

# **Artifact typology**

**First draft**

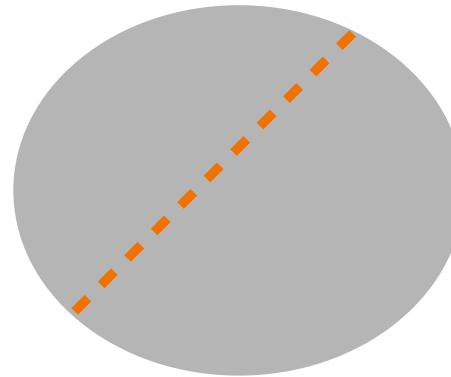
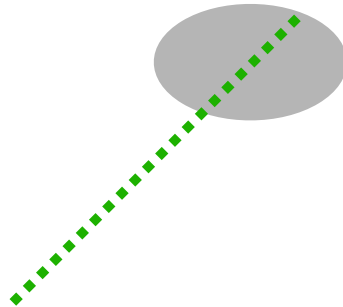
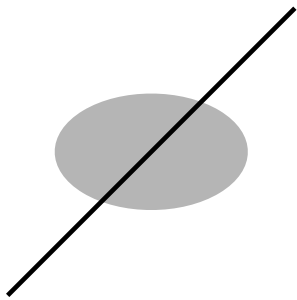
**July 2024, simplification crew**

# Three types of edges:

CONTINUING (C)

ENDING (E)

SINGLE (S)



“Continuing”: continues before and after artifact

“Ending”: continues only at one end

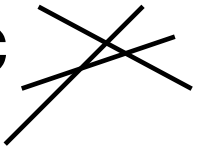
“Single”: does not continue

Note: always assuming that the 3 artefact edges belong to 3 SEPARATE continuity groups. —> since this is not always the case, we need to adjust this... (that's also why case 8 is not represented in the typology, see 3-node artefact with case numbers slide)

# 3-node artifacts

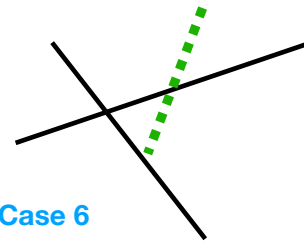
3

CCC



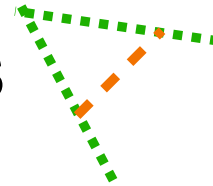
2+1

CCE



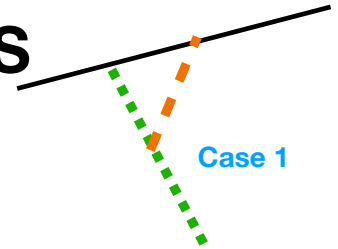
Case 6

EES



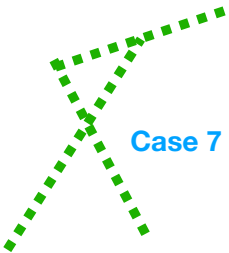
1+1+1

CES



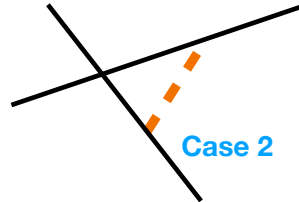
Case 1

EEE



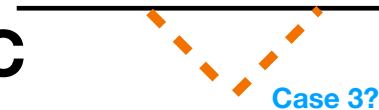
Case 7

CCS



Case 2

SSC



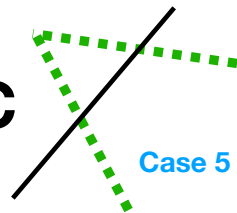
Case 3?

