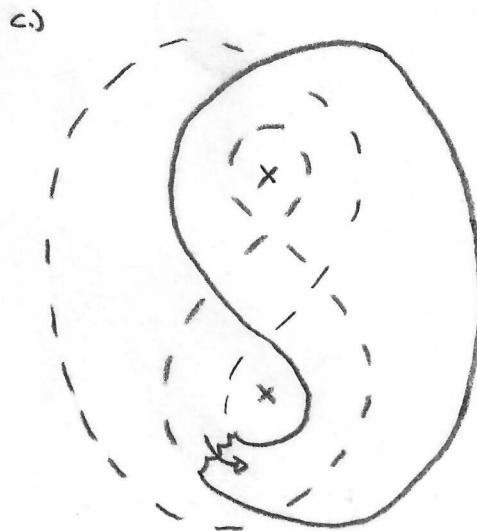
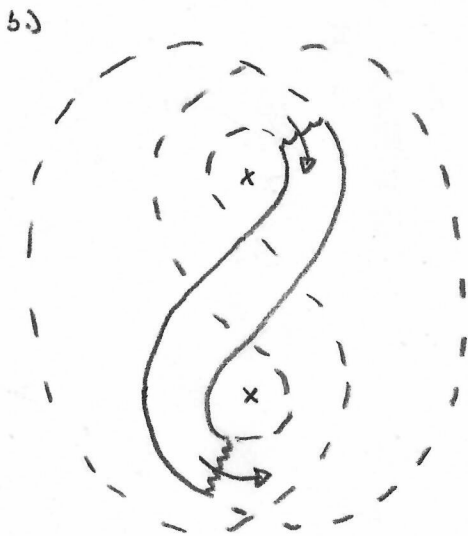
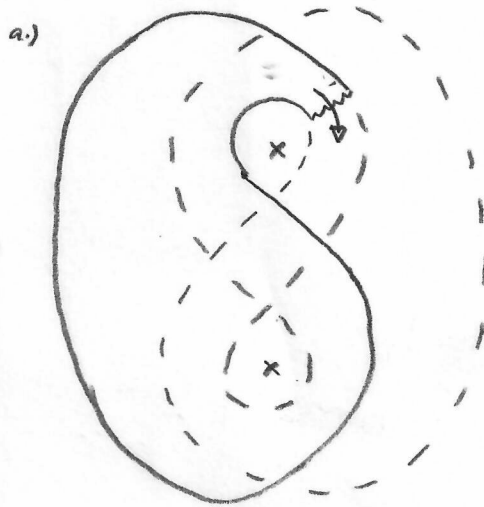
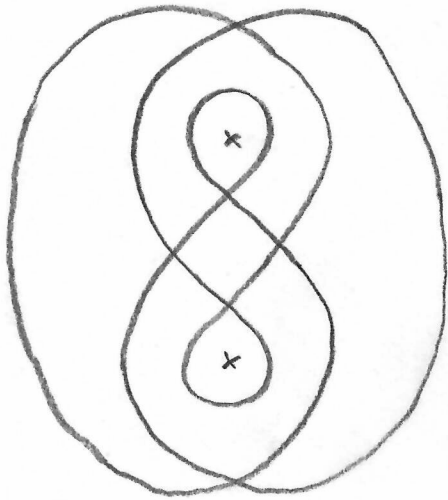


Beispiele für Konturen

Name	# Kurven	# Spitzen	# Exemplare (modulo Spiegelungen)
1. Kugel	1	0	2
2. Proj. Ebene	1	1	1
3. Torus	2	0	2
4. Klein'sche Flasche	1	0	1
5. Proj. Ebene mit Henkel	1	1	2
6. 2 Henkel- Brezel	1	0	{ 6 orientiert { 2 nicht orientiert

