



- What makes orthogonality work?
 - by remembering only $m + n$ things, we get $m * n$ capabilities.
- Orthogonality says that no point should be definable by more than one XY pair.
- Orthogonality advantageous only if:

$$m+n + e < m*n - e$$

ALGOL68

ALGOL68: Goals & History

Thesis: *It is good practice in programming language design to abstain from exceptions.*

- Design goals:
 - gen purpose, rigorously-defined language
 - Clear up trouble spots in ALGOL60
 - (but, Pascal more like A60 than A68 is)
 - orthogonality, extensibility
- ALGOL68 - development started in mid-60's.
 - Revised report (SIGPLAN Notices, May 1977) cleared up many ambiguities.