On Pragmatism

Written with the help of AI.

In Book I of the Elements[1], Euclid states a simple rule for equality, noting that magnitudes which coincide—which can be interchanged—are equal. Later, Leibniz[2] stated the same idea more generally in logic, defining two things as the same if one can be substituted for the other without changing the truth of any statement (*salva veritate*).

In practice, we often compare two positions, X and Y (such as claims, models, rules, or norms). Following the substitution principle above, we can build a framework for analyzing them with respect to a given *agent* A—any entity acting in the physical world—by comparing A operating under X against A operating under Y. Instead of asking whether X is true or Y is true, we ask what A *can reliably achieve in the physical world*.

Suppose that, with respect to A, replacing X with Y leaves everything A can reliably achieve in the physical world unchanged. In that case, we treat X and Y as equivalent for A (written $X \overset{A}{\sim} Y$). They belong to the same equivalence class and are interchangeable with respect to A's capabilities.

The main advantage of this approach is that it provides a concrete, operational way of comparing positions. Instead of leaving a disagreement at the level of abstract definitions or intuition, it reduces any comparison between two positions X and Y to whether A operating under X versus Y changes what A can reliably achieve in the physical world.

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[1] Euclid, Elements, Book I, Common Notion 4 (c. 300 BCE).

[2] G. W. Leibniz, Non inelegans specimen demonstrandi in abstractis (1687), "Eadem sunt, quorum unum potest substitui alteri salva veritate."

Asking this question is productive regardless of the answer:

- If a difference appears ($X \overset{A}{\nsim} Y$), the framework forces us to name it explicitly—what becomes reliably achievable or unachievable for A under X compared to Y. This turns an imprecise debate into a concrete problem that can be analyzed, tested, and acted on.
- If no difference appears ($X \overset{A}{\sim} Y$), we reach a clear conclusion that there is no difference between X and Y with respect to A. This avoids treating purely verbal variations as competing positions, and keeps analysis focused on distinctions that change A's capabilities.

In fact, this framing already does useful work before any comparison begins. Broad statements rarely specify a single way of operating under them, so asking what it means for A to operate under X forces a vague position into concrete actions in the world, or reveals that it is still underspecified.

A second strength of the framework is that it applies uniformly across scales of agency, from an individual to an organization or a society. Because capabilities depend on the agent, two positions can be equivalent for one agent ($X \overset{A}{\sim} Y$) and distinct for another ($X \overset{B}{\nsim} Y$). In this way, the framework stays grounded in outcomes in a shared physical world while capturing distinctions that only emerge at larger scales.