

Prof. Dr. Alfred Toth

Trajektische Variabilität eines à la carte-Menüs

1. In Toth (2025) hatten wir das vollständige System der $3^3 = 27$ ternären (triadisch-trichotomischen) semiotischen Relationen in Form von trajektischen Abbildungen der Form

$$T = (1, 2, 3) \mid (1, 2, 3)$$

mit $\mid = R((1, 2, 3), (1, 2, 3))$

dargestellt und die semiotischen Relationen nach dem Vorschlag Walthers für Zeichenklassen (vgl. Walther 1979, S. 79) in Kompositionen dyadischer Teilrelationen zerlegt

$$(3.x, 2.y, 1.z) = (3.x \rightarrow 2.y) \circ (2.y \rightarrow 1.z)$$

$$(z.1, y.2, x.3) = (z.1 \rightarrow y.2) \circ (y.2 \rightarrow x.3).$$

2. In der vorliegenden Arbeit wenden wir die trajektische Abbildungstheorie erstmals auf ein Tagesgericht an. Es kennt, wie alle Gerichte, Speisen, Menüs, usw. eine große Variabilität, die bisher algebraisch nicht erfaßbar war, auch mit der Diamondtheorie nicht. Diese Variabilität betrifft nicht nur die prinzipielle Substituierbarkeit der Beilagen, d.h. der Umgebungen und Nachbarschaften (vgl. Toth 2020), sondern auch und vor allem die Anordnung der Teile der Gerichte innerhalb eines vorgegebenen Rahmens.

2.1. Modelle ontischer Variabilität





2.2. Trajektische Variabilität

Sei

1 = B (Bratwurst)

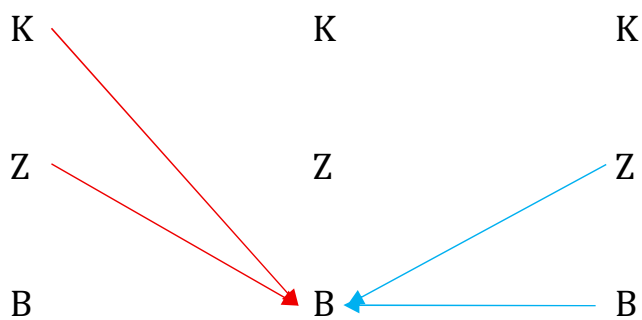
2 = Z (Zwiebelsoße)

3 = K (Kartoffelbeilage),

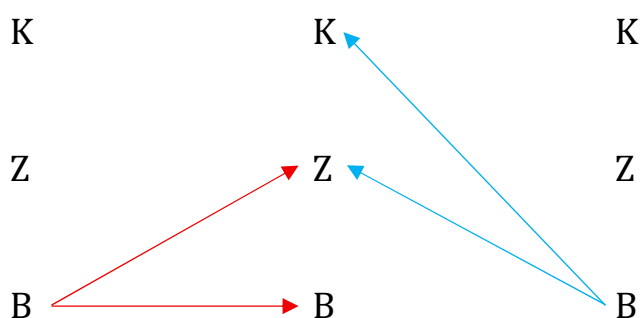
dann gibt es vermöge Toth (2025) $3^3 = 27$ ternäre kombinatorische trajektische Variationen des Gerichtes „Bratwurst mit Zwiebelsoße und Kartoffelbeilage“ (darin „Kartoffelbeilage“ ontische Variable für z.B. Rösti, Kartoffelbrei, Kroketten, Kartoffelsalat usw. ist). (OR = ontische Relation, DOR = duale ontische Relation, d.h. $OR \times DOR$.)

1. Ontisches Schema

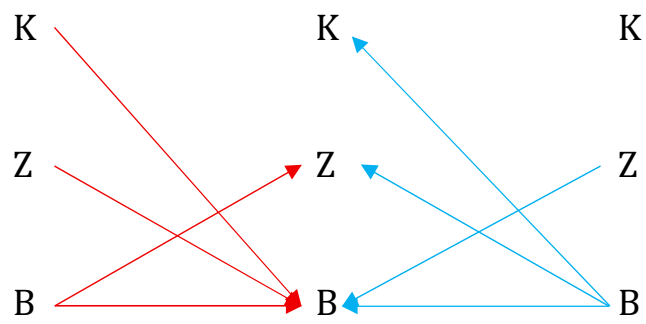
OR = (K.B, Z.B, B.B)



DOR = (B.B, B.Z, B.K)

