

Prof. Dr. Alfred Toth

Trajektische Interrelationen ontischer Stufigkeit

1. Die in Toth (2015) definierte ontische Relation der Ordinalität

$O = (\text{sub}, \text{koo}, \text{sup})$

basiert auf dem zweiwertigen Gegensatz von Unten (U) und Oben (O), führt aber als vermittelnde dritte Relation die Koordination, im folgenden durch M abgekürzt, ein. Das nachstehende ontische Modell zeigt alle drei Relationen bzw. Teilrelationen von O auf engstem Raum

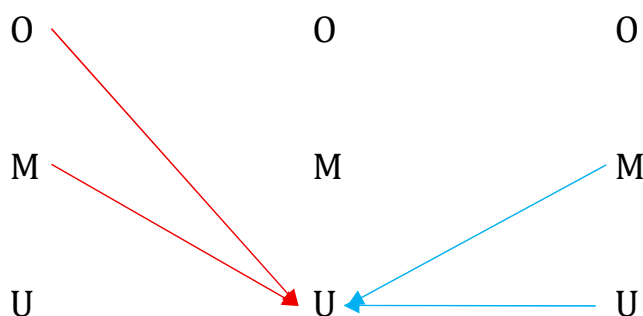


Hamburg, Friedrichstraße.

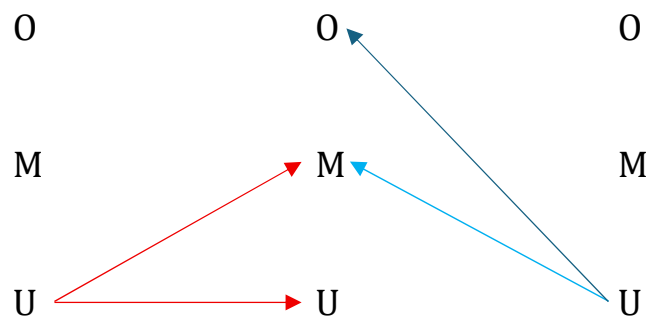
2. Im Gegensatz zu den übrigen 9 invarianten ontischen Relationen (vgl. Toth 2019) ist O die einzige, die vertikal definiert ist; die übrigen ontischen Relationen basieren alle auf horizontalen Gegensätzen, d.h. Links/Rechts oder Vorn/Hinten. O erzeugt damit den Übergang von den zwei ebenen zur dritten Dimension. Daher ist die Darstellung von O durch Trajektionsrelationen (vgl. Toth 2025) von besonderem Interesse. Um dies zu tun, bilden wir folgendermaßen ab: $1 \rightarrow U$, $2 \rightarrow M$, $3 \rightarrow O$. Die insgesamt 27 trajektischen semiotischen Relationen, die wiederum in Zeichenklassen und in Realitäts-thematiken differenziert werden, zeigen alle auf der Basis von 3 Kategorien möglichen Koinzidenzen und Schnitte der Teilrelationen von O.

1. Semiotische Relation

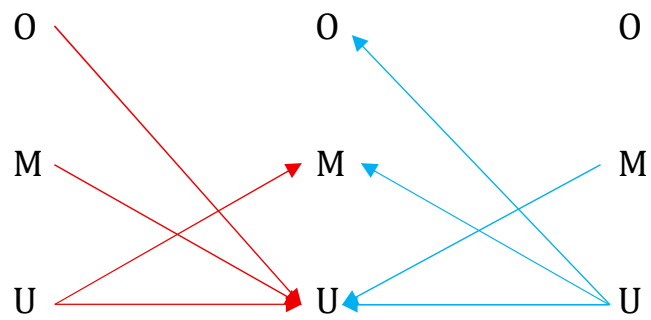
$ZKl = (O.U, M.U, U.U)$



RTh = (U.U, U.M, U.O)

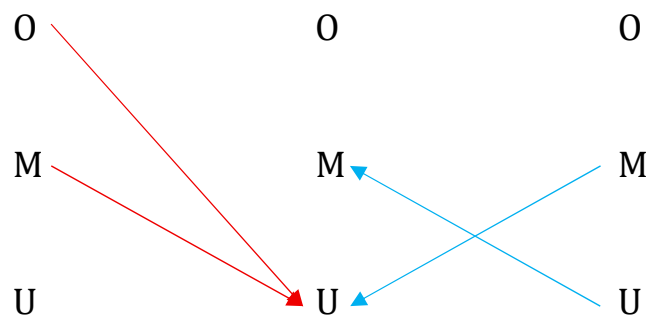


DS = [(O.U, M.U, U.U) × (U.U, U.M, U.O)]

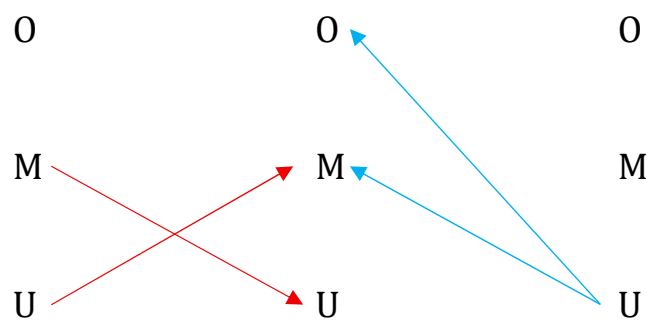


2. Semiotische Relation

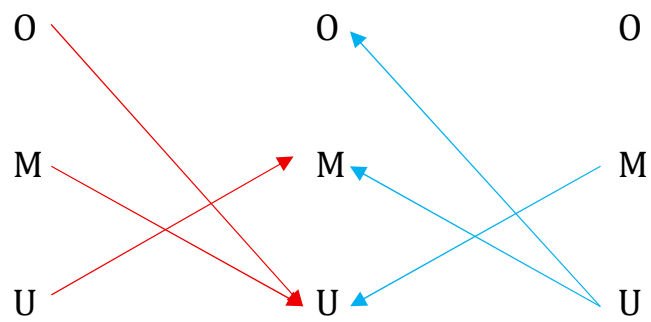
ZKl = (O.U, M.U, U.M)



RTh = (M.U, U.M, U.O)

