“Theory of Everything”

vs.

EMERGENCE

Is the whole really greater than the sum of its parts?

- Jess Brewer

Mathematically,

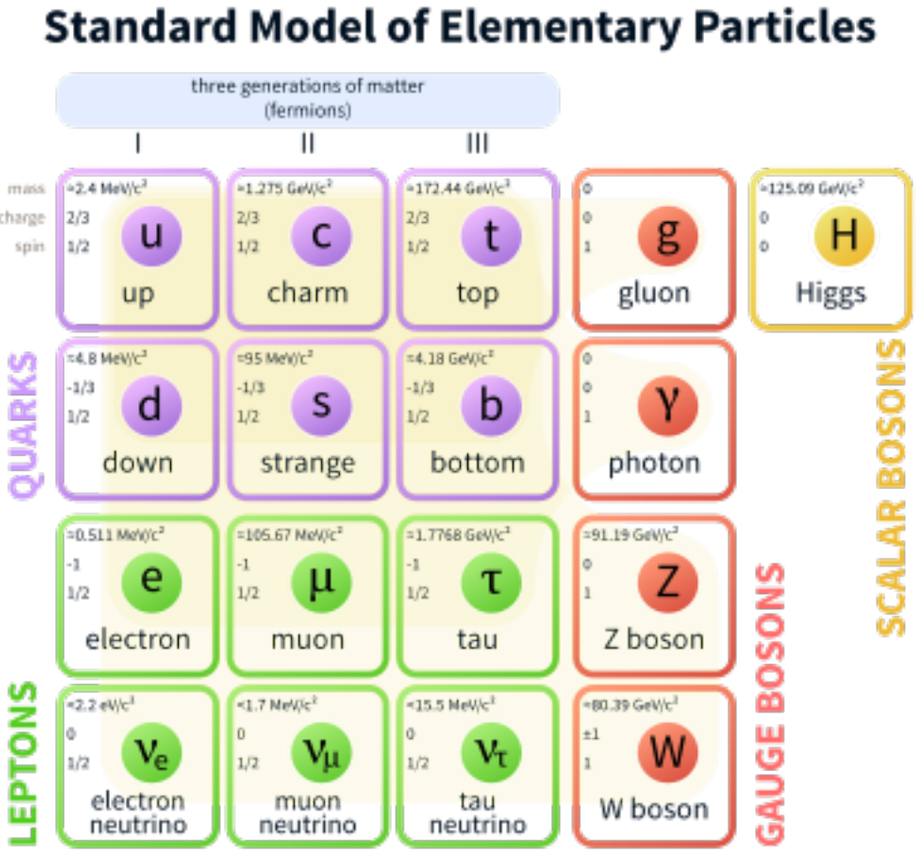
$$X > \sum_{\forall i} \Delta X_i$$ makes no sense and is patently ***wrong***.

Maybe what we mean is that $$\sum_{\forall i} \Delta X_i \not\Longleftrightarrow X$$

(the sum of the parts ***do not imply*** the whole).

Or maybe Mathematics (the preferred language of Physics) is intrinsically ***Reductionist***, which inclines physicists toward that outlook. ***??***