1. Sphäre



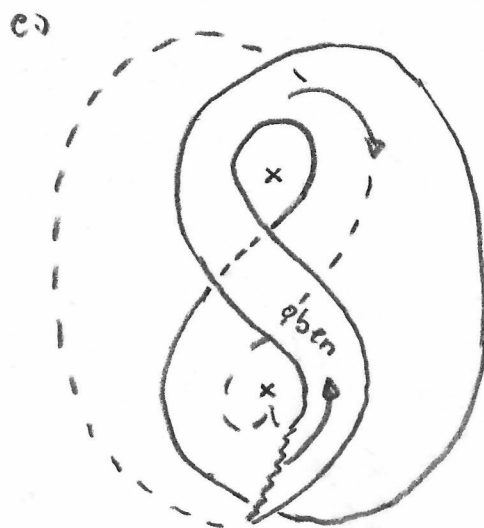
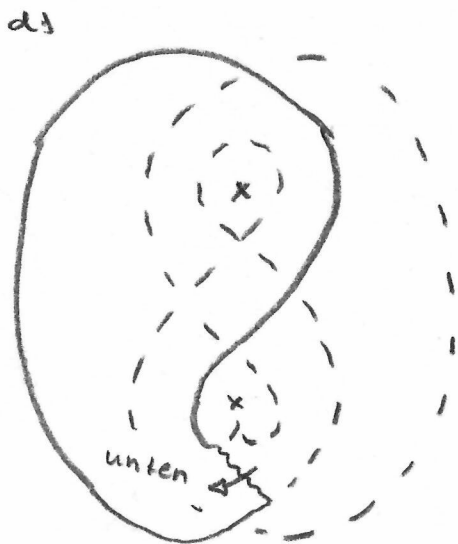
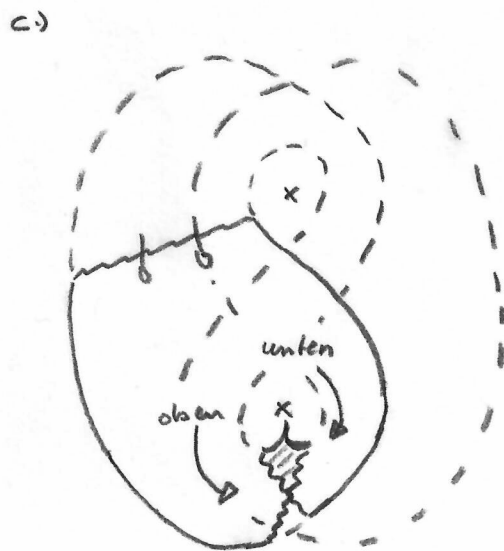
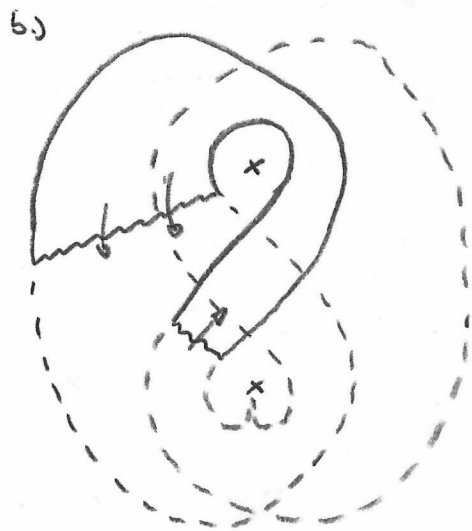
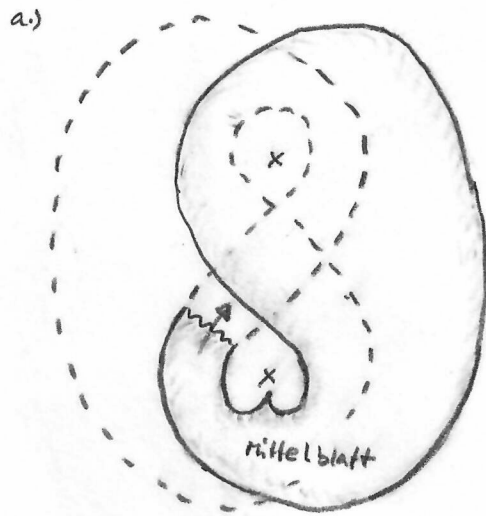
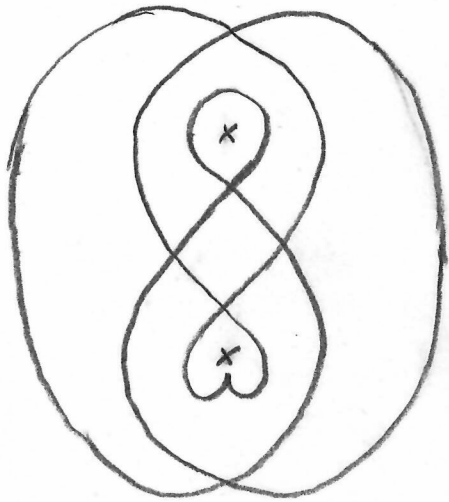
a) - c.) ist eine Kreissphäre.

Diese kommt auch säitenverkehrt vor.

