

Seminar XIII: The Object of Psychoanalysis (1965–1966)

Restoration of Session 16, May 4, 1966

It is a matter, for us, of situating our topology; to situate ourselves, we analysts, as acting in it. In a closed meeting, a small little group, someone asked me, recently, in connection with what I said about this topology — that it is not a metaphor — what is it then? What does it mean for us to situate ourselves as subjects in a reference which is not metaphorical. I did not answer; the person who was questioning me had not been at the last closed seminar and the elliptical response that I would have been able to give, would have confronted us with *jouissance*, would have been a reply that was not sufficiently commentated on.

To be situated in what is no longer the metaphor of the subject, is to go searching for the foundation of its position, not at all in any effect of meaning, but in what results from the combinatorial itself.

What exactly is involved in the subject, in its classical position, from this locus necessitated by the constitution of the objective world? Note that in this pure subject, the subject whose unitary reference the theoreticians and the philosophers have taken to extremes, this subject, I am saying, is not altogether believed in and with good reason. People cannot believe that the whole world is suspended on it. And it is indeed in this that there consists the accusation of idealism.

It is here that the visual structure of this subject ought to be explored. I already approached the material contributed by our analytic experience, and in the first place the screen, the screen that our analytic experience teaches us to be the principle of our doubt, what is seen does not reveal but hides something.

This screen, nevertheless, supports, for us, everything that presents itself. The foundation of the surface is at the source of everything that we describe as an organisation of form, a constellation. Henceforth, everything is organised in a superimposition of parallel planes and labyrinths are established with no exit to representation as such.

In a book that I recommended to the greater part of those who are here since, as a matter of fact, this audience is not much bigger than the one that I had the last time, a book called *Les paradoxes de la conscience* by Monsieur Ruyer, you will see the consequences of this structural reference. Everything that we conceive of as point by point correspondence of what is on one surface onto another, is imaged by the representation of a point from which the rays start, traversing the two parallel planes manifesting there a trace on a different one to that on a plane to the corresponding plane, a fundamental homothety, homology, so that, however we may manipulate the relationship of the image to the object, the result is that there must indeed be somewhere this famous subject, who unifies the configuration, the constellation, by limiting it to a few brilliant points, who unifies it somewhere, this something in which it consists. Hence the importance of the subject.

But this flight into a mythical unity, in which it is easy to see the requirement of the pure unifying spirit, the path, the path along which I am leading you, which is properly speaking what is called method, culminates at this topology which consists in this

remark that it is not at all by seeking something that is going to correspond to this surface at the back of the eye which is called the retina or moreover to any other, at whatever point the image is formed, that it is a matter of referring to as constituting the unifying element. Of course, this begins from the Cartesian distinction between extension and thought. This distinction supposes that extension is space as homogenous, in this unthinkable sense that it is, as Descartes says, entirely to be

conceived of as *partes extra partes*, except for something which is hidden in this remark, which is that it is homogenous, that each point is identical to all the others while at the same time being different, which is really what the hypothesis means, namely, that all its parts are of equal value.

Now, the experience of what is involved in this structure of space, not at all when we distinguish it from thought, from thought in so far as the signifying combinatorial supports it uniquely and fundamentally, that this space cannot effectively be at all separated from it, that it is on the contrary intimately consistent with it, that there is no need for an over-arching thought to grasp it again in this necessary coherence, that thought is only introduced into it by introducing measure into it, a measure in a way that is applicable, as in land-surveying, which far from exploring it, constructs it. I have designated here the essence of what is involved in the first steps of geometry, the trace of which is still conveyed by its name, geometry, of Greek, Euclidean geometry, entirely founded precisely on this theme of a measure being introduced, which hides that it is not at all thought which carries it but properly speaking what the Greeks themselves called measure. “Man is the measure of all things”, namely, his body, the foot, the thumb and the cubit (*la coudée*).

(5) Now, the progress of the thinking that has continued to be called geometric and, no doubt, it is not for nothing that *more geometrico* has always appeared to be the ideal for every deduction of thought, the progress, I am saying, of this geometry shows us the emergence of another mode of approach in which extension and combinatorial are closely tied together and which is, properly speaking, projective geometry.

Not at all equality, measure, an overlapping effect, but as you still remember, the often painful effort to ground the first deductions of geometry. Remember the time when you were put through the Hey presto! of a reversal onto the plane. God knows, this is an operation which did not seem to be implied in the premises to ground the status of the isosceles triangle. Displacement, translation, manipulation, even homothety; this whole operation starting from which Euclidean deduction fans out, is transformed, properly speaking in projective geometry, precisely by introducing from figure to figure the function of equivalence by transformation.