Let's look at some ***examples***…

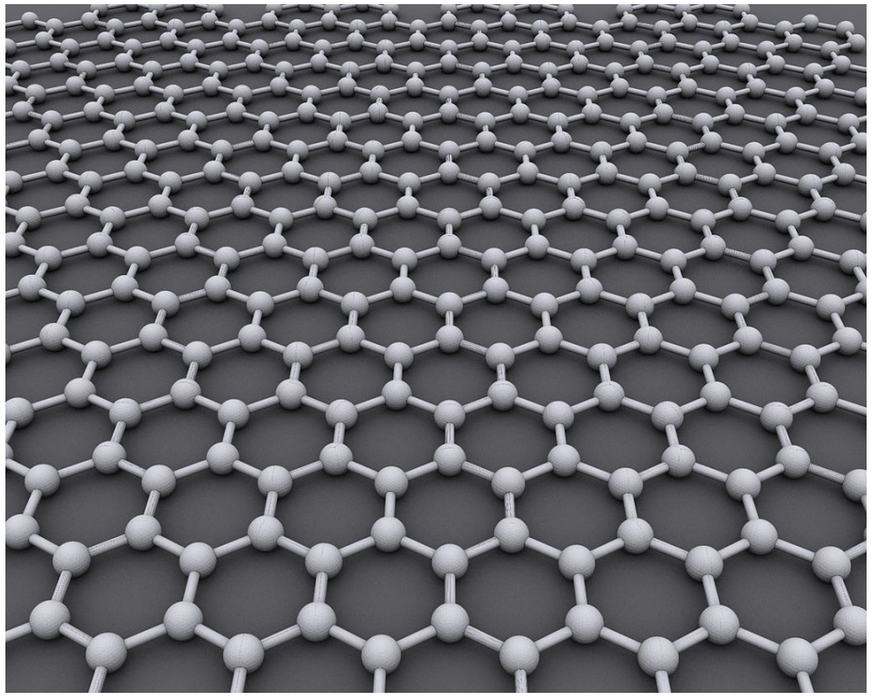


just as

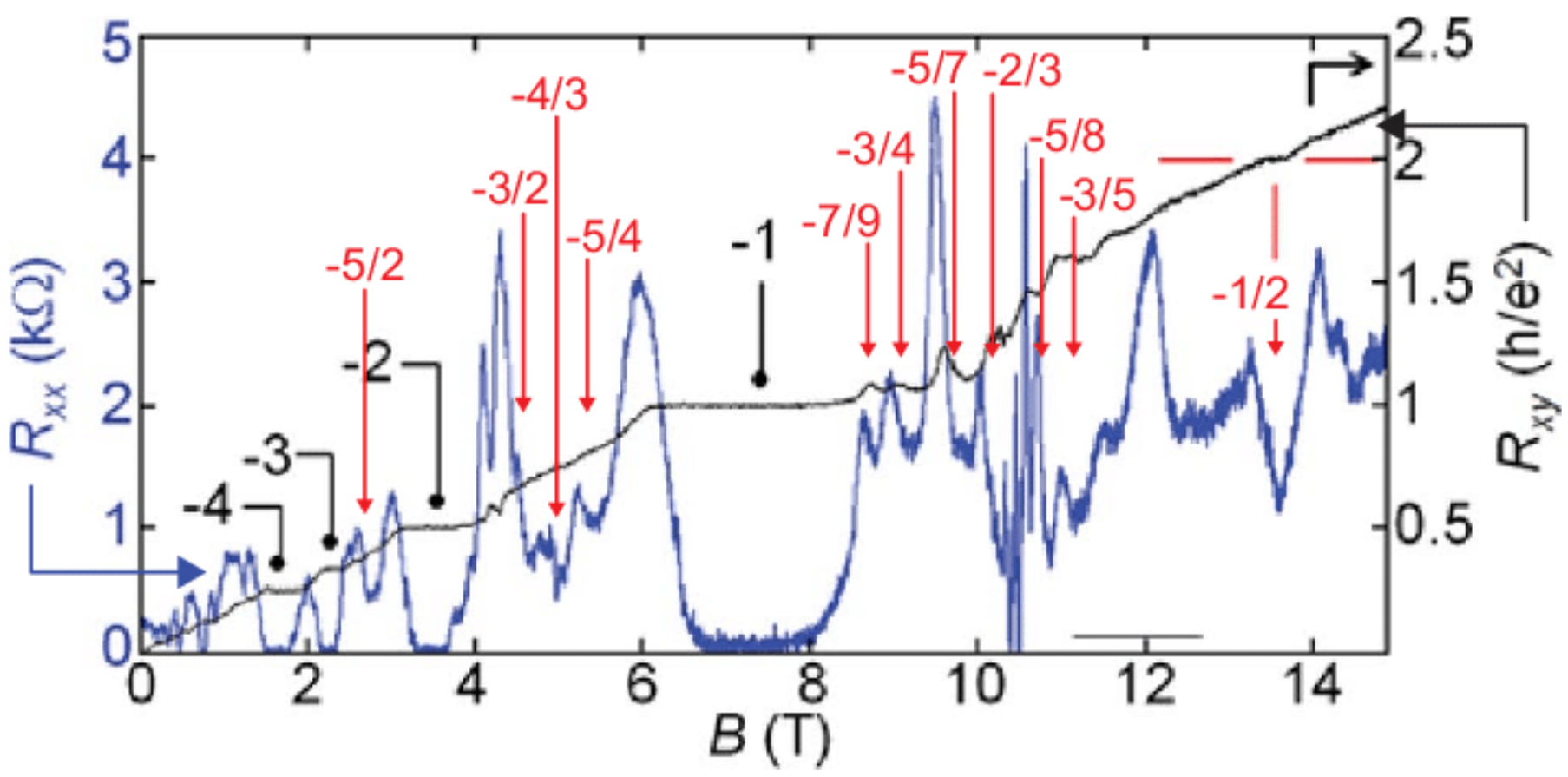
The Physical World

The Aesthetic World

just as



…except for theory "after the fact"



just as

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk
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+