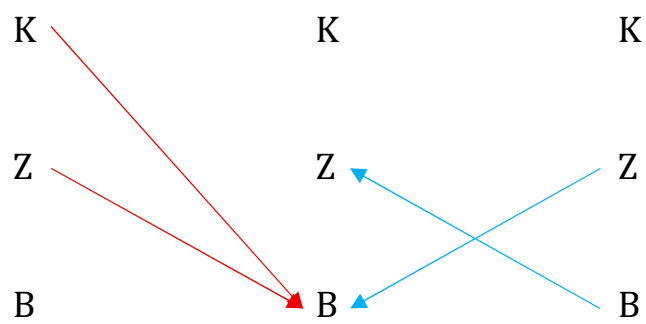


$$DS = [(K.B, Z.B, B.B) \times (B.B, B.Z, B.K)]$$

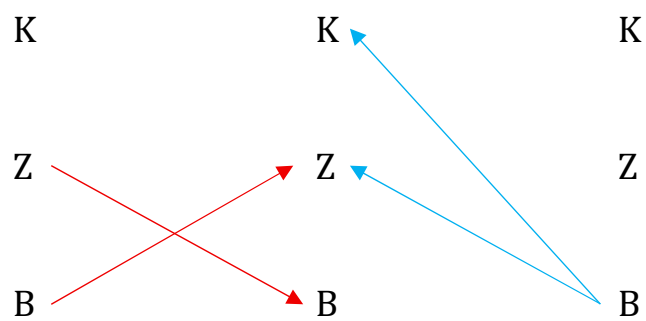


2. Ontisches Schema

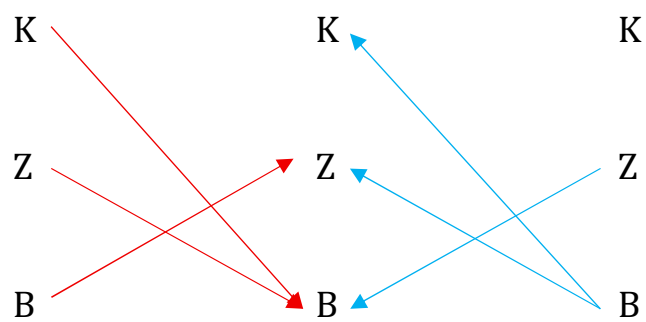
$$OR = (K.B, Z.B, B.Z)$$



$$DOR = (Z.B, B.Z, B.K)$$

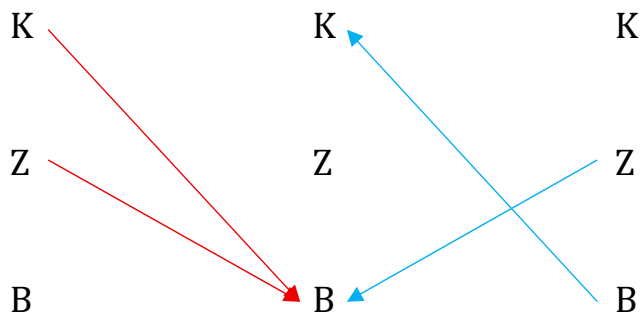


$$DS = [(K.B, Z.B, B.Z) \times (Z.B, B.Z, B.K)]$$

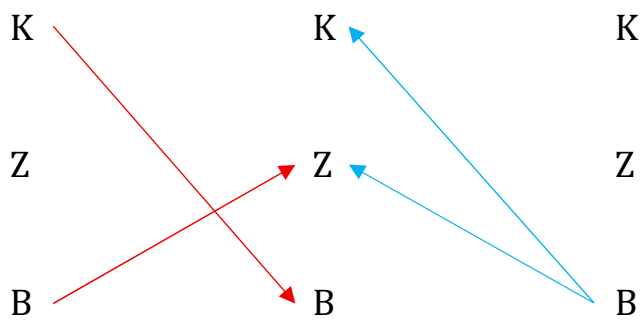


3. Ontisches Schema

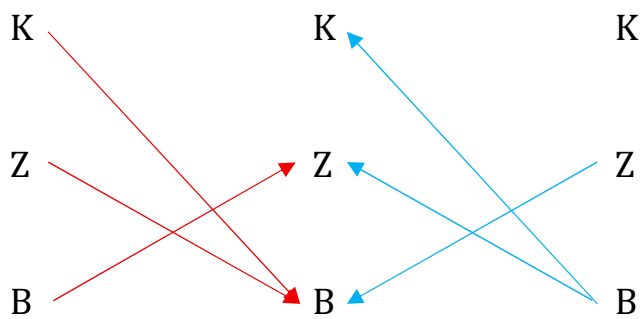
OR = (K.B, Z.B, B.K)



DOR = (K.B, B.Z, B.K)

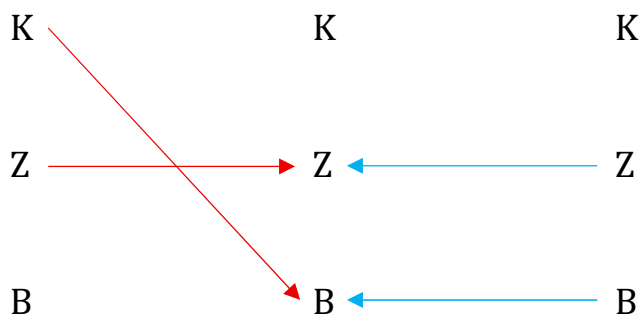


DS = [(K.B, Z.B, B.K) × (K.B, B.Z, B.K)]

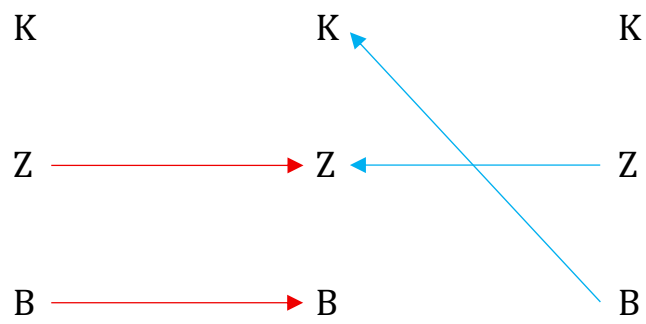


4. Ontisches Schema

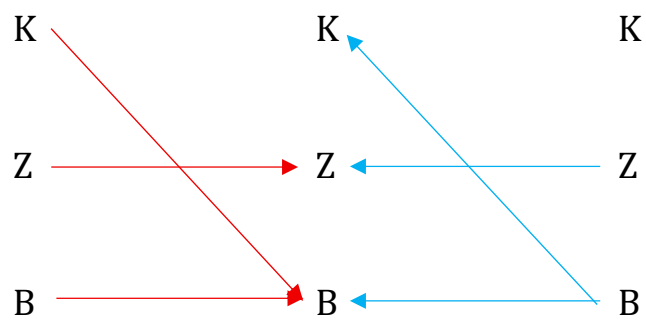
OR = (K.B, Z.Z, B.B)



DOR = (B.B, Z.Z, B.K)

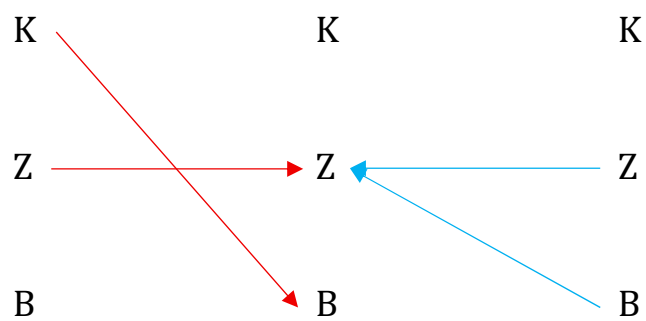


DS = [(K.B, Z.Z, B.B) × (B.B, Z.Z, B.K)]

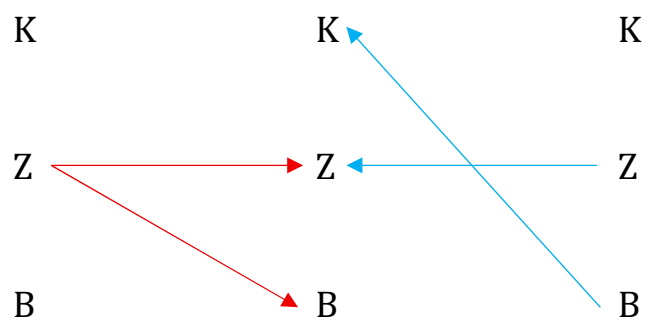


5. Ontisches Schema

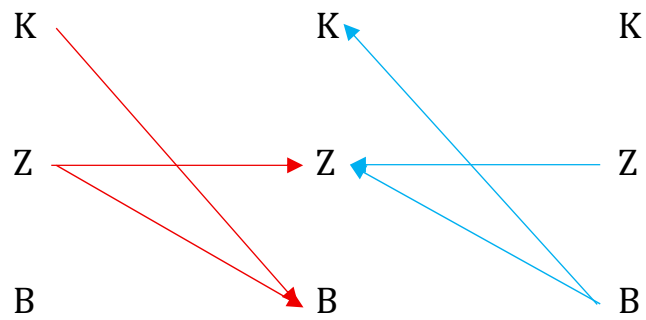
OR = (K.B, Z.Z, B.Z)



DOR = (Z.B, Z.Z, B.K)

