Prof. Dr. Alfred Toth

Matrizen der P-Teilrelationen und ihre kürzesten Pfade

1. In Toth (2025a) hatten wir die P-Teilrelationen als Operatoren eingeführt und die PP-Matrix als Normalmatrix für quadralektische Zahlenfelder bestimmt.

2. Im folgenden bilden wir alle 6 P-Matrizen und bestimmen die kürzesten Übergänge zwischen den Pfaden nach Toth (2025b).

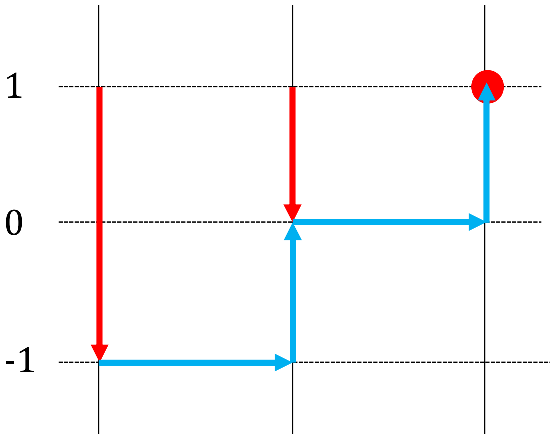
2.1. $o^{PP\rightarrow}$(-1.x, 0.y, 1.z) = (-1.x, 0.y, 1.z)

	-1	0	1
-1	-1.-1	-1.0	-1.1
0	0.-1	0.0	0.1
1	1.-1	1.0	1.1 .

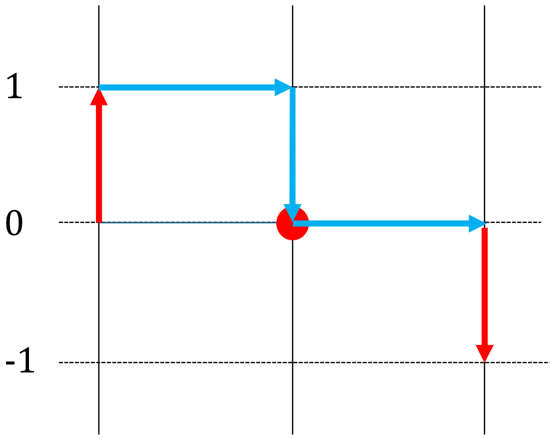
Dieser Fall wurde bereits in Toth (2025a) behandelt.

2.2. $o^{PP\leftarrow}$(-1.x, 0.y, 1.z) = (z.1, y.0, x.-1)

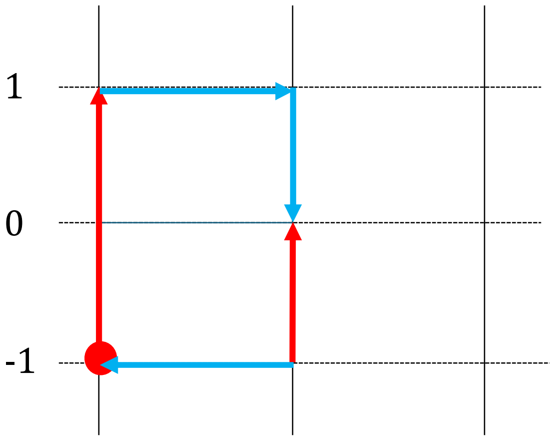
	1	0	-1
1	1.1	1.0	1.-1
0	0.1	0.0	0.-1
-1	-1.1	-1.0	-1.-1



Graph von (1.1 1.0 1.-1)



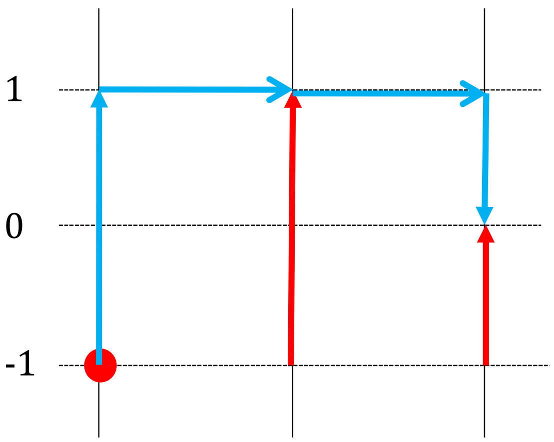
Graph von (0.1 0.0 0.-1)



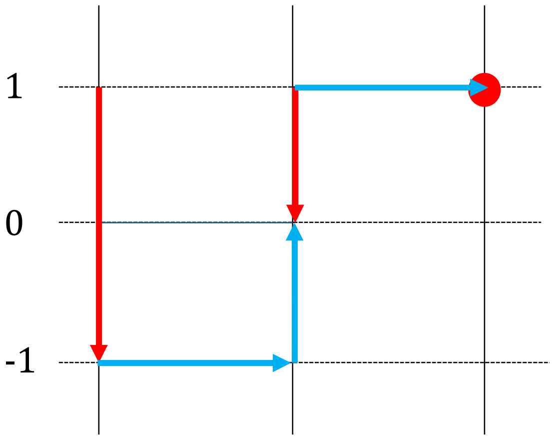
Graph von (-1.1 -1.0 -1.-1)

