Some remarks:

- Biological model:
  Repair enzymes, mutator genes.
- There exists *no deterministic control*.
  Instead, strategy parameters evolve as object variables do.
- There is only an *indirect link* between fitness and useful strategy parameter settings.
- $\vec{\sigma}$, $\vec{\alpha}$ are conceivable as an *internal model* of the local topology.
- Standard strategy: $n_\sigma = n$, $n_\alpha = 0$.
- For correlated mutations:
  - **$\vec{\sigma}_c \sim \vec{N}(\vec{0}, \mathbf{C})$ is generated by a multiplication of the uncorrelated random vector $\vec{\sigma}_u$ by n_α rotation matrices (Schwefel 1981, Rudolph 1992).**

$$\vec{\sigma}_c = \prod_{i=1}^{n-1} \prod_{j=i+1}^{n} \mathbf{R}(\alpha_{ij}) \cdot \vec{\sigma}_u \quad .$$

  - **Exactly the feasible (positive definite) correlation matrices $\mathbf{C}$ can be created this way (Rudolph 1992).**