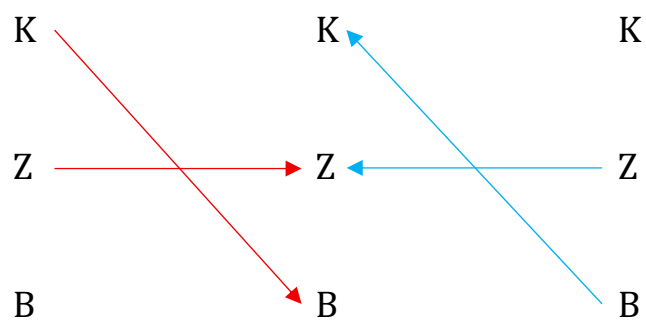


$$DS = [(K.B, Z.Z, B.Z) \times (Z.B, Z.Z, B.K)]$$

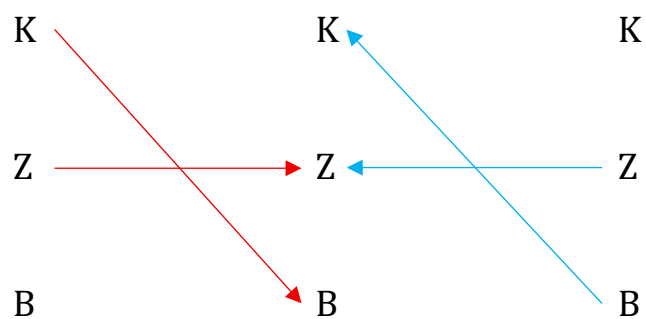


6. Ontisches Schema

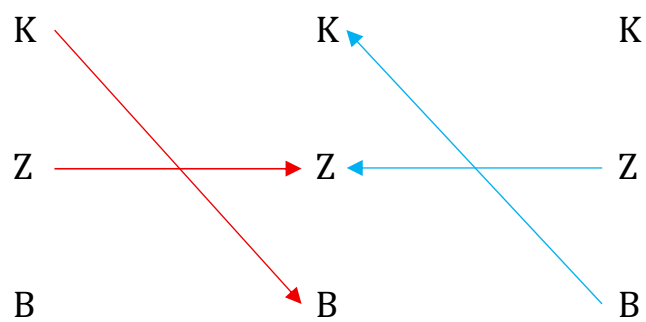
$$OR = (K.B, Z.Z, B.K)$$



$$DOR = (K.B, Z.Z, B.K)$$

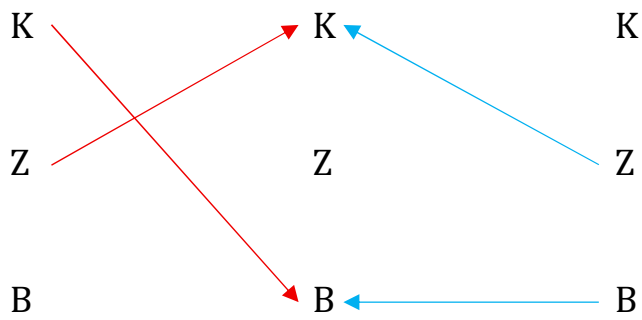


$$DS = [(K.B, Z.Z, B.K) \times (K.B, Z.Z, B.K)]$$

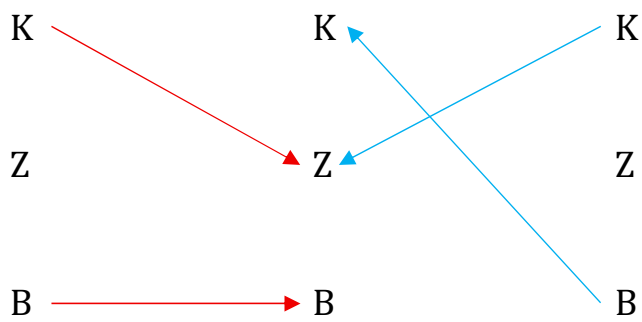


7. Ontisches Schema

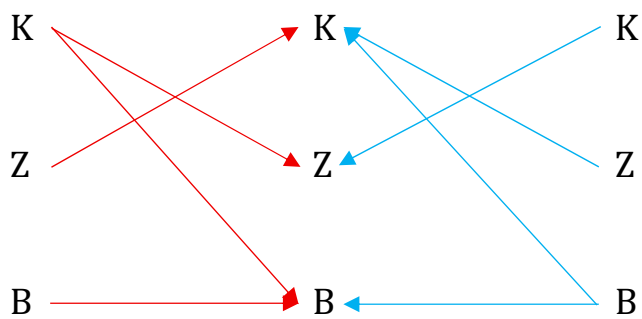
OR = (K.B, Z.K, B.B)



DOR = (B.B, K.Z, B.K)

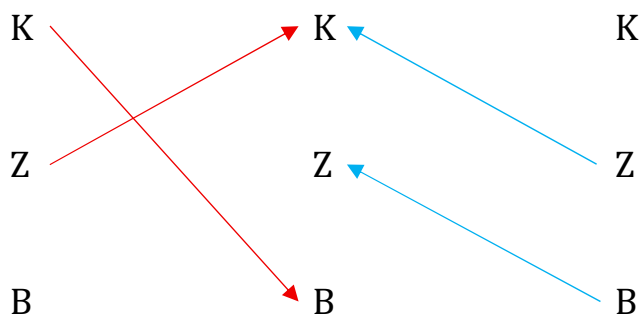


DS = [(K.B, Z.K, B.B) × (B.B, K.Z, B.K)]

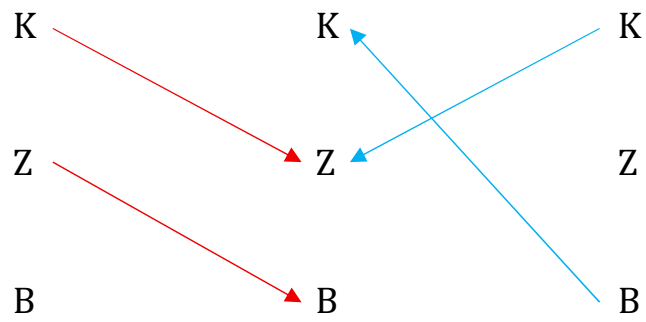


8. Ontisches Schema

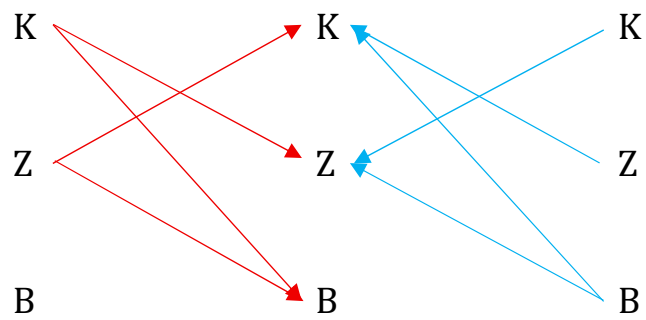
OR = (K.B, Z.K, B.Z)



DOR = (Z.B, K.Z, B.K)

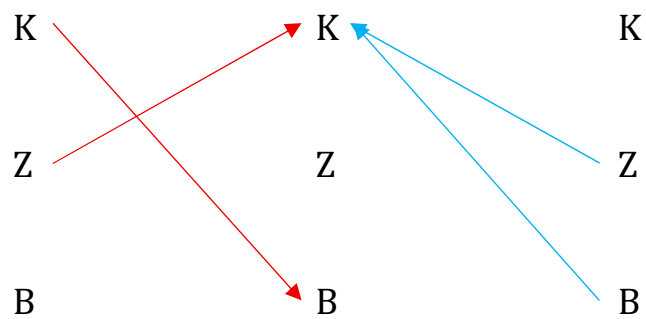


DS = [(K.B, Z.K, B.Z) $\times$ (Z.B, K.Z, B.K)]

