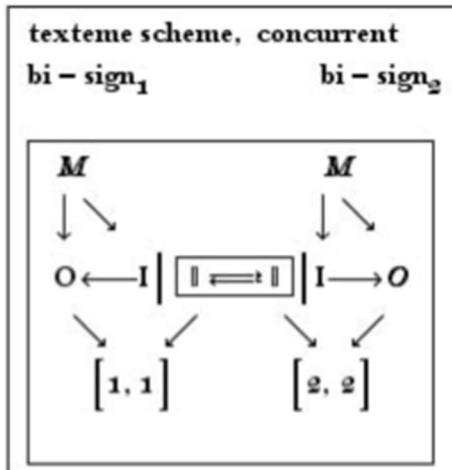


Prof. Dr. Alfred Toth

## Homogene, teilhomogene und heterogene semiotische Texteme

1. Der Begriff und das formale Modell des „textemes“ (Textems) wurden von Kaehr (2009a, S. 10 ff.) eingeführt.



**texteme :**

*diamond* = (sign + environment)

*bi - sign* = (diamond + 2 - anchor)

*texteme* = (composed bi - signs + chiasm).

Danach hat also ein Zeichen einen reflektorischen „Zwilling“, das Bi-Sign (vgl. Toth 2018). Das Bi-Sign zusammen mit seiner Umgebung (vgl. Kaehr 2009)

Firstness: Peirce: A

Kaehr:  $A | a$

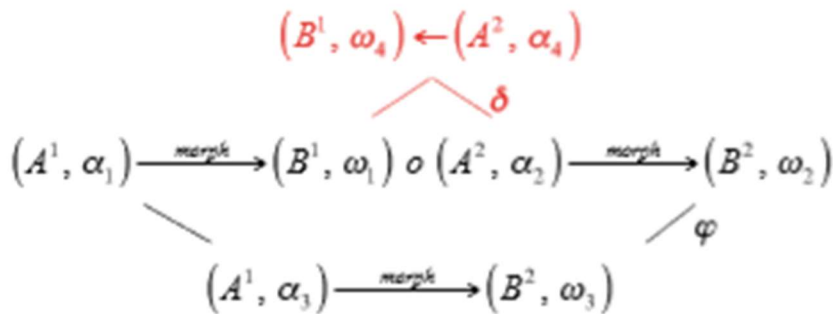
Secondness: Peirce:  $A \rightarrow B$

Kaehr:  $A \rightarrow B | c$

Thirdness: Peirce:  $A \rightarrow C$

Kaehr:  $A \rightarrow C | b_1 \leftarrow b_2$

bilden einen Diamond, vgl. Kaehr (2008)



Werden Diamonds miteinander zusammengesetzt, so entsteht ein Textem. Dabei unterscheidet Kaehr (2009) zwischen homogenen

|                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $  \frac{[(M_\alpha \rightarrow I_\omega) \diamond (I_\alpha \rightarrow O_\omega)]^{(1,1)} \circ [(M_\alpha \rightarrow I_\omega) \diamond (I_\alpha \rightarrow O_\omega)]^{(1,2)}}{(M_\alpha \rightarrow O_\omega)^{(1,1)} \Big  \begin{matrix} (2) \\ (I_\omega \Leftarrow \tilde{I}_\alpha)^{(1)} \end{matrix} \Big  (M_\alpha \rightarrow O_\omega)^{(1,2)}}  $ <p><b>Diamond composition rule for homogeneous semiotic texteme</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

und heterogenen Textemen

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $  \frac{[(M_\alpha \rightarrow I_\omega) \diamond (I_\alpha \rightarrow O_\omega)]^{(1,1)} \circ [(I_\alpha \rightarrow M_\omega) \diamond (M_\alpha \rightarrow O_\omega)]^{(1,2)}}{(M_\alpha \rightarrow O_\omega)^{(1,1)} \Bigg  \begin{pmatrix} I_\omega \leftarrow I_\alpha & (1) \\ M_\omega \leftarrow M_\alpha & (2) \end{pmatrix} \Bigg  (I_\alpha \rightarrow O_\omega)^{(1,2)}}  $ <p><b>Diamond composition rule for heterogeneous semiotic texteme</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

2. Bi-Signs werden nach Kaehr also als trianguläre Modelle, entsprechend der Definition des Zeichens durch Peirce und Bense als triadisch-trichotomischer Relation, eingeführt. Da jedes Bi-Sign als Diamond dargestellt werden kann, bildet auch jedes Bi-Sign ein triviales, nämlich mit sich selbst zusammengesetztes, Textem.

