

Accident vs. Law

1. **Goal:** to explain the difference between “accidental” facts and “law-like” facts.
 - a. **Non-empiricist attempt:** “Nomic necessity.”
 - b. **Empiricist attempt:** “Humean supervenience.” *The idea:* the *totality of particular, physical facts* is what determines the laws. *Claim:* the laws are those facts that cannot be changed without also changing the totality of particular physical facts.
Write this claim as a supervenience relation: _____

2. **Carroll’s Objection.** You can construct a situation in which you have all the same facts, but difference physical laws.
Write down the point of Carroll’s objection as a supervenience relation:

Carroll’s Counterexample

- i) *Define L:* “All X-particles that enter a Y-field have spin up.”
- ii) *Construction.* Describe two Worlds 1* and 2* with the properties that:
 - a. They have identical physical facts; and
 - b. World 1* differs only “accidentally” from World 1, and World 2* differs only “accidentally” from World 2.

World 1:
“L is a law”

World 2:
“L is not a law”

World 1*
Identical to World 1 except for an “accidental” difference.

World 2*
Identical to World 2 except for an “accidental” difference.

- iii) *Conclusion.* Carroll’s has constructed a situation in which World 1* and World 2* have the same physical facts. But his intuition is that “accidental” difference should not change the laws. So *L* is a law in World 1*, and *L* is not a law in World 2*. –That is, World 1* and World 2* are **physically identical, but have different laws.**