Trichotomy Thesis: There is an exhaustive set of mutually exclusive relationships of quantitative comparison consisting of greater than, less than, and equal to.

Proposed Counterexamples: Literary contest; Law career vs. hang-gliding career; Stonehenge vs. Salisbury Cathedral; Michelangelo vs. Mozart.

The Argument from Small Improvements

1. Trichotomy Thesis (TT) Suppose for *reductio*
2. \( \neg(A > B) \) & \( \neg(A < B) \) Premise
3. \( A^+ > A \) Premise
4. \( \neg(A^+ > B) \) Premise
5. \( A = B \) 1, 2
6. \( A^+ > B \) 3, 5, Principle of Transitivity
7. \( (A^+ > B) \) & \( \neg(A^+ > B) \) 4, 6, Conjunction
8. \( \therefore \neg\text{TT} \) *Reductio ad Absurdum*

The Structure of Parity

Biased Difference: The difference between \( A \) and \( B \) with respect to \( Q \) is *biased* \( =_d \) A and \( B \) are different in a way that favors one over the other.

Unbiased Difference: The difference between \( A \) and \( B \) with respect to \( Q \) is *unbiased* \( =_d \) there is a difference between \( A \) and \( B \), and it’s not the case that the difference between \( A \) and \( B \) favors one over the other.
Parity: $A$ and $B$ are on a par with respect to $Q = \triangleq A$ and $B$ are comparable with respect to $Q$, but neither $A$ nor $B$ is greater than the other, nor are they equal; the difference between $A$ and $B$ is nonzero but unbiased.

Equality: $[(A = B) \& (A^+ > A)] \Rightarrow (A^+ > B)$

Parity: $[(A \approx B) \& (A^+ > A)] \not\Rightarrow (A^+ > B)$