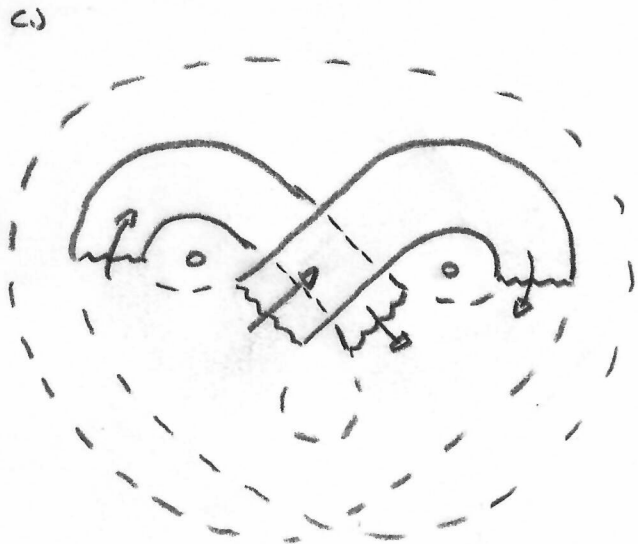
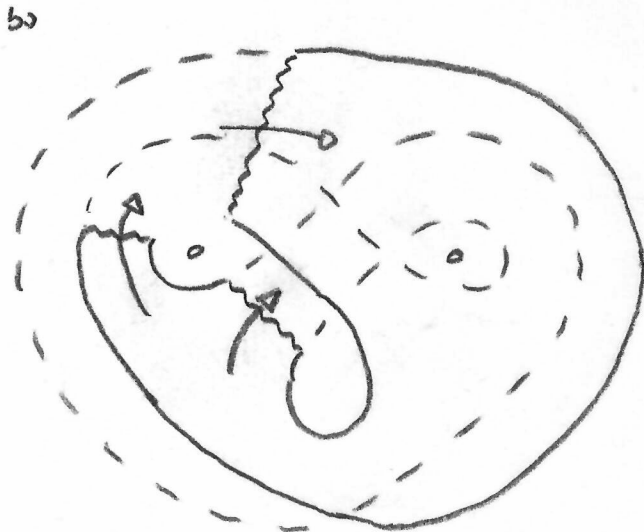
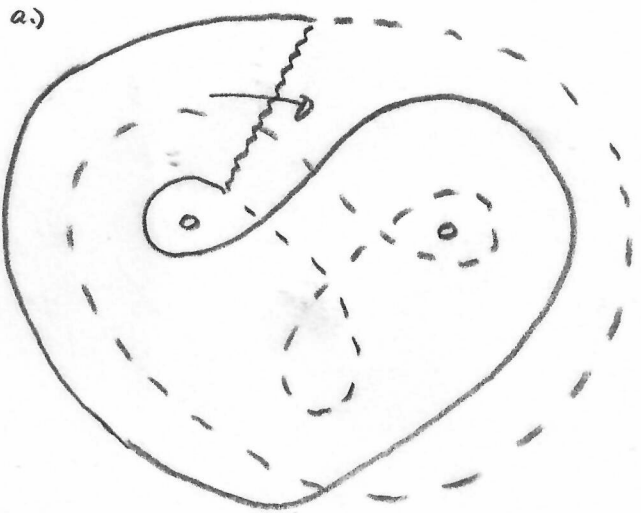
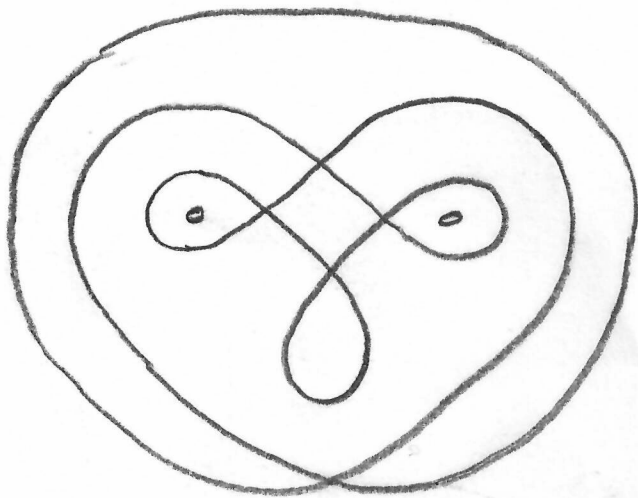
Sphäre I : Zwei "gleiche" Kreisscheiben verkleben.

Sphäre II : - " - "verschiedene" - " - " - " - "