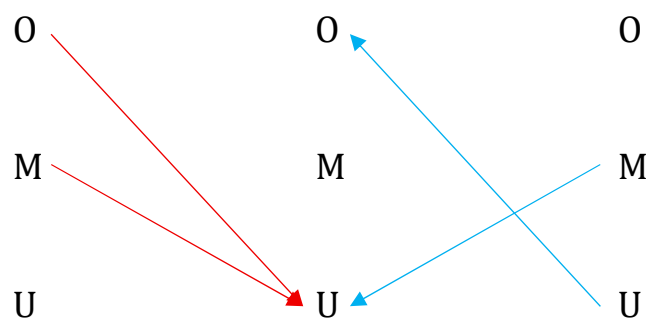


$$DS = [(O.U, M.U, U.M) \times (M.U, U.M, U.O)]$$

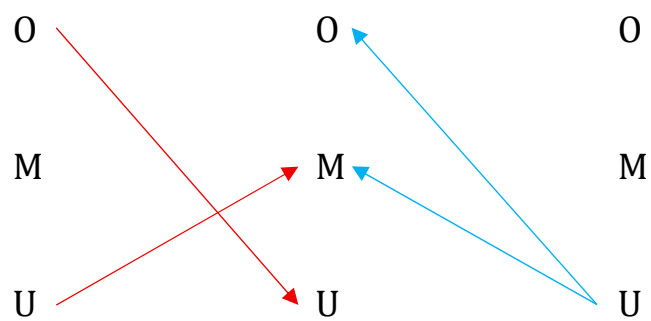


3. Semiotische Relation

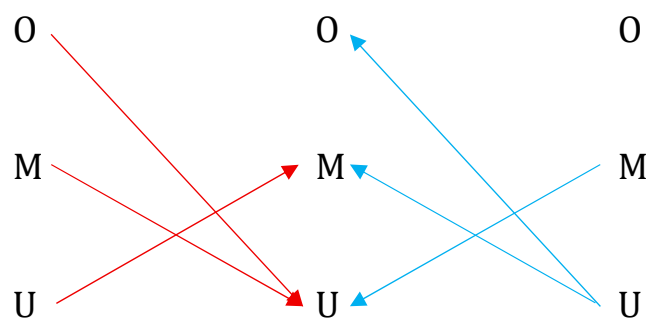
$$ZKl = (O.U, M.U, U.O)$$



$$RTh = (O.U, U.M, U.O)$$

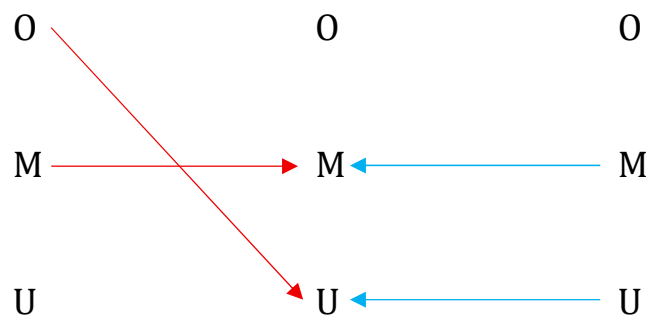


$$DS = [(O.U, M.U, U.O) \times (O.U, U.M, U.O)]$$

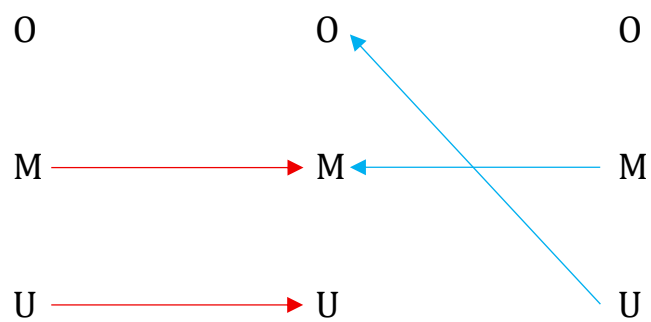


4. Semiotische Relation

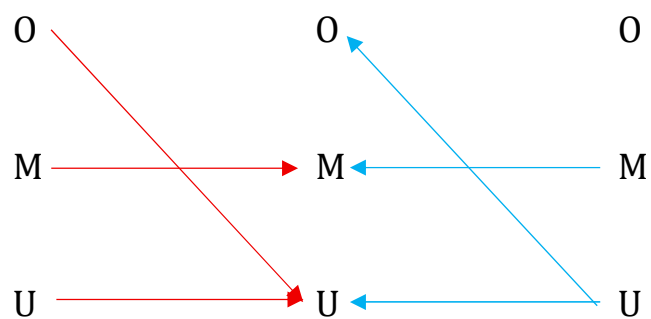
ZKl = (O.U, M.M, U.U)



RTh = (U.U, M.M, U.O)

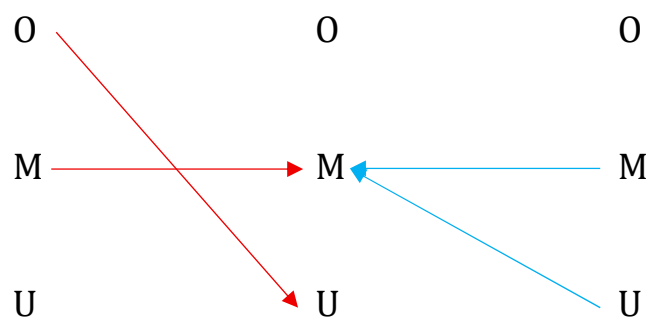


DS = [(O.U, M.M, U.U) × (U.U, M.M, U.O)]

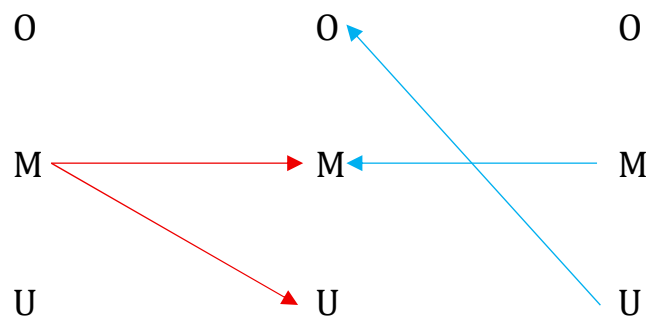


5. Semiotische Relation

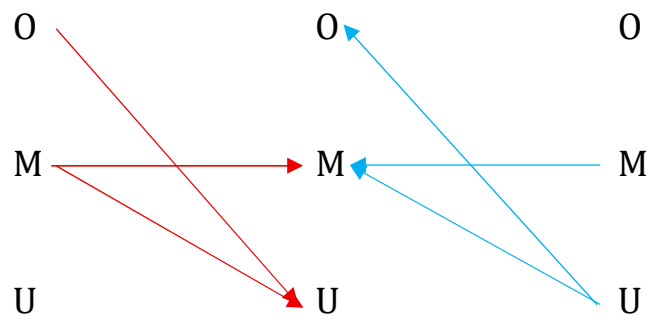
ZKl = (O.U, M.M, U.M)



RTh = (M.U, M.M, U.O)

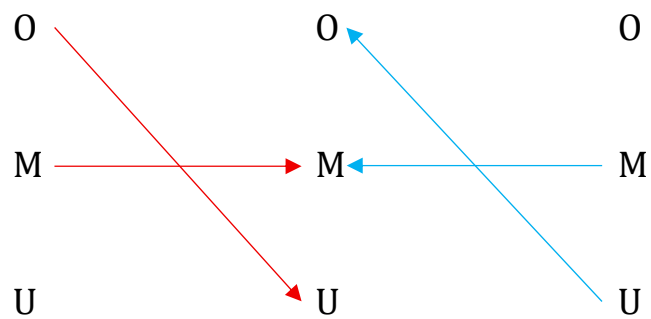


DS = [(O.U, M.M, U.M) × (M.U, M.M, U.O)]

