

# Metamorphoses

## MIRACULOUS QUALITATIVE DIFFERENCES



### Quantitative vs. Qualitative Differences

Quantitative differences are differences of degree. X differs from Y because it has more or less of something than Y has. Examples:

- Student John earns an overall 88% while student Mary earns an overall 89%. Because both will get the same grade, the difference is one of **degree** only.
- At the end of inning eight, the New York Yankees have scored five runs, and the Philadelphia Phillies have scored four. Neither is yet the winner or loser, so their difference is one of **degree** only.

Qualitative differences are differences in kind. X differs from Y because it's in a different category than Y. Examples:

- Student John earns an overall 89% while student Mary earns an overall 90%. Because Mary now earns an A while John still earns a B, their grades are different in **kind**. Mary's performance qualifies for the higher grade.
- At game's end, the Yankees have scored 5 runs, and the Phillies have scored 4. Because categories are now different for both teams—winner and loser—their difference is now one of **kind**.

### METAMORPHOSES

Here are some qualitative differences that have continued to mystify scientists, philosophers, and thinkers generally.

- **Material → Non-Material**

Can anything exist if it's not made of matter and/or energy? How can we understand the moment, if one exists, that matter/energy transforms into an idea or a non-material substance?

- **Non-Living → Living**

At what point does non-living material become living, able to detect and respond to environmental change, grow and develop, and reproduce? How can we understand such a transformation?

- **Unaware → Aware → Self-Aware**

At what point does an organism become not only aware of the world but aware of itself? At what point does an aware organism become aware that it's aware? How can we understand the mystery of self-consciousness.

- **Is → Ought**

Can we logically derive a statement of moral value, what ought to be, from a statement of fact, what is, or must we rely on fallible human judgment?

*Clearly, quantitative differences and qualitative differences are qualitatively different.*

