or suggest volume subdued by a minimum of slight modeling - The ^{early} It ~~shows~~ ^{shows} that works mainly with line ~~is~~. Botticelli later painters of the same type, Pontorno, Ingres, though doile to the dictates of Occidental taste for ^{more} realism, ~~had~~ ^{felt compelled} to carry the description of volume further - They use a compromise formula in which light does not come from one focus, does not cast shadows, but, very much as is the case in chemical photography by which objects impress the plate in the dark, the ratio of light augments in proportion of the ~~when the object~~ ^{when the object} ~~near the~~ ^{near the} plane of the picture, diminishes when it recedes - Thus, sharp ~~demarcations~~ ^{contrasts} do not occur in the linear modelings and the silhouette, ^{is kept} ~~is kept~~ primitively planned, remains dominant and the surface planning intact. This solution, though it does not impair the line construction and beauty of the picture, is rather an escape from the problem of volume, than a solution - It tends to diminish both volume and space and to insist dangerously on the purely decorative. To present a perfectly satisfactory solution of volume, a picture must be thought of in space, from the beginning. That is to say, its balance of components must be between solids, not outlines - To such mind as that of the painter of space, outline is the most elusive part of a solid, its uncertain frontier where the atmosphere begins - and thus not a strong plastic tool - The part of each object ^{seen} ~~is~~ more like a battle-ground between light and shade and the line that roughly defines the two territories, is the active line that resumes the object, that is worked into the two-dimensional scheme, that is the

its abuse

values and volume

projection
conditions on the canvas of the space composition - 14
The two types are simultaneously used in the illustr. by Greco -

The danger of space is to loose contact with the surface balance of the painting. A simple imitation of natural effects can open spaces and fill them with volumes but then the frame of the picture becomes simply the "open window" or a spectacle - It must not be forgotten that the interlay of proportions and balance that constitute a picture are possible only between a limited number of elements - "Unlimited vistas" are not to be desired in paint. They are destructive of its reason to be - comparison
If space composition and surface composition are not incompatible. In fact the former can be made sensible to the onlooker only through its tracks in the latter. It is the job of the painter to see that one does not exclude the other -

Values = It is a common error to think that volume is more realized when light and shade are more contrasted in value. So that the maximum strength of volume would be when its values range from true white to true black. Yet we must not forget that the human eye, the same that looks at pictures has looked at the natural world and has grown to appreciate the most delicate shifting of hues and to translate them into tactile information. The picture must treat the eye to as subtle a spectacle as the world does if the optical nerves are to function pleasantly. The brain too plays the game, if the painter, instead of forcing the material into an approximate make believe, is brave enough to state its limitations - A modelled drawing in hard pencil will never suffer in the rendition of volume from the fact that its darkest value is a light gray. This material limitation is on the contrary a



Poussin



Volume in space

Examples -

Abuse of light

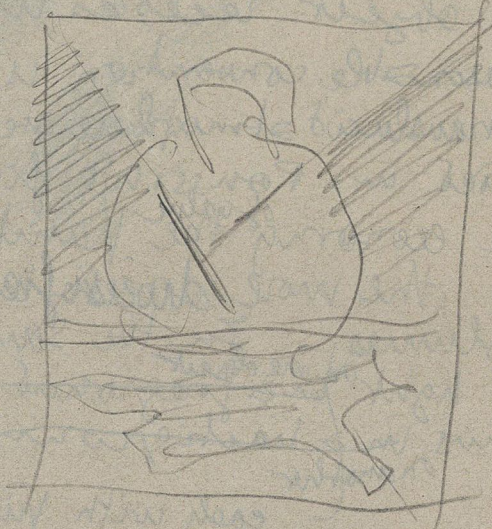
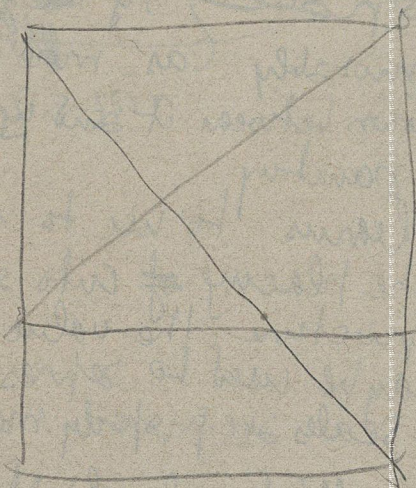
15
fool proof method of correct representation for through light and shade of an object. They partake of the same quality of the same object, its position in space, its local texture - and ~~for~~ are simply quantitative variations of a same quality ~~light~~.

