

Prof. Dr. Alfred Toth

Dyadic-tetravalent semiotic functions

1. Triadic-trichotomic semiotic functions have been extensively studied in Toth (2008a), especially in Chapter 2 (pp. 148-178). In the present article I want to give their corresponding dyadic-tetravalent functions, in connection to the investigation of subject- and object distribution in those functions (Toth 2011), since they will play a crucial role after mathematical semiotics will finally have become a part of computer science. Different from a previous study (2009b), I will start here from a contextuated sign model for 4 contextures, i.e. not from a semiotic, but from a pre-semiotic sign relation, in order to maintain the framework elaborated in Toth (2008a). Therefore, we have semiotic functions with 3 or 2 variables, which can lie in 4 contextures:

$$\left. \begin{array}{l}
 \text{Maximal variable scheme: } w = f(x_{i,j,k}, y_{i,j,k}, z_{i,j,k}) \\
 \text{Minimal variable scheme: } w = f(x_{i,j,k}, y_{i,j,k}) \\
 \\
 \text{Maximal contextural scheme: } w = f(x_{i,j,k}, y_{i,j,k}, z_{i,j,k}) \\
 \text{Minimal contextural scheme: } w = f(x_{i,j}, y_{i,j})
 \end{array} \right\} i, j, k \in \{1, 2, 3, 4\}$$

Functions with $w = (oS_{1,3})$

1. $(oS_{1,3}) = f(sO_{1,3,4}, oO_{1,4})$
2. $(oS_{1,3}) = f(sO_{1,3,4}, oO_{1,4}, sS_{3,4})$
3. $(oS_{1,3}) = f(sO_{1,3,4}, sS_{3,4})$
4. $(oS_{1,3}) = f(sO_{1,3,4}, sS_{3,4}, oO_{1,4})$
5. $(oS_{1,3}) = f(oO_{1,4}, sO_{1,3,4})$
6. $(oS_{1,3}) = f(oO_{1,4}, sO_{1,3,4}, sS_{3,4})$
7. $(oS_{1,3}) = f(oO_{1,4}, sS_{3,4})$
8. $(oS_{1,3}) = f(oO_{1,4}, sS_{3,4}, sO_{1,3,4})$
9. $(oS_{1,3}) = f(sS_{3,4}, sO_{1,3,4})$
10. $(oS_{1,3}) = f(sS_{3,4}, sO_{1,3,4}, oO_{1,4})$
11. $(oS_{1,3}) = f(sS_{3,4}, oO_{1,4})$
12. $(oS_{1,3}) = f(sS_{3,4}, oO_{1,4}, sO_{1,3,4})$

Functions with $w = (oS_{1,2})$

1. $(oS_{1,2}) = f(sO_{1,3,4}, oO_{1,4})$

2. $(oS_{1,2}) = f(sO_{1,3,4}, oO_{1,4}, sS_{3,4})$
3. $(oS_{1,2}) = f(sO_{1,3,4}, sS_{3,4})$
4. $(oS_{1,2}) = f(sO_{1,3,4}, sS_{3,4}, oO_{1,4})$
5. $(oS_{1,2}) = f(sO_{1,4}, oO_{1,4}, sS_{3,4})$
6. $(oS_{1,2}) = f(sO_{1,4}, oO_{1,2,4})$
7. $(oS_{1,2}) = f(sO_{1,4}, oO_{1,2,4}, sS_{3,4})$
8. $(oS_{1,2}) = f(sO_{1,4}, oO_{1,2,4}, sS_{2,4})$
9. $(oS_{1,2}) = f(sO_{1,4}, sS_{3,4})$
10. $(oS_{1,2}) = f(sO_{1,4}, sS_{3,4}, oO_{1,4})$
11. $(oS_{1,2}) = f(sO_{1,4}, sS_{3,4}, oO_{1,2,4})$
12. $(oS_{1,2}) = f(sO_{1,4}, sS_{2,4})$
13. $(oS_{1,2}) = f(sO_{1,4}, sS_{2,4}, oO_{1,2,4})$
14. $(oS_{1,2}) = f(oO_{1,4}, sO_{1,3,4})$
15. $(oS_{1,2}) = f(oO_{1,4}, sO_{1,3,4}, sS_{3,4})$
16. $(oS_{1,2}) = f(oO_{1,4}, sO_{1,4})$
17. $(oS_{1,2}) = f(oO_{1,4}, sO_{1,4}, sS_{3,4})$
18. $(oS_{1,2}) = f(oO_{1,4}, sS_{3,4})$
19. $(oS_{1,2}) = f(oO_{1,4}, sS_{3,4}, sO_{1,3,4})$
20. $(oS_{1,2}) = f(oO_{1,4}, sS_{3,4}, sO_{1,4})$
21. $(oS_{1,2}) = f(oO_{1,2,4}, sO_{1,4})$
22. $(oS_{1,2}) = f(oO_{1,2,4}, sO_{1,4}, sS_{3,4})$
23. $(oS_{1,2}) = f(oO_{1,2,4}, sO_{1,4}, sS_{2,4})$
24. $(oS_{1,2}) = f(oO_{1,2,4}, sS_{3,4})$
25. $(oS_{1,2}) = f(oO_{1,2,4}, sS_{3,4}, sO_{1,4})$
26. $(oS_{1,2}) = f(oO_{1,2,4}, sS_{2,4})$
27. $(oS_{1,2}) = f(oO_{1,2,4}, sS_{2,4}, sO_{1,4})$
28. $(oS_{1,2}) = f(sS_{3,4}, sO_{1,3,4})$
29. $(oS_{1,2}) = f(sS_{3,4}, sO_{1,3,4}, oO_{1,4})$
30. $(oS_{1,2}) = f(sS_{3,4}, sO_{1,4})$
31. $(oS_{1,2}) = f(sS_{3,4}, sO_{1,4}, oO_{1,4})$
32. $(oS_{1,2}) = f(sS_{3,4}, sO_{1,4}, oO_{1,2,4})$
33. $(oS_{1,2}) = f(sS_{3,4}, oO_{1,4})$
34. $(oS_{1,2}) = f(sS_{3,4}, oO_{1,4}, sO_{1,3,4})$
35. $(oS_{1,2}) = f(sS_{3,4}, oO_{1,4}, sO_{1,4})$
36. $(oS_{1,2}) = f(sS_{3,4}, oO_{1,2,4})$
37. $(oS_{1,2}) = f(sS_{3,4}, oO_{1,2,4}, sO_{1,4})$
38. $(oS_{1,2}) = f(sS_{2,4}, sO_{1,4})$
39. $(oS_{1,2}) = f(sS_{2,4}, sO_{1,4}, oO_{1,2,4})$
40. $(oS_{1,2}) = f(sS_{2,4}, oO_{1,2,4})$
41. $(oS_{1,2}) = f(sS_{2,4}, oO_{1,2,4}, sO_{1,4})$

Functions with $w = (oS_{2,3})$

1. $(oS_{2,3}) = f(sO_{1,3,4}, oO_{1,4})$
2. $(oS_{2,3}) = f(sO_{1,3,4}, oO_{1,4}, sS_{3,4})$
3. $(oS_{2,3}) = f(sO_{1,3,4}, sS_{3,4})$
4. $(oS_{2,3}) = f(sO_{1,3,4}, sS_{3,4}, oO_{1,4})$
5. $(oS_{2,3}) = f(sO_{1,4}, oO_{1,4})$
6. $(oS_{2,3}) = f(sO_{1,4}, oO_{1,4}, sS_{3,4})$
7. $(oS_{2,3}) = f(sO_{1,4}, oO_{1,2,4})$
8. $(oS_{2,3}) = f(sO_{1,4}, oO_{1,2,4}, sS_{3,4})$
9. $(oS_{2,3}) = f(sO_{1,4}, oO_{1,2,4}, sS_{2,4})$
10. $(oS_{2,3}) = f(sO_{1,4}, sS_{3,4})$
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13. $(oS_{2,3}) = f(sO_{1,4}, sS_{2,4})$
14. $(oS_{2,3}) = f(sO_{1,4}, sS_{2,4}, oO_{1,2,4})$
15. $(oS_{2,3}) = f(sO_{3,4}, oO_{1,4})$
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20. $(oS_{2,3}) = f(sO_{3,4}, oO_{2,4})$
21. $(oS_{2,3}) = f(sO_{3,4}, oO_{2,4}, sS_{3,4})$
22. $(oS_{2,3}) = f(sO_{3,4}, oO_{2,4}, sS_{2,4})$
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24. $(oS_{2,3}) = f(sO_{3,4}, sS_{3,4})$
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31. $(oS_{2,3}) = f(sO_{3,4}, sS_{2,3,4})$
32. $(oS_{2,3}) = f(sO_{3,4}, sS_{2,3,4}, oO_{2,4})$
33. $(oS_{2,3}) = f(oO_{1,4}, sO_{1,3,4})$
34. $(oS_{2,3}) = f(oO_{1,4}, sO_{1,3,4}, sS_{3,4})$
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43. $(oS_{2,3}) = f(oO_{1,2,4}, sO_{1,4}, sS_{3,4})$
44. $(oS_{2,3}) = f(oO_{1,2,4}, sO_{1,4}, sS_{2,4})$
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58. $(oS_{2,3}) = f(oO_{2,4}, sS_{3,4})$
59. $(oS_{2,3}) = f(oO_{2,4}, sS_{3,4}, sO_{3,4})$
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63. $(oS_{2,3}) = f(sS_{3,4}, sO_{1,3,4})$
64. $(oS_{2,3}) = f(sS_{3,4}, sO_{1,3,4}, oO_{1,4})$
65. $(oS_{2,3}) = f(sS_{3,4}, sO_{1,4})$
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71. $(oS_{2,3}) = f(sS_{3,4}, sO_{3,4}, oO_{2,4})$
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74. $(oS_{2,3}) = f(sS_{3,4}, oO_{1,4}, sO_{1,4})$
75. $(oS_{2,3}) = f(sS_{3,4}, oO_{1,4}, sO_{3,4})$
76. $(oS_{2,3}) = f(sS_{3,4}, oO_{1,2,4})$
77. $(oS_{2,3}) = f(sS_{3,4}, oO_{1,2,4}, sO_{1,4})$
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79. $(oS_{2,3}) = f(sS_{3,4}, oO_{2,4})$
80. $(oS_{2,3}) = f(sS_{3,4}, oO_{2,4}, sO_{3,4})$

81. $(oS_{2,3}) = f(sS_{2,4}, sO_{1,4})$
82. $(oS_{2,3}) = f(sS_{2,4}, sO_{1,4}, oO_{1,2,4})$
83. $(oS_{2,3}) = f(sS_{2,4}, sO_{3,4})$
84. $(oS_{2,3}) = f(sS_{2,4}, sO_{3,4}, oO_{1,2,4})$
85. $(oS_{2,3}) = f(sS_{2,4}, sO_{3,4}, oO_{2,4})$
86. $(oS_{2,3}) = f(sS_{2,4}, oO_{1,2,4})$
87. $(oS_{2,3}) = f(sS_{2,4}, oO_{1,2,4}, sO_{1,4})$
88. $(oS_{2,3}) = f(sS_{2,4}, oO_{1,2,4}, sO_{3,4})$
89. $(oS_{2,3}) = f(sS_{2,4}, oO_{2,4})$
90. $(oS_{2,3}) = f(sS_{2,4}, oO_{2,4}, sO_{3,4})$
91. $(oS_{2,3}) = f(sS_{2,3,4}, sO_{3,4}, oO_{2,4})$
92. $(oS_{2,3}) = f(sS_{2,3,4}, oO_{2,4}, sO_{3,4})$

Functions with $w = (sO_{1,3})$

1. $(sO_{1,3}) = f(sO_{1,3,4}, sO_{1,4})$
2. $(sO_{1,3}) = f(sO_{1,3,4}, sO_{1,4}, sO_{3,4})$
3. $(sO_{1,3}) = f(sO_{1,3,4}, sO_{3,4})$
4. $(sO_{1,3}) = f(sO_{1,3,4}, sO_{3,4}, sO_{1,4})$
5. $(sO_{1,3}) = f(sO_{1,4}, sO_{1,3,4})$
6. $(sO_{1,3}) = f(sO_{1,4}, sO_{1,3,4}, sO_{3,4})$
7. $(sO_{1,3}) = f(sO_{1,4}, sO_{3,4})$
8. $(sO_{1,3}) = f(sO_{1,4}, sO_{3,4}, sO_{1,3,4})$
9. $(sO_{1,3}) = f(sO_{3,4}, sO_{1,3,4})$
10. $(sO_{1,3}) = f(sO_{3,4}, sO_{1,3,4}, sO_{1,4})$
11. $(sO_{1,3}) = f(sO_{3,4}, sO_{1,4})$
12. $(sO_{1,3}) = f(sO_{3,4}, sO_{1,4}, sO_{1,3,4})$