Curiously, this progress is marked, historically, by the contribution properly speaking of artists, namely, those who were interested in perspective. Perspective is not optics. (6) It is not at all a matter in perspective of visual properties but, precisely, of this correspondence of what is

established concerning the figures which are inscribed on one surface with those which, on another surface, are produced from the simple consistency established of the function of a point starting from which straight lines join this point to the articulations of the first figure, to find themselves, by crossing another surface, making another figure appear.

We rediscover here the function of the screen. And it is not at all implied that between one figure and the other there should appear a relationship of resemblance or of similarity, but simply of the consistencies that we can define between the two. The screen, here, functions as what is interposed between the subject and the world. It is not an object like any other. Something is painted on it. Before defining what is involved in representation, the screen already announces to us, at the horizon, the dimension of the representative of the representation. Before the world becomes representation, its representative — I mean the representative of the representation — emerges. I will not deprive myself of the opportunity of evoking here for the first time, even if only to come back to it, a notion which, although prehistoric, cannot in any way be taken as archaeology in the matter.

(7) Cave picture (*l'art pariétal*) the one that we find precisely at the bottom of these closed spaces that are called caves, is it not a fact that in its mystery, whose principal one is undoubtedly that we still remain embarrassed as regards knowing the degree to which these places were illuminated; they were so only at the opening, to what degree these places were visited, they seem to have been rarely so if we are to believe the traces that we can pick out in the shape of traces of footprints in places which, nevertheless, are capable of carrying such marks.

Cave picture seems to refer us to nothing less than to what, later, is announced in the Platonic myth of the cave, which would then take on a different import, in effect, than a metaphorical one. If it is into the womb of a cave that Plato tries to take us in order to give rise for us to the dimension of the real, is it by chance that no doubt what is found on these walls, where recent explorations by methods which are scientific, and which are no longer breathless before these figures, imagining the man of earliest times in some anxiety or other about bringing back enough for the midday meal to his bourgeois wife, this exploration which, for its part, being brought to bear not on the imaginative interpretation of what can be involved in the relationship of an arrow and (8) an animal, especially when it appears that the wound carries the most obvious traces of being a vulvar representation, this method which brought into play, with M Leroy-Gourant, a carefully maintained card index, indeed even the use of an electronic machine, shows us that these figures are not scattered around at random, and that the constant, univocal frequency of deer at the entrance, of bison in the middle, introduces us directly, in a way, even though M Leroy-Gourant, and with good reason, does not make use of this reference point which, nevertheless, is very simple, which is immediately given to him by the import of my teaching, namely, that there is no need for those who participated, very obviously, around these pictures which are still enigmatic for us, in a form of worship, that these people had no need to go to the back of the cave for the signifiers at the entrance to represent them for the signifiers at the back,

which had no need, on the contrary, to be so frequently visited, as such, outside of the precise time for initiation.

Everything that accompanies these singular processions, lines of points, arrows which appear here to be much more directing of the subject than conveying an alimentary intention, everything indicates to us that a structural chain, that a distribution whose essence is properly speaking to be signifying, and this something which, of itself, can (9) give us the guide of a thinking, that is at once firm and prudent, with respect to what is in question.

The function of the screen as a support, as such, of significance is what we find immediately with the awakening of this something which, as regards man, assures us that, whatever tone of voice he emitted there, he was a speaking being.

It is here indeed that it is a matter of grasping in a closer way the relationship of significance to visual structure which is found, by the force of things, namely, by the fact that it seems, as far as anyone knows, that we will never have any trace of the voice of these first men, it is undoubtedly from the style of writing that we find the first manifestations in him of the word.

I do not need to insist on a very curious fact that these representations also highlight, that people go into ecstasy about the fact that they are naturalist, as if we had not learned from our analysis of realism the point to which, in every art, it is fundamentally metonymical, namely, designating something other than what it presents to us, these realistic shapes represent with a remarkable constancy this oscillating line which is (10) expressed in fact by the shape of this elongated S in which I, for my part, would see no inconvenience to see intersecting that of the S with which I designate the subject for you. Yes. Exactly for the same reason that when Monsieur Hogarth tries to designate what is involved in the structure of the beautiful, it is also exactly and specifically to this S that he refers.



William Hogarth Autoportrait

To give body, of course, to these extrapolations, which may, I agree, appear to you to be bold, we must now come to what I earlier called the visual structure of this topological world, the one on which there is founded any establishment of the subject. I said that this structure is logically prior to the physiology of the eye and even to optics, that it is the structure which the progress of

geometry allows us to formulate as giving, in an exact form, what is involved — I underline exact — what is involved in the relationship of the subject to extension.