To each position in space does correspond a distinct scale of light rendition. maximum and minimum tending towards a common point as the object recedes into space, if we accept this very reasonable convention is admirably (as more numerous veils of translucent atmosphere are thrown between it and us).

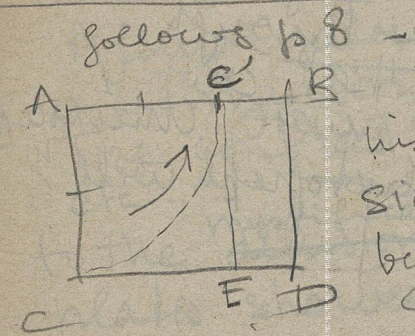
illustrated in Poussin's figure painting. The more economy of value the painter learns to use to round a volume, the more diversified the placing of into space of the volumes. - In the same picture the value that represents light on one object may be used to represent shadows on a background if scales are properly managed each with his own allotted scale of light-shadow.

Painters who are careless with values ~~become~~ incapable of ordering convincingly a number of personages into a common action. Perhaps the decaying of story-telling pictures and of classical subjects by the idolatry of still life is a result of this fact, that the - David had the most perfect knowledge of the "grammar" of values that enabled him to carry on such complex plans as his "Diogenes" Socrates drinking the poison. Degas, the last man to do genuine classical ordinances, did ~~make~~ strengthen himself against the current of impressionism by copying the "Salines" of Poussin - more than above for simpler subjects.

It is a strange fact that light that came into being in the painter world as a means to describe volume is often happens when a means is disfigured into an end, the painter who took the rendition of light as an aim, ended by destroying volume.



Turner or Monet to a certain extent fulfilled their purpose - But without ~~solidity~~ as landmarks shade does suffer and light detached of its constructive qualities is a poor result for such sacrifice -



follows p 8 - The comparisons that the eye instinctively makes between the two sides may be graphically described by rotating AC 90° to AC' on AB , with A as center.

This result operation is actually the ~~root~~ of the numerous compositions that employ the square constructed on the smaller side of the picture as an element. A clear-cut illustration is the Moroni portrait in the Metropolitan where the square alone is used for the painting proper, the remaining surface being devoted to an inscription. The painter emphasized the idea of the simultaneous existence of square and rectangle by tracing in the background and picking up on the folds of the dress of the woman portrayed two diagonals one for the square, one for the rectangle.

Values alone are a beautiful mean of plasticity, and the Chinese ink-school has done masterpieces in black and white that ^{additional} no colour could enhance. In Occident, drawings and prints have used value alone without seeming incomplete. However the painter uses colour - colour does not deny value as to each colour corresponds a value on the scale black-white. However the properties of colour modify and often contradict those of the corresponding value - more over the complex of colours is subject to many more — than its corresponding complex of values.

photography misleading

x There exists now a whole school of painters who believe the approach classical tendencies because they use mainly grays or gray hues of color. In fact having known most of the past masters through photographs of their work it is natural that color is the last means of art of which they are aware. Unconsciously their query is "Will my painting photograph well?"

colour complex

x green is also neutral considered alone

Photography has had a very disastrous result on the appreciation of painting. The more a painter makes colour active in his picture, the more weakened is its translation into values.

