

1. In what ways is our vocabulary for “middle-sized physical objects” primary?
2. What does Quine mean by this statement?
“...our statements about the external world face the tribunal of sense experience not individually but only as a corporate body.”

Three of Russell's Assumptions

(All denied by Quine)

- Foundationalism
- The Inside-Out Perspective
- The Givenness of Experience

Foundationalism:

The justification for our beliefs ultimately rests on a foundation of axiomatic certainties.

(Contrast with *coherentism*, according to which justification is coherence with other beliefs.)

All of our **knowledge of facts**, including knowledge about the external world, is ultimately justified by our **knowledge of sense data**, which needs no further justification.

...P...Q...R...



...S¹...S²...S³...

The Inside-Out Perspective

Our knowledge of the “outer” world is based on our knowledge of the “inner” world.

(Contrast with the idea that we find out about our minds by first finding out about the “outer” world.)

The Givenness of Experience

Our knowledge of our own experiences (e.g. sense-data) is perfect and unmediated.

(Contrast with the idea that our knowledge of our own experiences is imperfect and/or indirect.)

In what ways is our vocabulary for “middle-sized physical objects” primary? What makes it primary in this way?

Wie Schiffer sind wir, die ihr Schiff auf offener See umbauen müssen, ohne es jemals in einem Dock zerlegen und aus besten Bestandteilen neu errichten zu können.

—Otto Neurath

“Neurath has likened science to a boat which, if we are to rebuild it, we must rebuild plank by plank while staying afloat in it.”

—Quine, p.3

“The philosopher and the scientist are in the same boat. If we improve our understanding of ordinary talk of physical things, it will not be by reducing that talk to a more familiar idiom; there is none. It will be by clarifying the connections, causal or otherwise, between ordinary talk of physical things and various further matters which in turn we grasp with help of ordinary talk of physical things.”

—Quine, p.3

The philosopher's task differs from the others'...in detail, but in no such drastic way as those suppose who imagine for the philosopher a vantage point outside the conceptual scheme he takes in charge. There is no such cosmic exile. He cannot study and revise the fundamental conceptual scheme of science and common sense without having some conceptual scheme, whether the same or another no less in need of philosophical scrutiny, in which to work. He can scrutinize and improve the system from within, appealing to coherence and simplicity, but this is the theoretician's method generally.

- We learn words for physical objects first.
- This is not surprising, because we learn language in a socially-conditioned way, and other people can give us feedback only on usage about publicly available things.
- We can talk about sense-data often only by analogy to—or by using words originally for—physical things.

How do theoretical words, such as 'molecule' or 'photon', get their meanings, according to Quine?

Ways of Learning Words

- By ostension
- By analogy
- By description
- Contextually, by learning a sentence or a whole theory in which the word plays a part

“...the physicist’s understanding of what he is talking about must depend almost wholly on context: on knowing when to use various sentences which speak jointly of photons and of observed phenomena of light.”

—Quine, p.14

“Such sentences are like cantilever constructions, anchored in what they say of familiar objects at the near end and supporting the recondite objects at the far end. Explanation becomes oddly reciprocal: photons are posited to help explain the phenomena, and it is those phenomena and the theory concerning them that explain what the physicist is driving at in his talk of photons.”

—Quine, p.14

According to Russell, meaning (like knowledge) has a hierarchical structure: words for physical objects are understood in terms of words for sense data.

What about for Quine?

The Quine–Duhem Thesis

(a.k.a. confirmation holism)

Beliefs cannot be confirmed in isolation, but only relative to other background assumptions.