SSS



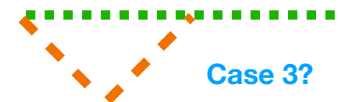
Case 4

EEC



Case 5

SSE

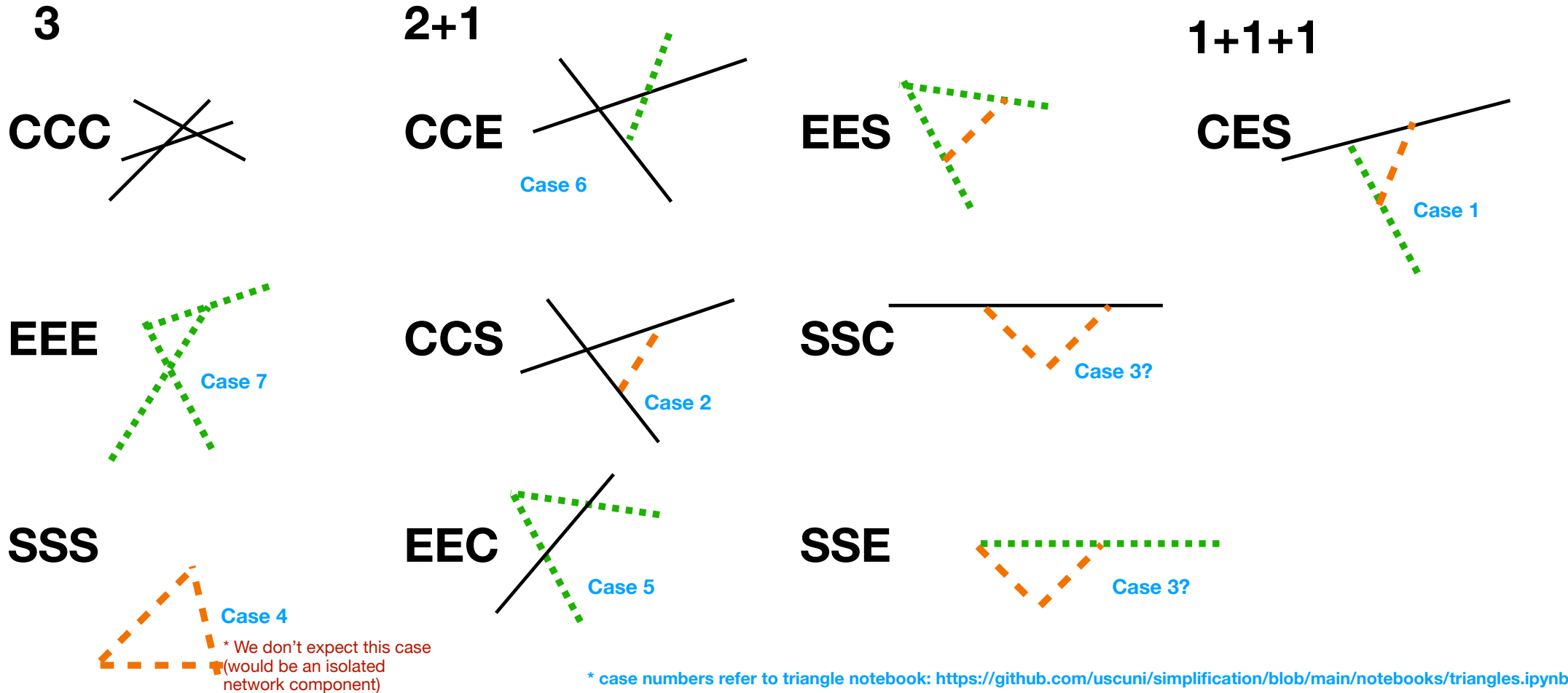


Case 3?

\* We don't expect this case  
(would be an isolated  
network component)

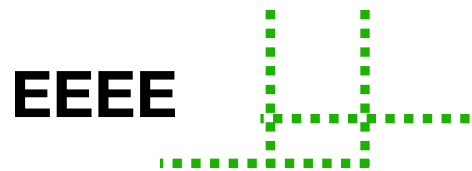
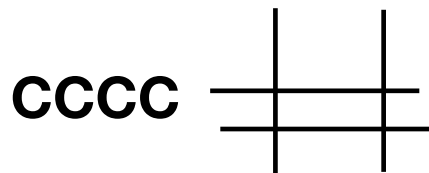
\* case numbers refer to triangle notebook: <https://github.com/uscuni/simplification/blob/main/notebooks/triangles.ipynb>

# 3-node artifacts with case numbers



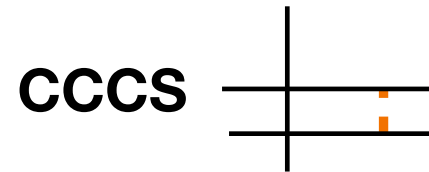
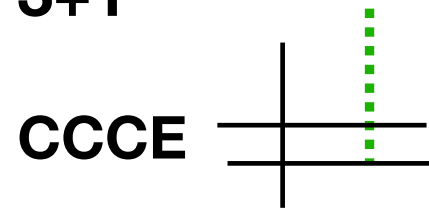
# 4-node artifacts, pt 1