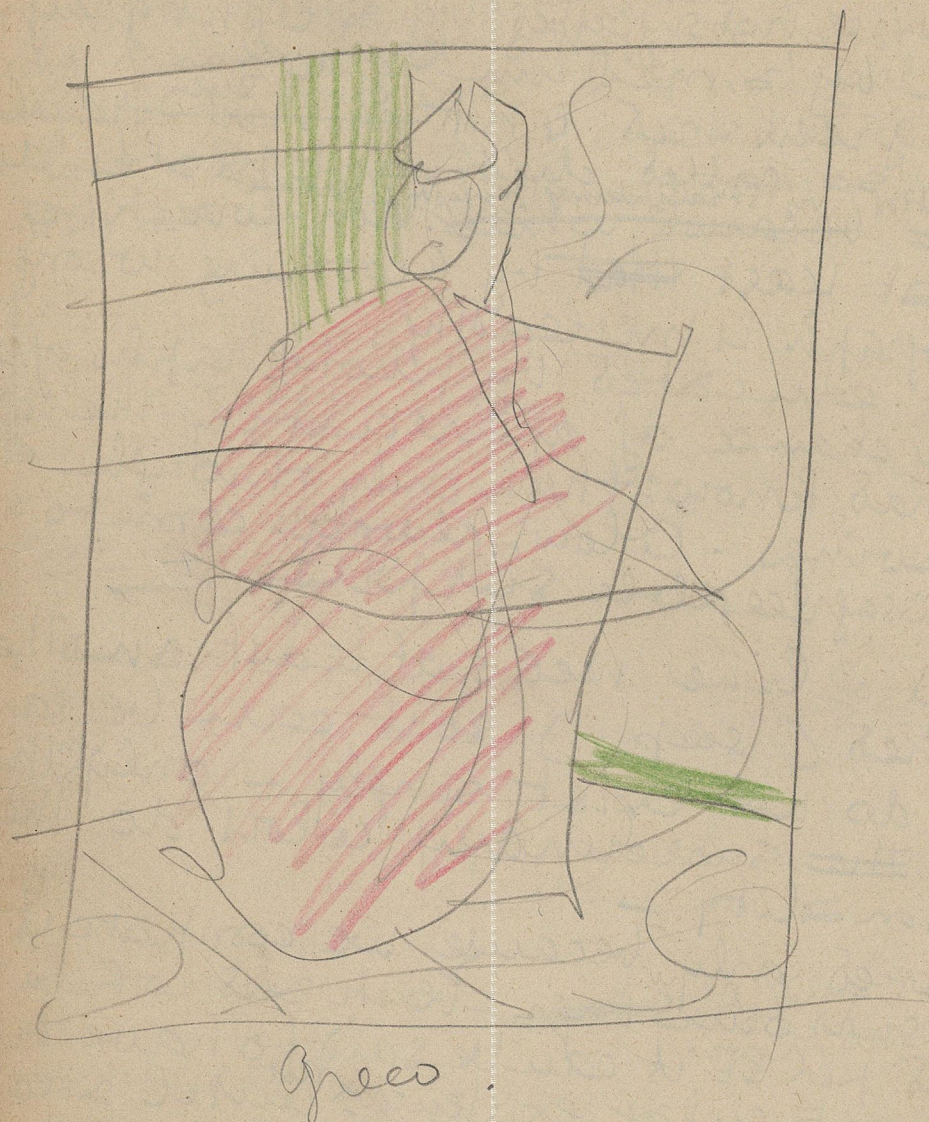
A lemon yellow is not suggested by a light gray, nor a vermillion by a medium gray, even translatable etc. - The so-called chromatic plates add to the ~~illusion~~ ^{mystification} ^{by straightening things in appearance} because white. Non-corrective plates show at least that by "looking wrong"

that the photograph is misleading. A generation educated by photographs of art works has less chance of appreciating the original than if they had known them only through engraving - line - engravings. Colour always come to such a rather disagreeable surprise +

As a segment of lines needs at least another to be qualified (seep) so it can be said that colours do not exist singly - only their reaction to the surrounding colors do they acquire personality -

red is red only because we compare it with ~~the~~ its surroundings - black and white - but considered per se it can be said to have no particular existence. green until another colour is laid aside do those two exalt their particularities

Those two colours in equal quantities, two segments of line of equal length, do not permit ^{the eye} ^{to retain} clear image - Only if they may said to neutralise each other optically so that a picture that would use those few tones in equal quantities, could not be said to be colored -