Functions with $w = (sO_{1,3,4})$

1. $(sO_{1,3,4}) = f(oS_{1,3}, oO_{1,4})$
2. $(sO_{1,3,4}) = f(oS_{1,3}, oO_{1,4}, sS_{3,4})$
3. $(sO_{1,3,4}) = f(oS_{1,3}, sS_{3,4})$
4. $(sO_{1,3,4}) = f(oS_{1,3}, sS_{3,4}, oO_{1,4})$
5. $(sO_{1,3,4}) = f(oS_{1,2}, oO_{1,4})$
6. $(sO_{1,3,4}) = f(oS_{1,2}, oO_{1,4}, sS_{3,4})$
7. $(sO_{1,3,4}) = f(oS_{1,2}, sS_{3,4})$
8. $(sO_{1,3,4}) = f(oS_{1,2}, sS_{3,4}, oO_{1,4})$
9. $(sO_{1,3,4}) = f(oS_{2,3}, oO_{1,4})$
10. $(sO_{1,3,4}) = f(oS_{2,3}, oO_{1,4}, sS_{3,4})$
11. $(sO_{1,3,4}) = f(oS_{2,3}, sS_{3,4})$

12. $(sO_{1,3,4}) = f(oS_{2,3}, sS_{3,4}, oO_{1,4})$
13. $(sO_{1,3,4}) = f(sO_{1,3}, sO_{1,4})$
14. $(sO_{1,3,4}) = f(sO_{1,3}, sO_{1,4}, sO_{3,4})$
15. $(sO_{1,3,4}) = f(sO_{1,3}, sO_{3,4})$
16. $(sO_{1,3,4}) = f(sO_{1,3}, sO_{3,4}, sO_{1,4})$
17. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{1,3})$
18. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{1,3}, sO_{3,4})$
19. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{3,4})$
20. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{3,4}, sO_{1,3})$
21. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{3,4}, oO_{1,2})$
22. $(sO_{1,3,4}) = f(sO_{1,4}, sO_{3,4}, sS_{2,3})$
23. $(sO_{1,3,4}) = f(sO_{1,4}, oO_{1,2})$
24. $(sO_{1,3,4}) = f(sO_{1,4}, oO_{1,2}, sO_{3,4})$
25. $(sO_{1,3,4}) = f(sO_{1,4}, sS_{2,3})$
26. $(sO_{1,3,4}) = f(sO_{1,4}, sS_{2,3}, sO_{3,4})$
27. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,3})$
28. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,3}, sO_{1,4})$
29. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,4})$
30. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,4}, sO_{1,3})$
31. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,4}, oO_{1,2})$
32. $(sO_{1,3,4}) = f(sO_{3,4}, sO_{1,4}, sS_{2,3})$
33. $(sO_{1,3,4}) = f(sO_{3,4}, oO_{1,2})$
34. $(sO_{1,3,4}) = f(sO_{3,4}, oO_{1,2}, sO_{1,4})$
35. $(sO_{1,3,4}) = f(sO_{3,4}, sS_{2,3})$
36. $(sO_{1,3,4}) = f(sO_{3,4}, sS_{2,3}, sO_{1,4})$
37. $(sO_{1,3,4}) = f(oO_{1,2}, sO_{1,4})$
38. $(sO_{1,3,4}) = f(oO_{1,2}, sO_{1,4}, sO_{3,4})$
39. $(sO_{1,3,4}) = f(oO_{1,2}, sO_{3,4})$
40. $(sO_{1,3,4}) = f(oO_{1,2}, sO_{3,4}, sO_{1,4})$
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45. $(sO_{1,3,4}) = f(oO_{1,4}, oS_{2,3})$
46. $(sO_{1,3,4}) = f(oO_{1,4}, oS_{2,3}, sS_{3,4})$
47. $(sO_{1,3,4}) = f(oO_{1,4}, sS_{3,4})$
48. $(sO_{1,3,4}) = f(oO_{1,4}, sS_{3,4}, oS_{1,3})$
49. $(sO_{1,3,4}) = f(oO_{1,4}, sS_{3,4}, oS_{1,2})$
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51. $(sO_{1,3,4}) = f(sS_{2,3}, sO_{1,4})$
52. $(sO_{1,3,4}) = f(sS_{2,3}, sO_{1,4}, sO_{3,4})$

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63. $(sO_{1,3,4}) = f(sS_{3,4}, oO_{1,4}, oS_{1,2})$
64. $(sO_{1,3,4}) = f(sS_{3,4}, oO_{1,4}, oS_{2,3})$

Functions with $w = (sO_{1,4})$

1. $(sO_{1,4}) = f(oS_{1,2}, oO_{1,4})$
2. $(sO_{1,4}) = f(oS_{1,2}, oO_{1,4}, sS_{3,4})$
3. $(sO_{1,4}) = f(oS_{1,2}, oO_{1,2,4})$
4. $(sO_{1,4}) = f(oS_{1,2}, oO_{1,2,4}, sS_{3,4})$
5. $(sO_{1,4}) = f(oS_{1,2}, oO_{1,2,4}, sS_{2,4})$
6. $(sO_{1,4}) = f(oS_{1,2}, sS_{3,4})$
7. $(sO_{1,4}) = f(oS_{1,2}, sS_{3,4}, oO_{1,4})$
8. $(sO_{1,4}) = f(oS_{1,2}, sS_{3,4}, oO_{1,2,4})$
9. $(sO_{1,4}) = f(oS_{1,2}, sS_{2,4})$
10. $(sO_{1,4}) = f(oS_{1,2}, sS_{2,4}, oO_{1,2,4})$
11. $(sO_{1,4}) = f(oS_{2,3}, oO_{1,4})$
12. $(sO_{1,4}) = f(oS_{2,3}, oO_{1,4}, sS_{3,4})$
13. $(sO_{1,4}) = f(oS_{2,3}, oO_{1,2,4})$
14. $(sO_{1,4}) = f(oS_{2,3}, oO_{1,2,4}, sS_{3,4})$
15. $(sO_{1,4}) = f(oS_{2,3}, oO_{1,2,4}, sS_{2,4})$
16. $(sO_{1,4}) = f(oS_{2,3}, sS_{3,4})$
17. $(sO_{1,4}) = f(oS_{2,3}, sS_{3,4}, oO_{1,4})$
18. $(sO_{1,4}) = f(oS_{2,3}, sS_{3,4}, oO_{1,2,4})$
19. $(sO_{1,4}) = f(oS_{2,3}, sS_{2,4})$
20. $(sO_{1,4}) = f(oS_{2,3}, sS_{2,4}, oO_{1,2,4})$
21. $(sO_{1,4}) = f(sO_{1,3}, sO_{1,3,4})$
22. $(sO_{1,4}) = f(sO_{1,3}, sO_{1,3,4}, sO_{3,4})$
23. $(sO_{1,4}) = f(sO_{1,3}, sO_{3,4})$
24. $(sO_{1,4}) = f(sO_{1,3}, sO_{3,4}, sO_{1,3,4})$
25. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{1,3})$
26. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{1,3}, sO_{3,4})$

27. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{3,4})$
28. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{3,4}, sO_{1,3})$
29. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{3,4}, oO_{1,2})$
30. $(sO_{1,4}) = f(sO_{1,3,4}, sO_{3,4}, sS_{2,3})$
31. $(sO_{1,4}) = f(sO_{1,3,4}, oO_{1,2})$
32. $(sO_{1,4}) = f(sO_{1,3,4}, oO_{1,2}, sO_{3,4})$
33. $(sO_{1,4}) = f(sO_{1,3,4}, sS_{2,3})$
34. $(sO_{1,4}) = f(sO_{1,3,4}, sS_{2,3}, sO_{3,4})$
35. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3})$
36. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3}, sO_{1,3,4})$
37. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3,4})$
38. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3,4}, sO_{1,3})$
39. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3,4}, oO_{1,2})$
40. $(sO_{1,4}) = f(sO_{3,4}, sO_{1,3,4}, sS_{2,3})$
41. $(sO_{1,4}) = f(sO_{3,4}, oO_{1,2})$
42. $(sO_{1,4}) = f(sO_{3,4}, oO_{1,2}, sO_{1,3,4})$
43. $(sO_{1,4}) = f(sO_{3,4}, oO_{1,4})$
44. $(sO_{1,4}) = f(sO_{3,4}, oO_{1,4}, oO_{1,2})$
45. $(sO_{1,4}) = f(sO_{3,4}, sS_{2,3})$
46. $(sO_{1,4}) = f(sO_{3,4}, sS_{2,3}, sO_{1,3,4})$
47. $(sO_{1,4}) = f(sO_{3,4}, sS_{2,3}, oO_{1,4})$
48. $(sO_{1,4}) = f(sO_{3,4}, sS_{2,3}, sS_{3,4})$
49. $(sO_{1,4}) = f(sO_{3,4}, sS_{3,4})$
50. $(sO_{1,4}) = f(sO_{3,4}, sS_{3,4}, sS_{2,3})$
51. $(sO_{1,4}) = f(oO_{1,2}, sO_{1,3,4})$
52. $(sO_{1,4}) = f(oO_{1,2}, sO_{3,4}, oO_{1,4})$
53. $(sO_{1,4}) = f(oO_{1,2}, sO_{3,4})$
54. $(sO_{1,4}) = f(oO_{1,2}, sO_{3,4}, sO_{1,3,4})$
55. $(sO_{1,4}) = f(oO_{1,2}, oO_{1,4})$
56. $(sO_{1,4}) = f(oO_{1,2}, oO_{1,4}, sO_{3,4})$
57. $(sO_{1,4}) = f(oO_{1,4}, oS_{1,2})$
58. $(sO_{1,4}) = f(oO_{1,4}, oS_{1,2}, sS_{3,4})$
59. $(sO_{1,4}) = f(oO_{1,4}, oS_{2,3})$
60. $(sO_{1,4}) = f(oO_{1,4}, oS_{2,3}, sS_{3,4})$
61. $(sO_{1,4}) = f(oO_{1,4}, sO_{3,4})$
62. $(sO_{1,4}) = f(oO_{1,4}, sO_{3,4}, oO_{1,2})$
63. $(sO_{1,4}) = f(oO_{1,4}, sO_{3,4}, sS_{2,3})$
64. $(sO_{1,4}) = f(oO_{1,4}, oO_{1,2})$
65. $(sO_{1,4}) = f(oO_{1,4}, oO_{1,2}, sO_{3,4})$
66. $(sO_{1,4}) = f(oO_{1,4}, sS_{2,3})$
67. $(sO_{1,4}) = f(oO_{1,4}, sS_{2,3}, sO_{3,4})$

68. $(sO_{1,4}) = f(oO_{1,4}, sS_{3,4})$
69. $(sO_{1,4}) = f(oO_{1,4}, sS_{3,4}, oS_{1,2})$
70. $(sO_{1,4}) = f(oO_{1,4}, sS_{3,4}, oS_{2,3})$
71. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{1,2})$
72. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{1,2}, sS_{3,4})$
73. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{1,2}, sS_{2,4})$
74. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{2,3})$
75. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{2,3}, sS_{3,4})$
76. $(sO_{1,4}) = f(oO_{1,2,4}, oS_{2,3}, sS_{2,4})$
77. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{3,4})$
78. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{3,4}, oS_{1,2})$
79. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{3,4}, oS_{2,3})$
80. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{2,4})$
81. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{2,4}, oS_{1,2})$
82. $(sO_{1,4}) = f(oO_{1,2,4}, sS_{2,4}, oS_{2,3})$
83. $(sO_{1,4}) = f(sS_{2,3}, sO_{1,3,4})$
84. $(sO_{1,4}) = f(sS_{2,3}, sO_{1,3,4}, sO_{3,4})$
85. $(sO_{1,4}) = f(sS_{2,3}, sO_{3,4})$
86. $(sO_{1,4}) = f(sS_{2,3}, sO_{3,4}, sO_{1,3,4})$
87. $(sO_{1,4}) = f(sS_{2,3}, sO_{3,4}, oO_{1,4})$
88. $(sO_{1,4}) = f(sS_{2,3}, sO_{3,4}, sS_{3,4})$
89. $(sO_{1,4}) = f(sS_{2,3}, oO_{1,4})$
90. $(sO_{1,4}) = f(sS_{2,3}, oO_{1,4}, sO_{3,4})$
91. $(sO_{1,4}) = f(sS_{2,3}, sS_{3,4})$
92. $(sO_{1,4}) = f(sS_{2,3}, sS_{3,4}, sO_{3,4})$
93. $(sO_{1,4}) = f(sS_{3,4}, oS_{1,2})$
94. $(sO_{1,4}) = f(sS_{3,4}, oS_{1,2}, oO_{1,4})$
95. $(sO_{1,4}) = f(sS_{3,4}, oS_{1,2}, oO_{1,2,4})$
96. $(sO_{1,4}) = f(sS_{3,4}, oS_{2,3})$
97. $(sO_{1,4}) = f(sS_{3,4}, oS_{2,3}, oO_{1,4})$
98. $(sO_{1,4}) = f(sS_{3,4}, oS_{2,3}, oO_{1,2,4})$
99. $(sO_{1,4}) = f(sS_{3,4}, sO_{3,4})$
100. $(sO_{1,4}) = f(sS_{3,4}, sO_{3,4}, sS_{2,3})$
101. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,4})$
102. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,4}, oS_{1,2})$
103. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,4}, oS_{2,3})$
104. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,2,4})$
105. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,2,4}, oS_{1,2})$
106. $(sO_{1,4}) = f(sS_{3,4}, oO_{1,2,4}, oS_{2,3})$
107. $(sO_{1,4}) = f(sS_{3,4}, sS_{2,3})$
108. $(sO_{1,4}) = f(sS_{3,4}, sS_{2,3}, sO_{3,4})$