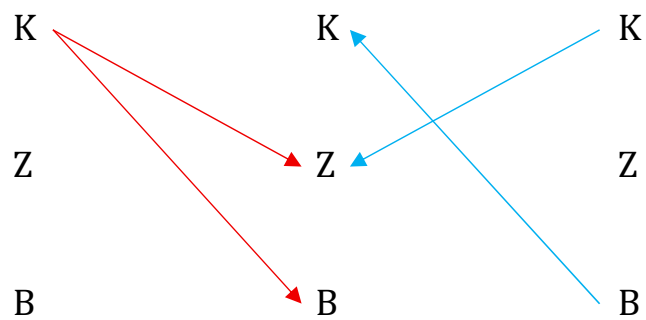


9. Ontisches Schema

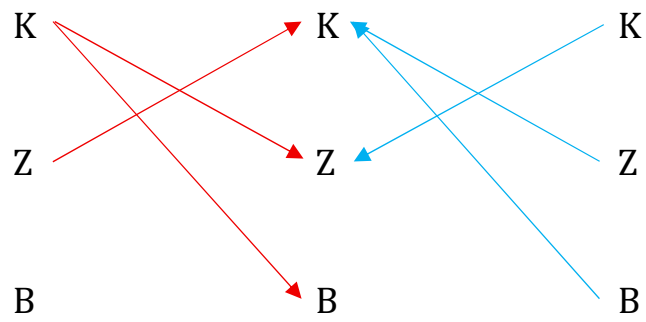
OR = (K.B, Z.K, B.K)



DOR = (K.B, K.Z, B.K)

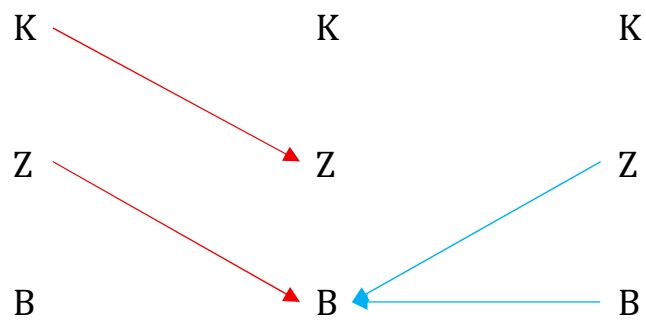


$$DS = [(K.B, Z.K, B.K) \times (K.B, K.Z, B.K)]$$

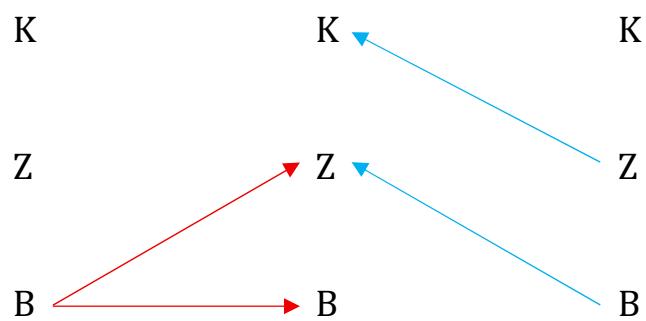


10. Ontisches Schema

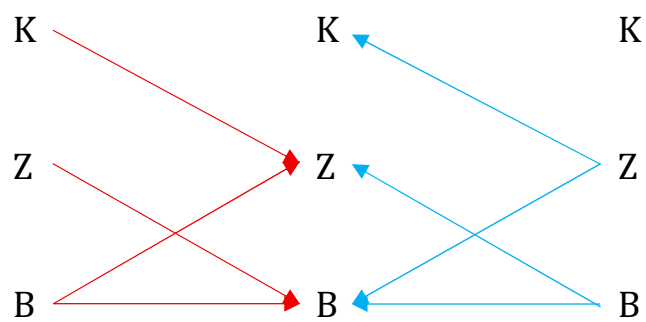
$$OR = (K.Z, Z.B, B.B)$$



$$DOR = (B.B, B.Z, Z.K)$$

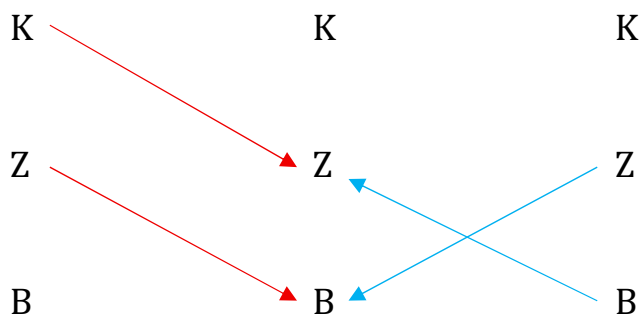


$$DS = [(K.Z, Z.B, B.B) \times (B.B, B.Z, Z.K)]$$

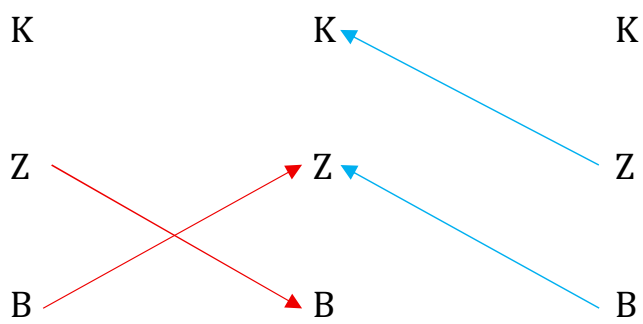


11. Ontisches Schema

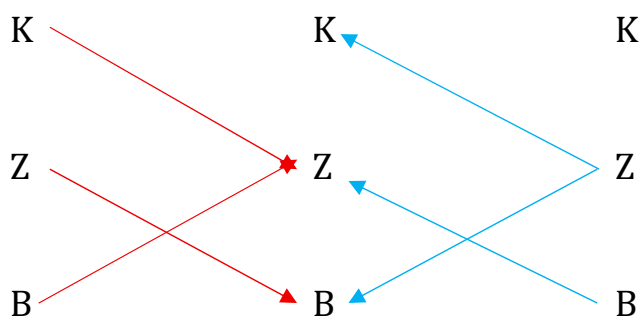
OR = (K.Z, Z.B, B.Z)



DOR = (Z.B, B.Z, Z.K)

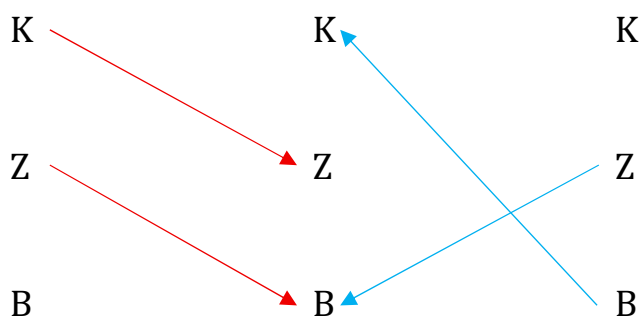


DS = [(K.Z, Z.B, B.Z) × (Z.B, B.Z, Z.K)]

