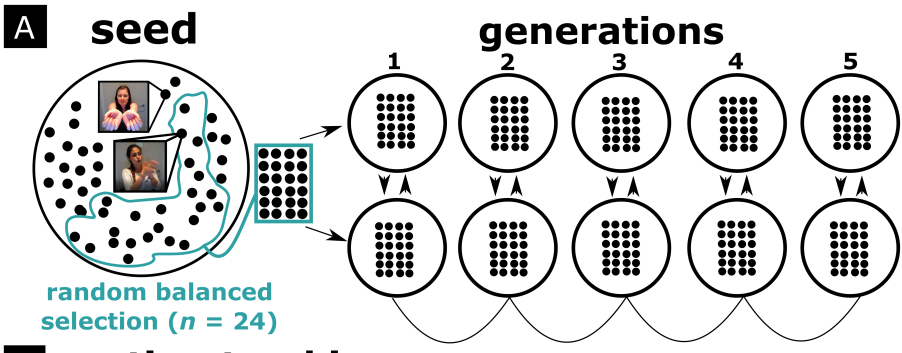
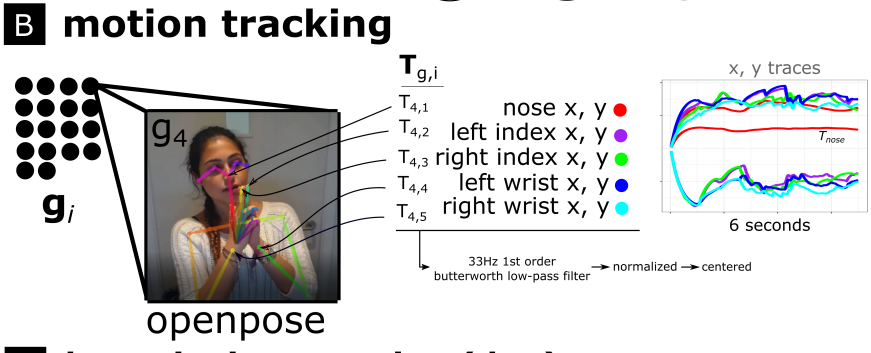
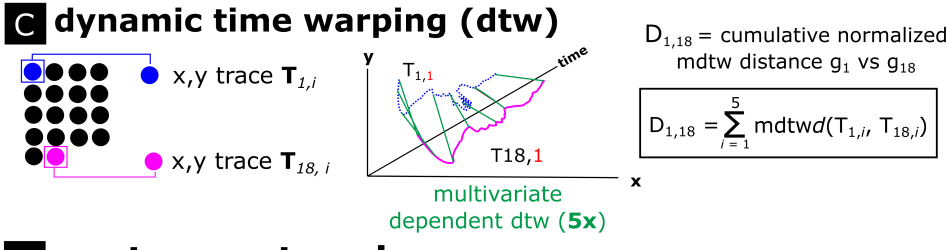
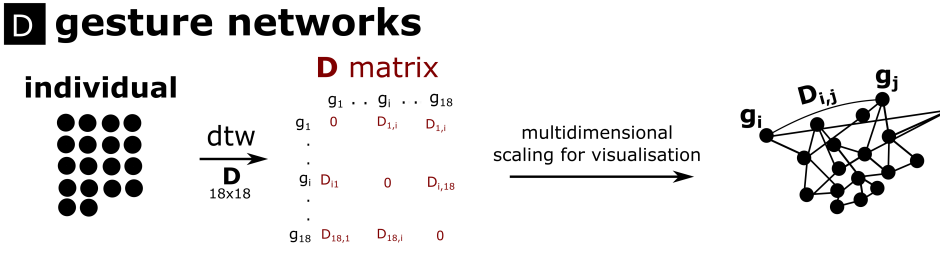

A
seed
generations
1
2
3
4
5
random balanced
selection (n = 24)


B
motion tracking
g4
gi
openpose
Tg,i
T4,1
T4,2
T4,3
T4,4
T4,5
nose x, y
left index x, y
right index x, y
left wrist x, y
right wrist x, y
33Hz 1st order
butterworth low-pass filter
normalized
centered
x, y traces
Tnose
6 seconds


C
dynamic time warping (dtw)
x,y trace T1,i
x,y trace T18, i
y
time
T1,1
T18,1
x
multivariate
dependent dtw (5x)
D1,18 = cumulative normalized
mdtw distance g1 vs g18
D1,18 = Σ mdtwd(T1,i, T18,i)
i = 1
5


D
gesture networks
individual
dtw
D
18x18
D matrix
g1 . . gi . . g18
g1 0 D1,i D1,i
gi Di1 0 Di,18
g18 D18,1 D18,i 0
multidimensional
scaling for visualisation
gj
Di,j
gi