And, undoubtedly, I am of course prevented by simple considerations of propriety from giving you here a lecture on projective geometry. It is necessary then that by a few indications, I stimulate the desire in you to refer to it, by means of some apologues, to make you sense its proper dimension.

Projective geometry is properly speaking combinatorial, combinatorial of points, of lines, of surfaces that can be traced out rigorously, but whose intuitive foundation — what points, lines, planes, evoke for you — is dissipated, is reabsorbed, and finally vanishes behind a certain number of purely combinatorial necessities, such as, for example, that the point will be defined as the intersection of two lines, that two lines will be defined as always cutting one another, for a combinatorial definition is not valid if it involves exceptions of the intuitive order. If we believe that parallels are precisely lines which do not cut, two lines will always cut one another at a point, and one may make out as best one can, but it is necessary for this point to exist.

Now, it appears that precisely this point exists, and that it is even by making it exist that projective geometry is founded and it is indeed in this that there consists the contribution of perspective, the fact is that it is precisely by projecting it onto another plane that one will see appearing, on this other plane, in a way whose interest is not that it is intuitive there, namely, perfectly visible in the joining of two lines on the horizon line, but that it has to correspond, according to strict laws, to an expected

equivalence, starting from hypotheses that are purely combinatorial, I repeat, which are the ones which will be pursued in the terms that two points, for example, will only determine a single straight line, and that two straight lines cannot cut one another at two points.

To make you sense what is involved in such definitions, I remind you, that the result is that in encountering the manipulations of Euclidean proofs, the admission of these principles, which are summarised in a form called the principle of duality, a purely projective, non-metrical, geometry can with confidence translate a theorem established in terms of points and of lines, by substituting point for line in its statement and line for point, and by obtaining a statement that is certainly as valid as the preceding one.

This is what emerges in the 17th century with the genius of Pascal, already prepared, without any doubt, by the multiple advent of a mental dimension as it is always presented in the history of the subject, which means, for example, that the theorem described as Brianchon's which states: "That a hexagon formed by six straight lines which are tangents of a conic" — therefore the hexagon circumscribes,

I imagine that you know what a conic is, but I remind you, a conic is a cone, it may be a hyperbola or a parabola, which means, on this occasion, that it is a matter of some of their shapes as they are generated in space and not simply in the form of revolutions; a cone

being defined then by the shape that it presents in space, through the enveloping of a line joining a point to a circle, for example, and not necessarily joining it from a point situated perpendicular to its centre — “all of these lines then present the property that the three lines that join the opposite vertices, which is easy to determine whatever the shape of the hexagon may be, by simply counting, these three lines converge in one point.”

From the simple fact of admitting the principles of projective geometry, this is immediately expressed by the fact that a hexagon formed by six points which repose on a conic, which is thus an inscribed hexagon, that in this case, the three points of intersection of the opposite sides, are on the same line.

If you have listened to these two statements, you see that they can be translated from one to the other by simple substitution, unequivocally, from point to line and from line to point. There is here in the process of the proof, as you clearly sense, something completely different to what brings into play measuring, ruler or compass, and that, as regards the combinatorial, it is indeed with points, with lines, indeed with planes, in terms of pure signifier and, moreover, with theorems that can be written out simply with letters that we are dealing.

(14) Now this, just by itself, is going to allow us to give a completely different import to what is involved in the correspondence of an object with what we will call its figure.

Here, we will introduce the apparatus which served us already as being essential to confront this mythical image of the eye ...

... which, whatever it may be, eludes, elides what is involved in the relationship of the representation to the object, since, in some way or other, the representation in it will always be a double of this object.

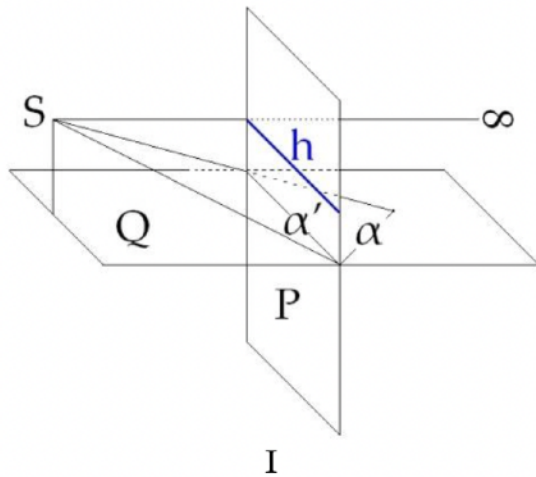
Confronted with what I first of all presented to you as the structure of vision opposing to it that of the look, and in a first approach, I put this look where it is grasped, where it is supported, namely, where it is scattered in this work that is called a picture.