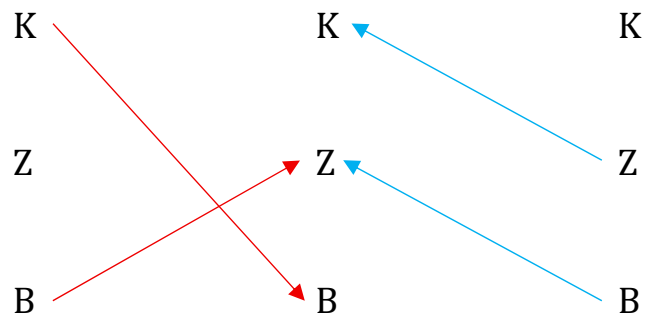


12. Ontisches Schema

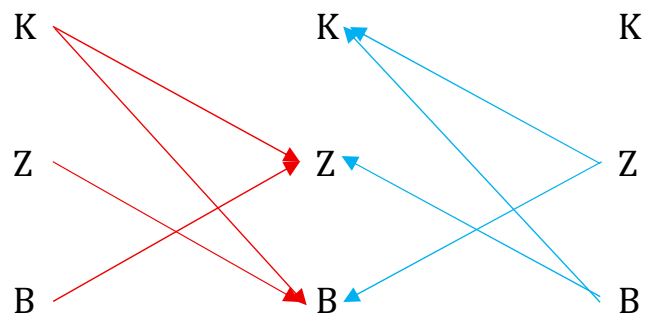
OR = (K.Z, Z.B, B.K)



DOR = (K.B, B.Z, Z.K)

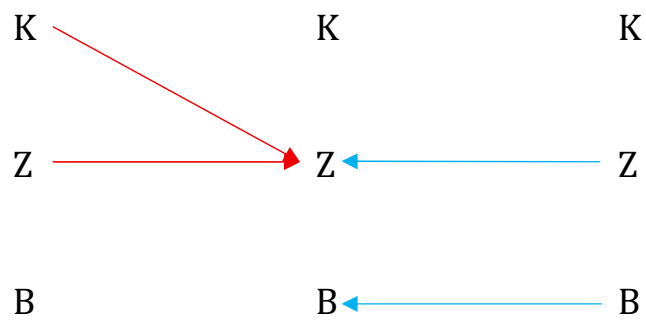


DS = [(K.Z, Z.B, B.K) × (K.B, B.Z, Z.K)]

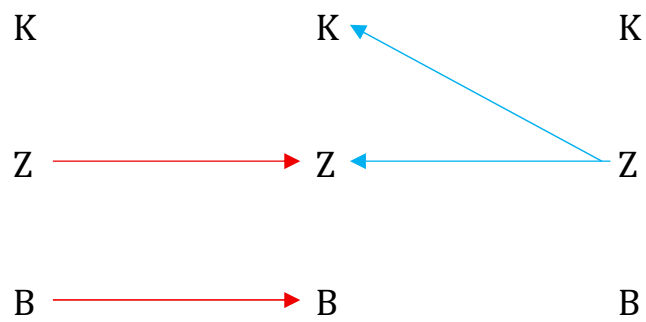


13. Ontisches Schema

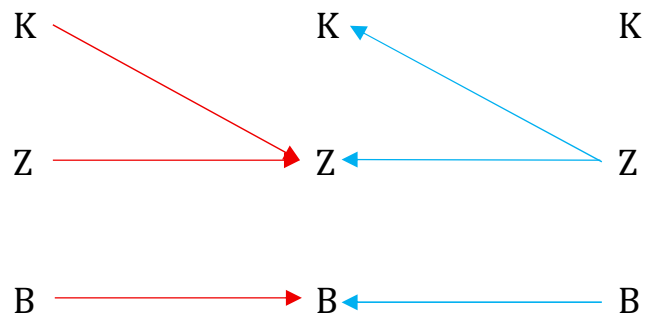
OR = (K.Z, Z.Z, B.B)



DOR = (B.B, Z.Z, Z.K)