2. Projektive Ebene



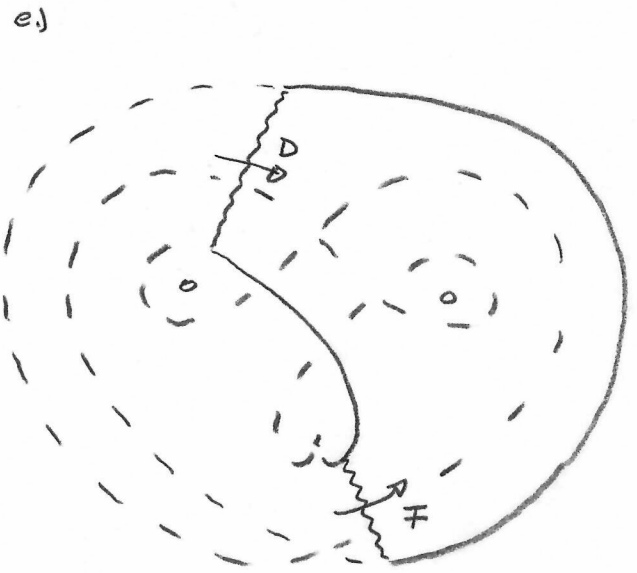
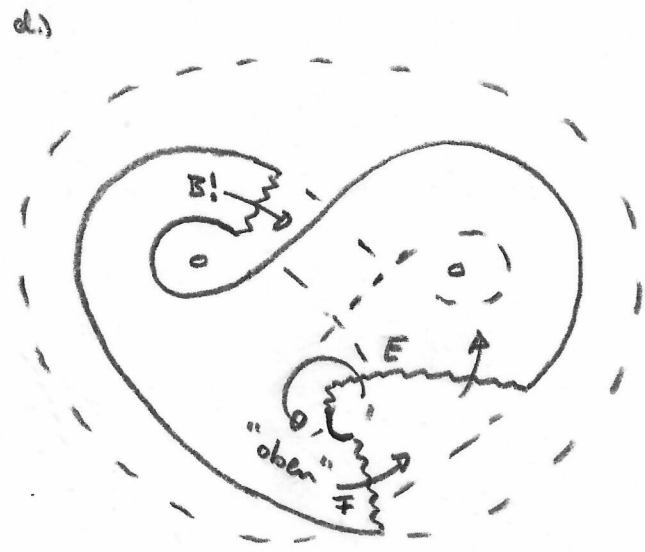
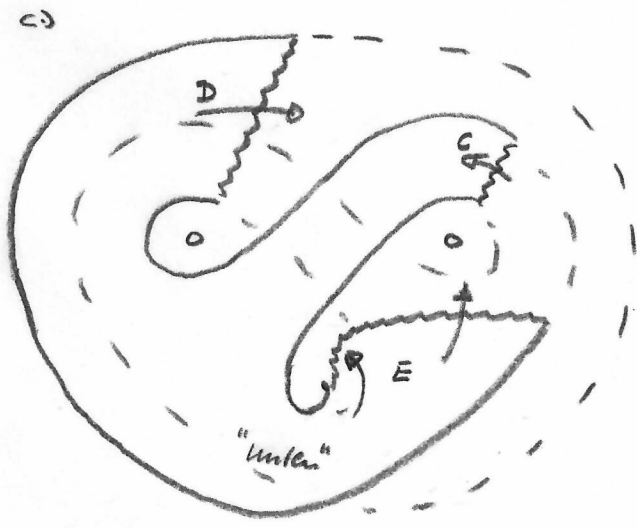
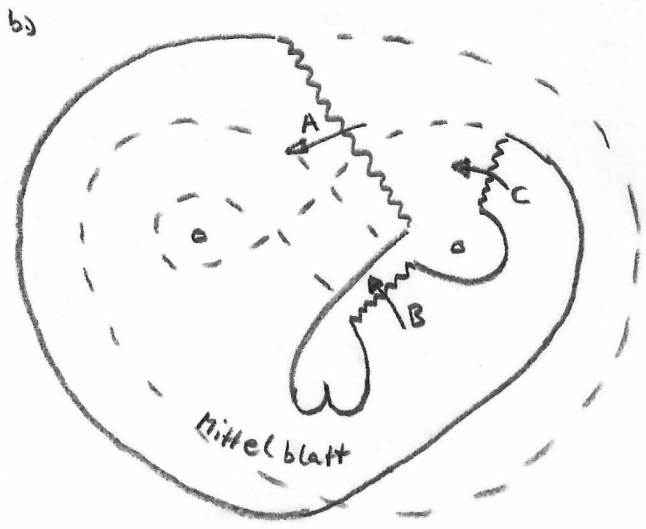
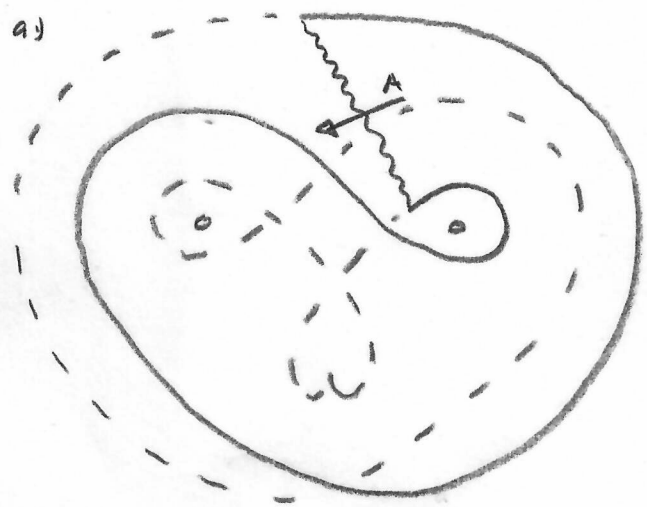
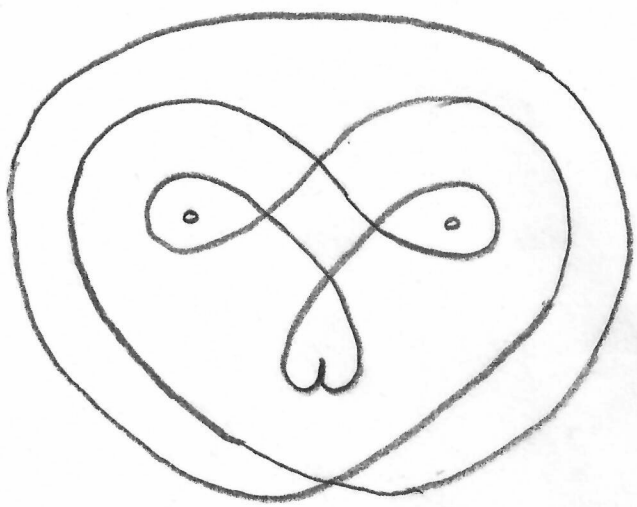
4. Klein'sche Flasche