Illustration

colour ^{as} value

dark painting

879'81

As only when the proportion is thrown off balance, (18)
 do we attain true color reaction — ^{see page 22}
 The colour that is used in most quantity becomes a sort of background
 on which the smaller quantity of
 colour becomes exalted —

see p 22 The red cap of Corot's fisherman is the shining
 Rembrandt light because of the area of shadow
 If the main colour is the theme of the picture
 as in green red cardinal and green landscape —
 this colour materializes only through an
 accompaniment of ^{contrasted} colours, subdued
 just enough so that they will not take the
 leading part —

The Cardinal is red because what would
 other wise be ^{of his robe} dull carmine is contrasted by
 is just a note to glazes of brilliant green
 tucked unobtrusively in the architectural
 background —

The Toledo is green because the earth red
 with which the canvas was prepared is
 allowed to show all through the open
 net work of the strokes — For very practical reason,

Painters have a ^{leaning} tendency to use colours in a rather
 pure state, because too much mixing makes the
 chemical composition unsound — and color ^{leans} ~~that~~
^{naturally} ~~a tendency~~ toward its maximum of intensity —

This one happens for each color at a different point
 on the black-white scale. Yellow is intense near
 white - red - green in between. blue and purple nearer to
 black. - So that colour, far from being ^{called at will} ~~a medium~~
 of furthering ~~make believe~~, dictates its own laws
 to the painter. Local colours, ^{if they are to be} true colours,
 will be possible only on the allotted values on the scale.

Thus we see that ^{in the case of} a painter who paints dark, like
 Combet, true colour takes

clear painting

red-green

blue-yellow

black ~~is~~ equals
white

colors relative

grammar of
color

geometry of color

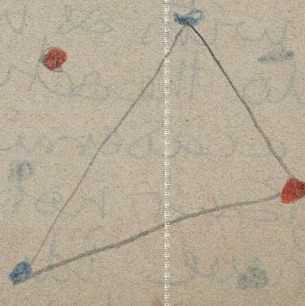
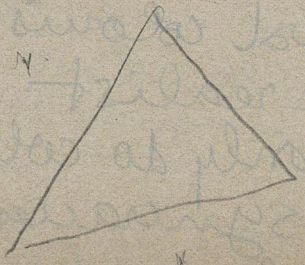
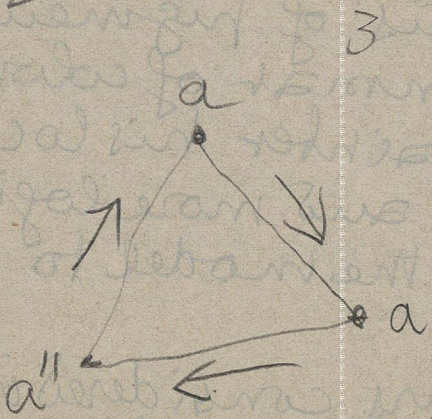
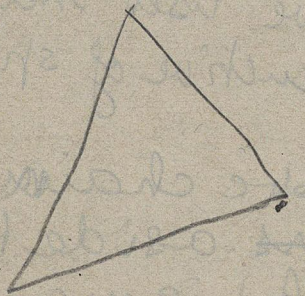
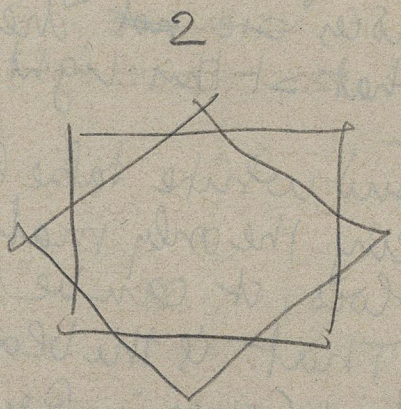
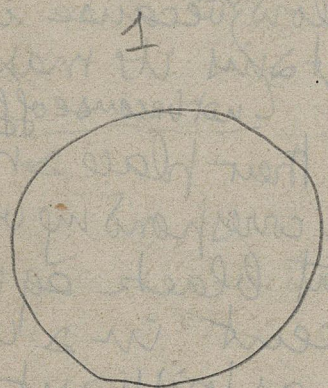
refuge in the high-lights (as when he speaks in a letter
of the true vermilion, ^{high light} on the nose of his model)
For painters who paint very clear, as does Matisse, whose
rules by the ~~line~~ ^{tone} of the canvas - colors ~~are~~ ^{are} at their intensity
only in the shadows - ~~the~~ color in the light being limited to yellow
~~and yellow and weakened hues of the others~~
It can be said that Delacroix, whose favorite combination
is red-green keeps his pictures ^{subdued} at the exact value where
red-green can be most intense -
Much more intelligent is the compound yellow -
blue favorite of both Greco and Vermeer because
it ~~covers~~ bridges most of the black-white scale -
Vermeer's ladies are ~~not~~ dressed in yellow, ^{but} because it is the
only color that at this light value ~~retains~~ ^{reaches} its maximum
~~coloring~~ ^{not because of feminine taste}