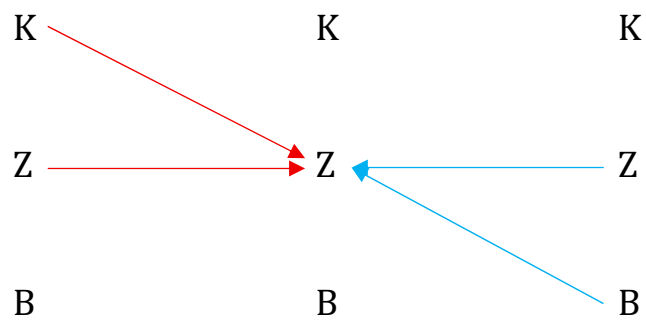


$$DS = [(K.Z, Z.Z, B.B) \times (B.B, Z.Z, Z.K)]$$

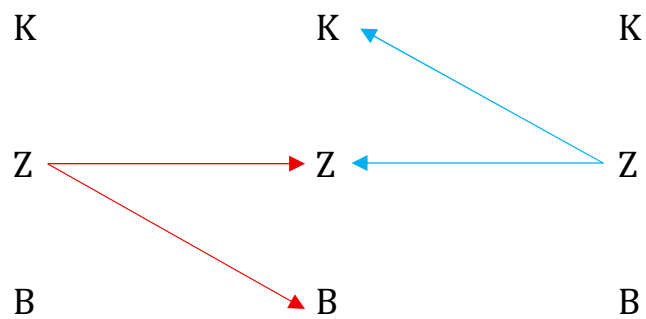


14. Ontisches Schema

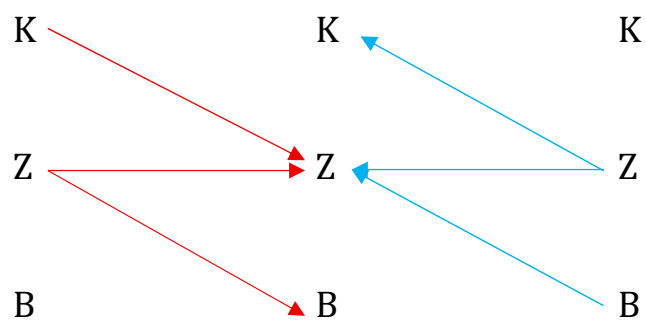
$$OR = (K.Z, Z.Z, B.Z)$$



$$DOR = (Z.B, Z.Z, Z.K)$$

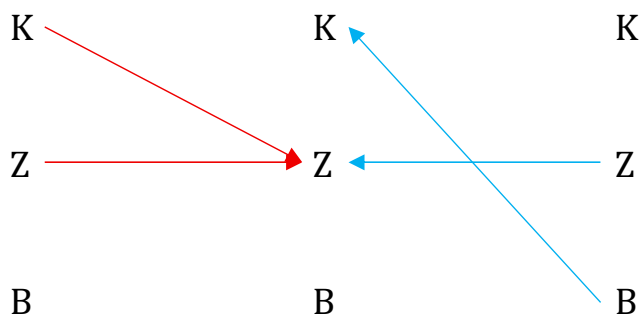


$$DS = [(K.Z, Z.Z, B.Z) \times (Z.B, Z.Z, Z.K)]$$

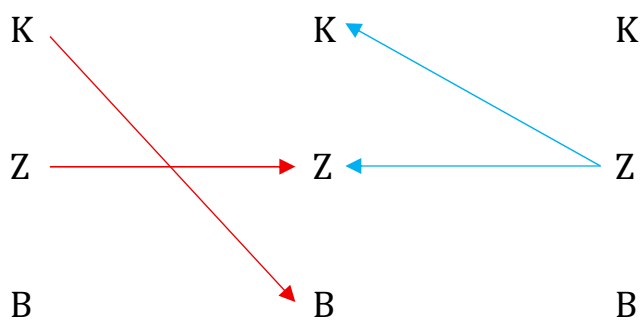


15. Ontisches Schema

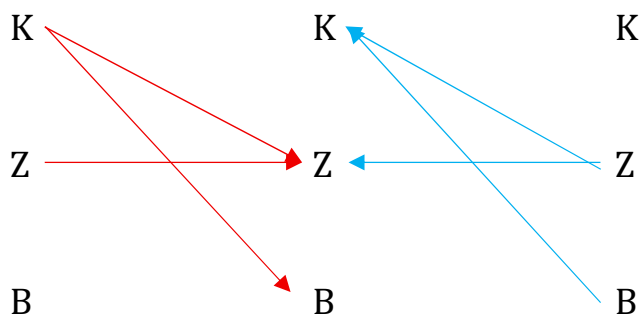
OR = (K.Z, Z.Z, B.K)



DOR = (K.B, Z.Z, Z.K)

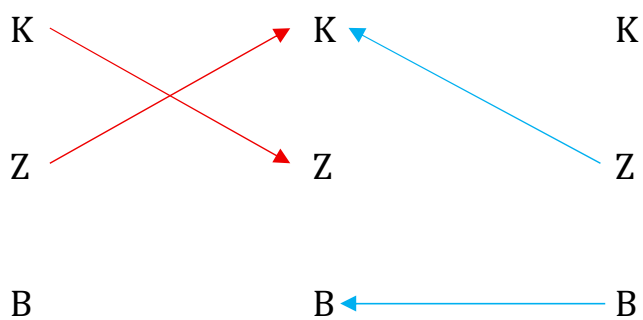


DS = [(K.Z, Z.Z, B.K) × (K.B, Z.Z, Z.K)]

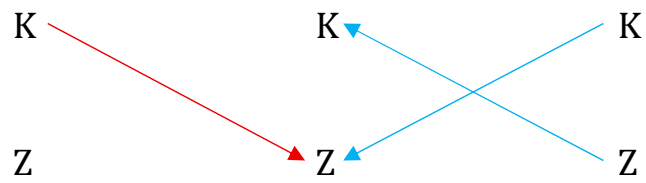


16. Ontisches Schema

OR = (K.Z, Z.K, B.B)

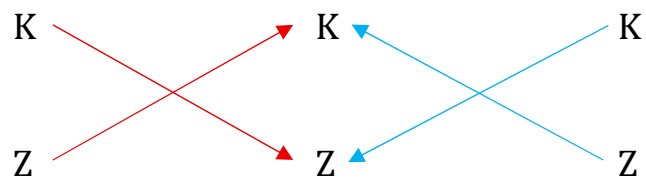


DOR = (B.B, K.Z, Z.K)



B $\longrightarrow$ B

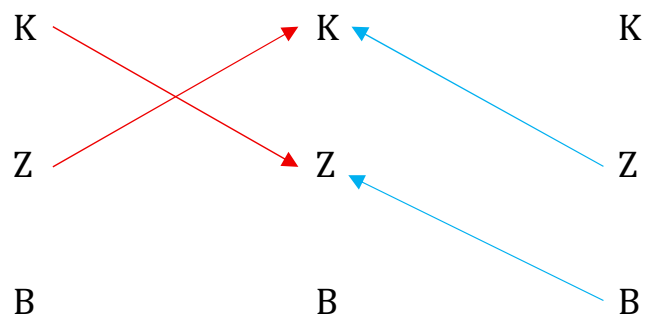
DS = [(K.Z, Z.K, B.B) $\times$ (B.B, K.Z, Z.K)]



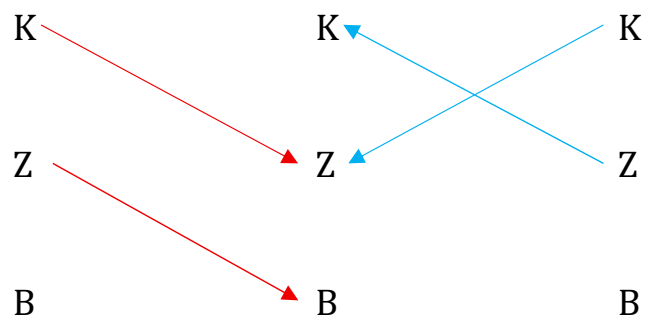
B $\longrightarrow$ B

17. Ontisches Schema

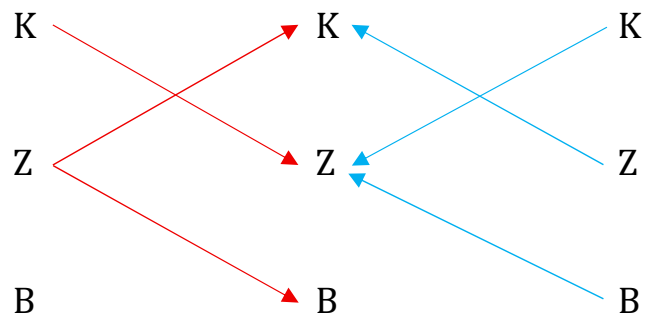
OR = (K.Z, Z.K, B.Z)



DOR = (Z.B, K.Z, Z.K)