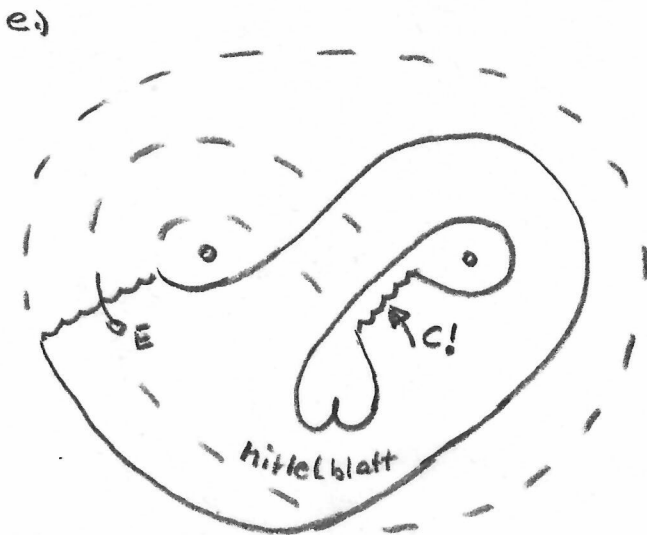
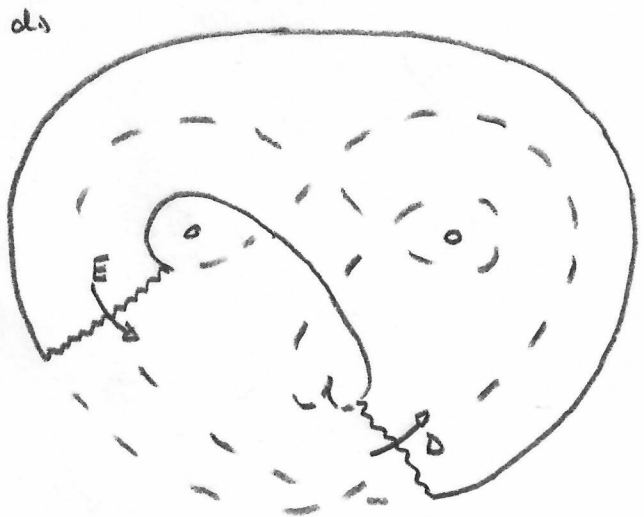
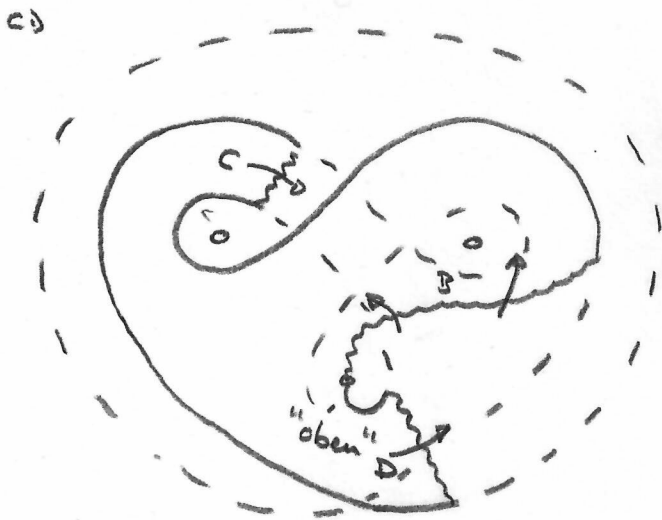
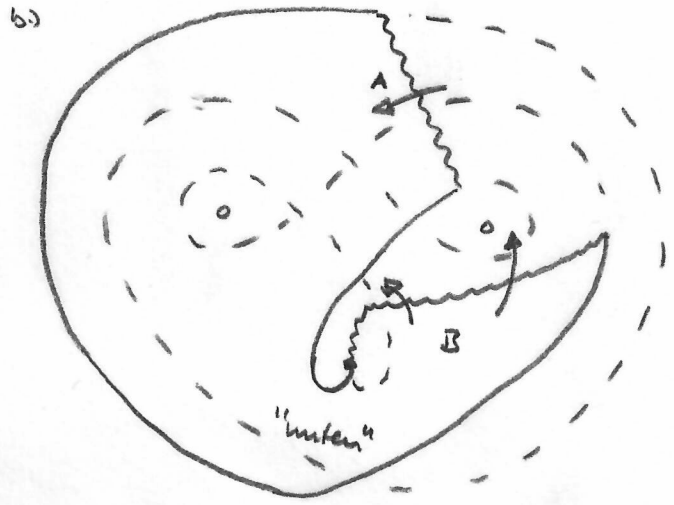
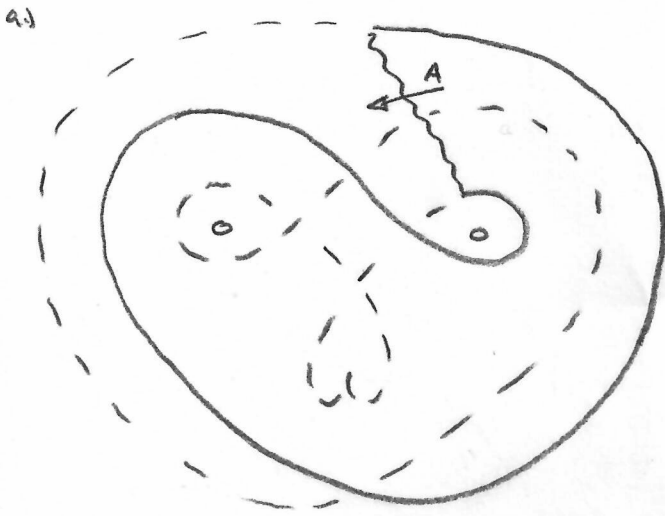
b) und a) beide seitlich schliessen den Kreisring ab.
Dabei wird die Kante 2x durchlaufen.

