Prof. Dr. Alfred Toth

Interrelationen der ternären Systemrelation

1. Wie in Toth (2025) aufgezeigt, kann man mit Hilfe von Trajekten 1. und 2. Stufe Interrelationen zwischen Teilrelationen semiotischer Relationen oder zwischen semiotischen Relationen sichtbar machen, die sogar in der algebraischen Diamondtheorie (vgl. Kaehr 2007) verborgen bleiben.

Im folgenden zeigen wir die Interrelationen zwischen den Korrelaten der in Toth (2015) eingeführten ternären Systemrelation

S* = (S, U, C),

darin S = System, U = Umgebung, C = Abschluß (closure) ist.

2. Trajektische Dualsysteme

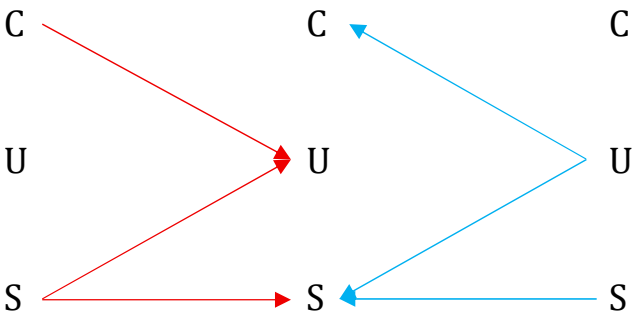
1. Systemrelation

C.S U.S S.S × S.S S.U S.C

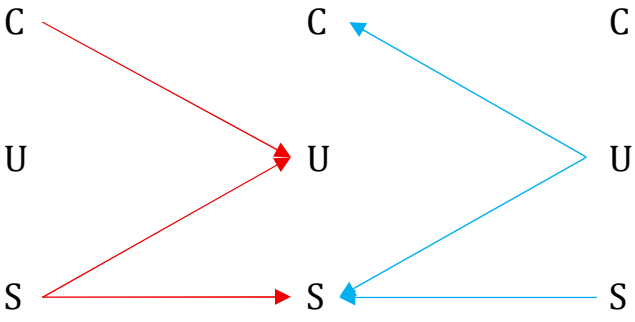
C.S U.S S.S U.S

U.S S.S S.U S.C

= (C.U, S.S) | (U.S, S.S) = (S.S, S.U) | (S.S, U.C)



= (C.U, S.U, S.S, S.S) = (S.S, S.S, U.S, U.C)



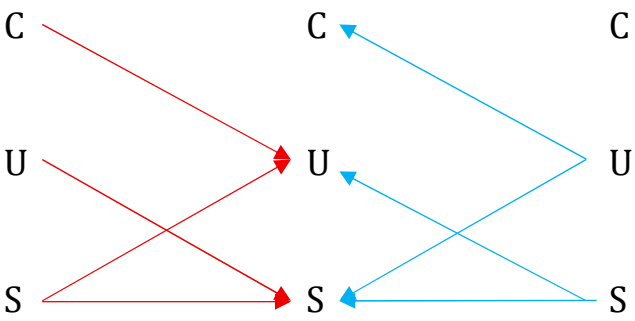
2. Systemrelation

C.S U.S S.U × U.S S.U S.C

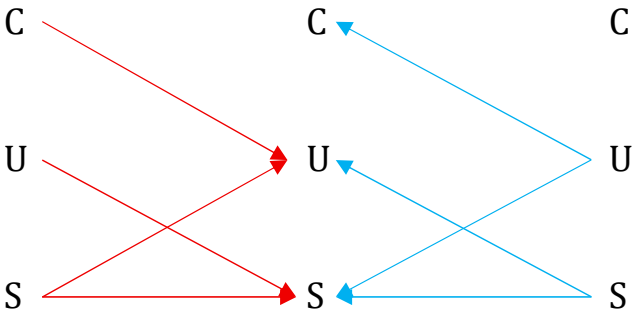
C.S U.S U.S S.U

U.S S.U S.U S.C

= (C.U, S.S) | (U.S, S.U) = (U.S, S.U) | (S.S, U.C)



= (C.U, S.U, S.S, S.U) = (U.S, S.S, U.S, U.C)