Αα Ββ Γγ Δδ Εε Ζζ Ηη Θθ Ιι Κκ
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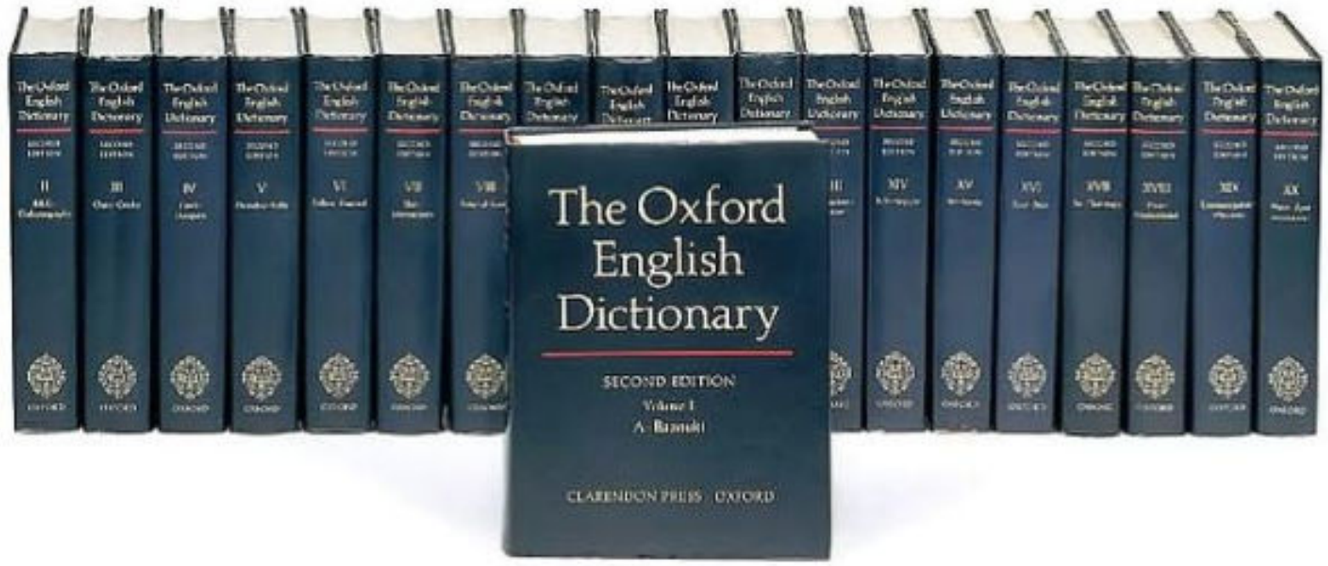

