# TRANSFORMATION OF AN OBJECT OF REALITY INTO AN OBJECT OF DESIRE

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### 1. Preamble

Lacan has accustomed us to read and work on the schema of "Letter 52" from Freud to Fliess. It is presented on figure 1.1 page 1. It is from this writing that Lacan led us to the *cross-cap* — presentation of a projective plane immersed in a 3D space as shown on 2.1 page 2. Lacan inscribes on it the graph of letter 52 which shows the progression of the perception of an external object, to the consciousness. This complex schema is represented on 2.2 page 2.

The least we can say is that the reading of this schema is not simple!

What I propose here is a presentation much easier to imagine but without trivializing it. This presentation shows us object a shaped as a disk, and the immersion line, which makes its reading so difficult, is pushed away to infinity.

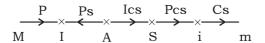


FIGURE 1.1. The letter 52 to Fliess, oriented by Lacan

#### 2. Detour by the geometry of the projective plane

I go back here to parts of previous articles [Sib95] [Sib96]. The projective plane is an object which dates back to the discoveries of perspective by Leon B. Alberti and Filippo Brunelleschi in the Renaissance. It is the mathematical formulation of the vanishing points and parallels which join at infinity. In picture 2.3 page 3 one sees a figuration of the Euclidean plane completed by a series of projective points. Each projective point corresponds to one single series of parallels on the plane. All the projective points construct a projective straight line all the way to infinity. We'll see later that Lacan names this straight line, the line with no points, "la ligne sans points".

The projective plane can thus be thought of as an assemblage of a spherical zone, the Euclidean plane, and of an aspherical, moebian zone, the projective straight line. This is detailed in the above-mentioned article. You should be aware that, as indicated on figure 2.4 page 3, a letter F which wanders on the plane to its projective confines comes back in reverse, like a right hand becoming a left hand,

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or comes back on the other side of the euclidean disk if it is considered as an opaque disk.

Here is what has to be remembered for what is to follow:

An object which is on one side of a disk, once this disk has been completed by a projective straight line, and which covers this projective plane comes back on the other side, inverted.

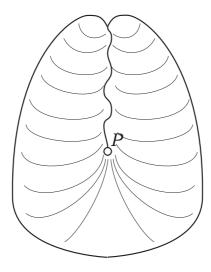


FIGURE 2.1. The cross-cap

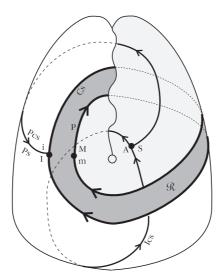


FIGURE 2.2. The R Schema imprinted on a cross-cap

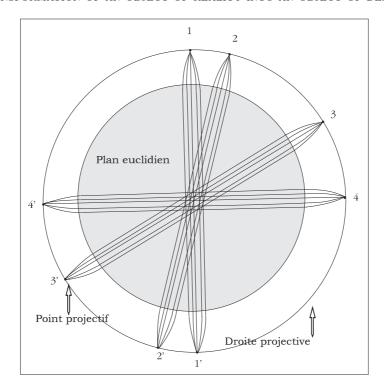


FIGURE 2.3. The projective plane

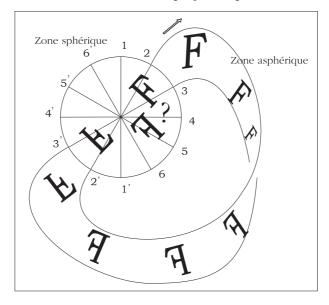


Figure 2.4. Transformations of letter  ${\bf F}$ 

### 3. The object a, a disk

The schema of figure 2.2 page 2 is isomorphic to a disk — i.e. a portion of a plane with two sides and one edge — stitched edge to edge to a Moebius ring – i.e. a portion of plane with one single side and one edge. Three zones can be delineated on this schema:

- (1) The moebian zone which represents the *Real*.
- (2) One side of the disk which represents the *Imaginary*.
- (3) The other side of the disk which represents the *Symbolic*.

It is noteworthy that all of the vectors of the graph on this schema are either on the sides of the disk or on its edge. Nothing will be seen in the moebian zone of the *Real*.

We are going to represent this projective plane seen from the disk point of view. It is presented in figure 4.1 page 5. You can see both sides of the disk artificially separated for easiness of reading, with one side S and one side I, the rest is the moebian zone of the Real which goes on to infinity — R zone.

#### 4. Object of reality, object of desire

The course of the graph allows us to materialize how a real object of perception becomes an object of desire and an instance of object a. Please refer to figure 1.1 and figure 4.1 for an easier way to follow the vectors.

- An object M of external reality comes in contact with a sense and leads to a perception  $\mathbf{P}$ .
- This perceptual course takes place along the edge of the disk on the silent side, the S side. Then it ends at point I.
- From the place of the Other  $A^1$  a fruitful encounter is proposed: **Ps**. This encounter takes place on the edge in I. It is what Freud called *sign-perception*. It is the matching of this perception with a similar pattern belonging to our previous experiences. If I see a leaf of a sycamore tree on the ground, I recognize it as such even though I have never seen this very leaf before and even though no leaves are identical.
- From the place of the Other an unconscious course starts simultaneously, called centrifugal **Ics**<sup>2</sup>.
- It leaves zone S to travel in the Real and then comes back on the other side of I. This path requires A CERTAIN TIME. The abolition of this time has been name the signifying involution. The edge of the disk in this case becomes the line with no points.
- This course, then goes on the side of I until it meets point  $\mathcal{S}$ , the barred subject.
- From this subjective position, the preconscious path starts, **Pcs**, which meets on the rim the counterpart of point *I*, point *i*.
- Finally, the last course, the one of consciousness, **Cs** takes place on the edge of the disk up to m, point facing the starting point M.

<sup>&</sup>lt;sup>1</sup>Although the Other starts with an "O", I keep the letter "A" from the French word "Autre".

<sup>&</sup>lt;sup>2</sup>Same comment, *Ics* comes from the French word "*Inconscient*"

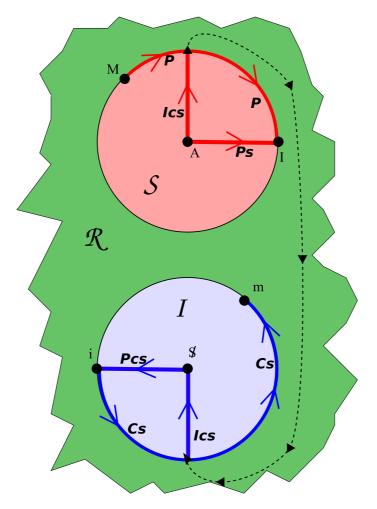


FIGURE 4.1. The disk

## 5. Conclusion

We can see that this presentation is compatible with the topological indications of Lacan. Its interest, for me, is that it makes us sensitive to the structure of object a as Lacan has taught it to us, namely a lenticular structure. This structure is part of our sensible universe. It does not demand any particular abstraction.

What is it that happened? An external object has touched perception. It has been considerably transformed by the psychic apparatus into an object of desire, object a. This object invented by the subject has a disk-like structure.

The thickness, the matter, the stuff of the disk completed by the Real is the synchronously uncrossable bar of the relation signifier/signified. The mandatory time duration, necessary for comprehension — the time to understand — passes by the moebian Real.

It is this reality, made of representations, and to it only that the subject has access to. Not so much of reality indeed!.

## References

[Sib95] J. Siboni. Génération temporelle du plan projectif. La Lettre de Topologie, may 1995.
[Sib96] J. Siboni. Plan projectif et sujet lacanien. TCPP, march 1996.

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