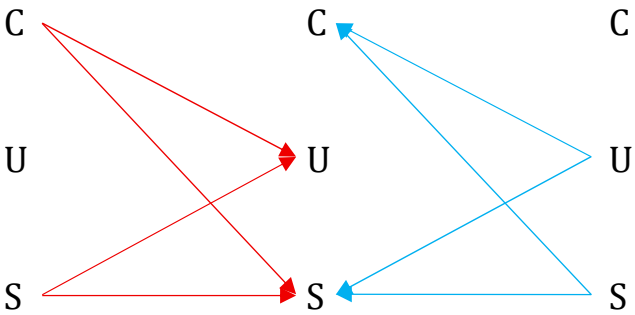
3. Systemrelation

C.S U.S S.C × C.S S.U S.C

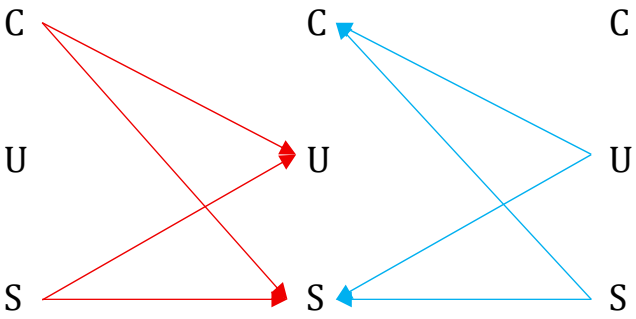
C.S U.S C.S S.U

U.S S.C S.U S.C

= (C.U, S.S) | (U.S, S.C) = (C.S, S.U) | (S.S, U.C)



= (C.U, S.U, S.S, S.C) = (C.S, S.S, U.S, U.C)



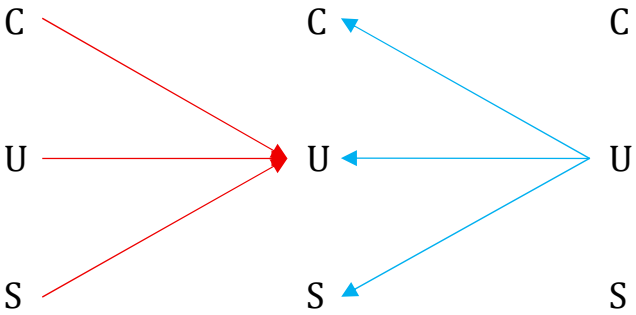
4. Systemrelation

C.S U.U S.U × U.S U.U S.C

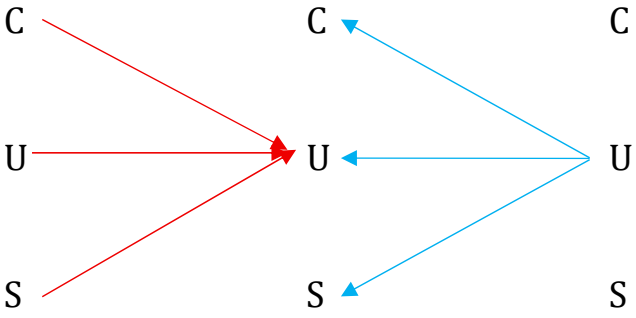
C.S U.U U.S U.U

U.U S.U U.U S.C

= (C.U, S.U) | (U.S, U.U) = (U.U, S.U) | (U.S, U.C)



= (C.U, S.U, U.S, U.U) = (U.U, S.U, U.S, U.C)



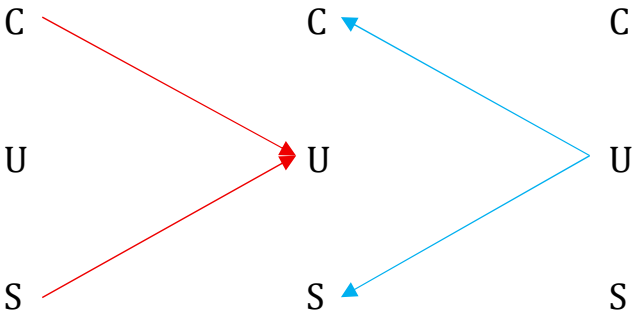
5. Systemrelation

C.S U.U S.C × C.S U.U S.C

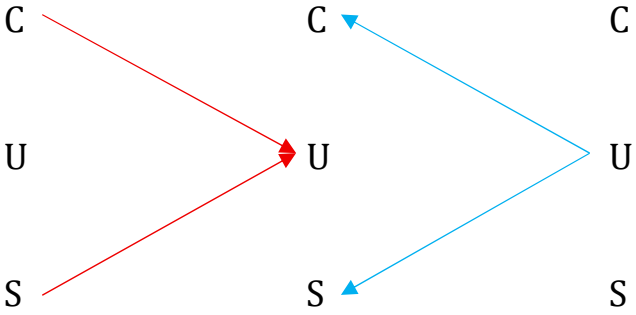
C.S U.U C.S U.U

U.U S.C U.U S.C

= (C.U, S.U) | (U.S, U.C) = (C.U, S.U) | (U.S, U.C)