109. $(sO_{1,4}) = f(sS_{2,4}, oS_{1,2})$
110. $(sO_{1,4}) = f(sS_{2,4}, oS_{1,2}, oO_{1,2,4})$
111. $(sO_{1,4}) = f(sS_{2,4}, oS_{2,3})$
112. $(sO_{1,4}) = f(sS_{2,4}, oS_{2,3}, oO_{1,2,4})$
113. $(sO_{1,4}) = f(sS_{2,4}, oO_{1,2,4})$
114. $(sO_{1,4}) = f(sS_{2,4}, oO_{1,2,4}, oS_{1,2})$
115. $(sO_{1,4}) = f(sS_{2,4}, oO_{1,2,4}, oS_{2,3})$

Functions with $w = (sO_{3,4})$

1. $(sO_{3,4}) = f(oS_{2,3}, oO_{1,4})$
2. $(sO_{3,4}) = f(oS_{2,3}, oO_{1,4}, sS_{3,4})$
3. $(sO_{3,4}) = f(oS_{2,3}, oO_{1,2,4})$
4. $(sO_{3,4}) = f(oS_{2,3}, oO_{1,2,4}, sS_{3,4})$
5. $(sO_{3,4}) = f(oS_{2,3}, oO_{1,2,4}, sS_{2,4})$
6. $(sO_{3,4}) = f(oS_{2,3}, oO_{2,4})$
7. $(sO_{3,4}) = f(oS_{2,3}, oO_{2,4}, sS_{3,4})$
8. $(sO_{3,4}) = f(oS_{2,3}, oO_{2,4}, sS_{2,4})$
9. $(sO_{3,4}) = f(oS_{2,3}, oO_{2,4}, sS_{2,3,4})$
10. $(sO_{3,4}) = f(oS_{2,3}, sS_{3,4})$
11. $(sO_{3,4}) = f(oS_{2,3}, sS_{3,4}, oO_{1,4})$
12. $(sO_{3,4}) = f(oS_{2,3}, sS_{3,4}, oO_{1,2,4})$
13. $(sO_{3,4}) = f(oS_{2,3}, sS_{3,4}, oO_{2,4})$
14. $(sO_{3,4}) = f(oS_{2,3}, sS_{2,4})$
15. $(sO_{3,4}) = f(oS_{2,3}, sS_{2,4}, oO_{1,2,4})$
16. $(sO_{3,4}) = f(oS_{2,3}, sS_{2,4}, oO_{2,4})$
17. $(sO_{3,4}) = f(oS_{2,3}, sS_{2,3,4})$
18. $(sO_{3,4}) = f(oS_{2,3}, sS_{2,3,4}, oO_{2,4})$
19. $(sO_{3,4}) = f(sO_{1,3}, sO_{1,3,4})$
20. $(sO_{3,4}) = f(sO_{1,3}, sO_{1,3,4}, sO_{1,4})$
21. $(sO_{3,4}) = f(sO_{1,3}, sO_{1,4})$
22. $(sO_{3,4}) = f(sO_{1,3}, sO_{1,4}, sO_{1,3,4})$
23. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,3})$
24. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,3}, sO_{1,4})$
25. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,4})$
26. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,4}, sO_{1,3})$
27. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,4}, oO_{1,2})$
28. $(sO_{3,4}) = f(sO_{1,3,4}, sO_{1,4}, sS_{2,3})$
29. $(sO_{3,4}) = f(sO_{1,3,4}, sS_{2,3})$
30. $(sO_{3,4}) = f(sO_{1,3,4}, sS_{2,3}, sO_{1,4})$
31. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3})$

32. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3}, sO_{1,3,4})$
33. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3,4})$
34. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3,4}, sO_{1,3})$
35. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3,4}, oO_{1,2})$
36. $(sO_{3,4}) = f(sO_{1,4}, sO_{1,3,4}, sS_{2,3})$
37. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,2})$
38. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,2}, sO_{1,3,4})$
39. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,2}, oO_{1,4})$
40. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,4})$
41. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,4}, oO_{1,2})$
42. $(sO_{3,4}) = f(sO_{1,4}, oO_{1,4}, sS_{2,3})$
43. $(sO_{3,4}) = f(sO_{1,4}, sS_{2,3})$
44. $(sO_{3,4}) = f(sO_{1,4}, sS_{2,3}, sO_{1,3,4})$
45. $(sO_{3,4}) = f(sO_{1,4}, sS_{2,3}, oO_{1,4})$
46. $(sO_{3,4}) = f(sO_{1,4}, sS_{2,3}, sS_{3,4})$
47. $(sO_{3,4}) = f(sO_{1,4}, sS_{3,4})$
48. $(sO_{3,4}) = f(sO_{1,4}, sS_{3,4}, sS_{2,3})$
49. $(sO_{3,4}) = f(oO_{1,2}, sO_{1,3,4})$
50. $(sO_{3,4}) = f(oO_{1,2}, sO_{1,3,4}, sO_{1,4})$
51. $(sO_{3,4}) = f(oO_{1,2}, sO_{1,4})$
52. $(sO_{3,4}) = f(oO_{1,2}, sO_{1,4}, sO_{1,3,4})$
53. $(sO_{3,4}) = f(oO_{1,2}, sO_{1,4}, oO_{1,4})$
54. $(sO_{3,4}) = f(oO_{1,2}, oO_{1,4})$
55. $(sO_{3,4}) = f(oO_{1,2}, oO_{1,4}, sO_{1,4})$
56. $(sO_{3,4}) = f(oO_{1,2}, oO_{1,4}, oO_{1,2,4})$
57. $(sO_{3,4}) = f(oO_{1,2}, oO_{1,2,4})$
58. $(sO_{3,4}) = f(oO_{1,2}, oO_{1,2,4}, oO_{1,4})$
59. $(sO_{3,4}) = f(oO_{1,4}, oS_{2,3})$
60. $(sO_{3,4}) = f(oO_{1,4}, oS_{2,3}, sS_{3,4})$
61. $(sO_{3,4}) = f(oO_{1,4}, sO_{1,4})$
62. $(sO_{3,4}) = f(oO_{1,4}, sO_{1,4}, oO_{1,2})$
63. $(sO_{3,4}) = f(oO_{1,4}, sO_{1,4}, sS_{2,3})$
64. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2})$
65. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2}, sO_{1,4})$
66. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2}, oO_{1,2,4})$
67. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2,4})$
68. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2,4}, oO_{1,2})$
69. $(sO_{3,4}) = f(oO_{1,4}, oO_{1,2,4}, sS_{2,3})$
70. $(sO_{3,4}) = f(oO_{1,4}, sS_{2,3})$
71. $(sO_{3,4}) = f(oO_{1,4}, sS_{2,3}, sO_{1,4})$
72. $(sO_{3,4}) = f(oO_{1,4}, sS_{2,3}, oO_{1,2,4})$

73. $(sO_{3,4}) = f(oO_{1,4}, sS_{3,4})$
74. $(sO_{3,4}) = f(oO_{1,4}, sS_{3,4}, oS_{2,3})$
75. $(sO_{3,4}) = f(oO_{1,2,4}, oS_{2,3})$
76. $(sO_{3,4}) = f(oO_{1,2,4}, oS_{2,3}, sS_{3,4})$
77. $(sO_{3,4}) = f(oO_{1,2,4}, oS_{2,3}, sS_{2,4})$
78. $(sO_{3,4}) = f(oO_{1,2,4}, oO_{1,2})$
79. $(sO_{3,4}) = f(oO_{1,2,4}, oO_{1,2}, oO_{1,4})$
80. $(sO_{3,4}) = f(oO_{1,2,4}, oO_{1,4})$
81. $(sO_{3,4}) = f(oO_{1,2,4}, oO_{1,4}, oO_{1,2})$
82. $(sO_{3,4}) = f(oO_{1,2,4}, oO_{1,4}, sS_{2,3})$
83. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{2,3})$
84. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{2,3}, oO_{1,4})$
85. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{2,3}, sS_{3,4})$
86. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{3,4})$
87. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{3,4}, oS_{2,3})$
88. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{3,4}, sS_{2,3})$
89. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{2,4})$
90. $(sO_{3,4}) = f(oO_{1,2,4}, sS_{2,4}, oS_{2,3})$
91. $(sO_{3,4}) = f(oO_{2,4}, oS_{2,3})$
92. $(sO_{3,4}) = f(oO_{2,4}, oS_{2,3}, sS_{3,4})$
93. $(sO_{3,4}) = f(oO_{2,4}, oS_{2,3}, sS_{2,4})$
94. $(sO_{3,4}) = f(oO_{2,4}, oS_{2,3}, sS_{2,3,4})$
95. $(sO_{3,4}) = f(oO_{2,4}, sS_{3,4})$
96. $(sO_{3,4}) = f(oO_{2,4}, sS_{3,4}, oS_{2,3})$
97. $(sO_{3,4}) = f(oO_{2,4}, sS_{2,4})$
98. $(sO_{3,4}) = f(oO_{2,4}, sS_{2,4}, oS_{2,3})$
99. $(sO_{3,4}) = f(oO_{2,4}, sS_{2,3,4})$
100. $(sO_{3,4}) = f(oO_{2,4}, sS_{2,3,4}, oS_{2,3})$
101. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,3,4})$
102. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,3,4}, sO_{1,4})$
103. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,4})$
104. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,4}, sO_{1,3,4})$
105. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,4}, oO_{1,4})$
106. $(sO_{3,4}) = f(sS_{2,3}, sO_{1,4}, sS_{3,4})$
107. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,4})$
108. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,4}, sO_{1,4})$
109. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,4}, oO_{1,2,4})$
110. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,2,4})$
111. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,2,4}, oO_{1,4})$
112. $(sO_{3,4}) = f(sS_{2,3}, oO_{1,2,4}, sS_{3,4})$
113. $(sO_{3,4}) = f(sS_{2,3}, sS_{3,4})$

114. $(sO_{3,4}) = f(sS_{2,3}, sS_{3,4}, sO_{1,4})$
115. $(sO_{3,4}) = f(sS_{2,3}, sS_{3,4}, oO_{1,2,4})$
116. $(sO_{3,4}) = f(sS_{2,3}, sS_{3,4}, sS_{2,4})$
117. $(sO_{3,4}) = f(sS_{2,3}, sS_{2,4})$
118. $(sO_{3,4}) = f(sS_{2,3}, sS_{2,4}, sS_{3,4})$
119. $(sO_{3,4}) = f(sS_{3,4}, oS_{2,3})$
120. $(sO_{3,4}) = f(sS_{3,4}, oS_{2,3}, oO_{1,4})$
121. $(sO_{3,4}) = f(sS_{3,4}, oS_{2,3}, oO_{1,2,4})$
122. $(sO_{3,4}) = f(sS_{3,4}, oS_{2,3}, oO_{2,4})$
123. $(sO_{3,4}) = f(sS_{3,4}, sO_{1,4})$
124. $(sO_{3,4}) = f(sS_{3,4}, sO_{1,4}, sS_{2,3})$
125. $(sO_{3,4}) = f(sS_{3,4}, oO_{1,4})$
126. $(sO_{3,4}) = f(sS_{3,4}, oO_{1,4}, oS_{2,3})$
127. $(sO_{3,4}) = f(sS_{3,4}, oO_{1,2,4})$
128. $(sO_{3,4}) = f(sS_{3,4}, oO_{1,2,4}, oS_{2,3})$
129. $(sO_{3,4}) = f(sS_{3,4}, oO_{1,2,4}, sS_{2,3})$
130. $(sO_{3,4}) = f(sS_{3,4}, oO_{2,4})$
131. $(sO_{3,4}) = f(sS_{3,4}, oO_{2,4}, oS_{2,3})$
132. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,3})$
133. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,3}, sO_{1,4})$
134. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,3}, oO_{1,2,4})$
135. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,3}, sS_{2,4})$
136. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,4})$
137. $(sO_{3,4}) = f(sS_{3,4}, sS_{2,4}, sS_{2,3})$
138. $(sO_{3,4}) = f(sS_{2,4}, oS_{2,3})$
139. $(sO_{3,4}) = f(sS_{2,4}, oS_{2,3}, oO_{1,2,4})$
140. $(sO_{3,4}) = f(sS_{2,4}, oS_{2,3}, oO_{2,4})$
141. $(sO_{3,4}) = f(sS_{2,4}, oO_{1,2,4})$
142. $(sO_{3,4}) = f(sS_{2,4}, oO_{1,2,4}, oS_{2,3})$
143. $(sO_{3,4}) = f(sS_{2,4}, oO_{2,4})$
144. $(sO_{3,4}) = f(sS_{2,4}, oO_{2,4}, oS_{2,3})$
145. $(sO_{3,4}) = f(sS_{2,4}, sS_{2,3})$
146. $(sO_{3,4}) = f(sS_{2,4}, sS_{2,3}, sS_{3,4})$
147. $(sO_{3,4}) = f(sS_{2,4}, sS_{3,4})$
148. $(sO_{3,4}) = f(sS_{2,4}, sS_{3,4}, sS_{2,3})$
149. $(sO_{3,4}) = f(sS_{2,3,4}, oS_{2,3})$
150. $(sO_{3,4}) = f(sS_{2,3,4}, oS_{2,3}, oO_{2,4})$
151. $(sO_{3,4}) = f(sS_{2,3,4}, oO_{2,4})$
152. $(sO_{3,4}) = f(sS_{2,3,4}, oO_{2,4}, oS_{2,3})$