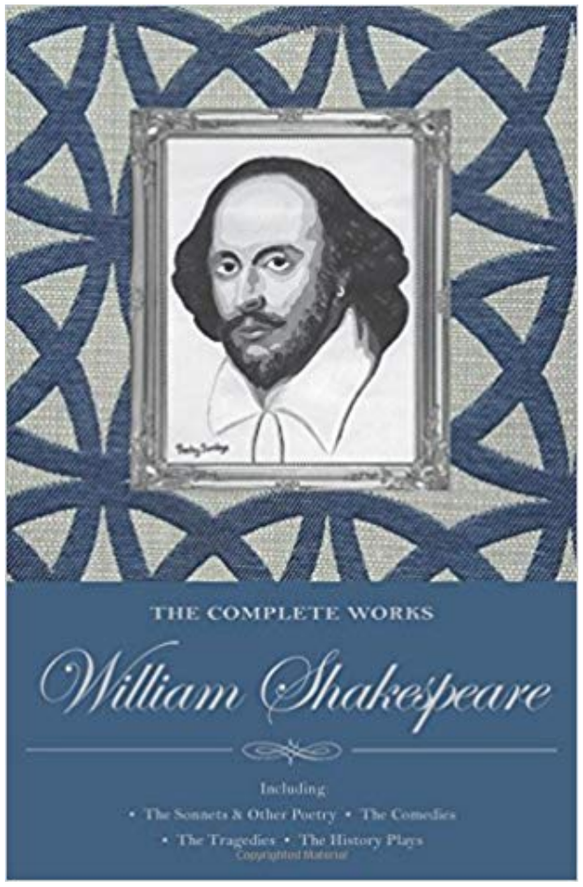

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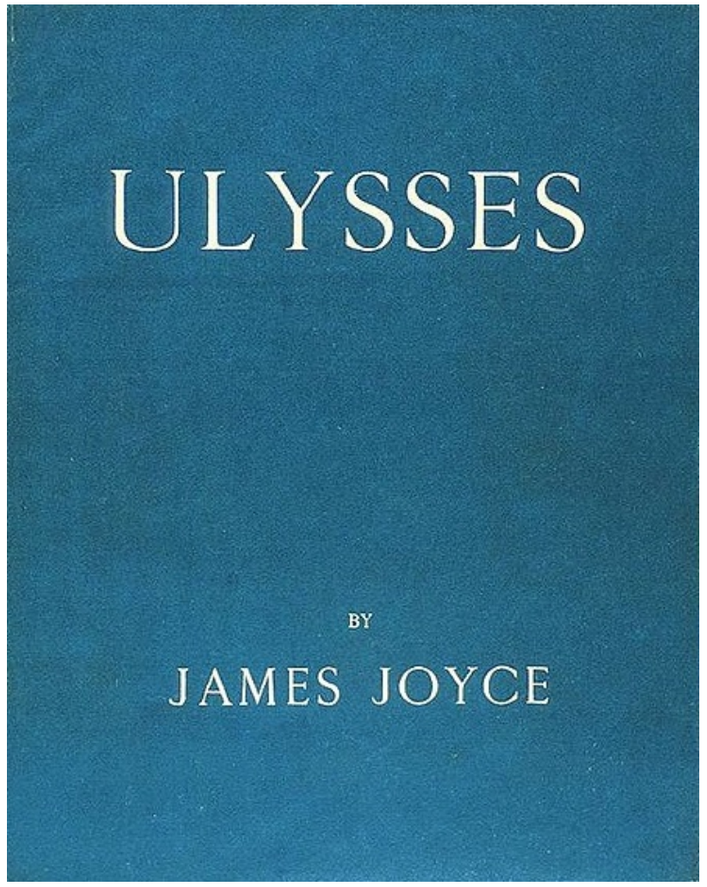

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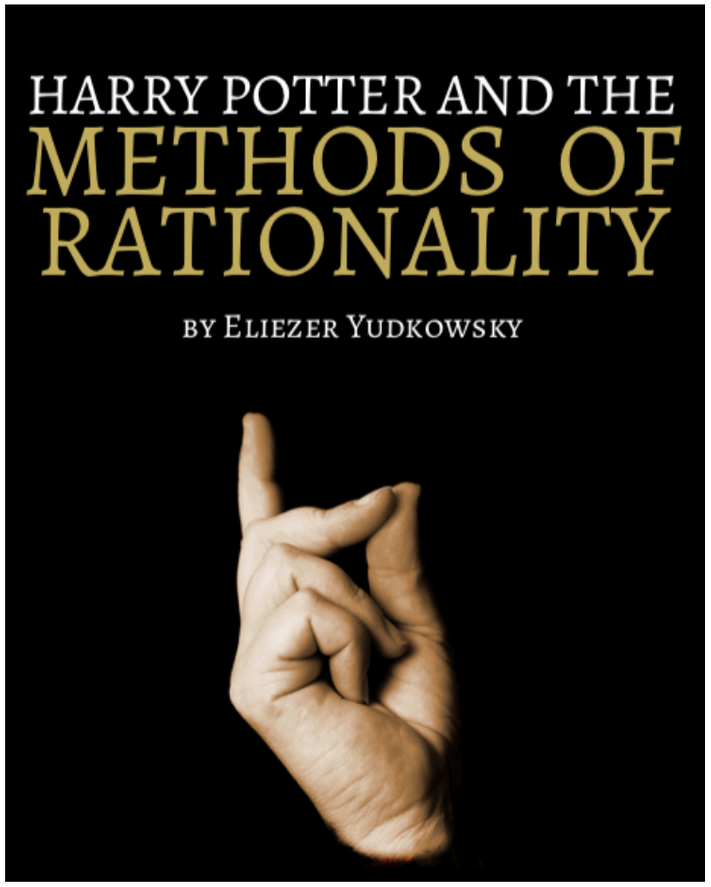

“Magical Thinking”

- Clarke’s Third Law: “*Any sufficiently advanced technology is indistinguishable from magic.*”

- Critics complain *fairly* that this encourages an attitude of, “*If it’s too complicated to understand, we might as well* treat *it as magic — i.e.* **intrinsically** incomprehensible.”

- Obviously many phenomena that once appeared “magical” are now at least partially explained and understood; but what’s wrong with “***magical thinking***” as a **provisional** outlook? What is the **alternative**?