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crisis and new paradigm. For Kuhn, novelty was a hallmark of science. Without revolution, science would degenerate.

### Changes of World view

- \* Paradigm shift brings about change of world view. After a revolution, the scientists work in a different world. The idea of a different world after revolution cannot be understood literally. The world is one but understanding of the world and nature keeps changing. Therefore, after a revolution, a scientist may view the world differently, have a different feeling of how it works, notice different phenomena, be puzzled by new difficulties and interact with it in new ways. Kuhn cites examples from astronomy (Copernican Revolution), Chemistry (discovery of oxygen by French Chemist Lavoisier) to explain changes of world view. Kuhn elaborates this idea in the section of his book "Revolutions as Changes of World view".

### Incommensurability

- \* Kuhn argued that there are significant limits to what the proponents of different theories can communicate to each other. Kuhn considered science as similar to the Darwin's idea of speciation. Revolutions are often like speciation events, in which one species splits into two, or in which one species continues but with a



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variant on the side following its own trajectory. This diversity leading to mutually incomprehensible theory of scientific language. The idea of incommensurability is not about theory choice.

## Progress through Revolutions

- \* Sciences progress by leaps & bounds. Scientific knowledge is cumulative, building upon previous benchmarks to scale new peaks. Kuhn ~~was~~ explained normal science as involving puzzle solving, filling up spaces in the theory. It is cumulative. The revolution, however, destroy the continuity. The new paradigm pose a set of problems different from the older ones. This is also a definition of incommensurability. How do we then account for progress if science gives up old paradigms and its associated concepts? A normal science is all about progress but revolutions are of a different kind of nature. A revolution changes the domain, changes even the very language in which we speak about some aspect of nature. For Kuhn, revolutions progress "away from" previous conceptions of the world. This is not a progress towards a pre-established goal. It is a progress away from what once worked well, but no longer handles its own new problems.

### Truth

Kuhn rejected one full, objective, true account of nature although he did not elaborate on it. Kuhn's book gave enormous impetus to Sociology of



Science. It also led to social constructivism. There is no sociology in the book of Thomas Kuhn. Scientific communities and their practices are at its core.



