

## Die morphismischen Prozesse zum semiotischen Aequilibrium

1. In Toth (2009b) wurden die semiosischen und retrosemiosischen Prozesse zur Erreichung des semiotischen Aequilibrium detailliert dargestellt. In diesem Aufsatz gehen wir von den Zeichenklassen als natürlichen Transformationen aus. Wie schon zuvor, werden auch hier minimale Zeichennetze (vgl. Toth 2009a), d.h. Paare von Zeichenklassen untersucht.

2. Die folgende Tabelle zeigt zeigt in der rechten Kolonne die natürlichen Transformationen mit ihren morphismischen Zusammenhängen. Die semiotischen Zusammenhänge zwischen den Zeichenklassen in der linken Hälfte der Tabelle wurde bereits in Toth (2009b) gegeben.

$\Delta(6/10)$	(3.1 2.3 1.3/3.3 2.3 1.3)	[[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(8/10)$	(3.2 2.2 1.3/3.3 2.3 1.3)	[[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , $\beta$ ]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(9/10)$	(3.2 2.3 1.3/3.3 2.3 1.3)	[[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(5/10)$	(3.1 2.2 1.3/3.3 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , $\beta$ ]] [[ $\alpha^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(6/9)$	(3.1 2.3 1.3/3.2 2.3 1.3)	[[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(3/10)$	(3.1 2.1 1.3/3.3 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\beta\alpha$ ]] [[ $\alpha^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(7/10)$	(3.2 2.2 1.2/3.3 2.3 1.3)	[[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , id2]] [[ $\alpha^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(8/9)$	(3.2 2.2 1.3/3.2 2.3 1.3)	[[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , $\beta$ ]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(4/10)$	(3.1 2.2 1.2/3.3 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(5/9)$	(3.1 2.2 1.3/3.2 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , $\beta$ ]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]

$\Delta(2/10)$	(3.1 2.1 1.2/3.3 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(1/10)$	(3.1 2.1 1.1/3.3 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , id3], [ $\alpha^\circ$ , id3]]
$\Delta(6/8)$	(3.1 2.3 1.3/3.2 2.2 1.3)	[[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]] [[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , $\beta$ ]]
$\Delta(3/9)$	(3.1 2.1 1.3/3.2 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\beta\alpha$ ]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(5/6)$	(3.1 2.2 1.3/3.1 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , $\beta$ ]] [[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]]
$\Delta(3/6)$	(3.1 2.1 1.3/3.1 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\beta\alpha$ ]] [[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]]
$\Delta(7/9)$	(3.2 2.2 1.2/3.2 2.3 1.3)	[[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , id2]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(6/7)$	(3.1 2.3 1.3/3.2 2.2 1.2)	[[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]] [[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , id2]]
$\Delta(4/9)$	(3.1 2.2 1.2/3.2 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(2/9)$	(3.1 2.1 1.2/3.2 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]
$\Delta(3/8)$	(3.1 2.1 1.3/3.2 2.2 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\beta\alpha$ ]] [[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , $\beta$ ]]
$\Delta(4/6)$	(3.1 2.2 1.2/3.1 2.3 1.3)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]] [[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]]
$\Delta(2/6)$	(3.1 2.1 1.2/3.1 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]] [[ $\beta^\circ$ , $\beta\alpha$ ], [ $\alpha^\circ$ , id3]]
$\Delta(1/9)$	(3.1 2.1 1.1/3.2 2.3 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , $\beta$ ], [ $\alpha^\circ$ , id3]]

