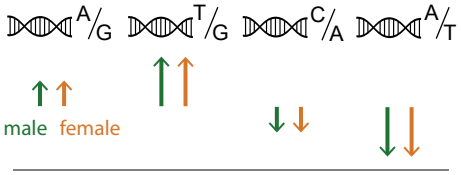
Model	Motivation	Illustration of Effect Covariance	Expectation from Heritability Analysis
No GxSex	Little previous evidence for GxSex		(a) h^2_m can only differ from h^2_f through environmental variance differences (b) $h^2_m < h^2$ or $h^2_f < h^2$
Weakly or negatively correlated genetic effects	Sexual dimorphism is pervasive and heritable contribution is expected to lie primarily in autosomes		(a) Low or negative genetic correlation (b) h^2_m , $h^2_f > h^2$, and the larger the difference, the lower the genetic correlation
Highly correlated effects, difference in magnitude (“amplification”)	Response to cues such as testosterone; evidence for GxE in non-human organisms		(a) High genetic correlation (b) h^2_m or $h^2_f < h^2$
Mixture of covariance relationships	Heritability analysis often incompatible with either model or cannot distinguish between models		Compatible with all observations; motivates: (a) Direct estimation of genetic effect covariance, rather than sole reliance on heritability estimates (b) Modelling mixture components