The sort of originating relationship of the look with the stain, in so far even as the biological phylum (*phyllome*) may make it effectively appear to us in extremely primitive organisms, in the form of a stain, starting from which the localised sensitivity that the stain represents in its relationship to light, can serve us as an image, as an example, for this something where the visual world originates.

But undoubtedly this is only an evolutionary equivocation whose value can only take (15) on, can only be affirmed as a reference by being referred to a perfectly graspable synchronic structure. What is involved in what are opposed as field of vision and as look precisely at the level of this topology?

Undoubtedly, the picture is going to continue to play a role in it, and this should not astonish us, if we have already admitted that something like a *montage*, like a mounting, like an apparatus, is

essential for what we are aiming at having the experience of, namely, the structure of the phantasy. And the picture about which we are going to speak, because it is in this sense that we



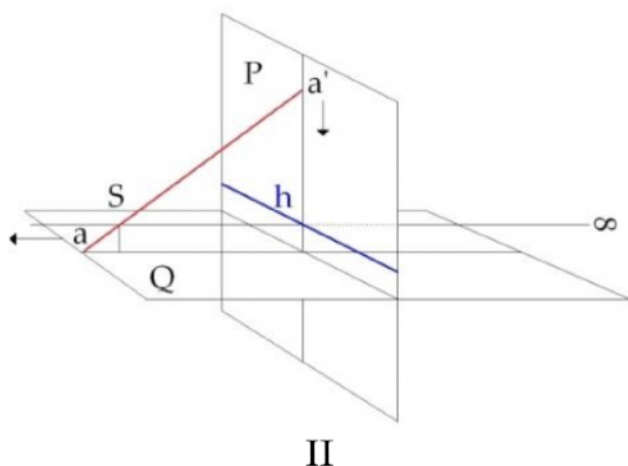
expect it to be of service, and of use, it is indeed as it is mounted on the easel that we are going to take this picture, as something which holds up as a material object, this is what is going to serve us as a reference for a certain number of reflections.

In projective geometry, this picture is going to be the plane that I spoke about earlier onto which, as everyone thinks, the lines that we will call, if you wish, ocular lines, so that there will be no equivocation with visual rays, the lines which join the essential point at the beginning of our demonstration, that we are going to call eye, and which is this ideal subject of identification

of the classical subject of knowledge, do not forget for example, in all the schemas that I gave on identification, that it is from an S-point of the eye that there start these lines that I trace out from this point in a straight line, an ocular line which is joined to what, to what we will distinguish as a support, point, line, even plane, in the ground plane (*plan-support*), these lines cross this other plane and the points, the lines where they cross it, indeed the crossing of the plane which will be determined with respect to one of these lines, to contain it for example, these crossings of the figure plane — I am distinguishing therefore ground-plane and figure plane — this crossing of the ocular line, leaving its trace on the figure plane, and this is what we have to deal with in what is involved in the construction of perspective. And this is what ought to reveal, materialise for us, the topology from which it results that something is produced in the construction of vision which is nothing other than what gives us the basis and the support of the phantasy, namely, a loss which is none other than the one that I call the loss of the o-object, and which is none other than the look and, on the other hand, a division of the subject.

What, in effect, does perspective teach us? Perspective teaches us that all the ocular lines which are parallel to the ground plane are going to determine on the figure plane a line which is none other than the horizon line. This horizon line is, as you know, the major reference point for any construction of perspective.

What does it correspond to in the ground plane? It corresponds also, if we maintain firmly the principles of the consistency of this combinatorial geometry, to a line. This line is, properly speaking, the one that the Greeks, in fact, only missed for reasons that today we will leave to one side, even if we ought one day to put them in question, that the Greeks could not but miss and what is, properly speaking, this line, a line that is also, and from our principles, also a straight line which is found at infinity on the ground plane and that, intuitively, we can only conceive of as representing, as I might say, the whole of it.



It is on this line that there are found the points where in the ground plane the parallel lines converge, which is shown in the figure plane, as you know, by the convergence of almost all the parallel lines at the horizon.

This is imaged, in general, and one sees it written by the best authors, this is something you know well, when you see a road going off towards the horizon, it becomes smaller and smaller, narrower and narrower. People forget only one thing, the danger of such references, for everything that we know as

horizon is a horizon of our terrestrial ball, namely, a completely different horizon, determined by the spherical shape, as is noted elsewhere, moreover, without seeing in this, it seems, the slightest contradiction, as is noted when we are told that the horizon is the proof of the roundness of the earth.