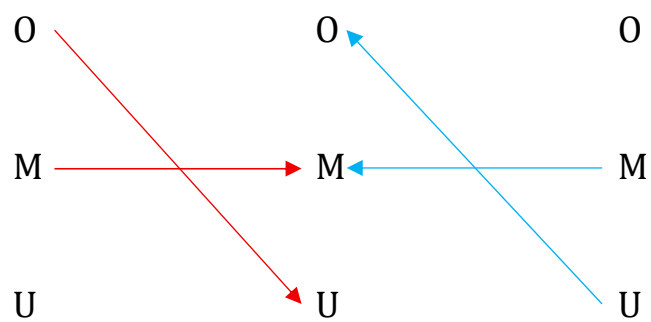


6. Semiotische Relation

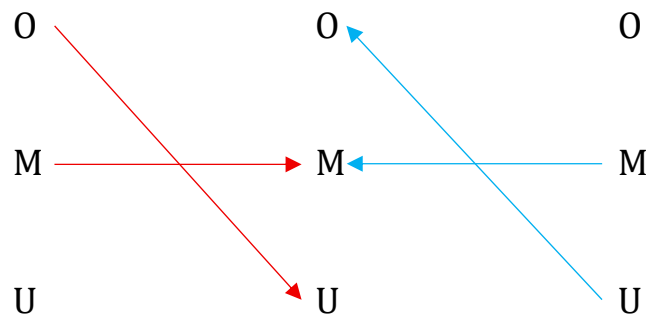
ZKl = (O.U, M.M, U.O)



RTh = (O.U, M.M, U.O)

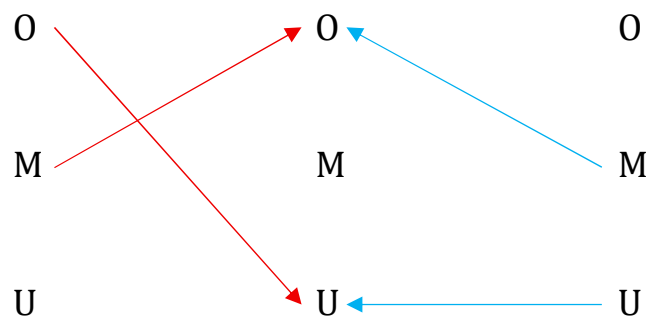


$$DS = [(O.U, M.M, U.O) \times (O.U, M.M, U.O)]$$

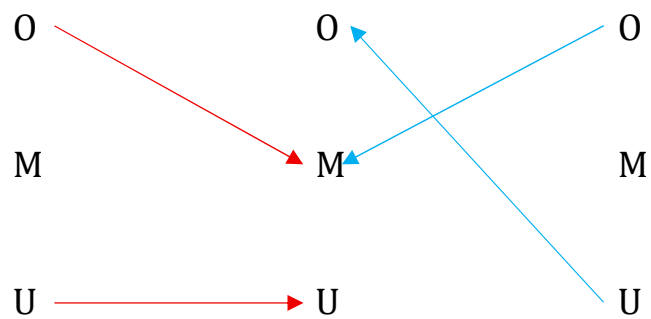


7. Semiotische Relation

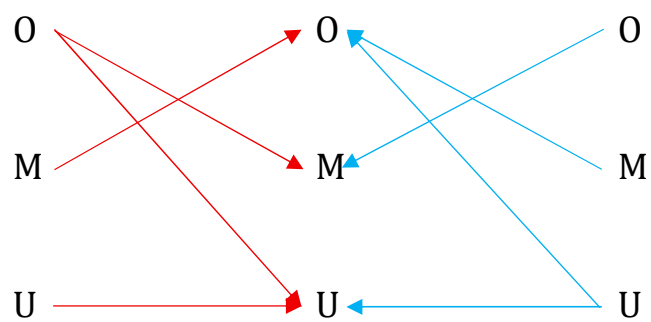
$$ZKl = (O.U, M.O, U.U)$$



$$RTh = (U.U, O.M, U.O)$$

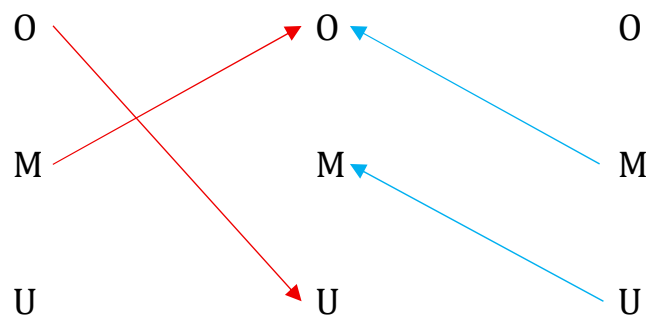


$$DS = [(O.U, M.O, U.U) \times (U.U, O.M, U.O)]$$

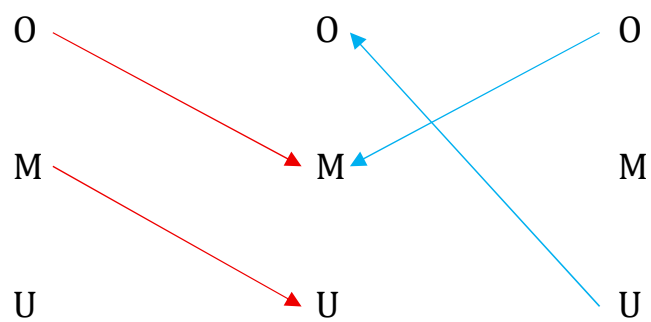


8. Semiotische Relation

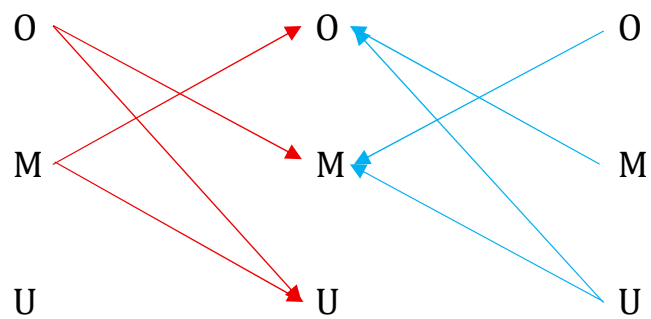
ZKl = (O.U, M.O, U.M)



RTh = (M.U, O.M, U.O)

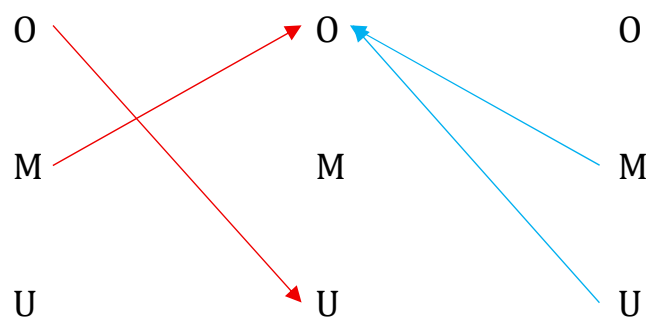


DS = [(O.U, M.O, U.M) × (M.U, O.M, U.O)]

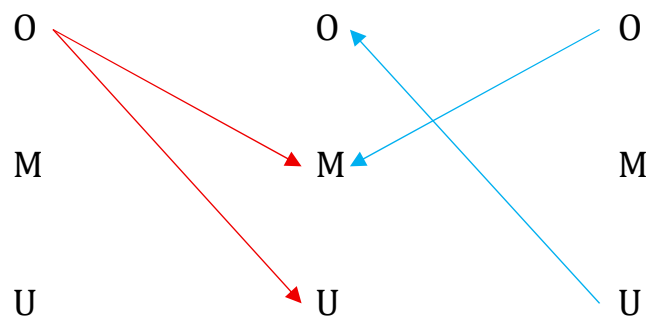


9. Semiotische Relation

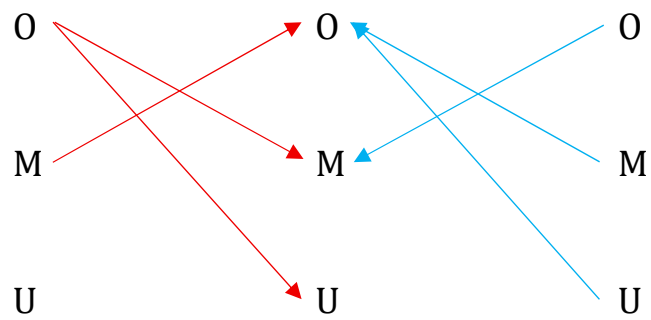
ZKl = (O.U, M.O, U.O)