5. Projektive Ebene mit
einem Henkel

Variante I:



Variante II:



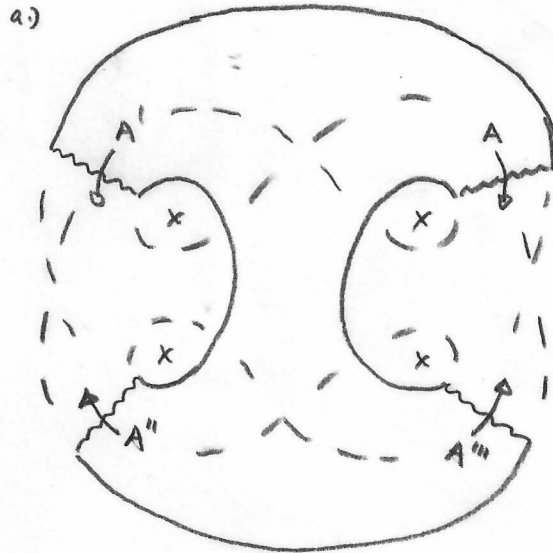
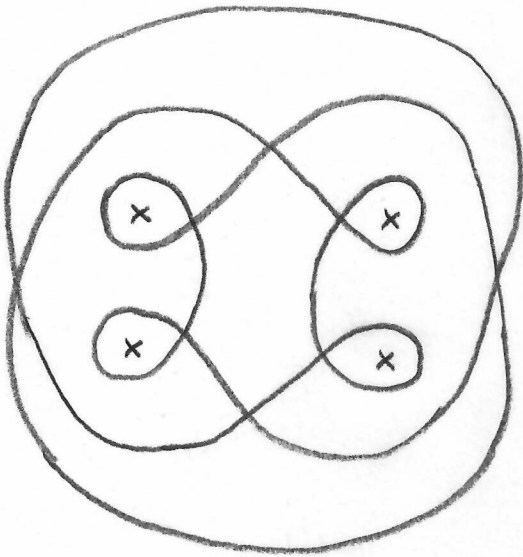
Den Unterschied I, II sieht man gut auf den "Mittelblättern":

I: "linker Auge" zu.