$\Delta(1/6)$	(3.1 2.1 1.1/3.1 2.3 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, id1]]$ $[[\beta^\circ, \beta\alpha], [\alpha^\circ, id3]]$
$\Delta(5/8)$	(3.1 2.2 1.3/3.2 2.2 1.3)	$[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$ $[[\beta^\circ, id2], [\alpha^\circ, \beta]]$
$\Delta(3/5)$	(3.1 2.1 1.3/3.1 2.2 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, \beta\alpha]]$ $[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$
$\Delta(7/8)$	(3.2 2.2 1.2/3.2 2.2 1.3)	$[[\beta^\circ, id2], [\alpha^\circ, id2]]$ $[[\beta^\circ, id2], [\alpha^\circ, \beta]]$
$\Delta(4/8)$	(3.1 2.2 1.2/3.2 2.2 1.3)	$[[\beta^\circ, \alpha], [\alpha^\circ, id2]]$ $[[\beta^\circ, id2], [\alpha^\circ, \beta]]$
$\Delta(5/7)$	(3.1 2.2 1.3/3.2 2.2 1.2)	$[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$ $[[\beta^\circ, id2], [\alpha^\circ, id2]]$
$\Delta(2/8)$	(3.1 2.1 1.2/3.2 2.2 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, \alpha]]$ $[[\beta^\circ, id2], [\alpha^\circ, \beta]]$
$\Delta(4/5)$	(3.1 2.2 1.2/3.1 2.2 1.3)	$[[\beta^\circ, \alpha], [\alpha^\circ, id2]]$ $[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$
$\Delta(3/7)$	(3.1 2.1 1.3/3.2 2.2 1.2)	$[[\beta^\circ, id1], [\alpha^\circ, \beta\alpha]]$ $[[\beta^\circ, id2], [\alpha^\circ, id2]]$
$\Delta(1/8)$	(3.1 2.1 1.1/3.2 2.2 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, id1]]$ $[[\beta^\circ, id2], [\alpha^\circ, \beta]]$
$\Delta(3/4)$	(3.1 2.1 1.3/3.1 2.2 1.2)	$[[\beta^\circ, id1], [\alpha^\circ, \beta\alpha]]$ $[[\beta^\circ, \alpha], [\alpha^\circ, id2]]$
$\Delta(2/5)$	(3.1 2.1 1.2/3.1 2.2 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, \alpha]]$ $[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$
$\Delta(2/3)$	(3.1 2.1 1.2/3.1 2.1 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, \alpha]]$ $[[\beta^\circ, id1], [\alpha^\circ, \beta\alpha]]$
$\Delta(1/5)$	(3.1 2.1 1.1/3.1 2.2 1.3)	$[[\beta^\circ, id1], [\alpha^\circ, id1]]$ $[[\beta^\circ, \alpha], [\alpha^\circ, \beta]]$

$\Delta(1/3)$	(3.1 2.1 1.1/3.1 2.1 1.3)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\beta\alpha$ ]]
$\Delta(4/7)$	(3.1 2.2 1.2/3.2 2.2 1.2)	[[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]] [[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , id2]]
$\Delta(2/7)$	(3.1 2.1 1.2/3.2 2.2 1.2)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]] [[ $\beta^\circ$ , id2], [ $\alpha^\circ$ , id2]]
$\Delta(1/7)$	(3.1 2.1 1.1/3.2 2.2 1.2)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , idf2], [ $\alpha^\circ$ , id2]]
$\Delta(2/4)$	(3.1 2.1 1.2)/3.1 2.2 1.2)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]] [[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]]
$\Delta(1/4)$	(3.1 2.1 1.1/3.1 2.2 1.2)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , $\alpha$ ], [ $\alpha^\circ$ , id2]]
$\Delta(1/2)$	(3.1 2.1 1.1/3.1 2.1 1.2)	[[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , id1]] [[ $\beta^\circ$ , id1], [ $\alpha^\circ$ , $\alpha$ ]]

Weggelassen wurden in dieser Tabelle die “notwendigen” morphismischen Zusammenhänge [[ $\beta^\circ$ , -], [ $\alpha^\circ$ , -]] bei jeder Zeichenklassen, da diese Morphismen nichts anderes als die die triadische Struktur jeder Zeichenklasse garantierenden Semiosen ( $3 \rightarrow 2$ ) und ( $2 \rightarrow 1$ ) sind. Allerdings ist es so, dass, anders als bei semiosischen und retrosemiosischen Prozessen (Toth 2009a), die morphismischen Zusammenhänge praktisch ganz allein durch diese “notwendigen” Zusammenhänge gewährleistet werden.

## Bibliographie

- Toth, Alfred, Zeichenzusammenhänge und Zeichennetze. In: Electronic Journal for Mathematical Semiotics, [www.mathematical-semiotics.com](http://www.mathematical-semiotics.com) (2009a)
- Toth, Alfred, Die semiosischen und retrosemiosischen Prozesse zur Erreichung des semiotischen Aequilibriums. In: Electronic Journal for Mathematical Semiotics, [www.mathematical-semiotics.com](http://www.mathematical-semiotics.com) (2009b)

© Prof. Dr. A. Toth, 23.2.2009