Functions with $w = (\text{oO}_{1,2})$

1. $(\text{oO}_{1,2}) = f(\text{sO}_{1,3,4}, \text{sO}_{1,4})$
2. $(\text{oO}_{1,2}) = f(\text{sO}_{1,3,4}, \text{sO}_{1,4}, \text{sO}_{3,4})$
3. $(\text{oO}_{1,2}) = f(\text{sO}_{1,3,4}, \text{sO}_{3,4})$
4. $(\text{oO}_{1,2}) = f(\text{sO}_{1,3,4}, \text{sO}_{3,4}, \text{sO}_{1,4})$
5. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{sO}_{1,3,4})$
6. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{sO}_{1,3,4}, \text{sO}_{3,4})$
7. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{sO}_{3,4})$
8. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{sO}_{3,4}, \text{sO}_{1,3,4})$
9. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{sO}_{3,4}, \text{oO}_{1,4})$
10. $(\text{oO}_{1,2}) = f(\text{sO}_{1,4}, \text{oO}_{1,4}, \text{sO}_{3,4})$
11. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{sO}_{1,3,4})$
12. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{sO}_{1,3,4}, \text{sO}_{1,4})$
13. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{sO}_{1,4})$
14. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{sO}_{1,4}, \text{sO}_{1,3,4})$
15. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{sO}_{1,4}, \text{oO}_{1,4})$
16. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{oO}_{1,4})$
17. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{oO}_{1,4}, \text{sO}_{1,4})$
18. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{oO}_{1,4}, \text{oO}_{1,2,4})$
19. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{oO}_{1,2,4})$
20. $(\text{oO}_{1,2}) = f(\text{sO}_{3,4}, \text{oO}_{1,2,4}, \text{oO}_{1,4})$
21. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{sO}_{1,4})$
22. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{sO}_{1,4}, \text{sO}_{3,4})$
23. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{sO}_{3,4})$
24. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{sO}_{3,4}, \text{sO}_{1,4})$
25. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{sO}_{3,4}, \text{oO}_{1,2,4})$
26. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{oO}_{1,2,4})$
27. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{oO}_{1,2,4}, \text{sO}_{3,4})$
28. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{oO}_{1,2,4}, \text{oO}_{2,4})$
29. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{oO}_{2,4})$
30. $(\text{oO}_{1,2}) = f(\text{oO}_{1,4}, \text{oO}_{2,4}, \text{oO}_{1,2,4})$
31. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{sO}_{3,4})$
32. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{sO}_{3,4}, \text{oO}_{1,4})$
33. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{oO}_{1,4})$
34. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{oO}_{1,4}, \text{sO}_{3,4})$
35. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{oO}_{1,4}, \text{oO}_{2,4})$
36. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{oO}_{2,4})$
37. $(\text{oO}_{1,2}) = f(\text{oO}_{1,2,4}, \text{oO}_{2,4}, \text{oO}_{1,4})$
38. $(\text{oO}_{1,2}) = f(\text{oO}_{2,4}, \text{oO}_{1,4})$
39. $(\text{oO}_{1,2}) = f(\text{oO}_{2,4}, \text{oO}_{1,4}, \text{oO}_{1,2,4})$

40. $(oO_{1,2}) = f(oO_{2,4}, oO_{1,2,4})$
 41. $(oO_{1,2}) = f(oO_{2,4}, oO_{1,2,4}, oO_{1,4})$

Functions with $w = (oO_{1,4})$

1. $(oO_{1,4}) = f(oS_{1,3}, sO_{1,3,4})$
2. $(oO_{1,4}) = f(oS_{1,3}, sO_{1,3,4}, sS_{3,4})$
3. $(oO_{1,4}) = f(oS_{1,2}, sO_{1,3,4})$
4. $(oO_{1,4}) = f(oS_{1,2}, sO_{1,3,4}, sS_{3,4})$
5. $(oO_{1,4}) = f(oS_{1,2}, sO_{1,4})$
6. $(oO_{1,4}) = f(oS_{1,2}, sO_{1,4}, sS_{3,4})$
7. $(oO_{1,4}) = f(oS_{1,2}, sS_{3,4})$
8. $(oO_{1,4}) = f(oS_{1,2}, sS_{3,4}, sO_{1,3,4})$
9. $(oO_{1,4}) = f(oS_{1,2}, sS_{3,4}, sO_{1,4})$
10. $(oO_{1,4}) = f(oS_{2,3}, sO_{1,3,4})$
11. $(oO_{1,4}) = f(oS_{2,3}, sO_{1,3,4}, sS_{3,4})$
12. $(oO_{1,4}) = f(oS_{2,3}, sO_{1,4})$
13. $(oO_{1,4}) = f(oS_{2,3}, sO_{1,4}, sS_{3,4})$
14. $(oO_{1,4}) = f(oS_{2,3}, sO_{3,4})$
15. $(oO_{1,4}) = f(oS_{2,3}, sO_{3,4}, sS_{3,4})$
16. $(oO_{1,4}) = f(oS_{2,3}, sS_{3,4})$
17. $(oO_{1,4}) = f(oS_{2,3}, sS_{3,4}, sO_{1,3,4})$
18. $(oO_{1,4}) = f(oS_{2,3}, sS_{3,4}, sO_{1,4})$
19. $(oO_{1,4}) = f(oS_{2,3}, sS_{3,4}, sO_{3,4})$
20. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{1,3})$
21. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{1,3}, sS_{3,4})$
22. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{1,2})$
23. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{1,2}, sS_{3,4})$
24. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{2,3})$
25. $(oO_{1,4}) = f(sO_{1,3,4}, oS_{2,3}, sS_{3,4})$
26. $(oO_{1,4}) = f(sO_{1,3,4}, sS_{3,4})$
27. $(oO_{1,4}) = f(sO_{1,3,4}, sS_{3,4}, oS_{1,3})$
28. $(oO_{1,4}) = f(sO_{1,3,4}, sS_{3,4}, oS_{1,2})$
29. $(oO_{1,4}) = f(sO_{1,3,4}, sS_{3,4}, oS_{2,3})$
30. $(oO_{1,4}) = f(sO_{1,4}, oS_{1,2})$
31. $(oO_{1,4}) = f(sO_{1,4}, oS_{1,2}, sS_{3,4})$
32. $(oO_{1,4}) = f(sO_{1,4}, oS_{2,3})$
33. $(oO_{1,4}) = f(sO_{1,4}, oS_{2,3}, sS_{3,4})$
34. $(oO_{1,4}) = f(sO_{1,4}, sO_{3,4}, sS_{2,3})$
35. $(oO_{1,4}) = f(sO_{1,4}, sO_{3,4})$
36. $(oO_{1,4}) = f(sO_{1,4}, sO_{3,4}, oO_{1,2})$

37. $(oO_{1,4}) = f(sO_{1,4}, oO_{1,2})$
38. $(oO_{1,4}) = f(sO_{1,4}, oO_{1,2}, sO_{3,4})$
39. $(oO_{1,4}) = f(sO_{1,4}, sS_{2,3})$
40. $(oO_{1,4}) = f(sO_{1,4}, sS_{2,3}, sO_{3,4})$
41. $(oO_{1,4}) = f(sO_{1,4}, sS_{3,4})$
42. $(oO_{1,4}) = f(sO_{1,4}, sS_{3,4}, oS_{1,2})$
43. $(oO_{1,4}) = f(sO_{1,4}, sS_{3,4}, oS_{2,3})$
44. $(oO_{1,4}) = f(sO_{3,4}, oS_{2,3})$
45. $(oO_{1,4}) = f(sO_{3,4}, oS_{2,3}, sS_{3,4})$
46. $(oO_{1,4}) = f(sO_{3,4}, sO_{1,4})$
47. $(oO_{1,4}) = f(sO_{3,4}, sO_{1,4}, oO_{1,2})$
48. $(oO_{1,4}) = f(sO_{3,4}, sO_{1,4}, sS_{2,3})$
49. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2})$
50. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2}, sO_{1,4})$
51. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2}, oO_{1,2,4})$
52. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2,4})$
53. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2,4}, oO_{1,2})$
54. $(oO_{1,4}) = f(sO_{3,4}, oO_{1,2,4}, sS_{2,3})$
55. $(oO_{1,4}) = f(sO_{3,4}, sS_{2,3})$
56. $(oO_{1,4}) = f(sO_{3,4}, sS_{2,3}, sO_{1,4})$
57. $(oO_{1,4}) = f(sO_{3,4}, sS_{2,3}, oO_{1,2,4})$
58. $(oO_{1,4}) = f(sO_{3,4}, sS_{3,4})$
59. $(oO_{1,4}) = f(sO_{3,4}, sS_{3,4}, oS_{2,3})$
60. $(oO_{1,4}) = f(oO_{1,2}, sO_{1,4})$
61. $(oO_{1,4}) = f(oO_{1,2}, sO_{1,4}, sO_{3,4})$
62. $(oO_{1,4}) = f(oO_{1,2}, sO_{3,4})$
63. $(oO_{1,4}) = f(oO_{1,2}, sO_{3,4}, sO_{1,4})$
64. $(oO_{1,4}) = f(oO_{1,2}, sO_{3,4}, oO_{1,2,4})$
65. $(oO_{1,4}) = f(oO_{1,2}, oO_{1,2,4})$
66. $(oO_{1,4}) = f(oO_{1,2}, oO_{1,2,4}, sO_{3,4})$
67. $(oO_{1,4}) = f(oO_{1,2}, oO_{1,2,4}, oO_{2,4})$
68. $(oO_{1,4}) = f(oO_{1,2}, oO_{2,4})$
69. $(oO_{1,4}) = f(oO_{1,2}, oO_{2,4}, oO_{1,2,4})$
70. $(oO_{1,4}) = f(oO_{1,2,4}, sO_{3,4})$
71. $(oO_{1,4}) = f(oO_{1,2,4}, sO_{3,4}, oO_{1,2})$
72. $(oO_{1,4}) = f(oO_{1,2,4}, sO_{3,4}, sS_{2,3})$
73. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{1,2})$
74. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{1,2}, sO_{3,4})$
75. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{1,2}, oO_{2,4})$
76. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{2,4})$
77. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{2,4}, oO_{1,2})$

