

## HuVAT talk about Michael Polanyi's book Personal Knowledge

This is a massive intense book about which this little talk can only give a bit of the flavour of. It is 428 pages of fine print with many footnotes in ultra-fine print.

This is a summary I have had on our website promoting this talk:

A brief exposition followed by discussion of Michael Polanyi's book with that title first published in 1958. It is primarily an enquiry into the nature and justification of scientific knowledge. Polanyi writes, "But my reconsideration of scientific knowledge leads on to a wide range of questions outside science. I start by rejecting the ideal of scientific detachment. In the exact sciences, this false ideal is perhaps harmless, for it is in fact disregarded there by scientists. But we shall see that it exercises a destructive influence in biology, psychology and sociology, and falsifies our whole outlook far beyond the domain of science. I want to establish an alternative ideal of knowledge, quite generally. I have used the findings of **Gestalt psychology** as my first clues to this conceptual reform. Scientists have run away from the philosophic implications of gestalt; I want to countenance them uncompromisingly. I regard knowing as an active comprehension of the things known, an action that requires **skill**. Such is the personal participation of the knower in all acts of understanding. But this does not make our understanding subjective..."

It addresses issues like scepticism, agnosticism, objective and subjective, science and technology outrunning morality, Marxism, liberty and totalitarianism... It connects deeply with "emergence" and evolution.

**Objective, subjective, personal** - fusion of personal and the objective is Personal Knowledge: p.4 theoretical knowledge (theory is a kind of map) is more objective than immediate experience.

Fiduciary; tacit/explicity knowledge; focal/subsidiary awareness;

**Gestalt** - German: Gestalt - "essence or shape of an entity's complete form" (Show images).

**Commitment**: actual foundations of science cannot be asserted at all; we dwell in scientific beliefs; focal awareness; subsidiary awareness; use of object as tools; tools as extension of our bodies; p.59, skills and Gestalt which relates to Wholes and Meanings p.57;

**Emergent properties**: in a previous talk I talked about a flock of geese is an emergent property; chapter on the Rise of Man; evolution is seen as an **achievement**; Polanyi disputes (long-range) evolution can be accounted for by natural selection (see p.382f); however, he does not propose creationism!; **randomness** is an emergent property; **Laplacian determinism** is denied (thoroughly torpedoed p.396); the properties of a gas understood as the relations of pressure, volume occupied and temperature are emergent properties of atoms or molecules in random motion; mathematical demonstration that randomness cannot be reduced to (in principle) knowledge of the precise behaviour of particles p. 391; human mind and the (Teilhard de Chardin's) noosphere is the most significant emergent property;

## Tacit component

### Language explains virtually everything why humans are so far above chimpanzees

p69 story of comparative growth of a child and a **chimpanzee** back in the 30s in Cuba. At the biological level the (human) acquisition of language ability was a small step but it created the **condition** for an enormous difference!

**Conviviality**: p.212f; scientific authority p.216f; harmfulness of the felt need to "**objectivity**" p.228; "**dynamo-objective**" coupling p.230; this is the section which a commentator on the blurb of the book referred to as "an intellectual tradition which has saddled us with **totalitarianism**";

### Is Evolution an achievement?

p. 382; Polanyi's story of "ascending biotic levels" middle of p.387f

### Authority of science (*an emergent property*)

p.216

### Objectivism lead to totalitarianism

p.228; dynamo-objective coupling p.230

Morphogenesis: 1 biogenesis 2. the formation and differentiation of tissues and organs.

Ontogenesis: biological development of an individual organism.

Phylogeny: evolution of a race as distinguished from the development of an individual organism.