Now, I would ask you to notice that even if we were on an infinite plane, there would always be a horizon line, for anyone who stood upright on it. What troubles and disturbs us in this consideration of the horizon line, is first of all what I will come back to later, namely, that we never see it except in a picture.

We will see later what is involved in the structure of a picture. Since a picture is limited, it does not even cross our minds that if the picture were infinitely extended, the horizon line would be straight to infinity, to such a degree on this occasion, do we satisfy ourselves with having simply to think in a crudely analogical way, namely, that the horizon there on the picture, is a horizon like our horizon, which one can go around.

Another remark is the following: it is that a picture is a picture and perspective is something different. We are going to see later how we get out of it in the picture.

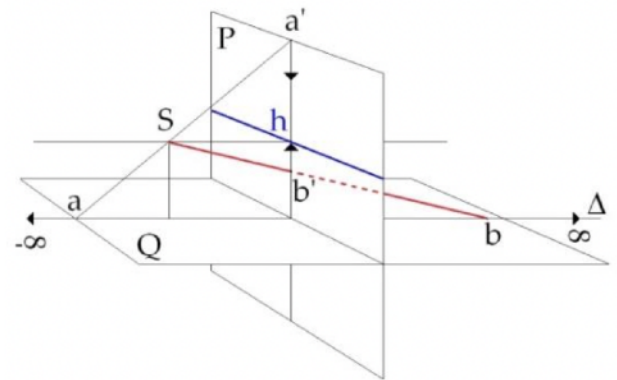
But if you begin from the conditions that I gave you for what must come to be traced on the figure plane, you will notice the following, which is that a picture made under these conditions, those of strict perspective, would have as an effect, if you suppose, for example, because you have to hang onto something, that you are standing on a plane covered by a pattern of squares going to infinity, that this pattern of squares has, of course, stopped — we will see later how — at the horizon.

And above the horizon? Naturally, you are going to say the sky. But not at all, not at all, not at all, not at all. Above, what is there, on the horizon, behind you, as I think that if you reflect on it, you can immediately grasp it, by drawing the line which joins the point that we have called S to what is behind on the ground plane which you will immediately see is going to be projected **above the horizon (II)**.

Let us suppose that at this horizon of the projective plane there comes, from the ground plane, to be stitched at the same point of horizon, the two opposite points of the ground plane, one, for example, which is on your extreme left on the horizon line of the ground plane, will come to be stitched to another one which is on your extreme right, also on the horizon line of the ground plane.

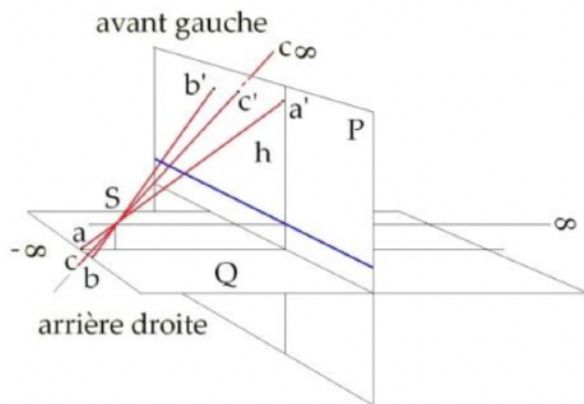
Have you understood? I mean No? Let us begin again.

You have a surface in front of you (III). You have in front of you a plane made out in squares. Let us suppose, for the greatest simplicity that it is horizontal and that you, for your part, are vertical. It is a line joining your eye — I am going to say things that are as simple as possible — to some point or other of this chequered ground plane and at infinity which determines on the vertical plane, let us say, to satisfy you, which is that of projection which is going to determine the correspondence point by point.



III

To every point on the horizon, namely, at the infinity of the ground plane there corresponds a point on the horizon of your vertical plane. Reflect on what is happening. Of course, it is a matter of a line which, precisely, as I began to say, has nothing to do with a visual ray. It is a line which starts behind you from the ground plane and which goes to your eye. It is going to end up on the figure plane at a point above the horizon.

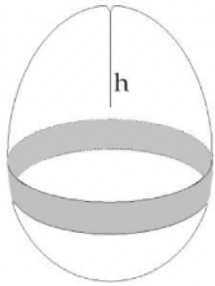


IV

To a point (IV) which corresponds to the horizon of the ground plane there is going to correspond another point coming to touch it from above, as I might say, on the horizon line, and what is behind you, on the right, since this passes and is crossed at the level of the eye point, is going to come exactly in the opposite sense to which it would present itself if you were to turn around, namely, that what you would see on the left, if you were to turn towards this horizon, you would see being picked out on the right, above the horizon line on

the projective plane, of the projection.