78. $(oO_{1,4}) = f(oO_{1,2,4}, oO_{2,4}, sS_{2,3})$
79. $(oO_{1,4}) = f(oO_{1,2,4}, sS_{2,3})$
80. $(oO_{1,4}) = f(oO_{1,2,4}, sS_{2,3}, sO_{3,4})$
81. $(oO_{1,4}) = f(oO_{1,2,4}, sS_{2,3}, oO_{2,4})$
82. $(oO_{1,4}) = f(oO_{2,4}, oO_{1,2})$
83. $(oO_{1,4}) = f(oO_{2,4}, oO_{1,2}, oO_{1,2,4})$
84. $(oO_{1,4}) = f(oO_{2,4}, oO_{1,2,4})$
85. $(oO_{1,4}) = f(oO_{2,4}, oO_{1,2,4}, oO_{1,2})$
86. $(oO_{1,4}) = f(oO_{2,4}, oO_{1,2,4}, sS_{2,3})$
87. $(oO_{1,4}) = f(oO_{2,4}, sS_{2,3})$
88. $(oO_{1,4}) = f(oO_{2,4}, sS_{2,3}, oO_{1,2,4})$
89. $(oO_{1,4}) = f(sS_{2,3}, sO_{1,4})$
90. $(oO_{1,4}) = f(sS_{2,3}, sO_{1,4}, sO_{3,4})$
91. $(oO_{1,4}) = f(sS_{2,3}, sO_{3,4})$
92. $(oO_{1,4}) = f(sS_{2,3}, sO_{3,4}, sO_{1,4})$
93. $(oO_{1,4}) = f(sS_{2,3}, sO_{3,4}, oO_{1,2,4})$
94. $(oO_{1,4}) = f(sS_{2,3}, oO_{1,2,4})$
95. $(oO_{1,4}) = f(sS_{2,3}, oO_{1,2,4}, sO_{3,4})$
96. $(oO_{1,4}) = f(sS_{2,3}, oO_{1,2,4}, oO_{2,4})$
97. $(oO_{1,4}) = f(sS_{2,3}, oO_{2,4})$
98. $(oO_{1,4}) = f(sS_{2,3}, oO_{2,4}, oO_{1,2,4})$
99. $(oO_{1,4}) = f(sS_{3,4}, oS_{1,3})$
100. $(oO_{1,4}) = f(sS_{3,4}, oS_{1,3}, sO_{1,3,4})$
101. $(oO_{1,4}) = f(sS_{3,4}, oS_{1,2})$
102. $(oO_{1,4}) = f(sS_{3,4}, oS_{1,2}, sO_{1,3,4})$
103. $(oO_{1,4}) = f(sS_{3,4}, oS_{1,2}, sO_{1,4})$
104. $(oO_{1,4}) = f(sS_{3,4}, oS_{2,3})$
105. $(oO_{1,4}) = f(sS_{3,4}, oS_{2,3}, sO_{1,3,4})$
106. $(oO_{1,4}) = f(sS_{3,4}, oS_{2,3}, sO_{1,4})$
107. $(oO_{1,4}) = f(sS_{3,4}, oS_{2,3}, sO_{3,4})$
108. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,3,4})$
109. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,3,4}, oS_{1,3})$
110. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,3,4}, oS_{1,2})$
111. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,3,4}, oS_{2,3})$
112. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,4})$
113. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,4}, oS_{1,2})$
114. $(oO_{1,4}) = f(sS_{3,4}, sO_{1,4}, oS_{2,3})$
115. $(oO_{1,4}) = f(sS_{3,4}, sO_{3,4})$
116. $(oO_{1,4}) = f(sS_{3,4}, sO_{3,4}, oS_{2,3})$

Functions with $w = (\mathbf{oO}_{1,2,4})$

1. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sO}_{1,4})$
2. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sO}_{1,4}, \mathbf{sS}_{3,4})$
3. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sO}_{1,4}, \mathbf{sS}_{2,4})$
4. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sS}_{3,4})$
5. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sS}_{3,4}, \mathbf{sO}_{1,4})$
6. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sS}_{2,4})$
7. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{1,2}, \mathbf{sS}_{2,4}, \mathbf{sO}_{1,4})$
8. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{1,4})$
9. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{1,4}, \mathbf{sS}_{3,4})$
10. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{1,4}, \mathbf{sS}_{2,4})$
11. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{3,4})$
12. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{3,4}, \mathbf{sS}_{3,4})$
13. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sO}_{3,4}, \mathbf{sS}_{2,4})$
14. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{3,4})$
15. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{3,4}, \mathbf{sO}_{1,4})$
16. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{3,4}, \mathbf{sO}_{3,4})$
17. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{2,4})$
18. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{2,4}, \mathbf{sO}_{1,4})$
19. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{oS}_{2,3}, \mathbf{sS}_{2,4}, \mathbf{sO}_{3,4})$
20. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{1,2})$
21. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{1,2}, \mathbf{sS}_{3,4})$
22. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{1,2}, \mathbf{sS}_{2,4})$
23. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{2,3})$
24. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{2,3}, \mathbf{sS}_{3,4})$
25. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{oS}_{2,3}, \mathbf{sS}_{2,4})$
26. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{3,4})$
27. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{3,4}, \mathbf{oS}_{1,2})$
28. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{3,4}, \mathbf{oS}_{2,3})$
29. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{2,4})$
30. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{2,4}, \mathbf{oS}_{1,2})$
31. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{1,4}, \mathbf{sS}_{2,4}, \mathbf{oS}_{2,3})$
32. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oS}_{2,3})$
33. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oS}_{2,3}, \mathbf{sS}_{3,4})$
34. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oS}_{2,3}, \mathbf{sS}_{2,4})$
35. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oO}_{1,2})$
36. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oO}_{1,2}, \mathbf{oO}_{1,4})$
37. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oO}_{1,4})$
38. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oO}_{1,4}, \mathbf{oO}_{1,2})$
39. $(\mathbf{oO}_{1,2,4}) = f(\mathbf{sO}_{3,4}, \mathbf{oO}_{1,4}, \mathbf{sS}_{2,3})$

40. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{2,3})$
41. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{2,3}, oO_{1,4})$
42. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{2,3}, sS_{3,4})$
43. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{3,4})$
44. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{3,4}, oS_{2,3})$
45. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{3,4}, sS_{2,3})$
46. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{2,4})$
47. $(oO_{1,2,4}) = f(sO_{3,4}, sS_{2,4}, oS_{2,3})$
48. $(oO_{1,2,4}) = f(oO_{1,2}, sO_{3,4})$
49. $(oO_{1,2,4}) = f(oO_{1,2}, sO_{3,4}, oO_{1,4})$
50. $(oO_{1,2,4}) = f(oO_{1,2}, oO_{1,4})$
51. $(oO_{1,2,4}) = f(oO_{1,2}, oO_{1,4}, sO_{3,4})$
52. $(oO_{1,2,4}) = f(oO_{1,2}, oO_{1,4}, oO_{2,4})$
53. $(oO_{1,2,4}) = f(oO_{1,2}, oO_{2,4})$
54. $(oO_{1,2,4}) = f(oO_{1,2}, oO_{2,4}, oO_{1,4})$
55. $(oO_{1,2,4}) = f(oO_{1,4}, sO_{3,4})$
56. $(oO_{1,2,4}) = f(oO_{1,4}, sO_{3,4}, oO_{1,2})$
57. $(oO_{1,2,4}) = f(oO_{1,4}, sO_{3,4}, sS_{2,3})$
58. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{1,2})$
59. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{1,2}, sO_{3,4})$
60. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{1,2}, oO_{2,4})$
61. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{2,4})$
62. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{2,4}, oO_{1,2})$
63. $(oO_{1,2,4}) = f(oO_{1,4}, oO_{2,4}, sS_{2,3})$
64. $(oO_{1,2,4}) = f(oO_{1,4}, sS_{2,3})$
65. $(oO_{1,2,4}) = f(oO_{1,4}, sS_{2,3}, sO_{3,4})$
66. $(oO_{1,2,4}) = f(oO_{1,4}, sS_{2,3}, oO_{2,4})$
67. $(oO_{1,2,4}) = f(oO_{2,4}, oO_{1,2})$
68. $(oO_{1,2,4}) = f(oO_{2,4}, oO_{1,2}, oO_{1,4})$
69. $(oO_{1,2,4}) = f(oO_{2,4}, oO_{1,4})$
70. $(oO_{1,2,4}) = f(oO_{2,4}, oO_{1,4}, oO_{1,2})$
71. $(oO_{1,2,4}) = f(oO_{2,4}, oO_{1,4}, sS_{2,3})$
72. $(oO_{1,2,4}) = f(oO_{2,4}, sS_{2,3})$
73. $(oO_{1,2,4}) = f(oO_{2,4}, sS_{2,3}, oO_{1,4})$
74. $(oO_{1,2,4}) = f(oO_{2,4}, sS_{2,3}, sS_{3,4})$
75. $(oO_{1,2,4}) = f(oO_{2,4}, sS_{3,4})$
76. $(oO_{1,2,4}) = f(oO_{2,4}, sS_{3,4}, sS_{2,3})$
77. $(oO_{1,2,4}) = f(sS_{2,3}, sO_{3,4})$
78. $(oO_{1,2,4}) = f(sS_{2,3}, sO_{3,4}, oO_{1,4})$
79. $(oO_{1,2,4}) = f(sS_{2,3}, sO_{3,4}, sS_{3,4})$
80. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{1,4})$

81. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{1,4}, sO_{3,4})$
82. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{1,4}, oO_{2,4})$
83. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{2,4})$
84. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{2,4}, oO_{1,4})$
85. $(oO_{1,2,4}) = f(sS_{2,3}, oO_{2,4}, sS_{3,4})$
86. $(oO_{1,2,4}) = f(sS_{2,3}, sS_{3,4})$
87. $(oO_{1,2,4}) = f(sS_{2,3}, sS_{3,4}, sO_{3,4})$
88. $(oO_{1,2,4}) = f(sS_{2,3}, sS_{3,4}, oO_{2,4})$
89. $(oO_{1,2,4}) = f(sS_{3,4}, oS_{1,2})$
90. $(oO_{1,2,4}) = f(sS_{3,4}, oS_{1,2}, sO_{1,4})$
91. $(oO_{1,2,4}) = f(sS_{3,4}, oS_{2,3})$
92. $(oO_{1,2,4}) = f(sS_{3,4}, oS_{2,3}, sO_{1,4})$
93. $(oO_{1,2,4}) = f(sS_{3,4}, oS_{2,3}, sO_{3,4})$
94. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{1,4})$
95. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{1,4}, oS_{1,2})$
96. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{1,4}, oS_{2,3})$
97. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{3,4})$
98. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{3,4}, oS_{2,3})$
99. $(oO_{1,2,4}) = f(sS_{3,4}, sO_{3,4}, sS_{2,3})$
100. $(oO_{1,2,4}) = f(sS_{3,4}, oO_{2,4})$
101. $(oO_{1,2,4}) = f(sS_{3,4}, oO_{2,4}, sS_{2,3})$
102. $(oO_{1,2,4}) = f(sS_{3,4}, sS_{2,3})$
103. $(oO_{1,2,4}) = f(sS_{3,4}, sS_{2,3}, sO_{3,4})$
104. $(oO_{1,2,4}) = f(sS_{3,4}, sS_{2,3}, oO_{2,4})$
105. $(oO_{1,2,4}) = f(sS_{2,4}, oS_{1,2})$
106. $(oO_{1,2,4}) = f(sS_{2,4}, oS_{1,2}, sO_{1,4})$
107. $(oO_{1,2,4}) = f(sS_{2,4}, oS_{2,3})$
108. $(oO_{1,2,4}) = f(sS_{2,4}, oS_{2,3}, sO_{1,4})$
109. $(oO_{1,2,4}) = f(sS_{2,4}, oS_{2,3}, sO_{3,4})$
110. $(oO_{1,2,4}) = f(sS_{2,4}, sO_{1,4})$
111. $(oO_{1,2,4}) = f(sS_{2,4}, sO_{1,4}, oS_{1,2})$
112. $(oO_{1,2,4}) = f(sS_{2,4}, sO_{1,4}, oS_{2,3})$
113. $(oO_{1,2,4}) = f(sS_{2,4}, sO_{3,4})$
114. $(oO_{1,2,4}) = f(sS_{2,4}, sO_{3,4}, oS_{2,3})$

Functions with $w = (oO_{2,4})$

1. $(oO_{2,4}) = f(oS_{2,3}, sO_{3,4})$
2. $(oO_{2,4}) = f(oS_{2,3}, sO_{3,4}, sS_{3,4})$
3. $(oO_{2,4}) = f(oS_{2,3}, sO_{3,4}, sS_{2,4})$
4. $(oO_{2,4}) = f(oS_{2,3}, sO_{3,4}, sS_{2,3,4})$