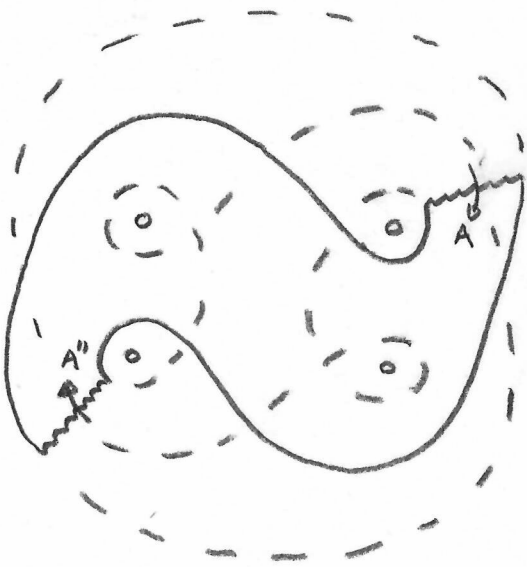
II: "beide Augen" offen.

6. 2 Henkel (8 Exemplare! oder mehr?)

Variante I : Torus mit Loch (symm.)

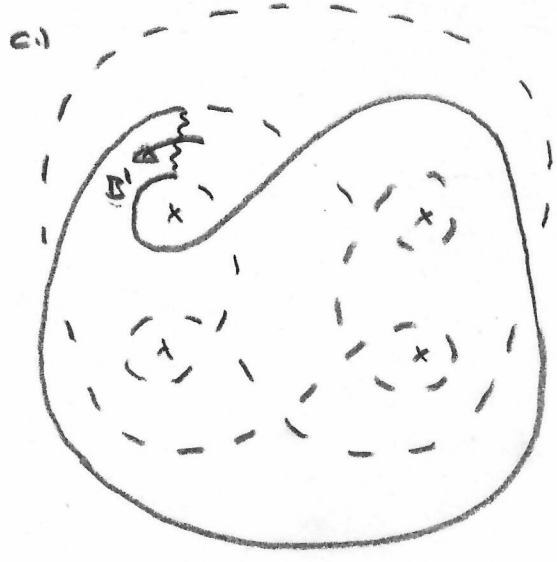
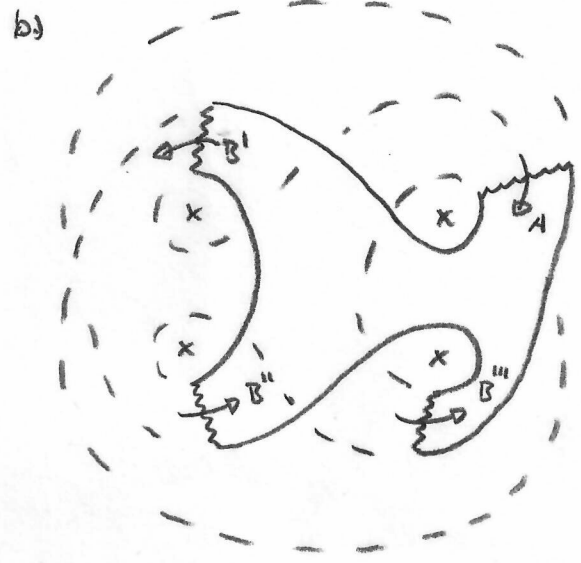
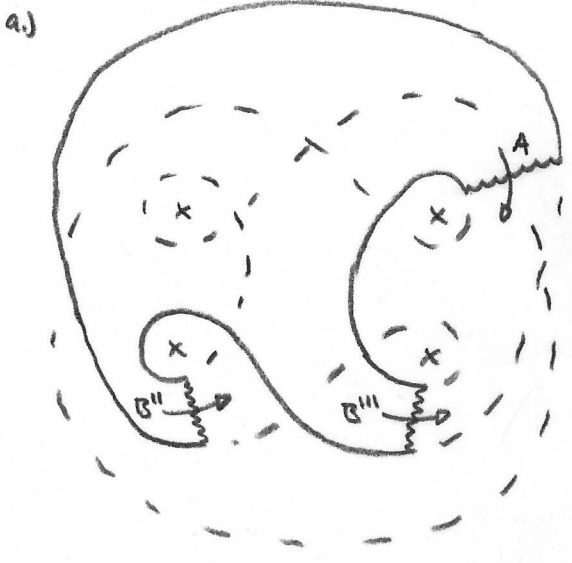


b)



b) seitenverkehrt beendet
Variante I

Variante II: Torus mit Loch (asym.)