4



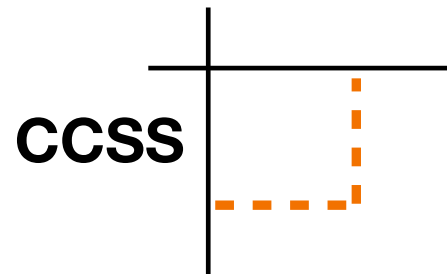
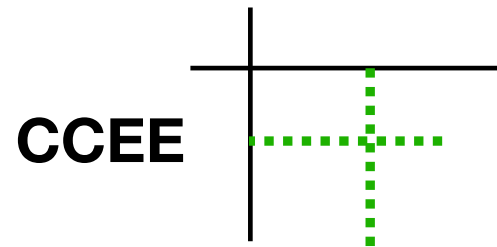
\* We don't expect this case  
(would be an isolated  
network component)

3+1

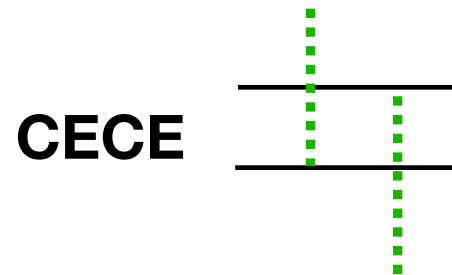
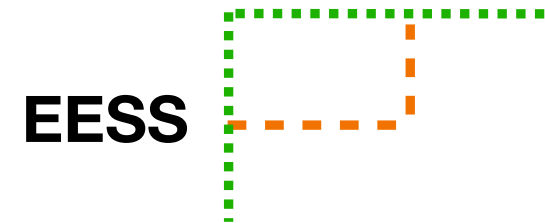


# 4-node artifacts, pt 2

2+2

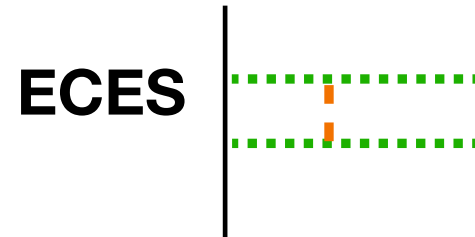
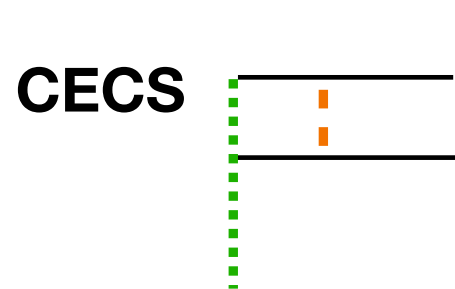
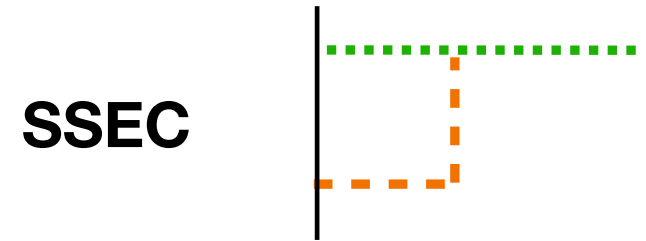
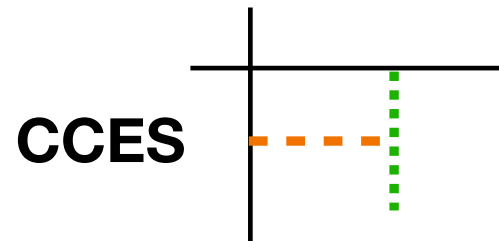


Note the “index symmetry”:  
 $CCEE = ECCE = EECC$ ;  
 $CECE = ECEC$



# 4-node artifacts, pt 3

2+1+1



# 5-node artifacts (in progress)

5	4+1	3+2	3+1+1	2+2+1
CCCCC EEEEEE SSSSS	CCCCE CCCCS  EEEEC EEEEES  SSSSC SSSSE	CCCEE CCCSS  EEECC EEESS  SSSCC SSSEE	CCCES EEECS SSSCE	CCEES CCSSE SSEEC

Q (to be discussed / explored):  
what kind of symmetries do we  
need to account for here? e.g. are  
these two to be treated the same:

CCSSE v. CSCSE