Black and white take logically their place among
colors as being the only match for the corresponding value -
Used as colors, it can be said that black equals
white. That is the black accent in a very
clear painting (eyes in Renoir) is as brilliant
as a white accent in a dark painting
(Rembrandt). They can be used only sparingly
because both, as values, are destructive of space illusion

Colors as we have seen are chained to
values and thus ~~and thus~~ aside the
chemical limitations of pigments, we
have ^{a further bound -} a logic, a grammar of color that
will dictate ^{to} the painter his local colour
with as much strength and more logic than
do the actual colours of the model to the
academic realist -

But not only do colours considered in themselves
have idiosyncracies, but as there is a
geometry of line by which a segment

color
translation on
a plan



dictates geometrical figures by translation²⁰
and those in their turn by movement in space
create volumes, so it is with colour, where,
the first brush stroke ^{of the picture} applied ~~color~~, ^{the} logical
architecture must come into being.

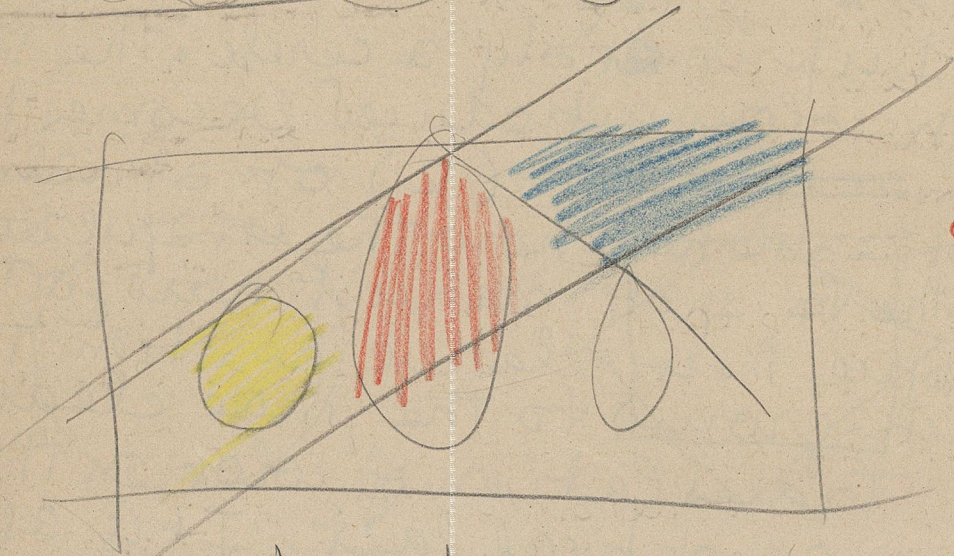
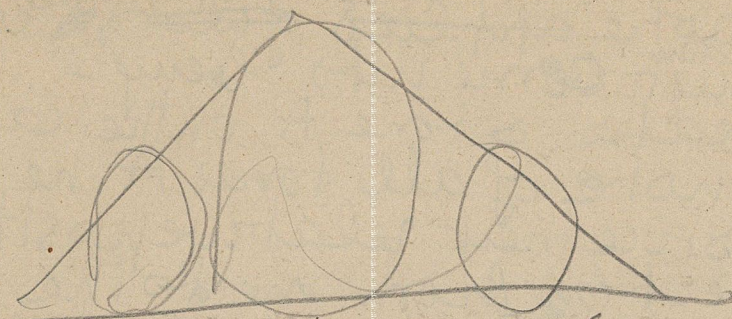
When the eye locates a tone A on the canvas
it will make a note of all tones A he can
found ~~and~~ notice their relative position
and draw direction from one to the other.