5. $(oO_{2,4}) = f(oS_{2,3}, sS_{3,4})$
6. $(oO_{2,4}) = f(oS_{2,3}, sS_{3,4}, sO_{3,4})$
7. $(oO_{2,4}) = f(oS_{2,3}, sS_{2,4})$
8. $(oO_{2,4}) = f(oS_{2,3}, sS_{2,4}, sO_{3,4})$
9. $(oO_{2,4}) = f(oS_{2,3}, sS_{2,3,4})$
10. $(oO_{2,4}) = f(oS_{2,3}, sS_{2,3,4}, sO_{3,4})$
11. $(oO_{2,4}) = f(sO_{3,4}, oS_{2,3})$
12. $(oO_{2,4}) = f(sO_{3,4}, oS_{2,3}, sS_{3,4})$
13. $(oO_{2,4}) = f(sO_{3,4}, oS_{2,3}, sS_{2,4})$
14. $(oO_{2,4}) = f(sO_{3,4}, oS_{2,3}, sS_{2,3,4})$
15. $(oO_{2,4}) = f(sO_{3,4}, sS_{3,4})$
16. $(oO_{2,4}) = f(sO_{3,4}, sS_{3,4}, oS_{2,3})$
17. $(oO_{2,4}) = f(sO_{3,4}, sS_{2,4})$
18. $(oO_{2,4}) = f(sO_{3,4}, sS_{2,4}, oS_{2,3})$
19. $(oO_{2,4}) = f(sO_{3,4}, sS_{2,3,4})$
20. $(oO_{2,4}) = f(sO_{3,4}, sS_{2,3,4}, oS_{2,3})$
21. $(oO_{2,4}) = f(oO_{1,2}, oO_{1,4})$
22. $(oO_{2,4}) = f(oO_{1,2}, oO_{1,4}, oO_{1,2,4})$
23. $(oO_{2,4}) = f(oO_{1,2}, oO_{1,2,4})$
24. $(oO_{2,4}) = f(oO_{1,2}, oO_{1,2,4}, oO_{1,4})$
25. $(oO_{2,4}) = f(oO_{1,4}, oO_{1,2})$
26. $(oO_{2,4}) = f(oO_{1,4}, oO_{1,2}, oO_{1,2,4})$
27. $(oO_{2,4}) = f(oO_{1,4}, oO_{1,2,4})$
28. $(oO_{2,4}) = f(oO_{1,4}, oO_{1,2,4}, oO_{1,2})$
29. $(oO_{2,4}) = f(oO_{1,4}, oO_{1,2,4}, sS_{2,3})$
30. $(oO_{2,4}) = f(oO_{1,4}, sS_{2,3})$
31. $(oO_{2,4}) = f(oO_{1,4}, sS_{2,3}, oO_{1,2,4})$
32. $(oO_{2,4}) = f(oO_{1,2,4}, oO_{1,2})$
33. $(oO_{2,4}) = f(oO_{1,2,4}, oO_{1,2}, oO_{1,4})$
34. $(oO_{2,4}) = f(oO_{1,2,4}, oO_{1,4})$
35. $(oO_{2,4}) = f(oO_{1,2,4}, oO_{1,4}, oO_{1,2})$
36. $(oO_{2,4}) = f(oO_{1,2,4}, oO_{1,4}, sS_{2,3})$
37. $(oO_{2,4}) = f(oO_{1,2,4}, sS_{2,3})$
38. $(oO_{2,4}) = f(oO_{1,2,4}, sS_{2,3}, oO_{1,4})$
39. $(oO_{2,4}) = f(oO_{1,2,4}, sS_{2,3}, sS_{3,4})$
40. $(oO_{2,4}) = f(oO_{1,2,4}, sS_{3,4})$
41. $(oO_{2,4}) = f(oO_{1,2,4}, sS_{3,4}, sS_{2,3})$
42. $(oO_{2,4}) = f(sS_{2,3}, oO_{1,4})$
43. $(oO_{2,4}) = f(sS_{2,3}, oO_{1,4}, oO_{1,2,4})$
44. $(oO_{2,4}) = f(sS_{2,3}, oO_{1,2,4})$
45. $(oO_{2,4}) = f(sS_{2,3}, oO_{1,2,4}, oO_{1,4})$

46. $(oO_{2,4}) = f(sS_{2,3}, oO_{1,2,4}, sS_{3,4})$
47. $(oO_{2,4}) = f(sS_{2,3}, sS_{3,4})$
48. $(oO_{2,4}) = f(sS_{2,3}, sS_{3,4}, oO_{1,2,4})$
49. $(oO_{2,4}) = f(sS_{2,3}, sS_{3,4}, sS_{2,4})$
50. $(oO_{2,4}) = f(sS_{2,3}, sS_{2,4})$
51. $(oO_{2,4}) = f(sS_{2,3}, sS_{2,4}, sS_{3,4})$
52. $(oO_{2,4}) = f(sS_{3,4}, oS_{2,3})$
53. $(oO_{2,4}) = f(sS_{3,4}, oS_{2,3}, sO_{3,4})$
54. $(oO_{2,4}) = f(sS_{3,4}, sO_{3,4})$
55. $(oO_{2,4}) = f(sS_{3,4}, sO_{3,4}, oS_{2,3})$
56. $(oO_{2,4}) = f(sS_{3,4}, oO_{1,2,4})$
57. $(oO_{2,4}) = f(sS_{3,4}, oO_{1,2,4}, sS_{2,3})$
58. $(oO_{2,4}) = f(sS_{3,4}, sS_{2,3})$
59. $(oO_{2,4}) = f(sS_{3,4}, sS_{2,3}, oO_{1,2,4})$
60. $(oO_{2,4}) = f(sS_{3,4}, sS_{2,3}, sS_{2,4})$
61. $(oO_{2,4}) = f(sS_{3,4}, sS_{2,4})$
62. $(oO_{2,4}) = f(sS_{3,4}, sS_{2,4}, sS_{2,3})$
63. $(oO_{2,4}) = f(sS_{2,4}, oS_{2,3})$
64. $(oO_{2,4}) = f(sS_{2,4}, oS_{2,3}, sO_{3,4})$
65. $(oO_{2,4}) = f(sS_{2,4}, sO_{3,4})$
66. $(oO_{2,4}) = f(sS_{2,4}, sO_{3,4}, oS_{2,3})$
67. $(oO_{2,4}) = f(sS_{2,4}, sS_{2,3})$
68. $(oO_{2,4}) = f(sS_{2,4}, sS_{2,3}, sS_{3,4})$
69. $(oO_{2,4}) = f(sS_{2,4}, sS_{3,4})$
70. $(oO_{2,4}) = f(sS_{2,4}, sS_{3,4}, sS_{2,3})$
71. $(oO_{2,4}) = f(sS_{2,3,4}, oS_{2,3})$
72. $(oO_{2,4}) = f(sS_{2,3,4}, oS_{2,3}, sO_{3,4})$
73. $(oO_{2,4}) = f(sS_{2,3,4}, sO_{3,4})$
74. $(oO_{2,4}) = f(sS_{2,3,4}, sO_{3,4}, oS_{2,3})$

Functions with $w = (sS_{2,3})$

1. $(sS_{2,3}) = f(sO_{1,3,4}, sO_{1,4})$
2. $(sS_{2,3}) = f(sO_{1,3,4}, sO_{1,4}, sO_{3,4})$
3. $(sS_{2,3}) = f(sO_{1,3,4}, sO_{3,4})$
4. $(sS_{2,3}) = f(sO_{1,3,4}, sO_{3,4}, sO_{1,4})$
5. $(sS_{2,3}) = f(sO_{1,4}, sO_{1,3,4})$
6. $(sS_{2,3}) = f(sO_{1,4}, sO_{1,3,4}, sO_{3,4})$
7. $(sS_{2,3}) = f(sO_{1,4}, sO_{3,4})$
8. $(sS_{2,3}) = f(sO_{1,4}, sO_{3,4}, sO_{1,3,4})$
9. $(sS_{2,3}) = f(sO_{1,4}, sO_{3,4}, oO_{1,4})$

10. $(sS_{2,3}) = f(sO_{1,4}, sO_{3,4}, sS_{3,4})$
11. $(sS_{2,3}) = f(sO_{1,4}, oO_{1,4})$
12. $(sS_{2,3}) = f(sO_{1,4}, oO_{1,4}, sO_{3,4})$
13. $(sS_{2,3}) = f(sO_{1,4}, sS_{3,4})$
14. $(sS_{2,3}) = f(sO_{1,4}, sS_{3,4}, sO_{3,4})$
15. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,3,4})$
16. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,3,4}, sO_{1,4})$
17. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,4})$
18. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,4}, sO_{1,3,4})$
19. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,4}, oO_{1,4})$
20. $(sS_{2,3}) = f(sO_{3,4}, sO_{1,4}, sS_{3,4})$
21. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,4})$
22. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,4}, sO_{1,4})$
23. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,4}, oO_{1,2,4})$
24. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,2,4})$
25. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,2,4}, oO_{1,4})$
26. $(sS_{2,3}) = f(sO_{3,4}, oO_{1,2,4}, sS_{3,4})$
27. $(sS_{2,3}) = f(sO_{3,4}, sS_{3,4})$
28. $(sS_{2,3}) = f(sO_{3,4}, sS_{3,4}, sO_{1,4})$
29. $(sS_{2,3}) = f(sO_{3,4}, sS_{3,4}, oO_{1,2,4})$
30. $(sS_{2,3}) = f(sO_{3,4}, sS_{3,4}, sS_{2,4})$
31. $(sS_{2,3}) = f(sO_{3,4}, sS_{2,4})$
32. $(sS_{2,3}) = f(sO_{3,4}, sS_{2,4}, sS_{3,4})$
33. $(sS_{2,3}) = f(oO_{1,4}, sO_{1,4})$
34. $(sS_{2,3}) = f(oO_{1,4}, sO_{1,4}, sO_{3,4})$
35. $(sS_{2,3}) = f(oO_{1,4}, sO_{3,4})$
36. $(sS_{2,3}) = f(oO_{1,4}, sO_{3,4}, sO_{1,4})$
37. $(sS_{2,3}) = f(oO_{1,4}, sO_{3,4}, oO_{1,2,4})$
38. $(sS_{2,3}) = f(oO_{1,4}, oO_{1,2,4})$
39. $(sS_{2,3}) = f(oO_{1,4}, oO_{1,2,4}, sO_{3,4})$
40. $(sS_{2,3}) = f(oO_{1,4}, oO_{1,2,4}, oO_{2,4})$
41. $(sS_{2,3}) = f(oO_{1,4}, oO_{2,4})$
42. $(sS_{2,3}) = f(oO_{1,4}, oO_{2,4}, oO_{1,2,4})$
43. $(sS_{2,3}) = f(oO_{1,2,4}, sO_{3,4})$
44. $(sS_{2,3}) = f(oO_{1,2,4}, sO_{3,4}, oO_{1,4})$
45. $(sS_{2,3}) = f(oO_{1,2,4}, sO_{3,4}, sS_{3,4})$
46. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{1,4})$
47. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{1,4}, sO_{3,4})$
48. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{1,4}, oO_{2,4})$
49. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{2,4})$
50. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{2,4}, oO_{1,4})$

51. $(sS_{2,3}) = f(oO_{1,2,4}, oO_{2,4}, sS_{3,4})$
52. $(sS_{2,3}) = f(oO_{1,2,4}, sS_{3,4})$
53. $(sS_{2,3}) = f(oO_{1,2,4}, sS_{3,4}, sO_{3,4})$
54. $(sS_{2,3}) = f(oO_{1,2,4}, sS_{3,4}, oO_{2,4})$
55. $(sS_{2,3}) = f(oO_{2,4}, oO_{1,4})$
56. $(sS_{2,3}) = f(oO_{2,4}, oO_{1,4}, oO_{1,2,4})$
57. $(sS_{2,3}) = f(oO_{2,4}, oO_{1,2,4})$
58. $(sS_{2,3}) = f(oO_{2,4}, oO_{1,2,4}, oO_{1,4})$
59. $(sS_{2,3}) = f(oO_{2,4}, oO_{1,2,4}, sS_{3,4})$
60. $(sS_{2,3}) = f(oO_{2,4}, sS_{3,4})$
61. $(sS_{2,3}) = f(oO_{2,4}, sS_{3,4}, oO_{1,2,4})$
62. $(sS_{2,3}) = f(oO_{2,4}, sS_{3,4}, sS_{2,4})$
63. $(sS_{2,3}) = f(oO_{2,4}, sS_{2,4})$
64. $(sS_{2,3}) = f(oO_{2,4}, sS_{2,4}, sS_{3,4})$
65. $(sS_{2,3}) = f(sS_{3,4}, sO_{1,4})$
66. $(sS_{2,3}) = f(sS_{3,4}, sO_{1,4}, sO_{3,4})$
67. $(sS_{2,3}) = f(sS_{3,4}, sO_{3,4})$
68. $(sS_{2,3}) = f(sS_{3,4}, sO_{3,4}, sO_{1,4})$
69. $(sS_{2,3}) = f(sS_{3,4}, sO_{3,4}, oO_{1,2,4})$
70. $(sS_{2,3}) = f(sS_{3,4}, sO_{3,4}, sS_{2,4})$
71. $(sS_{2,3}) = f(sS_{3,4}, oO_{1,2,4})$
72. $(sS_{2,3}) = f(sS_{3,4}, oO_{1,2,4}, sO_{3,4})$
73. $(sS_{2,3}) = f(sS_{3,4}, oO_{1,2,4}, oO_{2,4})$
74. $(sS_{2,3}) = f(sS_{3,4}, oO_{2,4})$
75. $(sS_{2,3}) = f(sS_{3,4}, oO_{2,4}, oO_{1,2,4})$
76. $(sS_{2,3}) = f(sS_{3,4}, oO_{2,4}, sS_{2,4})$
77. $(sS_{2,3}) = f(sS_{3,4}, sS_{2,4})$
78. $(sS_{2,3}) = f(sS_{3,4}, sS_{2,4}, sO_{3,4})$
79. $(sS_{2,3}) = f(sS_{3,4}, sS_{2,4}, oO_{2,4})$
80. $(sS_{2,3}) = f(sS_{3,4}, sS_{2,4}, sS_{2,3,4})$
81. $(sS_{2,3}) = f(sS_{2,4}, sO_{3,4})$
82. $(sS_{2,3}) = f(sS_{2,4}, sO_{3,4}, sS_{3,4})$
83. $(sS_{2,3}) = f(sS_{2,4}, oO_{2,4})$
84. $(sS_{2,3}) = f(sS_{2,4}, oO_{2,4}, sS_{3,4})$
85. $(sS_{2,3}) = f(sS_{2,4}, sS_{3,4}, sO_{3,4})$
86. $(sS_{2,3}) = f(sS_{2,4}, sS_{3,4})$
87. $(sS_{2,3}) = f(sS_{2,4}, sS_{3,4}, oO_{2,4})$
88. $(sS_{2,3}) = f(sS_{2,4}, sS_{3,4}, sS_{2,3,4})$
89. $(sS_{2,3}) = f(sS_{2,4}, sS_{2,3,4}, sS_{3,4})$
90. $(sS_{2,3}) = f(sS_{2,3,4}, sS_{3,4})$
91. $(sS_{2,3}) = f(sS_{2,3,4}, sS_{3,4}, sS_{2,4})$