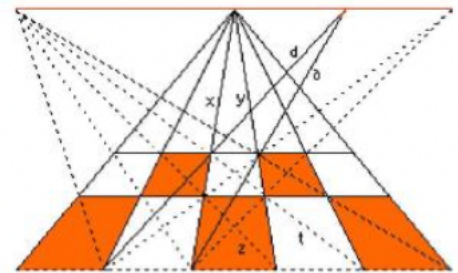
In other words, that a line that we cannot define as round, since it is only round because of our daily apprehension of terrestrial roundness, that it is from this line, which is at infinity on the ground plane, that we will see the points knotting together, coming respectively from above, and from below, and in a way that, for the horizon behind, is attached in a strictly reverse order to what is involved for the horizon in front.



I can, of course, on this occasion, suppose, as Plato does in his cave, my head fixed and, consequently, determining two halves of which I can speak, as regards the ground plane. What you see there is nothing other, moreover, than the pure and simple illustration of what is involved when I represent the projective plane for you on the board in the form of a **cross-cap**, namely, that what you see, *instead of a spherical world*, is a certain ball knotted in a certain way, crossing itself and which means that what presented itself at first as a plane to infinity, comes in another plane, having been divided, to be knotted onto itself at the level of this horizon line; and to be knotted in such

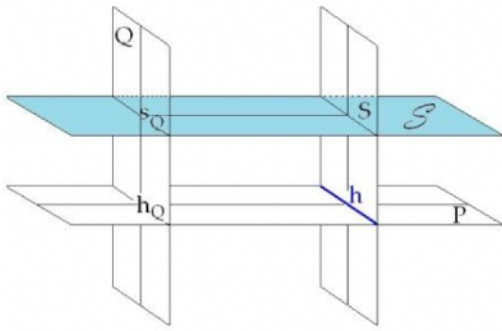
a way that to each one of the horizon points of the ground plane, is knotted what? Precisely, what the shape that I already put on the board of the projective plane, namely, its diametrically opposite point. It is indeed for this reason that it comes about that in such a projection, it is the point behind on the right which is knotted to the point in front on the left.

This is what is involved in the horizon line, indicating to us, already, that what gives its consistency to a signifying world with a visual structure, is an envelope structure and not at all one of indefinite extension. It nevertheless remains, that it is not at all enough to say these things as I have just imaged them for you, for I forgot in the question the squares that I had put there uniquely to be of use to you, but which is not indifferent, for a pattern of squares being made up of parallel lines, it must be said that having also admitted the fact that I fixed my head, all the parallel lines of space, as you have, I think, no difficulty in imagining, are going to rejoin at a certain vanishing point at the horizon, one single point, namely, that it is the direction of all the parallel lines in a certain given position which determines the unique horizon point at which they are going to cross in the figure plane.



If you have **this infinite pattern of squares** that we are speaking about, what you will see joining together at the horizon, will be all the parallel lines of all the squares at a single point. Which does not prevent it being the same point where all the parallel lines of all the pattern of squares behind, will also join together from above.

These remarks which are fundamental for any science of perspective and which are those that any artist who has trouble ordering anything whatsoever, a series of figures on a picture, or moreover the lines of what is called a monument, which is the arrangement of a certain number of objects around a void, will take into account; and that this point on the horizon line that I spoke about earlier in connection with the pattern of squares is exactly what is usually called, I do not see that I am contributing here anything that is really all that transcendent, the vanishing point of the perspective. This vanishing point of the perspective is properly speaking what represents in the



VII

figure the eye that looks. The eye is not to be grasped outside the figure, it is in the figure and everyone, ever since there has been a science of perspective, has always recognised it as such and called it that.

- It is called the eye in Alberti;
- it is called the eye in Albrecht Dürer.

But that is not all. For I regret that I have been made waste time in explaining this point that is really very accessible, that is not all. That is not at all the whole story for there are also things which are between the picture and me.

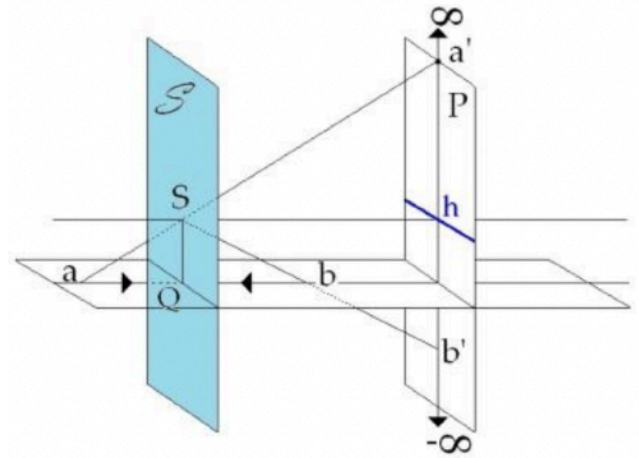
The things that are between the picture and me, can also, by the same procedure, be represented on the plane of the picture. Or they will go towards depths that we can hold to be infinite, none of this hinders us, but they will stop at a point which corresponds to what? To the plane parallel to the picture which passes — I am going to say, to facilitate things for you — which passes through my eye or **through the point S (V)**.

