Revelation, Humility, and the Structure of the World

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Revelation and Humility

- Revelation holds for a property P iff
  - Possessing the concept of P enables us to know what property P is

- Humility holds for a property P iff
  - We are unable to know what property P is [through certain methods of investigation]
Examples

- Revelation holds for (arguably/allegedly):
  - Primitive color properties?
  - Phenomenal properties?
  - No-hidden-essence properties, e.g. philosopher, action, friend?

- Humility holds for (arguably/allegedly)
  - Fundamental physical properties such as mass, spin, charge?
Revelatory Concepts

- A revelatory concept is a property-concept such that possessing the concept puts one in a position to know (through a priori reflection) what the property is.
  - E.g. *friend* is arguably revelatory, *water* is not

- How to formulate more precisely?
  - … if one can know a priori *C is such-and-such*, where *such-and-such* is a revelatory concept of the referent of *C*? [circular]
  - … if one can know a priori *C is essentially such-and-such*… [likewise]
2D Analysis

Maybe: A revelatory concept is one such that it picks out the same property in all worlds considered as actual.

- *Heat*: picks out different property depending on which world turns out to be actual (molecular motion, whatever plays the heat role).
- *Philosopher*: arguably picks out the same property no matter which world turns out to be actual.

Equivalently (given modal analysis of properties): A property concept is revelatory iff whether an object in a world considered as counterfactual falls into the extension of the concept is independent of which world is considered as actual.
Epistemic Rigidity

- I.e., a revelatory concept is an *epistemically rigid* property-concept
  - Where a concept is epistemically rigid iff it has the same referent in all epistemically possible worlds (in all worlds considered as actual).
  - The referent of an epistemically rigid concept does not vary with empirical variation in how the world turns out.

- Given theses about the a priori availability of 2D semantic values, we can see the referent of an epistemically rigid concept as a priori available.

- N.B. this isn’t a wholly reductive characterization of revelatory concept, since related notions (e.g. that of semantic neutrality) are needed to characterize 2D evaluation. But it’s at least informative.
A humble concept is a property-concept C such that we can’t know what the referent of C is.

More precisely: a humble concept is a concept C such that we are unable to know any identity of the form C=R, where R is a revelatory concept.

E.g. mass is humble iff we can’t know mass=R, where R is a revelatory concept of mass.
Revelatory and Humble Concepts

- No revelatory concepts are humble.
- Some nonrevelatory concepts may be nonhumble
  - E.g. Dave’s favorite property.
  - Or water, if H2O is revelatory.

- Among humble concepts, some may be humble because there is no revelatory concept of their referent.
  - E.g., no revelatory concept of mass or H2O?

- Some concepts C may be humble because although there is a revelatory concept R of their referent, we can’t know \( C = R \)
  - E.g. there’s in principle a revelatory concept R of mass (Stoljar’s o-concept?), but we can’t possess R, or we can possess R but we can’t know \( mass = R \).
Which Concepts are Which?

- Candidates for revelatory concepts:
  - consciousness (and other phenomenal concepts)
  - redness (or perfect redness) and other secondary quality concepts
  - cause
  - spatiotemporal concepts

- Candidates for nonrevelatory concepts:
  - most theoretical property-concepts (the property that actually plays role R)
  - redness (imperfect redness) and other secondary quality concepts
  - concepts of the property of being a certain individual

- Candidates for humble concepts
  - All the nonrevelatory concepts above: especially theoretical concepts of fundamental physical properties
Ramsey-sentence analysis of physical theory:
- Where physics says $T(\text{mass, charge, \ldots})$
- This can be restated as: exists P1, P2, such that $T(P1, P2, \ldots)$
- Mass = the property P1 that best witnesses the Ramsey sentence

If so, our theoretical concept of mass, charge, and so on are nonrevelatory: they pick out whatever property actually plays the specified role, and so pick out different properties in different worlds considered as actual.

Lewis: physical theory can’t tell us which of these worlds is actual, so it can’t tell us which property really plays the mass-role.

So mass is a humble concept (at least with respect to physical theory).
The Structure of the World


- Carnap, *The Logical Structure of the World*: The only objective conception of the world is a structural conception.