RTh = (O.U, O.M, U.O)

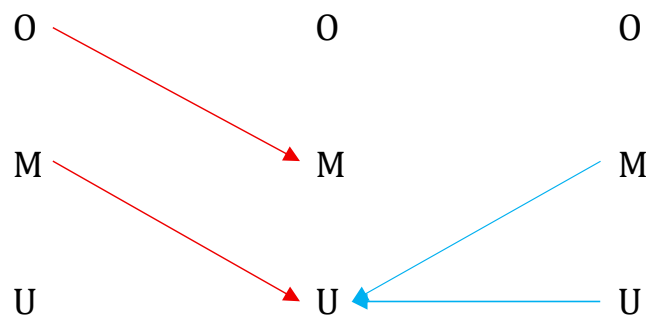


DS = [(O.U, M.O, U.O) × (O.U, O.M, U.O)]

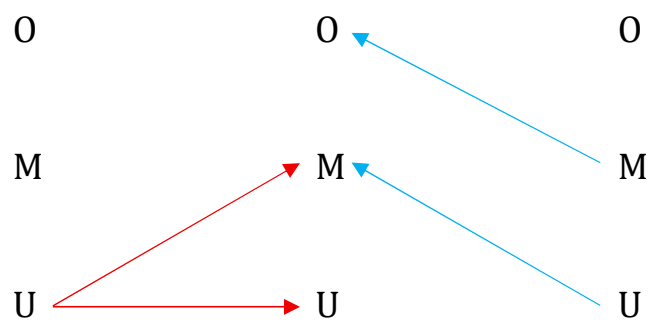


10. Semiotische Relation

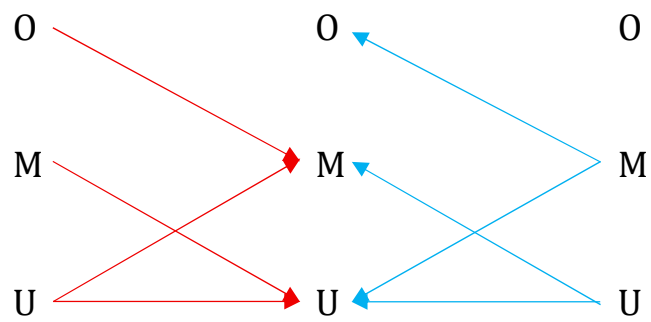
ZKl = (O.M, M.U, U.U)



RTh = (U.U, U.M, M.O)