= (C.U, S.U, U.S, U.C) = (C.U, S.U, U.S, U.C)



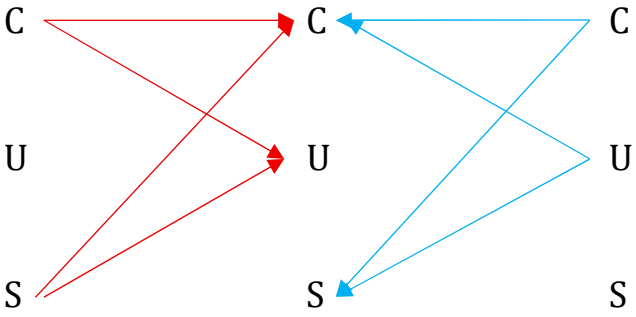
6. Systemrelation

C.S U.C S.C × C.S C.U S.C

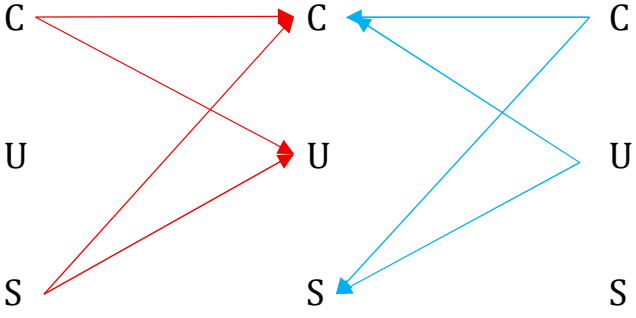
C.S U.C C.S C.U

U.C S.C C.U S.C

= (C.U, S.C) | (U.S, C.C) = (C.C, S.U) | (C.S, U.C)



= (C.U, S.U, C.S, C.C) = (C.C, S.C, U.S, U.C)



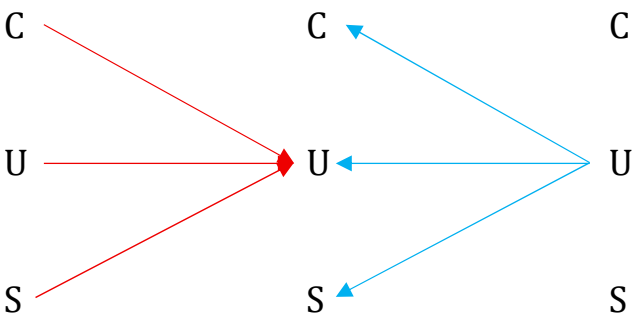
7. Systemrelation

C.U U.U S.U × U.S U.U U.C

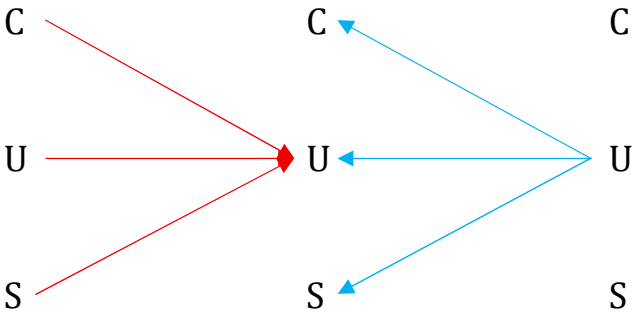
C.U U.U U.S U.U

U.U S.U U.U U.C

= (C.U, U.U) | (U.S, U.U) = (U.U, S.U) | (U.U, U.C)



= (C.U, U.U, U.S, U.U) = (U.U, S.U, U.U, U.C)



