A bipartite graph can be written as $V = V_1 \cup V_2$ (with $V_1 \cap V_2 = \emptyset$) such that $E \subseteq V_1 \times V_2$.

For an even graph, even distances are colorable.

For an odd graph, odd distances are not colorable.

Warning: Bipartite ≠ Biconnected
Directed Acyclic Graph

1 \rightarrow 3 \rightarrow 2 \rightarrow 4 \rightarrow 5 \rightarrow 6

topological ordering of a DAG

From Conen et al

16/17 underpants
5/17 pants
5/17 belt
4/17 shorts
10/13 shirt
11/12 tie
14/15 watch

up watch short tie pants belt jacket

socks shoes