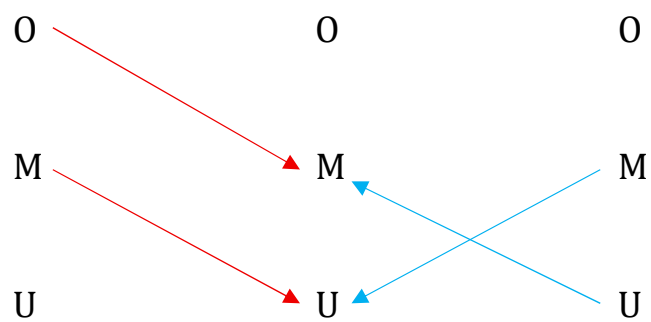


$$DS = [(O.M, M.U, U.U) \times (U.U, U.M, M.O)]$$

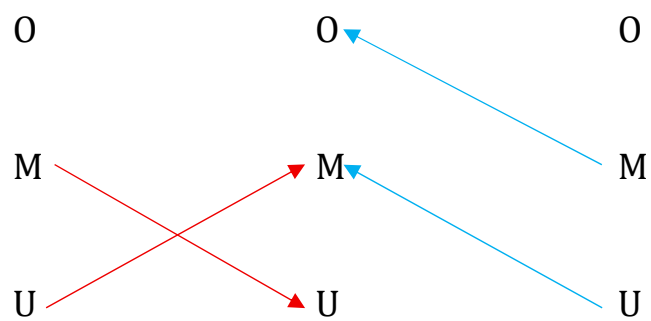


11. Semiotische Relation

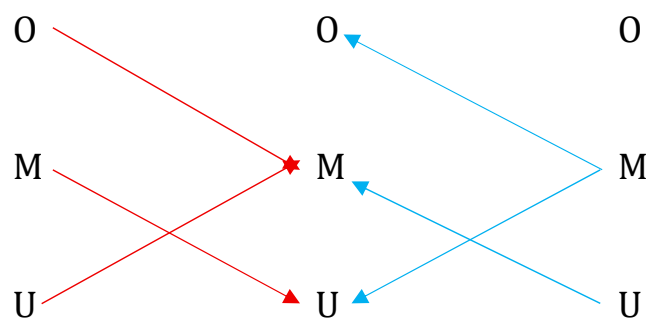
$$ZKl = (O.M, M.U, U.M)$$



$$RTh = (M.U, U.M, M.O)$$

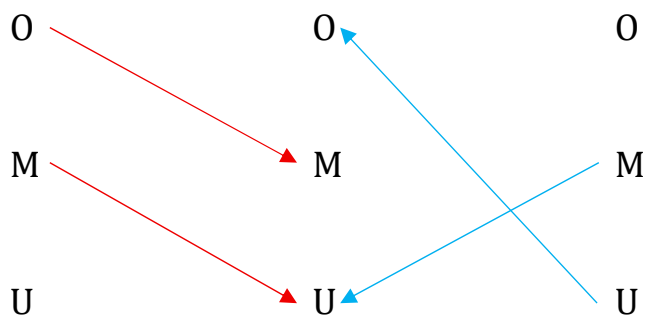


$$DS = [(O.M, M.U, U.M) \times (M.U, U.M, M.O)]$$

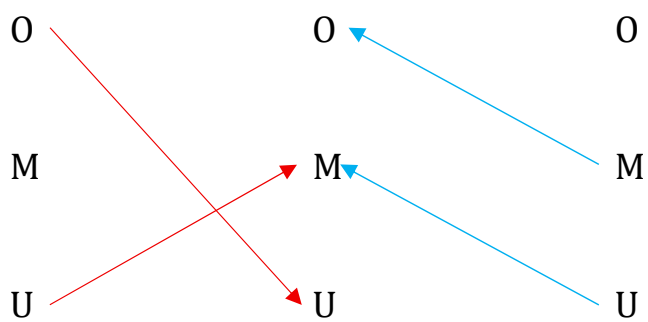


12. Semiotische Relation

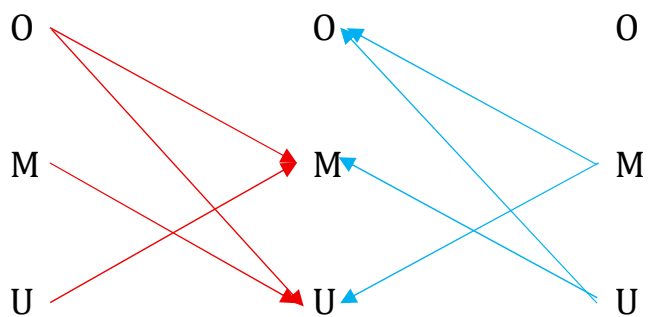
$$ZKl = (O.M, M.U, U.O)$$



$$RTh = (O.U, U.M, M.O)$$

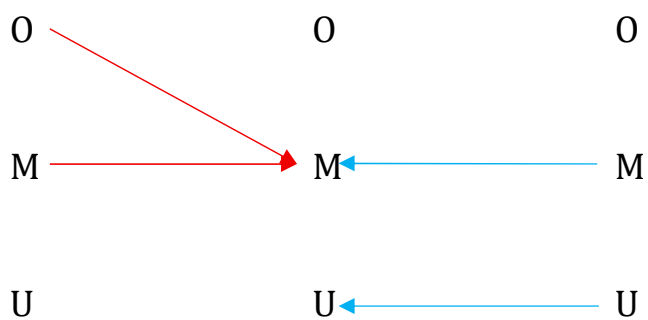


$$DS = [(O.M, M.U, U.O) \times (O.U, U.M, M.O)]$$

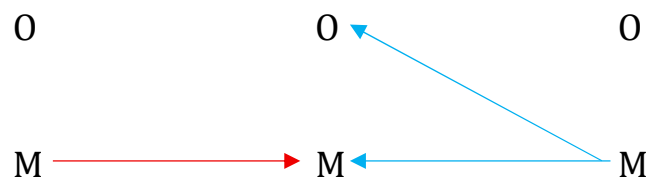


13. Semiotische Relation

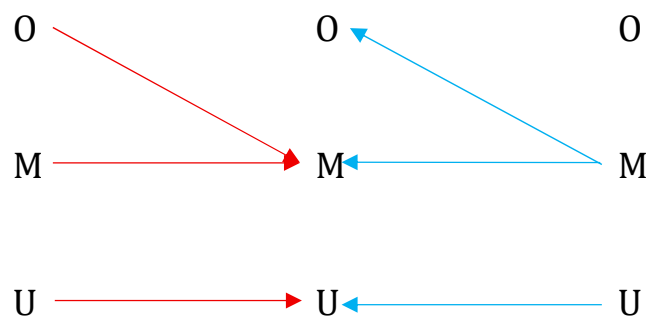
$$ZKl = (O.M, M.M, U.U)$$



RTh = (U.U, M.M, M.O)

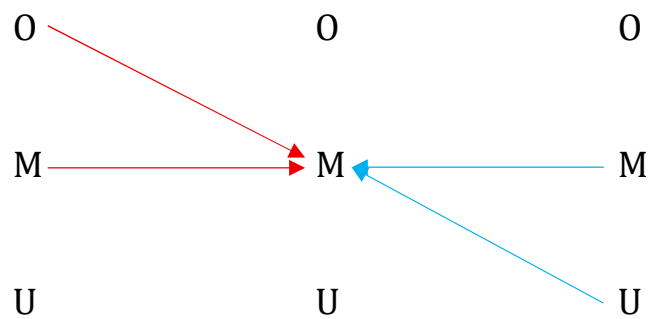


DS = [(O.M, M.M, U.U) × (U.U, M.M, M.O)]

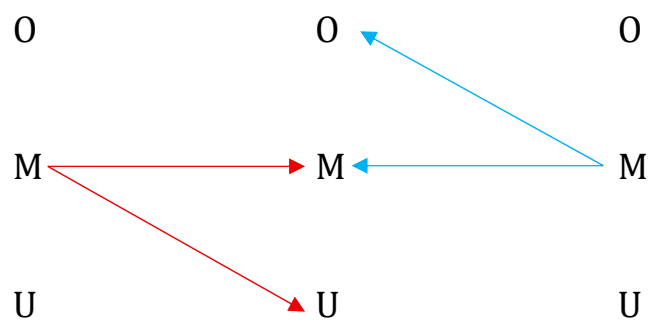


14. Semiotische Relation

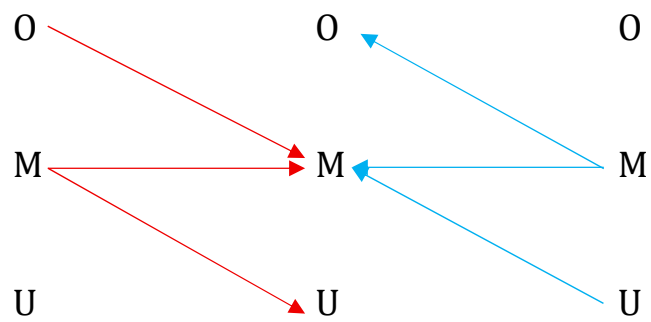
ZKl = (O.M, M.M, U.M)



RTh = (M.U, M.M, M.O)