Thus if 1 is primarily a circle, the same
figure with colour introduced becomes two
squares ~~or two crosses~~ (2) or a triangle.

(3) It is noticeable here how the irregular or
shape of the B spots makes it hard for the
eye to notice their relative position. They
become a back-ground to the more clear cut
triangle. Translation of color on the
plane is thus an optical fact. It is as if
one point a would move to a', then to
a'' and back to a with the eye
following it in its course.

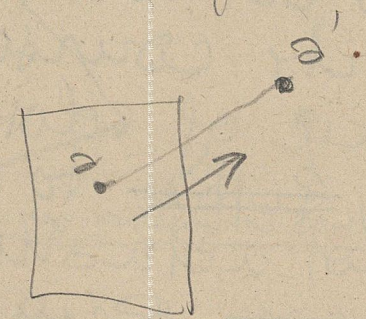
The importance of color translation
is thus enormous ^{where the composition yet are} ~~figures~~ to make known
figures that are not actually traced on
the canvas. ~~As seen~~ Reversing the
order of presentation of the figures, we see
how a line construction can be
modified or transformed by color.

1. a triangle in line acting as a diagonal
right ~~to the~~ left is neutralised in 2 by
a color triangle acting diagonal left-right &



color translation
into space

Mantegna



Thus on a line construction that is 21
 purely static can be made alive by
 throwing it off balance with a superposed
 color construction -
 Or color can bring balance to an over
 dynamic line -
 Thus the Mantegna "Shepherd" is - where
 a pyramidal line arrangement of the most
 academic balance is modified by the startling
 diagonal color scheme, is given life.
 We see here that complementaries set as if the
 same color
 Those examples correspond to what in line
 is translation on the plan of the canvas.
 But color, as is the case with line can be
 made also to move into space, can be
 used, as line was, to create its own space.
 In natural vision, ^{most} tones are at their full intensity
 when near the eye, and tone down as they recede.
 Thus a true vermillion ^a will logically be seen ^a
 on the plan of the canvas - A similar vermillion
 but toned down in intensity, will correspond
 to a backward shift of the surface tone -
 Thus is space created.
 Blue as being the most atmospheric color
 is used in ~~landscape~~ ^{seemingly} landscape convention
 to signify ~~a back ground~~ ^{infinite space}. The eye by weighing ^{accurately}
 the intensity of blue ~~that modifies the local~~ ^{color of an object} can measure ^{the} ~~distance~~
 the object it signifies - to the foreground.
 Yellow is naturally a foreground.
 So that the yellow-blue combination ^{already}
 as favorite with Vermeer and Geric, not only ^{mentioned}
 bridges values and thus helps describe
 volumes, but also, and better than other duals,
 bridges space

cannot be meant to represent the atmospheric
degradation of tone ~~in the sense for example of the~~
for the personages stand only a few feet from each other.
the use

Of all painters Poussin is perhaps the one who used with more thoroughness the space creating properties of color. In the "St Peter curing the sick" at the Metropolitan the orange red of the tunic in the foreground turn to true red in the middle distance, then as the people recede to a wine red, purple and light mauve -

read to a witness, purple and
 This is to say the local colour of the garments ~~is chosen~~
 of those diverse hues, ^{with such logic as to} ~~so as to help~~ ^{appropriate} ~~relate~~ the space relation
 of the figures already strongly ordained by the
 geometry of the ^{line} architecture - ^{He thus uses to define each point of the} ~~the two co-ordinates, line and colour~~
 those space creating properties were totally ignored
 by impressionism who by following the accidental
 aspects of nature were led to use ~~colours~~ ^{pigment}
 regardless of their true qualities, only for their
 mental associations with visual memory - In
 this sense it can be said that Monet ^{was}
~~not~~ a colorist. ^{Thou Pousin or David} ~~though he did use~~ It is ^{regard to} ~~in~~ colour,
^{very same} ~~the attitude~~ ^{artists} ~~that~~ the academic ~~draftsmen~~ ~~also~~
 whom the impressionists thought they fought -
 had towards drawing

color to color reaches

That pigment laid on a canvas have anything (26)
to do with a representation of the world, is not
in fact, at all. Yet ^(X) the world can be there that

