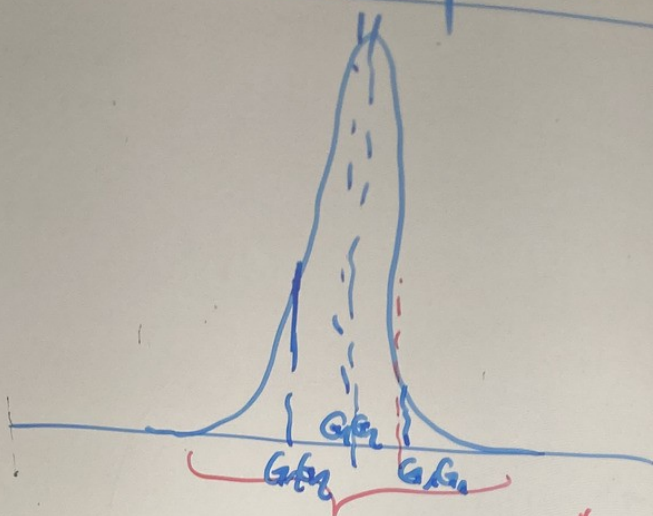
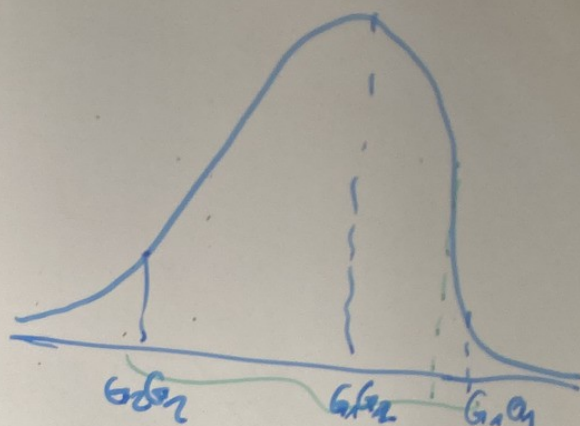


animals as parents



low variation*

⇒ difficult to select animals as parents



large variation*

⇒ easier to select animals as parents.

* variation at the genetic level

Measure for spread or variation:

Variance for a discrete random variable X

$$\text{Var}[X] = \sum_{x_i \in \mathcal{X}_X} (x_i - \mu_X)^2 \cdot f(x_i)$$

$\mu_X = E(X)$
 $f(x_i)$ → probability that X takes value x_i
 Sum over all possible values that X can take