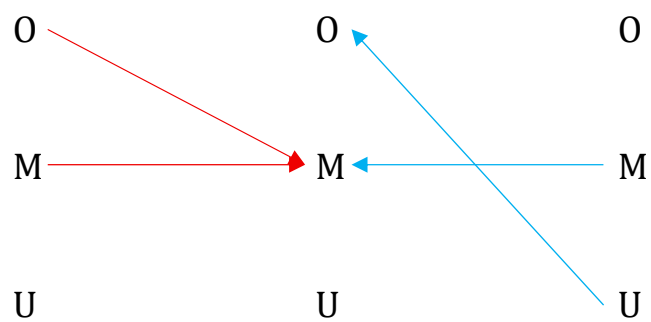


$$DS = [(O.M, M.M, U.M) \times (M.U, M.M, M.O)]$$

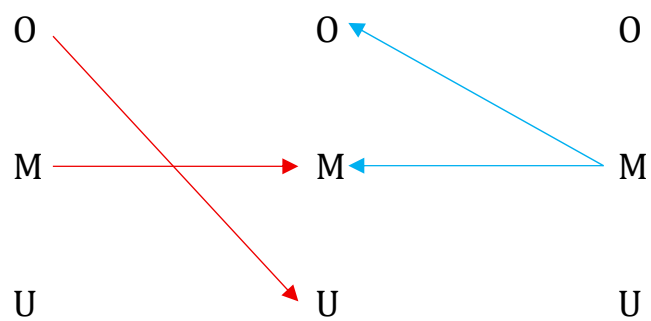


15. Semiotische Relation

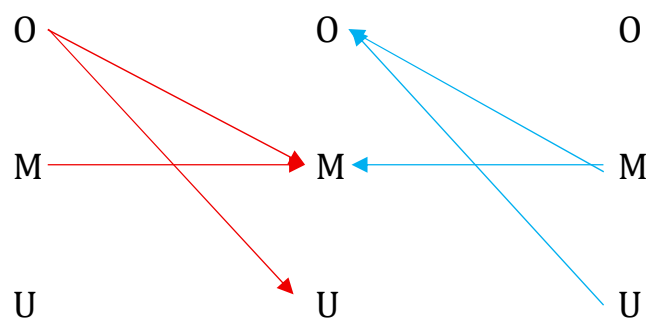
$$ZKl = (O.M, M.M, U.O)$$



$$RTh = (O.U, M.M, M.O)$$

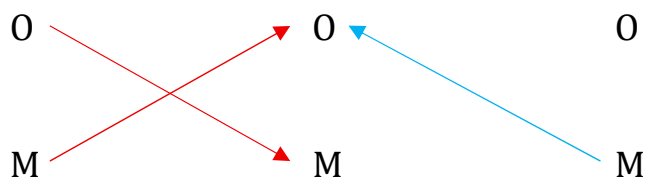


$$DS = [(O.M, M.M, U.O) \times (O.U, M.M, M.O)]$$

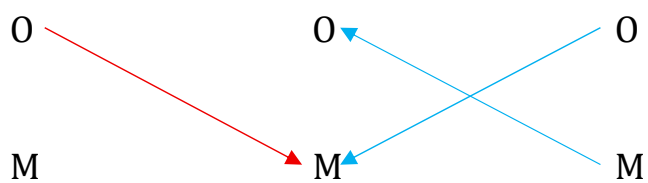


16. Semiotische Relation

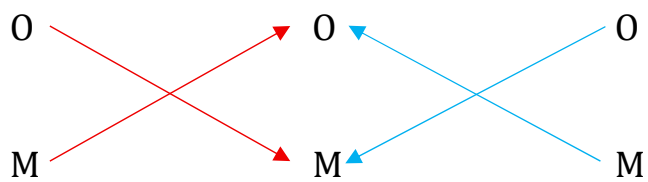
$$\text{Zkl} = (\text{O.M}, \text{M.O}, \text{U.U})$$



$$\text{RTh} = (\text{U.U}, \text{O.M}, \text{M.O})$$



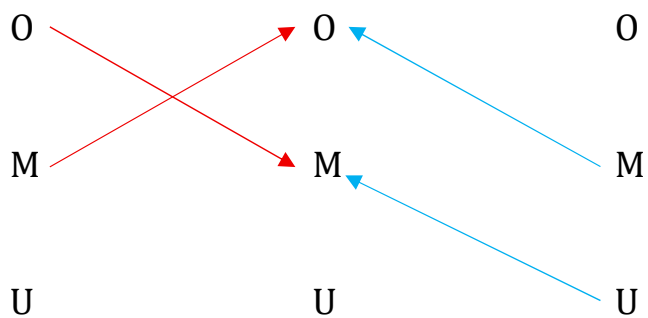
$$\text{DS} = [(\text{O.M}, \text{M.O}, \text{U.U}) \times (\text{U.U}, \text{O.M}, \text{M.O})]$$



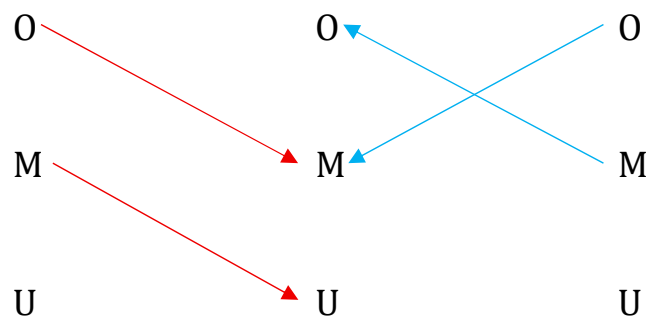
$$\text{U} \longrightarrow \text{U} \longleftarrow \text{U}$$

17. Semiotische Relation

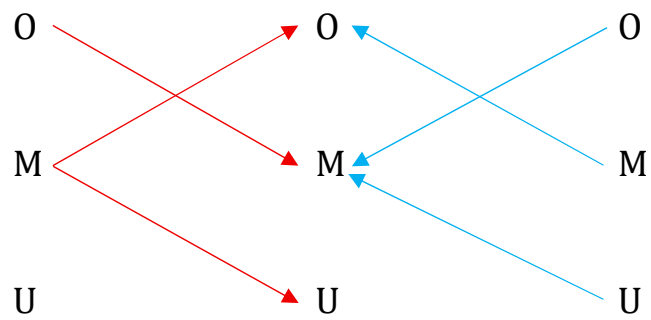
$$\text{Zkl} = (\text{O.M}, \text{M.O}, \text{U.M})$$



RTh = (M.U, O.M, M.O)

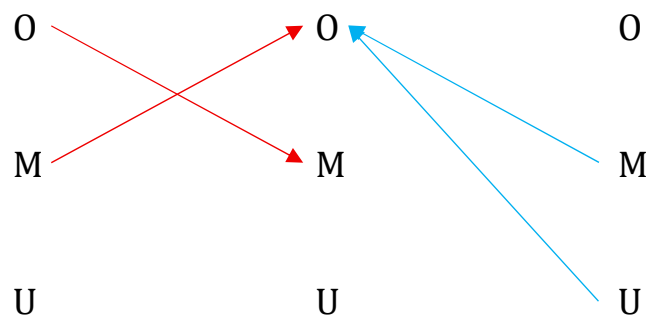


DS = [(O.M, M.O, U.M) × (M.U, O.M, M.O)]

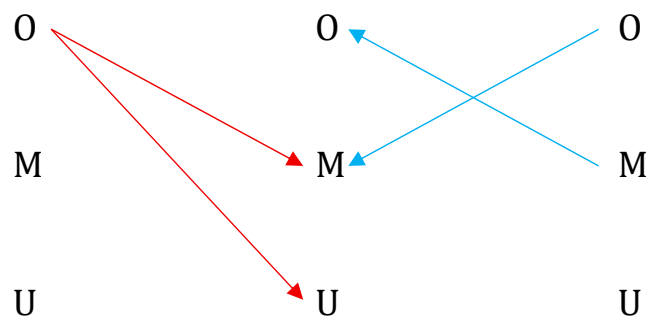


18. Semiotische Relation

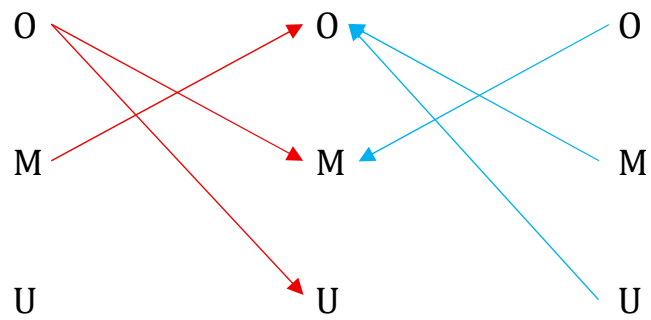
ZKl = (O.M, M.O, U.O)



RTh = (O.U, O.M, M.O)

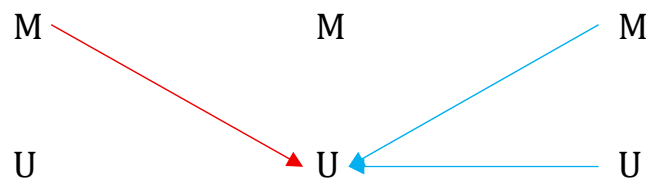


$$DS = [(O.M, M.O, U.O) \times (O.U, O.M, M.O)]$$

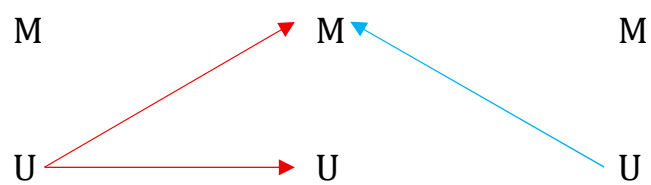
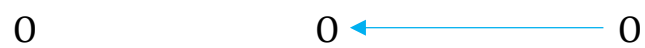