## 2.1. Homogene Texteme bei $ZR^{3,3}$

    $\equiv$     bi-sign

    $\equiv$     bi-sign

    $\equiv$     bi-sign

    $\equiv$     bi-sign

    $\equiv$     bi-sign

    $\equiv$     bi-sign

## 2.2. Heterogene Texteme bei $ZR^{3,3}$

    $\equiv$    

    $\equiv$    

    $\equiv$    

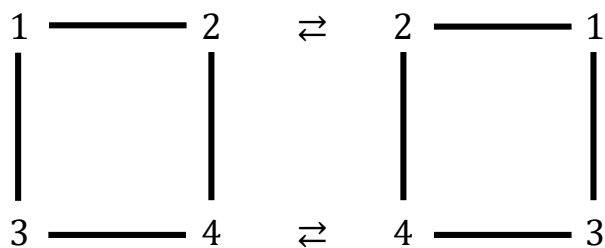
    $\equiv$    

    $\equiv$    

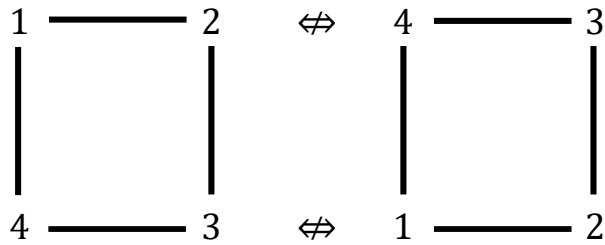
    $\equiv$    

Wie man sieht, zerfallen also alle als semiotische adjungierte Automaten darstellbaren elementaren Texteme bei  $ZR^{3,3}$  in die zwei von Kaehr definierten diskreten Klassen der homogenen und der heterogenen Texte.

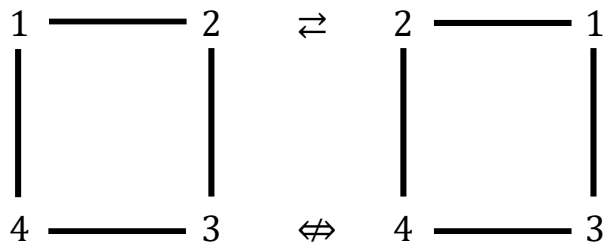
3. Sobald wir es aber mit n-adischen Zeichenrelationen für  $n > 3$  zu tun haben, sind neben homogenen Textemen der Form



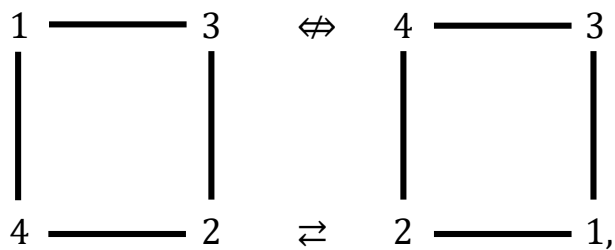
und heterogenen der Form



auch noch teilhomogene (bzw. teilheterogene) der beiden folgenden Formen zu unterscheiden



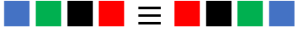
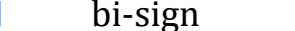
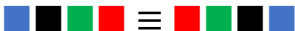
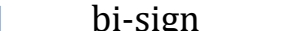
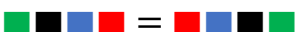
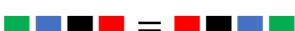
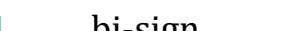
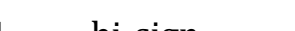
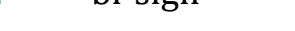
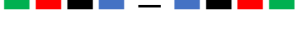
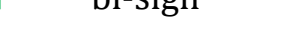
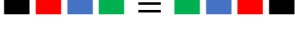
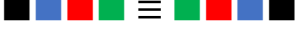
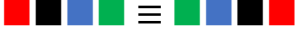
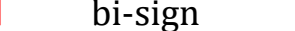
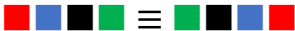
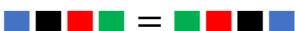
oder



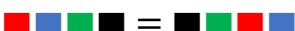
d.h. also mit einfacher statt doppelter Reflexivität.

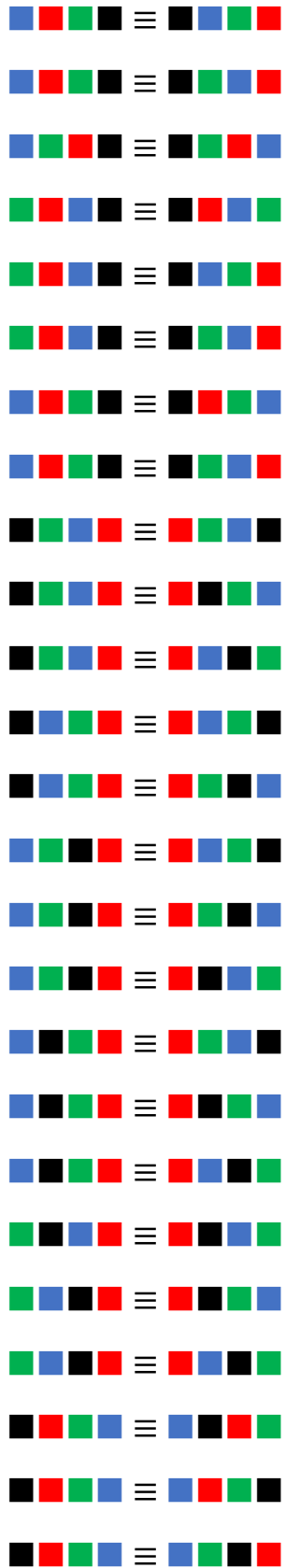
### 3.1. Homogene Texteme bei $ZR^{4,4}$