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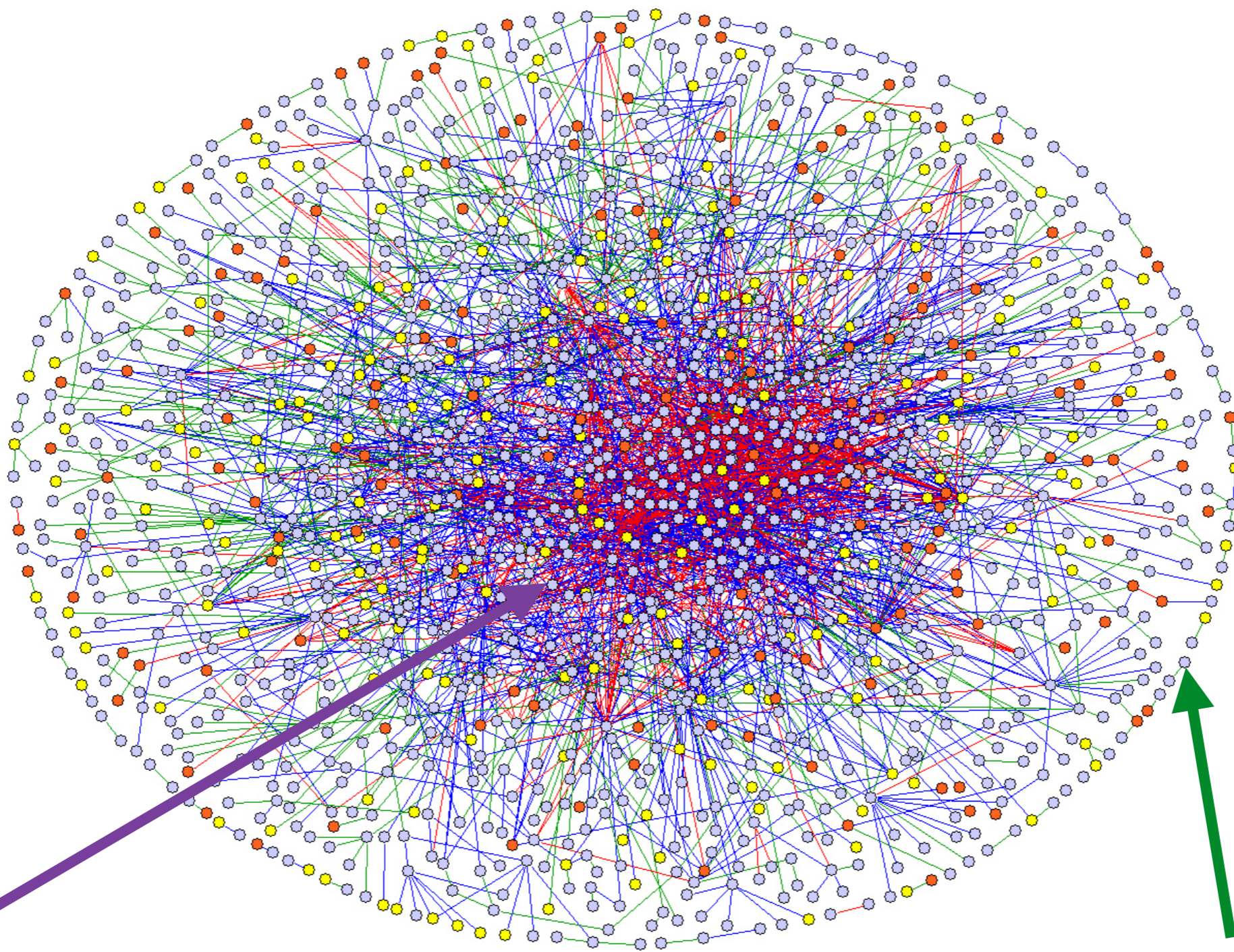
Some consequences of taking this seriously:

- Our experiences never directly support belief in tables, chairs, etc. They only offer support if we make lots of assumptions.
- No belief is immune to revision!

“...our statements about the external world face the tribunal of sense experience not individually but only as a corporate body.”

“The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges.”

The Web of Belief



that $2+2=4$

that I am seeing
something beige

“Or, to change the figure, total science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field. Truth values have to be redistributed over some of our statements. Re-evaluation of some statements entails re-evaluation of others, because of their logical interconnections—the logical laws being in turn simply certain further statements of the system, certain further elements of the field.”

“But the total field is so undetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole.”

pp.39–40

“If this view is right, it is misleading to speak of the empirical content of an individual statement—especially if it be a statement at all remote from the experiential periphery of the field.”

“Furthermore it becomes folly to seek a boundary between synthetic statements, which hold contingently on experience, and analytic statements which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision.”

Russell

Statements about
physical objects

**CAUSAL
INFERENCE**

Statements about
sense-contents

Quine