19. Semiotische Relation

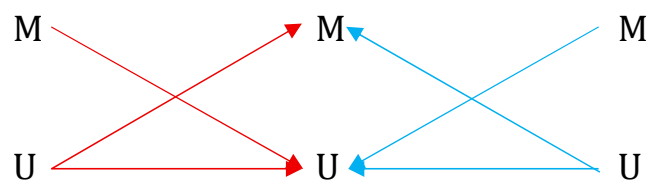
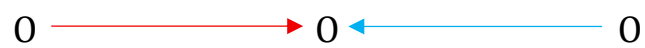
$$ZKl = (O.O, M.U, U.U)$$



$$RTh = (U.U, U.M, O.O)$$

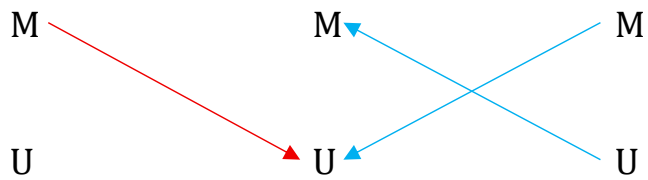


$$DS = [(O.O, M.U, U.U) \times (U.U, U.M, O.O)]$$

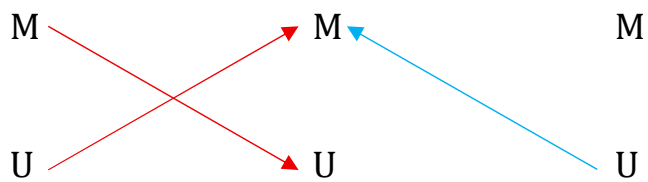
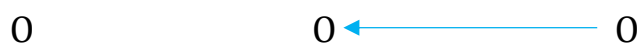


20. Semiotische Relation

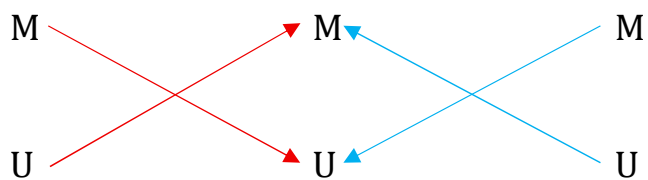
$$ZKl = (O.O, M.U, U.M)$$



$$RTh = (M.U, U.M, O.O)$$

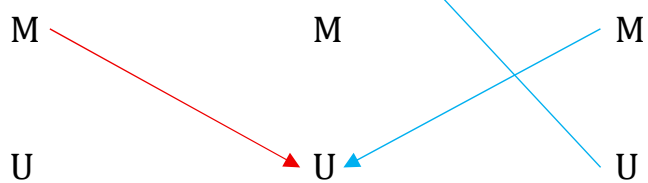


$$DS = [(O.O, M.U, U.M) \times (M.U, U.M, O.O)]$$

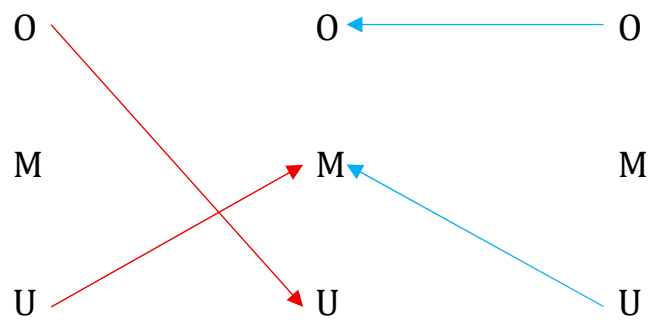


21. Semiotische Relation

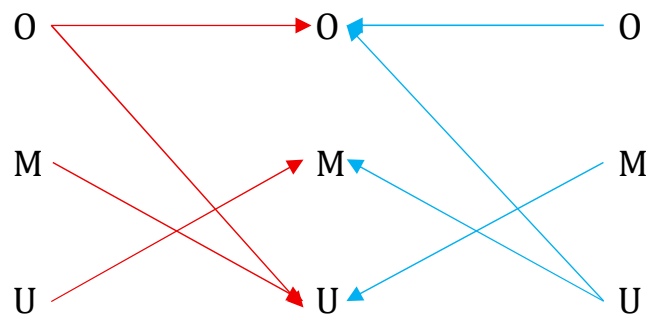
$$ZKl = (O.O, M.U, U.O)$$



RTh = (O.U, U.M, 0.0)



DS = [(O.O, M.U, U.O) × (O.U, U.M, 0.0)]

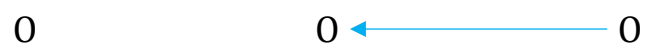


22. Semiotische Relation

ZKl = (O.O, M.M, U.U)



RTh = (U.U, M.M, 0.0)

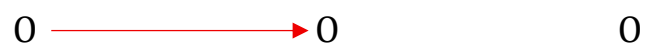


$$DS = [(0.O, M.M, U.U) \times (U.U, M.M, 0.O)]$$

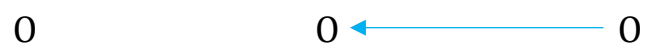


23. Semiotische Relation

$$ZKl = (0.O, M.M, U.M)$$



$$RTh = (M.U, M.M, 0.O)$$

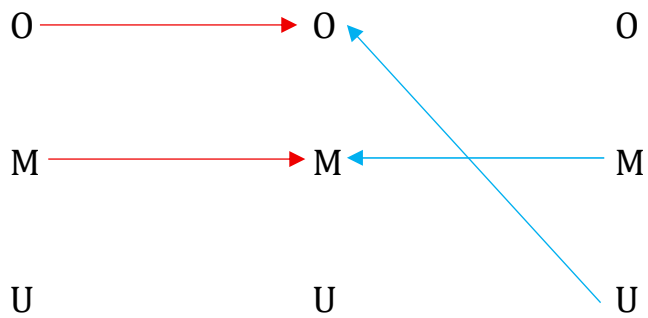


$$DS = [(0.O, M.M, U.M) \times (M.U, M.M, 0.O)]$$

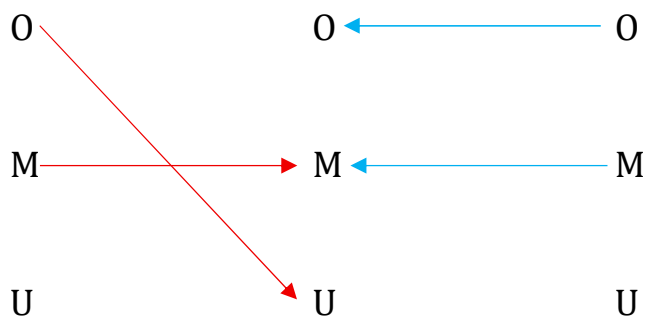


24. Semiotische Relation

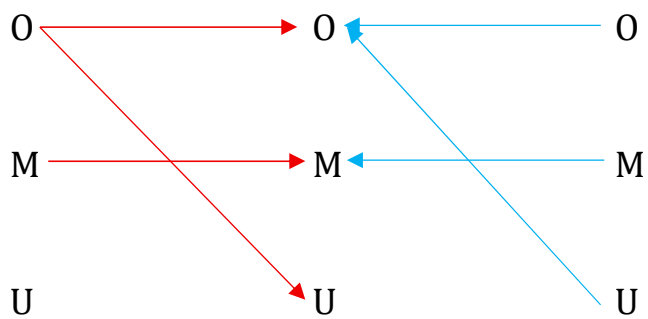
ZKl = (O.O, M.M, U.O)