② Preface
a "Why don't you paint what you see" The answer
is "Because we try to paint what we know"
If a writer limits himself to jotting down
overheard conversations, he would not
be such a good writer.
Writers can expound at ease on the art of writing
but painters do so ^{if they have} at least in words, more rarely.
They are in this ~~last~~ position of being neither
bona fide workmen, as carpenters, plumbers, etc
are, not, and equally, intellectuals. ^{They are conscious of it} and they are shy.
Their craft is certainly manual and their dominion
over the material and their joy in handling it are
typically of a craftsman. But while one
understands easily the use of a table, or a chair,
or of plumbing, and thus feels a social intercourse
of exchange with their maker, one is more
at doubt concerning the use of a picture.
It is one of those baffling objects that are
rather a nuisance, unless you know how
to use them, like a piano.
In truth is an object only in appearance

to use them, like a piano —
A picture in truth is an object only in appearance
That is, a picture in the dark is not any more a
picture. It is only its optical projection
on the human eye that gives it its worth.
The physical ^{object} is just the projecting machine
and the optical picture, the real one,
^{exists and} functions ^{only} in this semi-physical, semi-
spiritual ^{world}, the human brain.

cannot be meant ^{used here} to represent the atmospheric
~~in the sense of contribution each other~~

natural vision

18.642

scientific attitude

That pigments laid on a canvas have anything (26)
to do with a representing of the world, is not
in fact, apparent. Yet ^(x) we will see further that
this is the fact, and universal usage would
uphold it. But even accepting as a postulate
that painting must be representational, does
not solve the problem — What we know of
the world we know through stereoscopic vision,
two distinct images whose near superpositions
gives us volume and space ^{also} we move and
multiply ^{turn} those points of view, ^{ways to} the objects move
too. ^{In such} we accumulate visual data —
Vision ~~through~~ one eye through a peephole, or an
incredibly immobile spectacle

The eye ^{is directed to} focuses on a plan, blurring all other, and
thus isolates and details. The eye ^{does not embrace} a scene, grasps
successively — ^{and the eye is forbidden to choose, this}

where all is thrown pell-mell into one
single focus is the best possible attainment
of one who would paint "natural"
In so doing he would deny the very laws
of natural vision —

The binocular vision that creates ^{volume and} spaces,
the focusing ^{on points}, the movements of both the
onlooker and the object are of all part of
natural vision and though they cannot
be duplicated in paint, they can be
suggested by judicious use of the ^{optical qualities inherent to the} material used.

Then there is this gap between the thing
seen and the thing known —
It would have been easier 50 years ago to
state that academic painters do represent the

subjective

world as is - Then ^{the term} science had a kind of
^{accumulative} permanent meaning and each optical fact relating
 to a physical one, the painting of a collection of
 physical facts had a certain ^{value of} scientific ~~data~~. Since
 then science trapped matter into the atom, and
 shattering the atom, found its composition more
 like energy than matter. The world as ^{modern} science sees
 it is full of mystery, its laws only relative, submitted
 to a kind of free will on the part of matter -
 Such ^{unfathomable} ~~unfathomable~~ dynamism must be
 built into a picture that is to give a scientific
 rendering of the world. And this do we find
 in the work of the greater ^{subjective} masters, while it
 is to be missed in the clear-cut, clearly labelled
 so-called objective pictures -
 It is not astonishing that objective and
 subjective should ~~share~~ ^{have} the same ^{pulse} ~~beat~~. Our own
 human mechanism is also part of the creation
 and, as the Chinese clearly expound, painting
 the laws of mountains and trees and river falls
 is but an ^{introspective} ~~introspective~~ excursion -
 Painting, even if we start our quest with
 the commonplace assertion that one must
 paint "real" becomes an examination
 a very spiritual affair -
 With its body as physical as is a chair or a
 table, its ~~life~~ ^{life} functioning in the
 sensorial fringe of our mental reactions,
 its aims of spiritual introspection,
 painting bridges our whole universe,
 and the painter, that produces this strange
 object, will never cease to apologize for
 being neither a ^{pure} craftsman ~~and~~ nor a
 mere intellectual.