$$92. (sS_{2,3}) = f(sS_{2,3,4}, sS_{2,4}, sS_{3,4})$$

Functions with $w = (sS_{3,4})$

1. $(sS_{3,4}) = f(oS_{1,3}, sO_{1,3,4})$
2. $(sS_{3,4}) = f(oS_{1,3}, sO_{1,3,4}, oO_{1,4})$
3. $(sS_{3,4}) = f(oS_{1,3}, oO_{1,4})$
4. $(sS_{3,4}) = f(oS_{1,3}, oO_{1,4}, sO_{1,3,4})$
5. $(sS_{3,4}) = f(oS_{1,2}, sO_{1,3,4})$
6. $(sS_{3,4}) = f(oS_{1,2}, sO_{1,3,4}, oO_{1,4})$
7. $(sS_{3,4}) = f(oS_{1,2}, sO_{1,4})$
8. $(sS_{3,4}) = f(oS_{1,2}, sO_{1,4}, oO_{1,4})$
9. $(sS_{3,4}) = f(oS_{1,2}, sO_{1,4}, oO_{1,2,4})$
10. $(sS_{3,4}) = f(oS_{1,2}, oO_{1,4})$
11. $(sS_{3,4}) = f(oS_{1,2}, oO_{1,4}, sO_{1,3,4})$
12. $(sS_{3,4}) = f(oS_{1,2}, oO_{1,4}, sO_{1,4})$
13. $(sS_{3,4}) = f(oS_{1,2}, oO_{1,2,4})$
14. $(sS_{3,4}) = f(oS_{1,2}, oO_{1,2,4}, sO_{1,4})$
15. $(sS_{3,4}) = f(oS_{2,3}, sO_{1,3,4})$
16. $(sS_{3,4}) = f(oS_{2,3}, sO_{1,3,4}, oO_{1,4})$
17. $(sS_{3,4}) = f(oS_{2,3}, sO_{1,4})$
18. $(sS_{3,4}) = f(oS_{2,3}, sO_{1,4}, oO_{1,4})$
19. $(sS_{3,4}) = f(oS_{2,3}, sO_{1,4}, oO_{1,2,4})$
20. $(sS_{3,4}) = f(oS_{2,3}, sO_{3,4})$
21. $(sS_{3,4}) = f(oS_{2,3}, sO_{3,4}, oO_{1,4})$
22. $(sS_{3,4}) = f(oS_{2,3}, sO_{3,4}, oO_{1,2,4})$
23. $(sS_{3,4}) = f(oS_{2,3}, sO_{3,4}, oO_{2,4})$
24. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,4})$
25. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,4}, sO_{1,3,4})$
26. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,4}, sO_{1,4})$
27. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,4}, sO_{3,4})$
28. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,2,4})$
29. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,2,4}, sO_{1,4})$
30. $(sS_{3,4}) = f(oS_{2,3}, oO_{1,2,4}, sO_{3,4})$
31. $(sS_{3,4}) = f(oS_{2,3}, oO_{2,4})$
32. $(sS_{3,4}) = f(oS_{2,3}, oO_{2,4}, sO_{3,4})$
33. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{1,3})$
34. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{1,3}, oO_{1,4})$
35. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{1,2})$
36. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{1,2}, oO_{1,4})$
37. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{2,3})$

38. $(sS_{3,4}) = f(sO_{1,3,4}, oS_{2,3}, oO_{1,4})$
39. $(sS_{3,4}) = f(sO_{1,3,4}, oO_{1,4})$
40. $(sS_{3,4}) = f(sO_{1,3,4}, oO_{1,4}, oS_{1,3})$
41. $(sS_{3,4}) = f(sO_{1,3,4}, oO_{1,4}, oS_{1,2})$
42. $(sS_{3,4}) = f(sO_{1,3,4}, oO_{1,4}, oS_{2,3})$
43. $(sS_{3,4}) = f(sO_{1,4}, oS_{1,2})$
44. $(sS_{3,4}) = f(sO_{1,4}, oS_{1,2}, oO_{1,4})$
45. $(sS_{3,4}) = f(sO_{1,4}, oS_{1,2}, oO_{1,2,4})$
46. $(sS_{3,4}) = f(sO_{1,4}, oS_{2,3})$
47. $(sS_{3,4}) = f(sO_{1,4}, oS_{2,3}, oO_{1,4})$
48. $(sS_{3,4}) = f(sO_{1,4}, oS_{2,3}, oO_{1,2,4})$
49. $(sS_{3,4}) = f(sO_{1,4}, sO_{3,4})$
50. $(sS_{3,4}) = f(sO_{1,4}, sO_{3,4}, sS_{2,3})$
51. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,4})$
52. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,4}, oS_{1,2})$
53. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,4}, oS_{2,3})$
54. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,2,4})$
55. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,2,4}, oS_{1,2})$
56. $(sS_{3,4}) = f(sO_{1,4}, oO_{1,2,4}, oS_{2,3})$
57. $(sS_{3,4}) = f(sO_{1,4}, sS_{2,3})$
58. $(sS_{3,4}) = f(sO_{1,4}, sS_{2,3}, sO_{3,4})$
59. $(sS_{3,4}) = f(sO_{3,4}, oS_{2,3})$
60. $(sS_{3,4}) = f(sO_{3,4}, oS_{2,3}, oO_{1,4})$
61. $(sS_{3,4}) = f(sO_{3,4}, oS_{2,3}, oO_{1,2,4})$
62. $(sS_{3,4}) = f(sO_{3,4}, oS_{2,3}, oO_{2,4})$
63. $(sS_{3,4}) = f(sO_{3,4}, sO_{1,4})$
64. $(sS_{3,4}) = f(sO_{3,4}, sO_{1,4}, sS_{2,3})$
65. $(sS_{3,4}) = f(sO_{3,4}, oO_{1,4})$
66. $(sS_{3,4}) = f(sO_{3,4}, oO_{1,4}, oS_{2,3})$
67. $(sS_{3,4}) = f(sO_{3,4}, oO_{1,2,4})$
68. $(sS_{3,4}) = f(sO_{3,4}, oO_{1,2,4}, oS_{2,3})$
69. $(sS_{3,4}) = f(sO_{3,4}, oO_{1,2,4}, sS_{2,3})$
70. $(sS_{3,4}) = f(sO_{3,4}, oO_{2,4})$
71. $(sS_{3,4}) = f(sO_{3,4}, oO_{2,4}, oS_{2,3})$
72. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,3})$
73. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,3}, sO_{1,4})$
74. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,3}, oO_{1,2,4})$
75. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,3}, sS_{2,4})$
76. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,4})$
77. $(sS_{3,4}) = f(sO_{3,4}, sS_{2,4}, sS_{2,3})$
78. $(sS_{3,4}) = f(oO_{1,4}, oS_{1,3})$

79. $(sS_{3,4}) = f(oO_{1,4}, oS_{1,3}, sO_{1,3,4})$
80. $(sS_{3,4}) = f(oO_{1,4}, oS_{1,2})$
81. $(sS_{3,4}) = f(oO_{1,4}, oS_{1,2}, sO_{1,3,4})$
82. $(sS_{3,4}) = f(oO_{1,4}, oS_{1,2}, sO_{1,4})$
83. $(sS_{3,4}) = f(oO_{1,4}, oS_{2,3})$
84. $(sS_{3,4}) = f(oO_{1,4}, oS_{2,3}, sO_{1,3,4})$
85. $(sS_{3,4}) = f(oO_{1,4}, oS_{2,3}, sO_{1,4})$
86. $(sS_{3,4}) = f(oO_{1,4}, oS_{2,3}, sO_{3,4})$
87. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,3,4})$
88. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,3,4}, oS_{1,3})$
89. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,3,4}, oS_{1,2})$
90. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,3,4}, oS_{2,3})$
91. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,4})$
92. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,4}, oS_{1,2})$
93. $(sS_{3,4}) = f(oO_{1,4}, sO_{1,4}, oS_{2,3})$
94. $(sS_{3,4}) = f(oO_{1,4}, sO_{3,4})$
95. $(sS_{3,4}) = f(oO_{1,4}, sO_{3,4}, oS_{2,3})$
96. $(sS_{3,4}) = f(oO_{1,2,4}, oS_{1,2})$
97. $(sS_{3,4}) = f(oO_{1,2,4}, oS_{1,2}, sO_{1,4})$
98. $(sS_{3,4}) = f(oO_{1,2,4}, oS_{2,3})$
99. $(sS_{3,4}) = f(oO_{1,2,4}, oS_{2,3}, sO_{1,4})$
100. $(sS_{3,4}) = f(oO_{1,2,4}, oS_{2,3}, sO_{3,4})$
101. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{1,4})$
102. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{1,4}, oS_{1,2})$
103. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{1,4}, oS_{2,3})$
104. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{3,4})$
105. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{3,4}, oS_{2,3})$
106. $(sS_{3,4}) = f(oO_{1,2,4}, sO_{3,4}, sS_{2,3})$
107. $(sS_{3,4}) = f(oO_{1,2,4}, oO_{2,4})$
108. $(sS_{3,4}) = f(oO_{1,2,4}, oO_{2,4}, sS_{2,3})$
109. $(sS_{3,4}) = f(oO_{1,2,4}, sS_{2,3})$
110. $(sS_{3,4}) = f(oO_{1,2,4}, sS_{2,3}, sO_{3,4})$
111. $(sS_{3,4}) = f(oO_{1,2,4}, sS_{2,3}, oO_{2,4})$
112. $(sS_{3,4}) = f(oO_{2,4}, oS_{2,3})$
113. $(sS_{3,4}) = f(oO_{2,4}, oS_{2,3}, sO_{3,4})$
114. $(sS_{3,4}) = f(oO_{2,4}, sO_{3,4})$
115. $(sS_{3,4}) = f(oO_{2,4}, sO_{3,4}, oS_{2,3})$
116. $(sS_{3,4}) = f(oO_{2,4}, oO_{1,2,4})$
117. $(sS_{3,4}) = f(oO_{2,4}, oO_{1,2,4}, sS_{2,3})$

118. $(sS_{3,4}) = f(oO_{2,4}, sS_{2,3})$
119. $(sS_{3,4}) = f(oO_{2,4}, sS_{2,3}, oO_{1,2,4})$
120. $(sS_{3,4}) = f(oO_{2,4}, sS_{2,3}, sS_{2,4})$
121. $(sS_{3,4}) = f(oO_{2,4}, sS_{2,4})$
122. $(sS_{3,4}) = f(oO_{2,4}, sS_{2,4}, sS_{2,3})$
123. $(sS_{3,4}) = f(sS_{2,3}, sO_{1,4})$
124. $(sS_{3,4}) = f(sS_{2,3}, sO_{1,4}, sO_{3,4})$
125. $(sS_{3,4}) = f(sS_{2,3}, sO_{3,4})$
126. $(sS_{3,4}) = f(sS_{2,3}, sO_{3,4}, sO_{1,4})$
127. $(sS_{3,4}) = f(sS_{2,3}, sO_{3,4}, oO_{1,2,4})$
128. $(sS_{3,4}) = f(sS_{2,3}, sO_{3,4}, sS_{2,4})$
129. $(sS_{3,4}) = f(sS_{2,3}, oO_{1,2,4})$
130. $(sS_{3,4}) = f(sS_{2,3}, oO_{1,2,4}, sO_{3,4})$
131. $(sS_{3,4}) = f(sS_{2,3}, oO_{1,2,4}, oO_{2,4})$
132. $(sS_{3,4}) = f(sS_{2,3}, oO_{2,4})$
133. $(sS_{3,4}) = f(sS_{2,3}, oO_{2,4}, oO_{1,2,4})$
134. $(sS_{3,4}) = f(sS_{2,3}, oO_{2,4}, sS_{2,4})$
135. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,4})$
136. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,4}, sO_{3,4})$
137. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,4}, oO_{2,4})$
138. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,4}, sS_{2,3,4})$
139. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,3,4})$
140. $(sS_{3,4}) = f(sS_{2,3}, sS_{2,3,4}, sS_{2,4})$
141. $(sS_{3,4}) = f(sS_{2,4}, sO_{3,4})$
142. $(sS_{3,4}) = f(sS_{2,4}, sO_{3,4}, sS_{2,3})$
143. $(sS_{3,4}) = f(sS_{2,4}, oO_{2,4})$
144. $(sS_{3,4}) = f(sS_{2,4}, oO_{2,4}, sS_{2,3})$
145. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3})$
146. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3}, sO_{3,4})$
147. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3}, oO_{2,4})$
148. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3}, sS_{2,3,4})$
149. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3,4})$
150. $(sS_{3,4}) = f(sS_{2,4}, sS_{2,3,4}, sS_{2,3})$
151. $(sS_{3,4}) = f(sS_{2,3,4}, sS_{2,3})$
152. $(sS_{3,4}) = f(sS_{2,3,4}, sS_{2,3}, sS_{2,4})$
153. $(sS_{3,4}) = f(sS_{2,3,4}, sS_{2,4})$
154. $(sS_{3,4}) = f(sS_{2,3,4}, sS_{2,4}, sS_{2,3})$

