	0	1	2		n <sub>2</sub> -2	n <sub>2</sub> -1	$n_2$
0	X	W2					W3
1							
2							
	W1			W4			W1
n <sub>1</sub> -2							
n <sub>1</sub> -1							
$n_1$	W3	W2					X

**Figure S2** Joint Site Frequency Spectrum (JSFS) classes, according to the Wakeley-Hey model. On left most column we have the sample size  $n_1$  of population 1. On the upper most row we have the sample size  $n_2$  of population 2. The summary statistics proposed by Wakeley-Hey (1997) are represented by the letters W1 to W4.

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