Davon gibt es, je nach Position,
4 Stück: II_i ; $i=1, \dots, 4$

Folgende orientierte "Brezeln"
sind möglich:

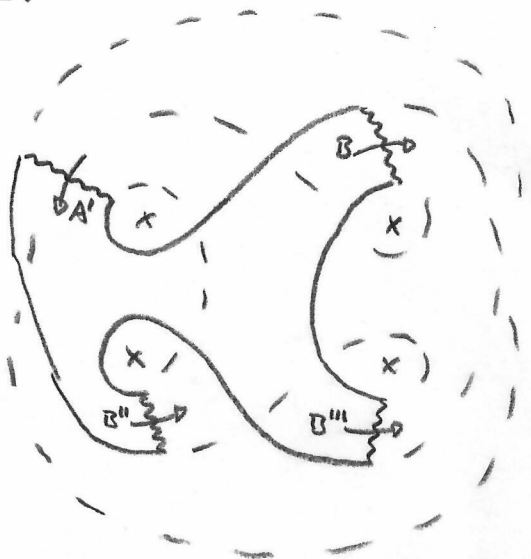
- $\text{I} \# \text{I}$ (vollsymm.)
- $\text{I} \# \text{II}_i$ (1 Exemplar mod Spiegelung)
- $\text{II}_1 \# \text{II}_i$; $i=1, \dots, 4$ (4 Exemplare)

\Rightarrow 6 orientierte Brezeln

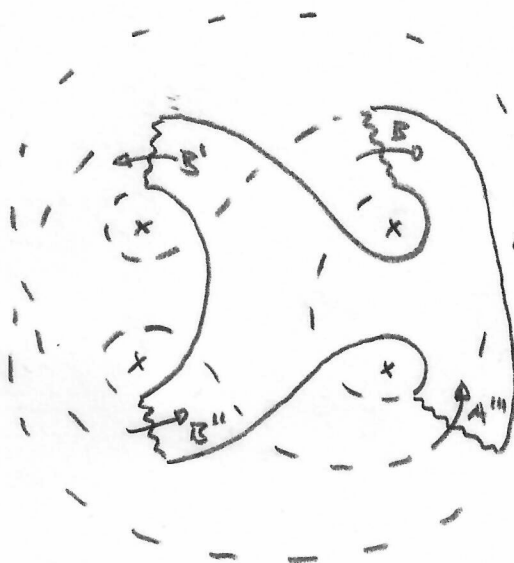
Variante III : nicht-orientierte Brezel (asymm.)

a) und b) wie in Variante I

c)



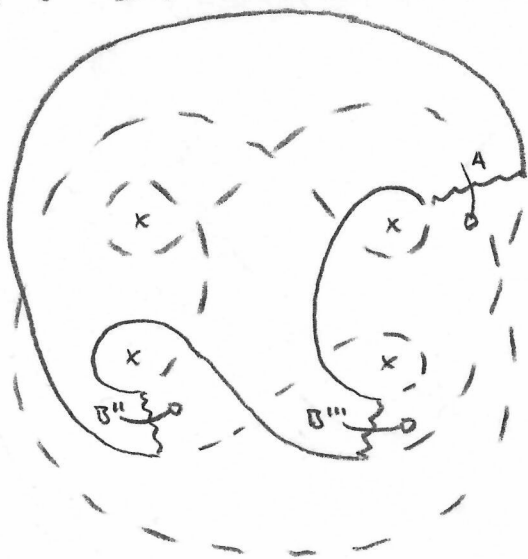
d)



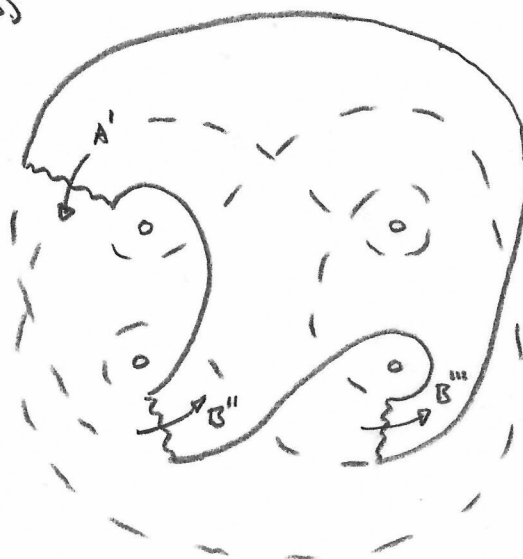
Die offenen Enden B' bzw B''' lassen sich mit II c) bzw dem Gedrehten beenden.

Variante IV nicht orientierte Brezel (symm.)

a.) (wie II a.)



b)



c) Man stellt a) und b) auf den Kopf, dann sind genau alle A-Enden offen

d) Mit dem Teil I b) bzw. dem Seitenverkehten läßt sich IV schließen.