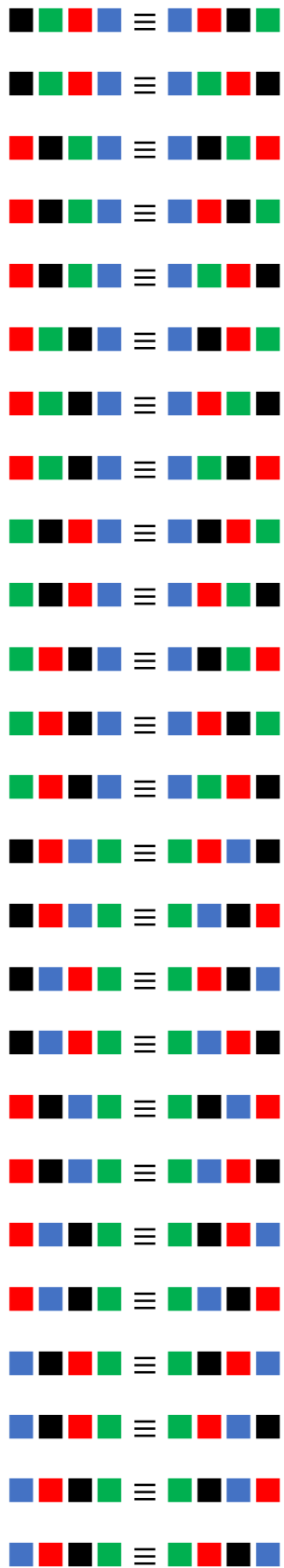
|  |          |  |         |
|--|----------|--|---------|
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |

|                                                                                     |          |                                                                                     |         |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|---------|
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|    | $\equiv$ |    | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |
|  | $\equiv$ |  | bi-sign |

### 3.2. Teilhomogene Texteme bei $ZR^{4,4}$

|                                                                                     |          |                                                                                     |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |
|  | $\equiv$ |  |





### 3.3. Heterogene Texteme bei ZR<sup>4,4</sup>



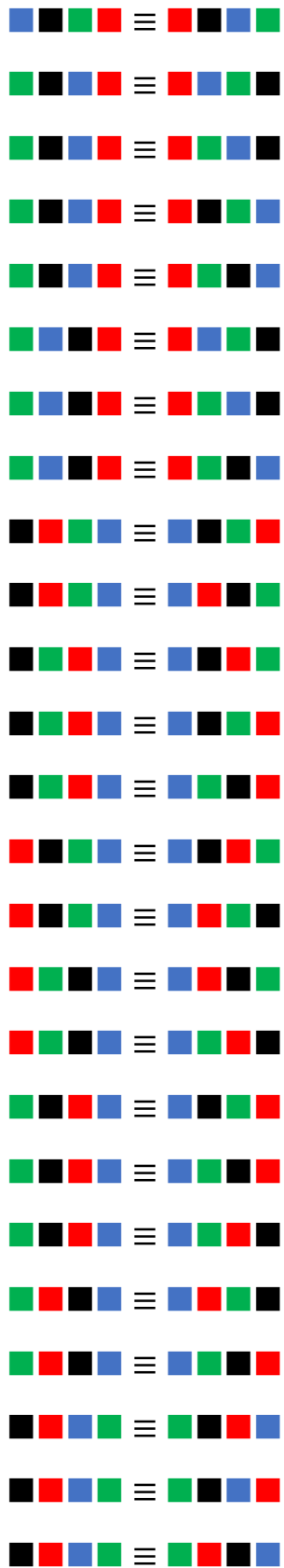


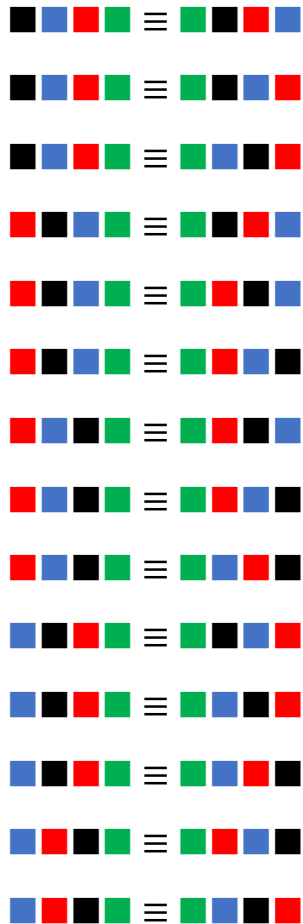


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## Literatur

Kaehr, Rudolf, Diamond semiotics. In:

<http://www.thinkartlab.com/pkl/lola/Diamond%20Semiotics/Diamond%20Semiotics.pdf> (Kaehr 2008)

Kaehr, Rudolf, XANADU's textemes. In: ThinkArt Lab (Glasgow), 2009

Toth, Alfred, Bi-Signs bei semiotischen zellulären Automaten. In: Electronic Journal for Mathematical Semiotics, 2018

27.12.2018