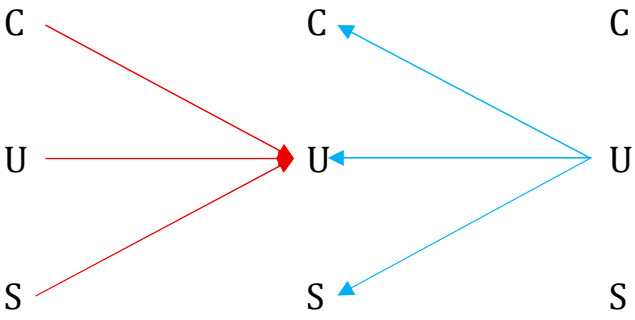
8. Systemrelation

C.U U.U S.C × C.S U.U U.C

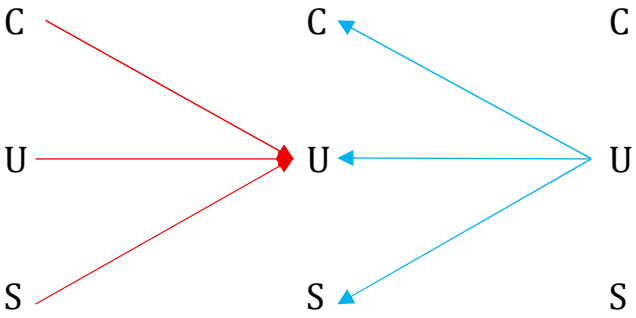
C.U U.U C.S U.U

U.U S.C U.U U.C

= (C.U, U.U) | (U.S, U.C) = (C.U, S.U) | (U.U, U.C)



= (C.U, U.U, U.S, U.C) = (C.U, S.U, U.U, U.C)



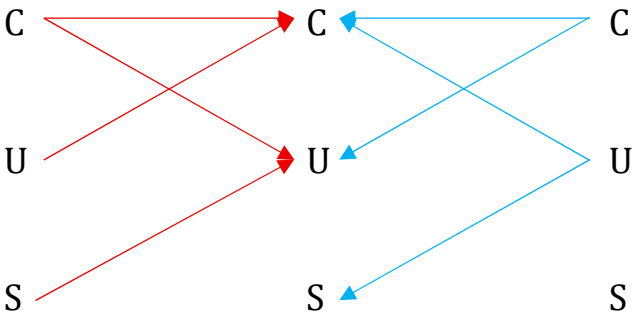
9. Systemrelation

C.U U.C S.C × C.S C.U U.C

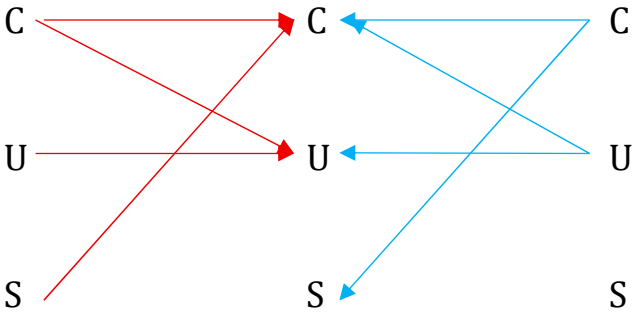
C.U U.C C.S C.U

U.C S.C C.U U.C

= (C.U, U.C) | (U.S, C.C) = (C.C, S.U) | (C.U, U.C)



= (C.U, U.U, C.S, C.C) = (C.C, S.C, U.U, U.C)



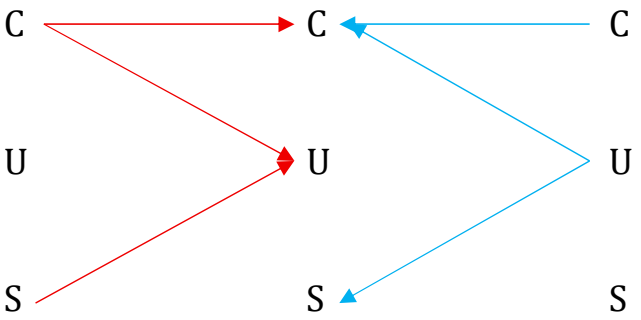
10. Systemrelation

C.C U.C S.C × C.S C.U C.C

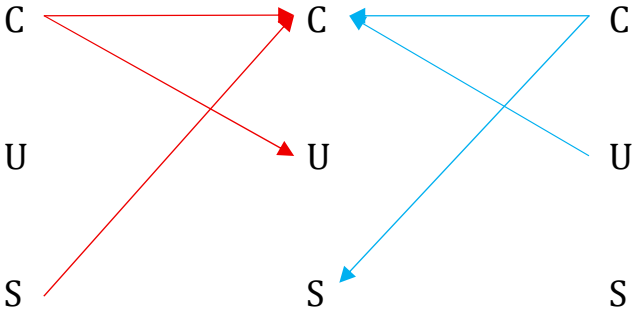
C.C U.C C.S C.U

U.C S.C C.U C.C

= (C.U, C.C) | (U.S, C.C) = (C.C, S.U) | (C.C, U.C)



= (C.U, C.U, C.S, C.C) = (C.C, S.C, U.C, U.C)



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