We have here two traces. We have the trace of that through which the picture has cut the ground (*support*). **It is the inverse of the horizon line (VI)**. In other words, it is what, if we were to reverse the relationships, and we have the right to, constitutes as

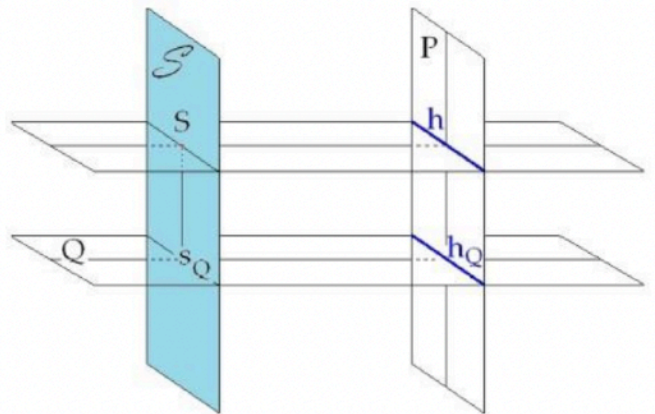
horizon line in the ground, the infinite line in the figure. And then,

there is the line which represents **the section of the ground by the plane of the picture (VII)**. They are two lines.

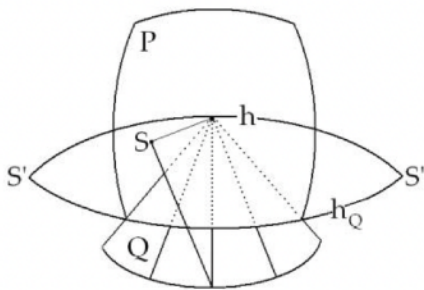
It is late and I will tell you something much less rigorous because of the little time that remains to me. Things take much longer to explain than might appear at first.



V



VI



Rigorously (right), this means that there is another eye point (*point d'oeil*) which is the one constituted by the line to infinity on the figure plane, and its intersection by something which is well there, namely, the line through which the figure plane cuts the ground plane.

These two lines cut one another since they are both on the figure plane. And what is more, they cut one another at a single point for this point is well and truly the same on the line to infinity.

In order to remain in the domain of images, I would say that this distance of two parallel lines which are on the ground plane, the ones that are determined by my fixed position as a looker, and the one which is determined by the insertion, the meeting of the picture with the ground plane, this gap, this gap which, in the figure plane, is only translated by one point, by a point which, for its part, is totally hidden for we cannot designate it as we designate the vanishing point at the horizon.

This point essential for the whole configuration and very specially characteristic, this lost point, if you are willing to be satisfied with this image, which falls in the gap between two parallel lines as regards what is involved as regards the ground, this is the point that I am calling the point of the looking subject.

We have therefore the vanishing point which is the point of the subject *qua* seeing (*voyant*), and the point which falls in the gap between the subject and the figure plane which is the one that I am calling the point of the looking (*regardant*) subject.

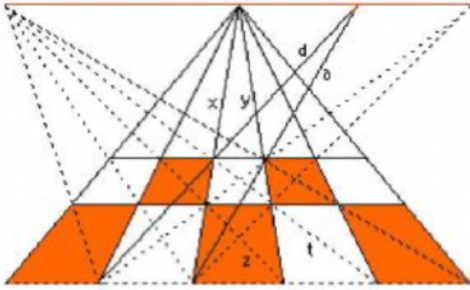
This is not a novelty. It is a novelty to introduce it in this way, to find in it the topology of \$, with respect to which it must now be known where we situate the (o) which determines the division between these two points. I am saying, of these two points in so far as they represent the subject in the figure.

Going further will allow us to establish an altogether rigorous apparatus, *montage*, which shows us at the level of the visual combinatorial, what the phantasy is.

Where we will have to situate it in this totality, is what will be said later.

But from now, so that you do not think that I am leading you here into abyssal regions (27) — I am not doing depth psychology, I am trying to do geometry, and God knows I have taken precautions, after having read everything that may be referred to this history of perspective, from Euclid, who missed it so completely in his *Aphorisms*, down to the people of whom I spoke earlier, and even to Michel Foucault's last book which directly alludes to these matters in his analysis of *Las Meninas* (*Les suivantes*) in the first chapter of *Les mots et les choses*, I tried to give you something that would be altogether a support for it, it must be said.