- Structural realists (Worrall, etc): Scientific theories are structural theories.
Russell advocates

(something like) humility for fundamental physical properties [at least relative to scientific/perceptual investigation]

(something like) revelation for mental properties

Further Russellian suggestion: maybe fundamental physical properties are in fact mental or proto-mental properties.

Cf. Maxwell, Stoljar, etc.

If so, humility may ultimately fail for physical properties, as philosophical/phenomenological investigation can help reveal their nature.
Question

Russell’s structuralism is often held to have been refuted by M.H.A. Newman in 1928, who argued that structural descriptions are near-vacuous descriptions.

Q: How to reconcile this problem for structuralism with the popularity of quasi-Russellian views in the philosophy of mind?
A purely structural description of the world is a description of the form

there exist relations R1, R2, ..., and there exist entities x, y, z, ..., such that ....  [xR1y, ~xR2z, and so on]

Pure structuralism (Russell, Carnap): The content of science can be captured in a purely structural description.

Newman: Purely structural descriptions are near-vacuous.

- They are satisfied by any set of the right cardinality.
- Given such a set, we can always define up relations R1, R2, ..., that satisfy the descriptions relative to members of the set

(Compare: Putnam’s model-theoretic argument.)
Impure Structuralism

Russell’s response:
- Newman is right about pure structuralism
- Science delivers more than a purely structural description of the world
- Its description involves a basic relation: the relation of “spatiotemporal copunctuality” between sense-data and physical objects.
- We assume this relation R, and give an impure structural description:
  there exist entities x, y, z, [relations R1, R2, …, properties P1, P2, P3…] such that xRy, yRz [P1x, xR1y, …]

Presumably we grasp relation R by understanding it
- I.e. we have a revelatory concept of R?
- Perhaps R is one of the universals with which we have Russellian acquaintance.
- Interpretive puzzle: what happened to acquaintance (with universals as well as with sense-data) in Russell’s structuralism?
Carnap’s Structuralism

- Carnap’s construction can initially be read as a weak structural description:
  - Assume relation $R = \text{recollected phenomenal similarity between elementary experiences}$
  - $R$ is taken as epistemically basic
  - Use $R$ to define all other objects and properties
  - Yields a weak structural description $D$ of the world, invoking $R$.

- Carnap wants to be a pure structuralist, so ultimately tries to drop $R$
  - i.e. “there exists a relation $R$ such that $D$”
  - To avoid vacuity, he stipulates that $R$ is a “founded” (“natural”, “experiencable”) relation.
  - Can of worms! Better to keep $R$ and be a weak structuralist.
The Ramsey approach leads to something akin to structuralism.

The Ramsey sentence for our best scientific theories will take the form:
exists P₁, P₂, …, R₁, R₂, … T(P₁, P₂, …, R₁, R₂, …)
where T uses only O-terms.

Some O-terms will themselves be theoretical terms, definable by their own Ramsey sentences with other (fewer?) O-terms in turn.

Ultimately: a sentence with basic O-terms that we cannot eliminate:
- This sentence specifies the structure of the world as characterized by science?

Q: What are the ultimate O-terms?
Global Ramsification

- Extreme view: global Ramsification (or “global descriptivism” in Lewis):
  - No O-terms! All non-logical terms are treated as theoretical terms.
  - Result: a pure Ramsey sentence with no non-logical O-terms
    \[ \exists x, y, x, P_1, P_2, \ldots, R_1, R_2, \ldots \; T(x, y, \ldots, P_1, P_2, \ldots, R_1, R_2, \ldots) \]
    (where \( T \) involves only logical expressions)

- This is a sort pure structuralism, and suffers from Newman’s problem
  - Lewis recognizes/rediscover the problem in “Putnam’s Paradox”
  - His way out: restrict quantifiers to natural properties and relations -- cf. Carnap

- Alternative way out: allow basic O-terms that are not theoretical terms.
  - These terms don’t express non-revelatory role-realizer concepts
  - The O-terms (for properties and relations) will express revelatory concepts?
  - Cf. Weak structuralism
Spatiotemporal Structuralism