Functions with $w = (sS_{2,4})$

1. $(sS_{2,4}) = f(oS_{1,2}, sO_{1,4})$
2. $(sS_{2,4}) = f(oS_{1,2}, sO_{1,4}, oO_{1,2,4})$
3. $(sS_{2,4}) = f(oS_{1,2}, oO_{1,2,4})$
4. $(sS_{2,4}) = f(oS_{1,2}, oO_{1,2,4}, sO_{1,4})$
5. $(sS_{2,4}) = f(oS_{2,3}, sO_{1,4})$
6. $(sS_{2,4}) = f(oS_{2,3}, sO_{1,4}, oO_{1,2,4})$
7. $(sS_{2,4}) = f(oS_{2,3}, sO_{3,4})$
8. $(sS_{2,4}) = f(oS_{2,3}, sO_{3,4}, oO_{1,2,4})$
9. $(sS_{2,4}) = f(oS_{2,3}, sO_{3,4}, oO_{2,4})$
10. $(sS_{2,4}) = f(oS_{2,3}, oO_{1,2,4})$
11. $(sS_{2,4}) = f(oS_{2,3}, oO_{1,2,4}, sO_{1,4})$
12. $(sS_{2,4}) = f(oS_{2,3}, oO_{1,2,4}, sO_{3,4})$
13. $(sS_{2,4}) = f(oS_{2,3}, oO_{2,4})$
14. $(sS_{2,4}) = f(oS_{2,3}, oO_{2,4}, sO_{3,4})$
15. $(sS_{2,4}) = f(sO_{1,4}, oS_{1,2})$
16. $(sS_{2,4}) = f(sO_{1,4}, oS_{1,2}, oO_{1,2,4})$
17. $(sS_{2,4}) = f(sO_{1,4}, oS_{2,3})$
18. $(sS_{2,4}) = f(sO_{1,4}, oS_{2,3}, oO_{1,2,4})$
19. $(sS_{2,4}) = f(sO_{1,4}, oO_{1,2,4})$
20. $(sS_{2,4}) = f(sO_{1,4}, oO_{1,2,4}, oS_{1,2})$
21. $(sS_{2,4}) = f(sO_{1,4}, oO_{1,2,4}, oS_{2,3})$
22. $(sS_{2,4}) = f(sO_{3,4}, oS_{2,3})$
23. $(sS_{2,4}) = f(sO_{3,4}, oS_{2,3}, oO_{1,2,4})$
24. $(sS_{2,4}) = f(sO_{3,4}, oS_{2,3}, oO_{2,4})$
25. $(sS_{2,4}) = f(sO_{3,4}, oO_{1,2,4})$
26. $(sS_{2,4}) = f(sO_{3,4}, oO_{1,2,4}, oS_{2,3})$
27. $(sS_{2,4}) = f(sO_{3,4}, oO_{2,4})$
28. $(sS_{2,4}) = f(sO_{3,4}, oO_{2,4}, oS_{2,3})$
29. $(sS_{2,4}) = f(sO_{3,4}, sS_{2,3})$
30. $(sS_{2,4}) = f(sO_{3,4}, sS_{2,3}, sS_{3,4})$
31. $(sS_{2,4}) = f(sO_{3,4}, sS_{3,4})$
32. $(sS_{2,4}) = f(sO_{3,4}, sS_{3,4}, sS_{2,3})$
33. $(sS_{2,4}) = f(oO_{1,2,4}, oS_{1,2})$
34. $(sS_{2,4}) = f(oO_{1,2,4}, oS_{1,2}, sO_{1,4})$
35. $(sS_{2,4}) = f(oO_{1,2,4}, oS_{2,3})$
36. $(sS_{2,4}) = f(oO_{1,2,4}, oS_{2,3}, sO_{1,4})$
37. $(sS_{2,4}) = f(oO_{1,2,4}, oS_{2,3}, sO_{3,4})$
38. $(sS_{2,4}) = f(oO_{1,2,4}, sO_{1,4})$
39. $(sS_{2,4}) = f(oO_{1,2,4}, sO_{1,4}, oS_{1,2})$

40. $(sS_{2,4}) = f(oO_{1,2,4}, sO_{1,4}, oS_{2,3})$
41. $(sS_{2,4}) = f(oO_{1,2,4}, sO_{3,4})$
42. $(sS_{2,4}) = f(oO_{1,2,4}, sO_{3,4}, oS_{2,3})$
43. $(sS_{2,4}) = f(oO_{2,4}, oS_{2,3})$
44. $(sS_{2,4}) = f(oO_{2,4}, oS_{2,3}, sO_{3,4})$
45. $(sS_{2,4}) = f(oO_{2,4}, sO_{3,4})$
46. $(sS_{2,4}) = f(oO_{2,4}, sO_{3,4}, oS_{2,3})$
47. $(sS_{2,4}) = f(oO_{2,4}, sS_{2,3})$
48. $(sS_{2,4}) = f(oO_{2,4}, sS_{2,3}, sS_{3,4})$
49. $(sS_{2,4}) = f(oO_{2,4}, sS_{3,4})$
50. $(sS_{2,4}) = f(oO_{2,4}, sS_{3,4}, sS_{2,3})$
51. $(sS_{2,4}) = f(sS_{2,3}, sO_{3,4})$
52. $(sS_{2,4}) = f(sS_{2,3}, sO_{3,4}, sS_{3,4})$
53. $(sS_{2,4}) = f(sS_{2,3}, oO_{2,4})$
54. $(sS_{2,4}) = f(sS_{2,3}, oO_{2,4}, sS_{3,4})$
55. $(sS_{2,4}) = f(sS_{2,3}, sS_{3,4})$
56. $(sS_{2,4}) = f(sS_{2,3}, sS_{3,4}, sO_{3,4})$
57. $(sS_{2,4}) = f(sS_{2,3}, sS_{3,4}, oO_{2,4})$
58. $(sS_{2,4}) = f(sS_{2,3}, sS_{3,4}, sS_{2,3,4})$
59. $(sS_{2,4}) = f(sS_{2,3}, sS_{2,3,4})$
60. $(sS_{2,4}) = f(sS_{2,3}, sS_{2,3,4}, sS_{3,4})$
61. $(sS_{2,4}) = f(sS_{3,4}, sO_{3,4})$
62. $(sS_{2,4}) = f(sS_{3,4}, sO_{3,4}, sS_{2,3})$
63. $(sS_{2,4}) = f(sS_{3,4}, oO_{2,4})$
64. $(sS_{2,4}) = f(sS_{3,4}, oO_{2,4}, sS_{2,3})$
65. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3})$
66. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3}, sO_{3,4})$
67. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3}, oO_{2,4})$
68. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3}, sS_{2,3,4})$
69. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3,4})$
70. $(sS_{2,4}) = f(sS_{3,4}, sS_{2,3,4}, sS_{2,3})$
71. $(sS_{2,4}) = f(sS_{2,3,4}, sS_{2,3})$
72. $(sS_{2,4}) = f(sS_{2,3,4}, sS_{2,3}, sS_{3,4})$
73. $(sS_{2,4}) = f(sS_{2,3,4}, sS_{3,4})$
74. $(sS_{2,4}) = f(sS_{2,3,4}, sS_{3,4}, sS_{2,3})$

Functions with $w = (sS_{2,3,4})$

1. $(sS_{2,3,4}) = f(oS_{2,3}, sO_{3,4})$
2. $(sS_{2,3,4}) = f(oS_{2,3}, sO_{3,4}, oO_{2,4})$
3. $(sS_{2,3,4}) = f(oS_{2,3}, oO_{2,4})$
4. $(sS_{2,3,4}) = f(oS_{2,3}, oO_{2,4}, sO_{3,4})$
5. $(sS_{2,3,4}) = f(sO_{3,4}, oS_{2,3})$
6. $(sS_{2,3,4}) = f(sO_{3,4}, oS_{2,3}, oO_{2,4})$
7. $(sS_{2,3,4}) = f(sO_{3,4}, oO_{2,4})$
8. $(sS_{2,3,4}) = f(sO_{3,4}, oO_{2,4}, oS_{2,3})$
9. $(sS_{2,3,4}) = f(oO_{2,4}, oS_{2,3})$
10. $(sS_{2,3,4}) = f(oO_{2,4}, oS_{2,3}, sO_{3,4})$
11. $(sS_{2,3,4}) = f(oO_{2,4}, sO_{3,4})$
12. $(sS_{2,3,4}) = f(oO_{2,4}, sO_{3,4}, oS_{2,3})$
13. $(sS_{2,3,4}) = f(sS_{2,3}, sS_{3,4})$
14. $(sS_{2,3,4}) = f(sS_{2,3}, sS_{3,4}, sS_{2,4})$
15. $(sS_{2,3,4}) = f(sS_{2,3}, sS_{2,4})$
16. $(sS_{2,3,4}) = f(sS_{2,3}, sS_{2,4}, sS_{3,4})$
17. $(sS_{2,3,4}) = f(sS_{3,4}, sS_{2,3})$
18. $(sS_{2,3,4}) = f(sS_{3,4}, sS_{2,3}, sS_{2,4})$
19. $(sS_{2,3,4}) = f(sS_{3,4}, sS_{2,4})$
20. $(sS_{2,3,4}) = f(sS_{3,4}, sS_{2,4}, sS_{2,3})$
21. $(sS_{2,3,4}) = f(sS_{2,4}, sS_{2,3})$
22. $(sS_{2,3,4}) = f(sS_{2,4}, sS_{2,3}, sS_{3,4})$
23. $(sS_{2,3,4}) = f(sS_{2,4}, sS_{3,4})$
24. $(sS_{2,3,4}) = f(sS_{2,4}, sS_{3,4}, sS_{2,3})$

3. The list of 1'162 dyadic-tetravalent functions presented here is exhaustive for a pre-semiotic 4-contextural 4-adic sign model. However, functions, which contain values that lie in more than 1 semiotic contexture, can be “split up” into several more functions, according to combinatorics. E.g., the function

$$(sS_{2,3,4}) = f(sS_{2,4}, sS_{3,4}, sS_{2,3})$$

can be split up in

$$\begin{aligned} (sS_2) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\ (sS_3) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\ (sS_4) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \end{aligned}$$

$$\begin{aligned}
(sS_{2,3}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{2,4}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{3,4}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{2,3,4}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{2,4,3}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{3,2,4}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{3,4,2}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{4,2,3}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}) \\
(sS_{4,3,2}) &= f(sS_{2,4}, sS_{3,4}, sS_{2,3}).
\end{aligned}$$

For the sake of avoiding longer lists which can be produced easily, such combinatorial cases have been left away.

Another strong source for enormous increase of further semiotic functions is the permutation of the contextural indices, i.e. the “morphismic” order, its complementary “hetero-morphismic” order and the “mediative” morphism between them (cf. Toth 2009a).

Bibliography

- Toth, Alfred, Semiotische Funktionentheorie. Klagenfurt 2008 (2008a)
 Toth, Alfred, Semiotics and Pre-Semiotics. 2 vols. Klagenfurt 2008 (2008b)
 Toth, Alfred, Inner and outer semiotic environments in the system of the trichotomic triads.
 In: Electronic Journal for Mathematical Semiotics,
<http://www.mathematical-semiotics.com/pdf/Inner%20and%20outer%20sem.%20environm..pdf>
 (2009a)
 Toth, Alfred, How many contexture-borders has a sign? In: Electronic Journal for Mathematical Semiotics, www.mathematical-semiotic.com (2009b)
 Toth, Alfred, Semiotische Subjekts- und Objektsdistribution. In: Electronic Journal for Mathematical Semiotics, 2011

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