But as regards this perfectly defined point that I have just given as the second point representing the seeing subject in the projective combinatorial, do not believe that I am the one who invented it. But it is represented otherwise, and this otherwise has already been called by people other than myself, the other eye, for example. It is exactly well known by all painters, this point. For since I



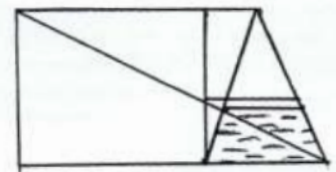
told you that this point, in its rigour, falls into the gap as I defined it on the ground plane, in order to situate itself at a point that you naturally cannot highlight, but which is required by the

fundamental equivalence of projective geometry and which is found in the figure point, it is all very well for it

to be at infinity, it finds itself there. How is this point used?

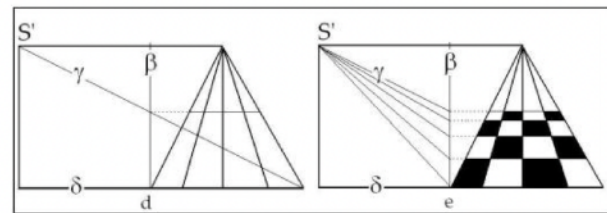
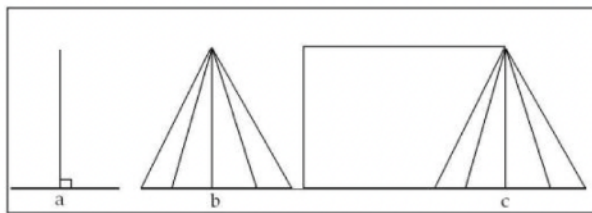
It is used by all of those who have made pictures by making use of perspective, that is very exactly between Massaccio and Van Eyck in the form of what is called the other eye, as I told you earlier.

It is the point which allows there to be constructed any plane perspective in so far as it vanishes, in so far as it is precisely in the ground plane. It is constructed very exactly in this way in Alberti. It is constructed a little differently in what is Le Pélerin. **Here it is:**



This is what is involved in discovering perspective, namely, a pattern of squares, for example, whose base is supported here. We have a reference.

If I lend myself to this, I mean if I want simply to do things that are simple for your comprehension, I put myself in the middle of this reference of the pattern of squares and a perpendicular line raised on the base of this pattern of squares gives me the vanishing point at the horizon. I will know then, already, that my pattern of squares is going to be arranged like that, with the help of my vanishing point.



But what is going to give me the height from which there is going to come the pattern of squares in perspective? Something which requires me to use my other eye. And what people discovered, rather late because, when all is said and done, the first theory is given of it in Alberti, a contemporary of those whom I have just named, Massaccio and Van Eyck, well then, I will take here a certain distance, which is exactly what corresponds to what I gave you earlier, as this gap of my block on the board. On this distance, taking a point situated at the same height as the vanishing point, I make a construction, a construction which, in Alberti, passes through a vertical line situated here. I trace out the diagonal here; here a horizontal line and here, I have the limit at (30) which my pattern of squaring will end, the one that I wanted to see in perspective.

I have therefore complete freedom as regards the height that I will give to this pattern of squares taken in perspective, namely, that inside my picture I choose as I wish the distance at which I am going to place myself from my pattern of squares so that it will appear to me in perspective, and this is so true, that in many classical pictures, you have in a masked form a little stain or indeed sometimes quite simply an eye.

An indication, here, of the point from which you yourself ought to take, the distance that you ought to put yourself from the picture, in order that the whole effort of perspective may be realised for you. As you see, this opens up another dimension

which is the following, this one which is exactly the same as the one that astonished you earlier, when I told you that above the horizon there is no sky. There is sky because you put at the back, on the horizon, a strut (*portant*) which is the sky. The

sky is never anything but a strut in reality as in the theatre, and in the same way, between you and the sky there is a whole series of struts. The fact that you can choose your distance in the picture, and in any picture whatsoever in the picture, and already the picture itself is a taking of distance, for we do not make a picture of you in the opening of the window in which you are framed.

Already you make the picture within this frame. Your relationship with this picture and what it has to do with phantasy, will allow us to have reference points, an assured figure for everything which, subsequently, will allow us to show the relationships of the o-object with the \$, this is what I hope, and I hope a little bit more quickly than today, I will be able to present for you the next time.



Masaccio



Van Eyck