

blue	+	-	⊠	⊠	-	+
red	-	⊠	+	+	⊠	-
green	⊠	+	-	-	+	⊠
	1	2	3	4	5	6

The “Gauss encoding” of the Borromean knot shows clearly how the adhesion of any two rings is due to the presence of a third ring. The stack is recursive: each ring that is taken to be on the top tucks beneath the ring next in the order. This “tuck” action makes the Borromean knot both self-intersecting and non-orienting — the two defining characteristics of projective surfaces.

fourth ring, following Lacan in Seminar XXIII, *The Sinthome* (1975–1976).

There is no definite pattern of the lipograms, but the arrangement of crossings into 1, 2, 3, 4, 5, and 6 offers a lambda-like passage that suggests a palindromic rise and fall that is implicit in the balance of spaces, two per row. The Gauss count simply shows what Lacan first noted, that the relation of any two rings (+/-) is “charged” by the absent ring, and that the absence “rotates” in an orderly way. The Real and Symbolic, therefore, can be understood only through the agency of the Imaginary; the Imaginary and the Symbolic by the Real; the Imaginary and Real by the Symbolic. This charges each of the domains as a “middle term” that operates silently, *enthymemically*, as the means by which the other two domains relate as they do.

Is there any real symmetry in the pattern of lipograms? This question raises the issue of the dimensionality of the rings. When shown in 2d graphics, it’s necessary to indicate the third dimension. One ring must be shown “on top,” the other “on the bottom” of a stack that exists in the virtual depth of the drawing. The *cross* must be shown but, in 3-space, it doesn’t technically exist. There is no solid linkage, just as with a stack of books, no book is really bonded to any other, only the order is important. In the Borromean ring-stack, however, there is the implication, as

the borromeo knot

The Borromean knot, symbol of the famous Renaissance Italian family, is the main emblem of Lacanian psychoanalysis. Each ring represents a “domain” — the Real, the Imaginary, and the Symbolic. While no two rings are linked physically, they are held in place by the presence of the (absent) third. This spooky adherence amounts to a kind of “idempotency” — an endurance in the face of change — so that in a Gauss analysis of the knot, notating each cross of a ring by another, the “adhesion” is due to the pattern of the non-crossings of “the” other ring (⊠), which is a role played by all the rings.¹ When the roll of the other is played by the all, when each ring is both top and bottom of imaginary “stack,” the > < function constitutes a frame around this void, both an outside, > • <, and an inside, < • >.

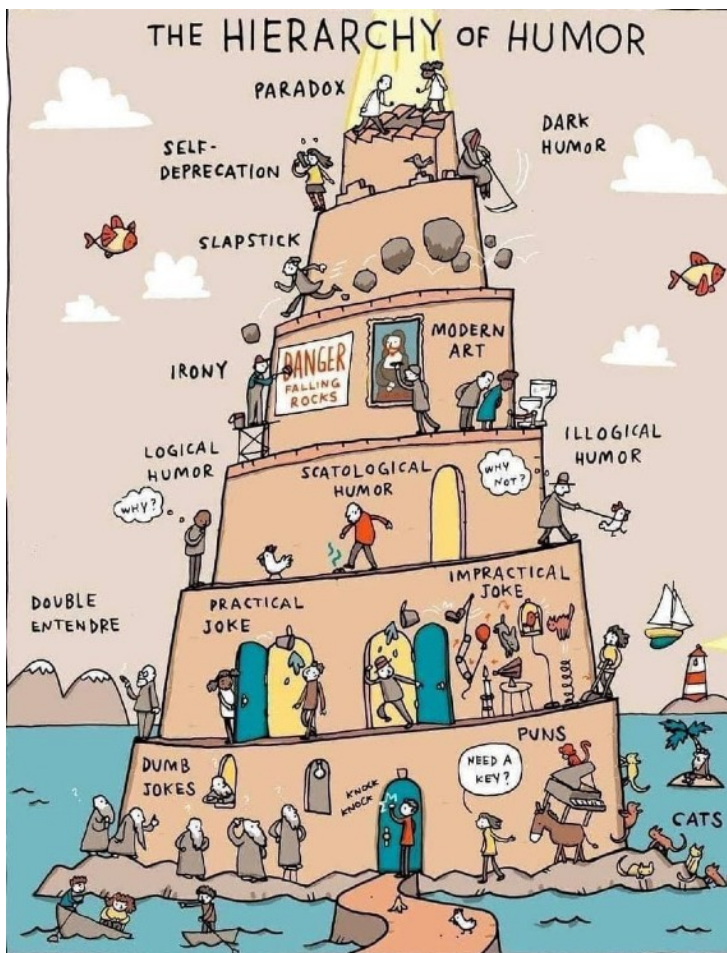
This points to an unusual theme rarely mentioned in Lacanian theory or even mathematics: the role of the “lipogram,” the missing element. George Perec famously wrote a novel demonstrating the power of the lipogram by completing the novel entirely without a single use of a word containing the letter “e.” Amazingly, when the novel was translated into English, the translator found a way to obey this rule, although the incidence of “e” in English is considerably different that it is in French. With each pair of over-and-under crossings “ghosted” by the missing ring, the knot is permeable. Various writers have speculated about the meaning of this, but most relate this empty space to *jouissance*, which some materialize as a

¹ The best work so far on the Borromean knot is Will Greenshields, *Writing the Structures of the Subject: Lacan and Topology* (Palgrave Macmillan, 2017).

with any stack, that a finite stack of three rings must have a ring on top and a ring on the bottom. In the circular, Escher-style, Borromeo ring-stack, there are none. Each ring is the top of one stack and the bottom of another, and this $\langle \rangle$ relation “slides” when the case of each ring is taken up separately. The overlaps do, however, establish that there is a *series order*, that the red ring (in the case in the illustration) lies “on top of” the green ring, and the blue ring lies “on top of” the red ring. But, if each ring as a top “tucks beneath” the ring that tops it, it is simultaneously a top and a bottom, a lower and a higher. The order of succession, so to speak, moves palindromically within the series. The top/bottom status \updownarrow of each ring becomes the \Leftrightarrow order of the stack. We are reminded of Lacan’s elaboration of his *matheme* $\$ \diamond a$, fantasy, that the *poinçon* can, in addition to being like the train-conductor’s punch validating/invalidating a ticket, it combines both a $<$ and $>$ as well as a \wedge and \vee .