- What might serve as ultimate O-terms for Lewis?
  - Theoretical terms defined in terms of impact on observables
  - Observables are definable in terms of effect on experiences
  - Experiences are definable in terms of effect on behavior/processing
  - Cause/effect definable in terms of counterfactuals
  - Counterfactuals definable in terms of laws
  - Laws are definable in terms of spatiotemporal regularities

- Possibly: Some spatiotemporal terms are O-terms, not theoretically defined
  - N.B. The Humean supervenience base is a distribution of properties across spacetime.
  - Truths about this base analytically entail all truths, but are themselves unanalyzable?
  - Some spatiotemporal concepts are revelatory concepts?

- Spatiotemporal structuralism: Science characterizes the distribution of certain (existentially specified) properties and relations over spacetime, in terms of spatiotemporal relations among their instances.
Problem: Spatiotemporal concepts are arguably not revelatory

- E.g. pick out relativistic properties in our word considered as actual, classical properties in classical worlds considered as actual.
- Or: pick out computational properties in a Matrix world considered as actual.
- In effect: spatiotemporal concepts are concepts of that manifold of properties and relations that serves as the normal causal basis for our spatiotemporal experience.

If so: spatiotemporal terms are not among the ultimate O-terms.

So what are the ultimate O-terms?
Nomic/Phenomenal Structuralism

- Alternative hypothesis: Ultimate O-terms include phenomenal terms and nomic terms
  - These show up ubiquitously in Ramseyan analyses of other terms.
  - Somewhat plausibly, phenomenal concepts aren’t theoretical and are revelatory.
  - Same for cause, or law, or counterfactually depends.

- If so, then the ultimate Ramseyan description of the world characterizes a manifold of existentially specified properties and relations, connected to each other and to experiences by nomic (causal, counterfactual) relations.
  - A post-Russellian weak structuralism?
  - Humility with respect to most theoretical properties.
  - Revelation with respect to nomic and phenomenal properties, and various properties analyzable (without rigidification) in terms of these.
Thin and Thick Conceptions

- This is a “thin” description of the world -- largely in terms of causal/nomic relations between entities, leaving their underlying categorical nature unspecified (except for occasional mental properties).

- Intuitively, it seems that we have a “thick” conception of the world, which includes categorical properties of things in the external world.

- Where does this thick conception come from, and how can we accommodate it?
Eden and the Manifest Image

- Suggestion: Our thick conception of the external world comes from the “Edenic” properties presented in perception.
  - Primitive colors, primitive spacetime, primitive mass, solidity, etc...

- Our concepts of these primitive properties are revelatory.
  - These concepts ground a natural thick conception of an Edenic world.

- But these properties are (arguably) uninstantiated.
  - So this thick conception is not a fully accurate conception of the world.
  - In the scientific image, we need not invoke these properties (except...)

- But the categorical properties play a central role in our manifest image of the world.
  - In everyday cognition, the thick, revelatory manifest image serves as a cognitive substitutive for the thin, non-revelatory scientific image.
We might think of the Edenic manifest image as the “phenomenal” world: the world as it is presented to us in experience.

The structural scientific image is what we can know of the “noumenal” world: the world as it is in itself.

The noumenal world also has intrinsic properties, not revealed by science
- Cf. Van Cleve, Pereboom, Langton.
- Cf. The Matrix: A noumenal world whose nature is computational

Phenomenal world = Eden; Noumenal World = The Matrix

Our conception of the phenomenal world is revelatory
Our conception of the noumenal world is largely humble.
Beyond Humility

Q: Can we know the nature of the “noumenal” properties of the world?

Possibilities:

- The noumenal properties are quasi-Edenic properties
- The noumenal properties are phenomenal or proto-phenomenal properties
- The noumenal properties are properties of which we have no conception

On the first two, revelatory concepts of these properties may be possible

Connecting our humble concepts of physical properties with these revelatory concepts of the same properties will be harder

- *Maybe* joint abduction from physics and phenomenology could eventually help

If so, then the domains of revelation and humility would come together to yield a fuller conception of the world.