2.3. $o^{PC\rightarrow}(-1.x, 0.y, 1.z) = (-1.x, 1.z, 0.y)$

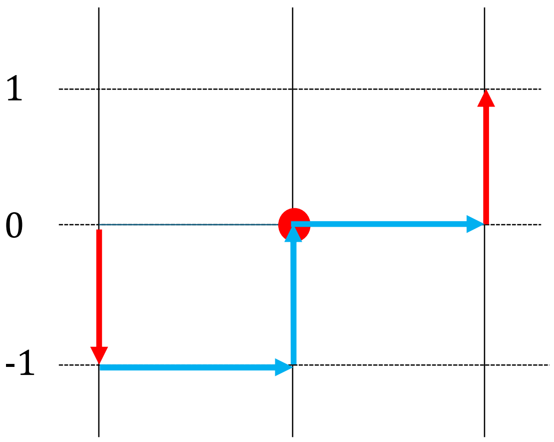
	-1	1	0
-1	-1.-1	-1.1	-1.0
1	1.-1	1.1	1.0
0	0.-1	0.1	0.0



Graph von (-1.-1 -1.1 -1.0)



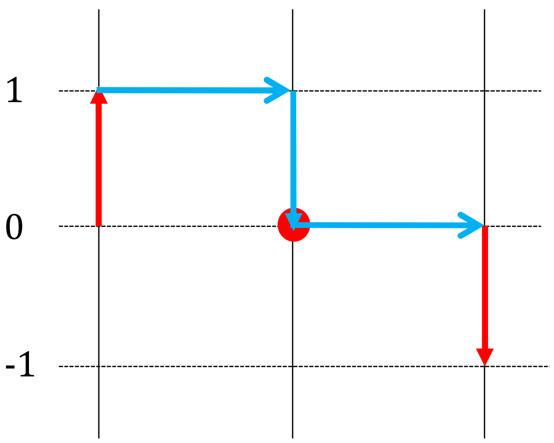
Graph von (1.-1 1.1 1.0)



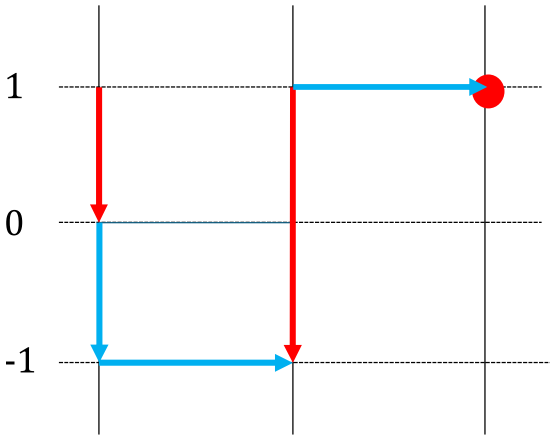
Graph von (0.-1 0.1 0.0)

2.4. $o^{PC\leftarrow}(-1.x, 0.y, 1.z) = (y.0, z.1, x.-1)$

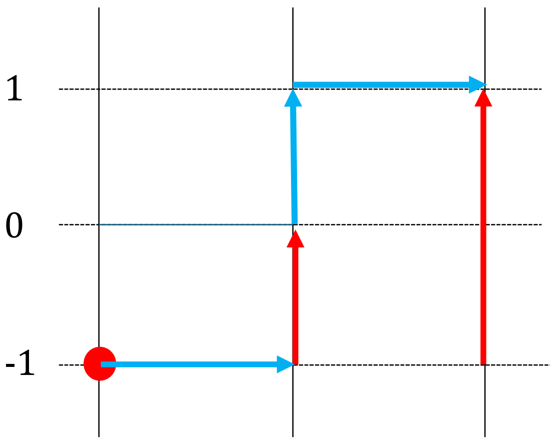
	0	1	-1
0	0.0	0.1	0.-1
1	1.0	1.1	1.-1
-1	-1.0	-1.1	-1.-1



Graph von (0.0 0.1 0.-1)



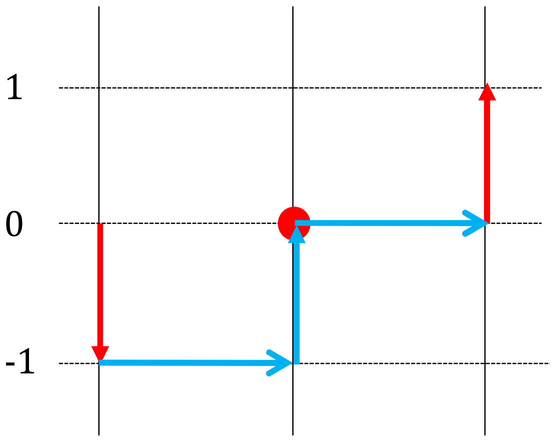
Graph von (1.0 1.1 1.-1)