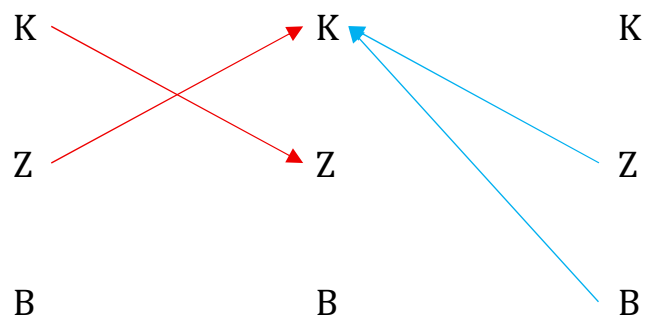


$$DS = [(K.Z, Z.K, B.Z) \times (Z.B, K.Z, Z.K)]$$

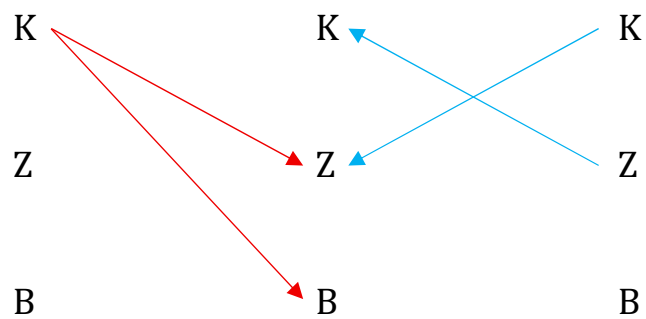


18. Ontisches Schema

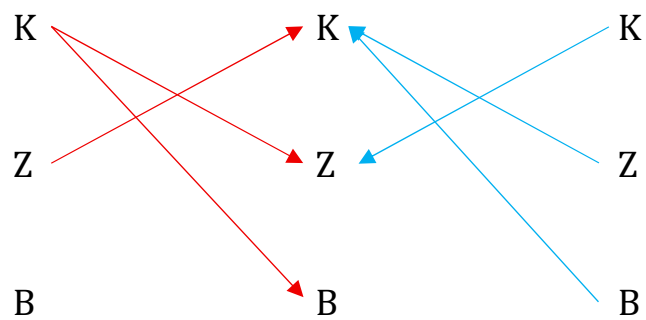
$$OR = (K.Z, Z.K, B.K)$$



$$DOR = (K.B, K.Z, Z.K)$$



$$DS = [(K.Z, Z.K, B.K) \times (K.B, K.Z, Z.K)]$$



19. Ontisches Schema

OR = (K.K, Z.B, B.B)

K $\xrightarrow{\text{red}}$ K K

Z Z Z
 B B $\xleftarrow{\text{blue}}$ B

DOR = (B.B, B.Z, K.K)

K K $\xleftarrow{\text{blue}}$ K

Z Z $\xleftarrow{\text{blue}}$ Z Z
 B $\xrightarrow{\text{red}}$ B B

DS = [(K.K, Z.B, B.B) $\times$ (B.B, B.Z, K.K)]

K $\xrightarrow{\text{red}}$ K $\xleftarrow{\text{blue}}$ K

Z Z $\xleftarrow{\text{blue}}$ Z Z
 B $\xrightarrow{\text{red}}$ B $\xleftarrow{\text{blue}}$ B

20. Ontisches Schema

OR = (K.K, Z.B, B.Z)

K $\xrightarrow{\text{red}}$ K K

Z Z $\xleftarrow{\text{blue}}$ Z Z
 B B $\xleftarrow{\text{blue}}$ B

DOR = (Z.B, B.Z, K.K)

K K ← K

Z Z Z
 B B B

The diagram shows two columns of nodes. The left column has 'Z' above 'B'. The right column has 'Z' above 'B'. Red arrows point from the left 'Z' to the right 'B' and from the left 'B' to the right 'Z'. Blue arrows point from the right 'Z' to the right 'B' and from the right 'B' to the right 'Z'.

DS = [(K.K, Z.B, B.Z) × (Z.B, B.Z, K.K)]

K → K ← K

Z Z Z
 B B B

The diagram shows two columns of nodes. The left column has 'Z' above 'B'. The right column has 'Z' above 'B'. Red arrows point from the left 'Z' to the right 'B' and from the left 'B' to the right 'Z'. Blue arrows point from the right 'Z' to the right 'B' and from the right 'B' to the right 'Z'.

21. Ontisches Schema

OR = (K.K, Z.B, B.K)

K → K ← K

Z Z Z
 B B B

The diagram shows two columns of nodes. The left column has 'Z' above 'B'. The right column has 'Z' above 'B'. Red arrows point from the left 'Z' to the right 'B' and from the left 'B' to the right 'Z'. Blue arrows point from the right 'Z' to the right 'B' and from the right 'B' to the right 'Z'.

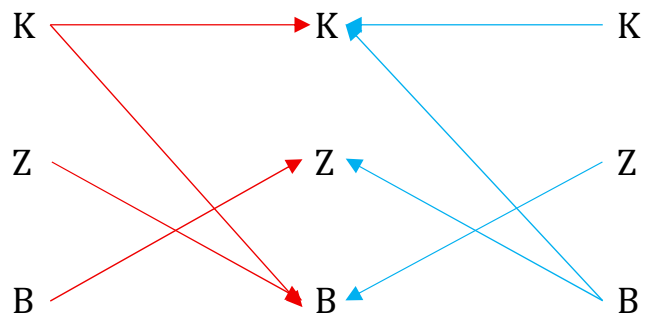
DOR = (K.B, B.Z, K.K)

K K ← K

Z Z Z
 B B B

The diagram shows two columns of nodes. The left column has 'Z' above 'B'. The right column has 'Z' above 'B'. Red arrows point from the left 'Z' to the right 'B' and from the left 'B' to the right 'Z'. Blue arrows point from the right 'Z' to the right 'B' and from the right 'B' to the right 'Z'.

$$DS = [(K.K, Z.B, B.K) \times (K.B, B.Z, K.K)]$$



22. Ontisches Schema

$$OR = (K.K, Z.Z, B.B)$$



$$DOR = (B.B, Z.Z, K.K)$$



$$DS = [(K.K, Z.Z, B.B) \times (B.B, Z.Z, K.K)]$$



23. Ontisches Schema

OR = (K.K, Z.Z, B.Z)

K $\xrightarrow{\text{red}}$ K K

Z $\xrightarrow{\text{red}}$ Z $\xleftarrow{\text{blue}}$ Z

B B $\xleftarrow{\text{blue}}$ B

DOR = (Z.B, Z.Z, K.K)

K K $\xleftarrow{\text{blue}}$ K

Z $\xrightarrow{\text{red}}$ Z $\xleftarrow{\text{blue}}$ Z

B $\xrightarrow{\text{red}}$ B B

DS = [(K.K, Z.Z, B.Z) $\times$ (Z.B, Z.Z, K.K)]

K $\xrightarrow{\text{red}}$ K $\xleftarrow{\text{blue}}$ K

Z $\xrightarrow{\text{red}}$ Z $\xleftarrow{\text{blue}}$ Z

B $\xrightarrow{\text{red}}$ B $\xleftarrow{\text{blue}}$ B

24. Ontisches Schema

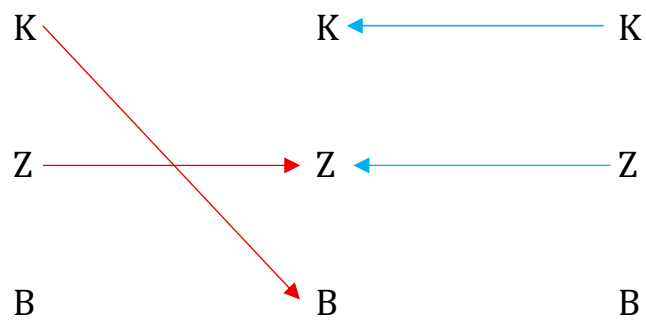
OR = (K.K, Z.Z, B.K)