RTh = (O.U, M.M, O.O)

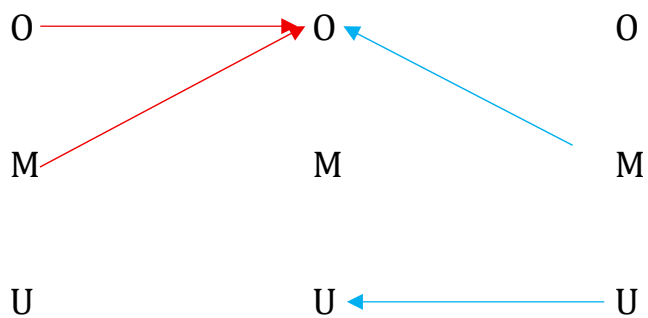


DS = [(O.O, M.M, U.O) × (O.U, M.M, O.O)]

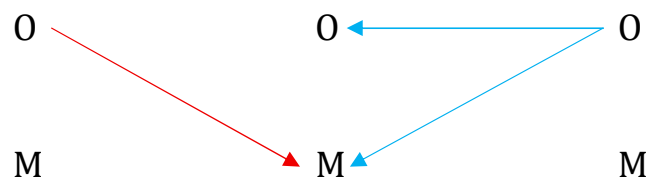


25. Semiotische Relation

ZKl = (O.O, M.O, U.U)

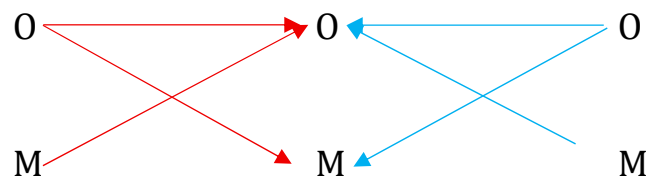


RTh = (U.U, 0.M, 0.0)



U → U

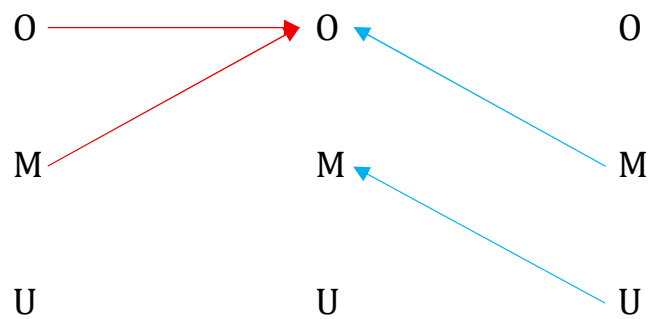
DS = [(0.0, M.0, U.U) × (U.U, 0.M, 0.0)]



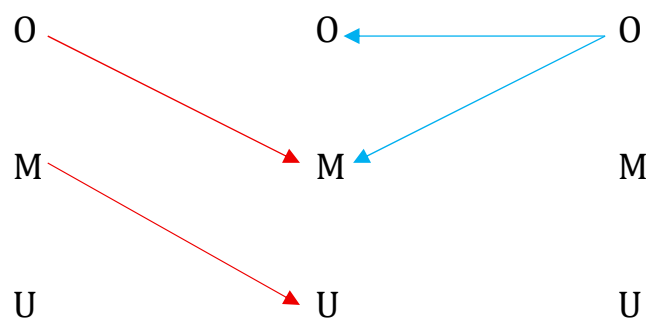
U → U

26. Semiotische Relation

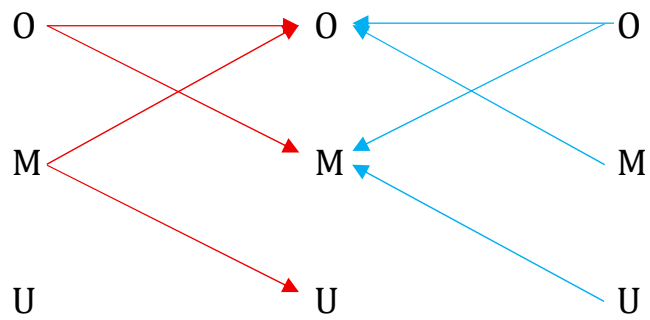
ZKl = (0.0, M.0, U.M)



RTh = (M.U, 0.M, 0.0)

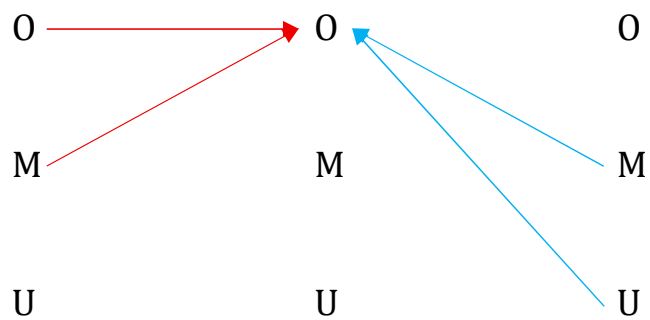


$$DS = [(0.O, M.O, U.M) \times (M.U, O.M, O.O)]$$

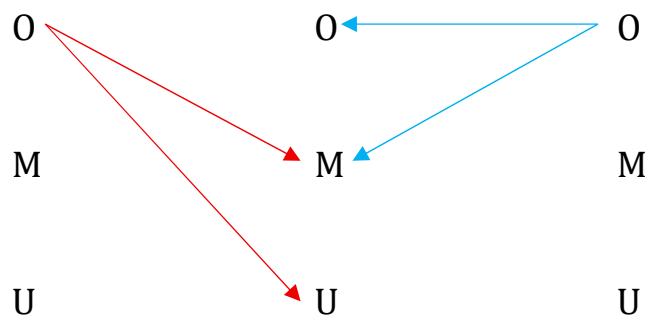


27. Semiotische Relation

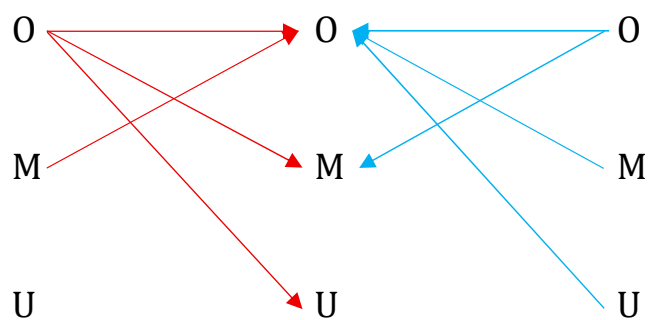
$$ZKl = (0.O, M.O, U.O)$$



$$RTh = (O.U, O.M, O.O)$$



$$DS = [(0.O, M.O, U.O) \times (O.U, O.M, O.O)]$$



Literatur

Toth, Alfred, Ordinationsrelation symbolischer Repertoires. In: Electronic Journal for Mathematical Semiotics, 2015

Toth, Alfred, Ränder bei den invarianten ontischen Relationen 1-10. In: Electronic Journal for Mathematical Semiotics, 2019

Toth, Alfred, Vollständiges trajektisches System triadisch-trichotomischer Relationen. In: Electronic Journal for Mathematical Semiotics, 2025

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