In the non-numerical calculus of George Spencer-Brown, the Borromeo knot may be written as showing clearly how non-orientation and self-intersection can work in 3-space. This graphic perpetually relocates the outside to the inside no matter which bracket seems to be the outer-most: 123, 231, 312, 123 This means that the graphic itself is not specific about whether the smaller space to the left side is an “inside” or an “outside.” Just as the stack of rings cannot specify top or bottom, Spencer-Brown’s echelon is a case of Lacanian *éxtimité* (inside-outness) and, topologically, an indicator not simply of a projective surface but of the *immersion* of a 2-d projective surface (e. g. cross-cap, Boys Surface, Klein Bottle) into 3-space. The immersion creates the paradox.

Here, we must jump from clinic to culture, so to speak. The Borromeo ring immersion is something we might



connect with *fou littéraire*, another Lacanian *topos*. It is a kind of joke, a bit of wit; in particular it is the kind of wit that is associated with humor (the *Witz*) and the implicit superiority of the “fool” who tells, shows, or makes the joke something funny, something that “caps” or “trumps” the audience of the joke. This is my case for the implicit order of the lipogram in the Borromeo ring-stack. It is, in its \updownarrow and \Leftrightarrow , the *poinçon*, \diamond , relation. The lipogram, clearly a sophisticated bit of humor as Perec directs and produces it in his novel without the letter “e,” *A Void* (*La disparition*). See this “ambigram” for an example of Perec’s version of the Borromeo knot. This kind of joke telling expands quickly and presciently, as in the idea of the Tower of Babel as a Comedy Club (illustration). Would it be too much to suggest that the Borromeo knot is a succinct disclosure of the Tower of Babel’s topological connection between heaven and earth? Or would this be just my idea of a cheap joke?

Lacan’s Borromeo knot idea affords us an unexpected insight into the literary device of the

lipogram. The “stack/non-stack” of rings in 3-space has a before-and-after aspect that, as < and >, suggest that the lipogram’s void has the shape of a mouth; and that the mouth itself is a paradoxical “silent vocalization” of a portal or word that, as “unspeakable” as it is “impassable,” reflexively self-substantial, self-instantiating, and self-sustaining. In its originality and durability, the lipogram defies extension but is paradoxically the basis of all extension. Could this not be the extension of Psyche in Freud’s famous end-of-life pronouncement, “*Psyche ist ausgedehnt; weiß nichts davon*” (Psyche is extended; knows nothing of it)? Should we not at least consider the most obvious form of extension, travel? And, should we not also accept the first subjective form of “knowing nothing,” the fool? The ethnography of a fool returns us immediately to the cultural consolidation of the lipogram as the form of the one who embodies folly but for that is not discounted. This embodiment can be permanently assigned to an individual who is a fool by birth or misadventure or to a “normal” person temporarily possessed. If the mind is a balance, the balance may be upset by as light a force as an idea or scene suddenly encountered. The effect can be collapse or acted-out hysteria, followed by recovery; or it can be, like the trauma of PTSD, a durable curse.

Sebastian Brandt’s famous *Ship of Fools* (*Das Narranschiff*) presents us with a poetic monogram that was



originally a historical reality, as Michel Foucault described in *Madness and Civilization*. The mind as travel can be set free to wander aimlessly, refused at every port, conveyance in perpetual motion. The lipogram as a ship embodies a motion that is circular or spiral; or, if constrained in one dimension, a back-and-forth. Indeed, “rocking,” from clock pendulums to cradles, has been poetically invested with the idea of perpetual idiocy, just as idiots (or, no less, prophets and other mantic adepts) sway back and forth.

In the lipogrammic text, words swerve around the space that simultaneously empty and unacknowledged. It is only with the revelation that the “letter” has been “missing all the time” do we suffer retroactively, just as the Gestalt psychologist Kurt Koffka recounted the story of travelers who, arriving at an inn after pushing their sleigh through a snowstorm, were told that they had just crossed the perilous semi-frozen Lake Constance, died on the spot of a fright they felt “too late but right on time.” In fact it is time that is corrected in such circumstances, or at least the idea of time as sequential causality. The lipogram’s “nothing” forces time itself to fold, since its nothing is encountered *après coup*, with a “blow” that crushes the rational skull. If the Borromeo knot tells us anything, it connects the clinical symptom to the cultural trait by giving us the formula which — thanks to the Gauss count — embeds a symmetry that is as much within the unit (more accurately, “the unary”) as the whole. It is the unit *as whole*. But, considering how the two rings are held in place by an absent third, the whole is a hole.

The concept of foolishness was a frequently used trope in the pre-Reformation period to legitimize criticism, as also used by Erasmus in his *Praise of Folly* and Martin Luther in his *Address to the Christian Nobility*. Court fools were allowed to say much what they wanted; by writing his work in the voice of the fool, In his 1494 book, *Das Narranschiff*, Brant could legitimize his criticism of the church. Brant takes up the ship of fools trope, popular at the time. [Wikipedia]