K $\xrightarrow{\text{red}}$ K $\xleftarrow{\text{blue}}$ K

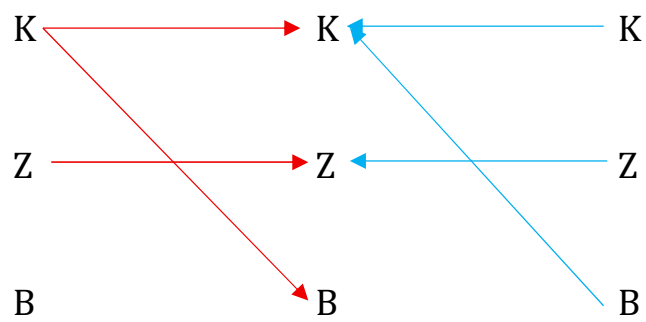
Z $\xrightarrow{\text{red}}$ Z $\xleftarrow{\text{blue}}$ Z

B B $\xleftarrow{\text{blue}}$ B

DOR = (K.B, Z.Z, K.K)

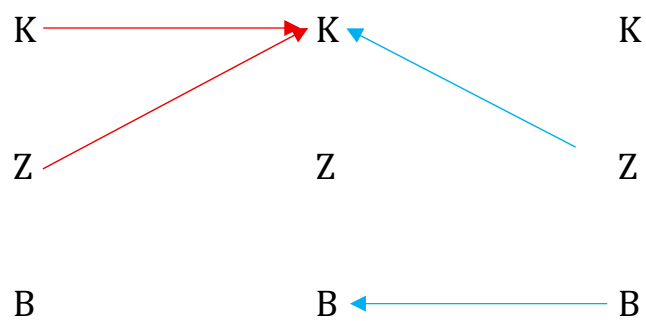


DS = [(K.K, Z.Z, B.K) × (K.B, Z.Z, K.K)]

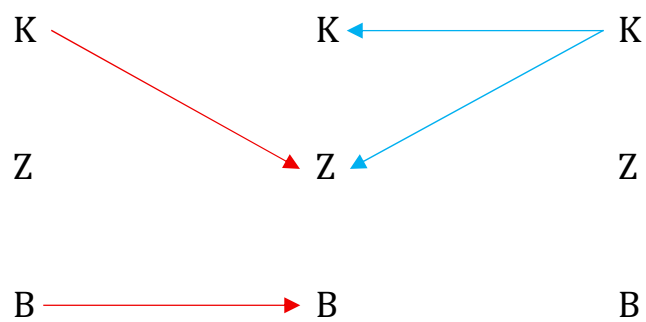


25. Ontisches Schema

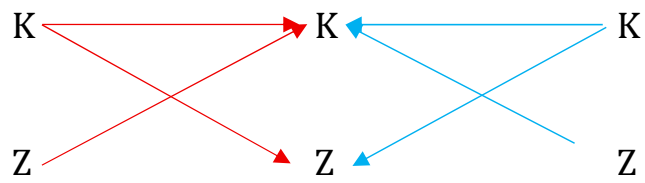
OR = (K.K, Z.K, B.B)



DOR = (B.B, K.Z, K.K)

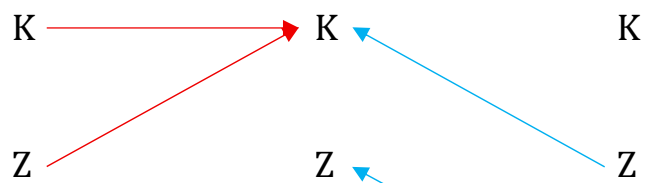


$$DS = [(K.K, Z.K, B.B) \times (B.B, K.Z, K.K)]$$

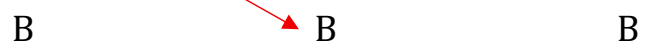
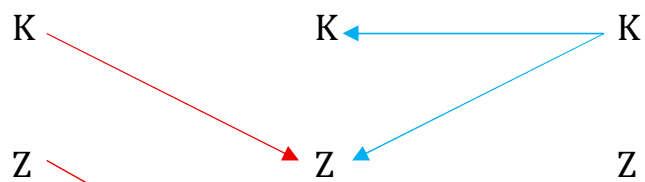


26. Ontisches Schema

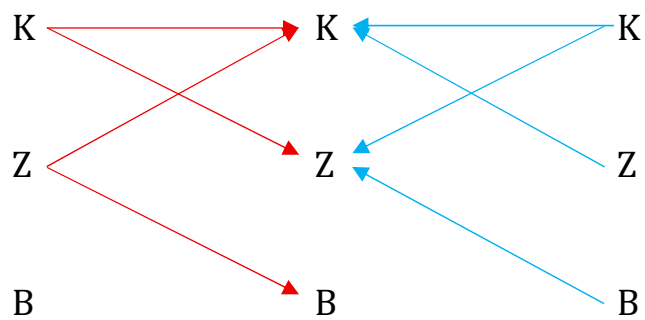
$$OR = (K.K, Z.K, B.Z)$$



$$DOR = (Z.B, K.Z, K.K)$$

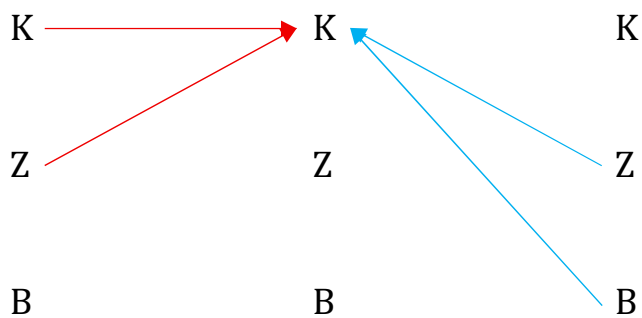


$$DS = [(K.K, Z.K, B.Z) \times (Z.B, K.Z, K.K)]$$

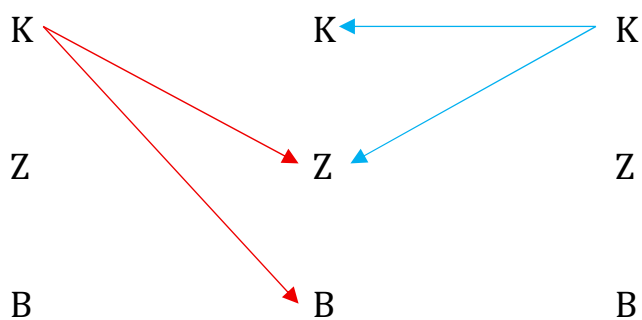


27. Ontisches Schema

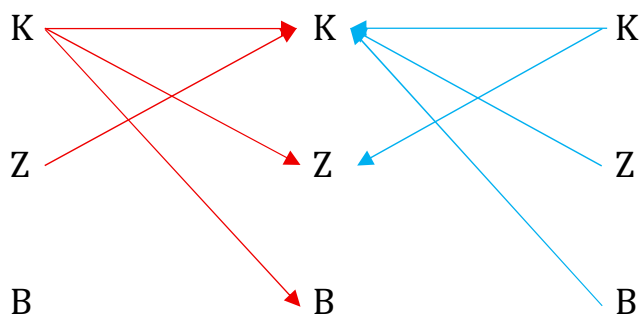
OR = (K.K, Z.K, B.K)



DOR = (K.B, K.Z, K.K)



DS = [(K.K, Z.K, B.K) × (K.B, K.Z, K.K)]



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