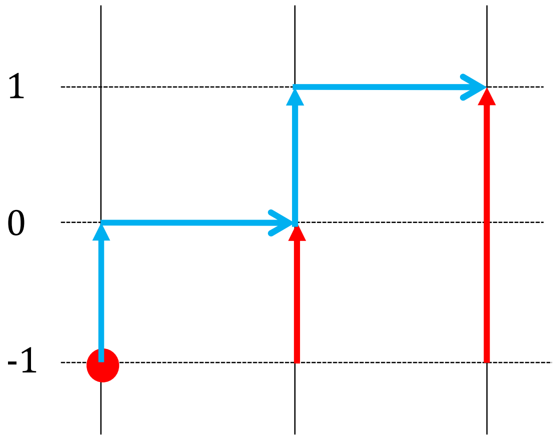
Graph von (-1.0 -1.1 -1.-1)

2.5. $o^{CP\rightarrow}$(-1.x, 0.y, 1.z) = (0.y, -1.x, 1.z)

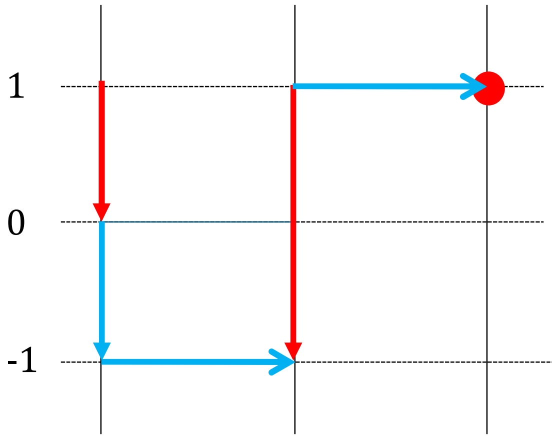
	0	-1	1
0	0.0	0.-1	0.1
-1	-1.0	-1.-1	-1.1
1	1.0	1.-1	1.1



Graph von (0.0 0.-1 0.1)



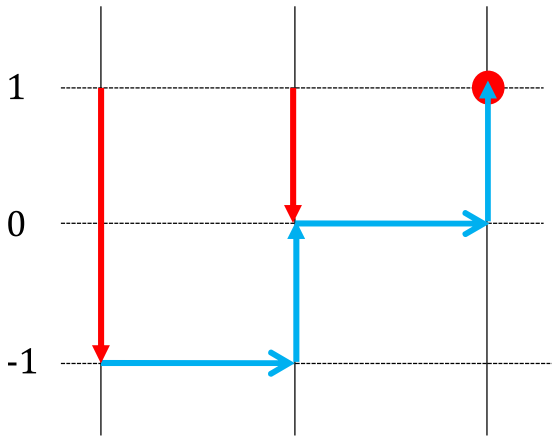
Graph von (-1.0 -1.-1 -1.1)



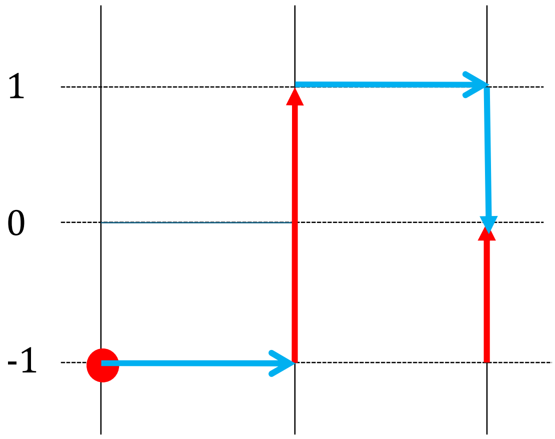
Graph von (1.0 1.-1 1.1)

2.6. $o^{CP\leftarrow}$(-1.x, 0.y, 1.z) = (z.1, x.-1, y.0)

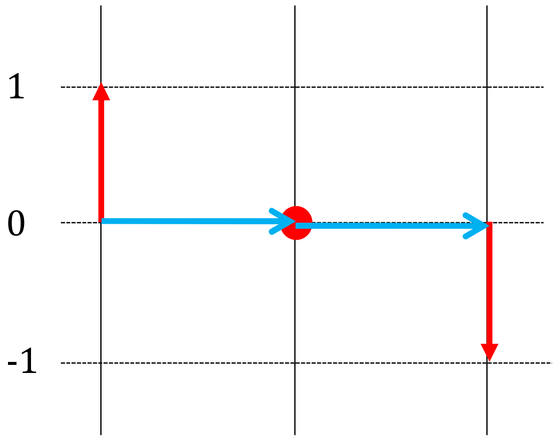
	1	-1	0
1	1.1	1.-1	1.0
-1	-1.1	-1.-1	-1.0
0	0.1	0.-1	0.0



Graph von (1.1 1.-1 1.0)



Graph von (-1.1 -1.-1 -1.0)



Graph von (0.1 0.-1 0.0)

Literatur

Toth, Alfred, Quadralektische Zahlenfelder. In: Electronic Journal for Mathematical Semiotics, 2025a

Toth, Alfred, Pfadverbindungen von possessiv-copossessiven Zahlen. In: Electronic Journal for Mathematical Semiotics, 2025b

28.2.2025