Phil 317: Handout #23
Robert Van Gulick: *Who's in Charge Here? And Who's Doing All the Work?*
Professor JeeLoo Liu

§ Main Theses:

1. **Mental properties are <u>not</u> epiphenomenal.**
2. **Intentional explanations <u>are</u> causal explanations.**
3. **Mental properties are not reducible to, or even dependent on, microphysical properties.**
4. **Higher-order properties describe the patterns that are real features of the world.**
5. **Higher-order patterns can have a degree of independence from their underlying physical realizations and can exert "downward causal influences."**
   ≠ Emergentism.
6. **Conjecture (p. 253): In most if not all of the neighboring worlds that are like our world in having some lawful or causal order but which do not contain any physical matter, patterns exist that are very much like the patterns in our world with acquiring, possessing, and exploiting information. Such patterns are all but inevitable consequences of the tendency of world over time to settle into patterns that are self-sustaining and self-preserving.**
7. **If (6), then the order of higher-level patterns is not dependent on the physical order of our world; rather, it is a much more pervasive order that simply manifests itself in our world in physical realizations.**
8. **Even strict (exceptionless) physical laws may be nothing more than stable self-sustaining recurrent states of the quantum flux of an irreducibly probabilistic and statistical reality.**
9. **Therefore, we can accept global supervenience without denying the mental their own role in structuring the sequence of events.**
10. **We can have a gap between two models which cannot be reduced. The gap exists because there are no well-ordered complete translation functions from one to the other -- a gap which results in part because of the ways their respective concepts are anchored in our specific discriminative and cognitive capacities.**

§ Introduction

A working assumption:
___ An explanation involving 'because' is a causal explanation.

But: this kind of explanation can be more than one.
E.g. One does something...
(i) because of one's belief (as a mental state or a mental event)
(ii) because one's belief has the intentional content that it does (as a mental property)

If both of these 'because' are to be interpreted causally, then what is being claimed about the event of Tom's raising the canteen to his lips is both that it was caused (in part) by the event of his having a certain belief, and that that belief's having the intentional content that

it did was causally relevant to (or causally responsible for) its producing the sorts of effects that it did.

Surely if Tom's belief had had a different content, its effects on his behavior would have been quite different.

*** There has been quite a debate about whether the mental properties invoked in such explanations ... can be *causally relevant* or *causally potent* properties.**
___ There is just one ontology of events possessing both physical and mental properties. However, with respect to causal potency, the mental properties are distinctly disadvantaged; indeed they are completely excluded from affecting any token event's causal powers or causal relations; those are determined solely by its physical properties.

§ Four Arguments for Mental-property Epiphenomenalism

***A1. The Strict Law Argument* (Kim; Sosa)___ appeal to a necessary connection between causality and strict laws**

1. **An event C's having the property F can cause an event E to occur (or cause E to have the property G) only if E has property G and there is a strict law which subsumes C and E in virtue of C's being F and E's being G.**
2. **Anomalism of the Mental: There are no strict laws involving mental properties.**

∴ **3. C's having a mental property M can neither cause the occurrence of any event E nor cause any event E to have a property G.**

∴ **4. Mental properties are not causally potent; they cannot affect or explain an event's having the effects that it does.**

∴ **5. Mental properties are not causally relevant; they are epiphenomenal.**

§ Van Gulick's Analysis of Argument A1

11. Mental-property (MP) epiphenomenalism is false.
12. There are no strict laws involving mental properties.
3. Premise 1 (The Nomological Character of Causality) is dubious.

*** Fodor's Suggestion:**
___ One might try to explicate nomic sufficiency in a way that does not demand subsumption under strict laws.
___ Nomic sufficiency can be provided as well by hedged or *ceteris paribus* laws in cases in which the law's *ceteris paribus* conditions are satisfied along with its antecedent.

***** Three Criticisms of Fodor's *Ceteris Paribus* Laws:**
(1) If there are psychological laws that are not deterministic, it will not be possible to achieve nomic sufficiency by simply adding the satisfaction of the *ceteris paribus* clauses.

(2) There is a danger of trivializing the claim of nomic sufficiency with respect to such laws (that there is no way of saying just what counts as satisfaction of the *ceteris paribus* clauses except by appeal to the occurrence or non-occurrence of the effect); all one may be saying is that in all the worlds in which F-related conditions sufficient for producing a G were satisfied, Gs occurred.
(3) Lower and LePore: With respect to every *ceteris paribus* law, there must also be a fundamental law of physics that subsumes c and e. To hold otherwise, would be to allow that there are causal relations that do not supervene on basic physical properties and laws.

§ Summary: [Three Criticisms of A1] (p. 241)
___ First, premise 1 is not equivalent to Davidson's principle of the nomological principle of causality, nor is it entailed by that principle.
___ Second, premise 1's plausibility depends on the assumption that causality requires nomic sufficiency, and that assumption is open to challenge (e.g. by appeal to quantum mechanics.)
___ Third, even if one accepts the nomic sufficiency requirement on causation, it may not be necessary to accept premiss 1, if there is a way for the requirement to be satisfied by less than strict laws (e.g. by non-strict laws with *ceteris paribus* clauses).

A2. The Exclusion Argument **(Kim)___ appeal to the overriding role of physical properties in determining causal relations thereby excluding mental properties from playing any causal role.**

1. Token Physicalism: Every mental event-token (i.e. every event-token having mental properties) is identical with some physical event-token (i.e. some event-token having physical properties).
2. The causal powers of a physical event-token are completely determined by its physical properties.
3. The Nonreducibility of the Mental: Mental properties are neither identical with nor reducible to physical properties.
∴ 4. A mental event-token's mental properties do not even partially determine its causal powers. (1, 2, 3)
∴ 5. Mental properties are not causally potent. (4)
∴ 6. Mental properties are not causally relevant; they are epiphenomenal. (5)

§ Van Gulick's Analysis of Argument A2

1. A2 relies on the assumption that only causally potent properties are causally relevant.
2. He accepts premises 1 - 3, but questions the inference from 4 - 6:
___ Causally relevant properties might be limited to those that contribute to an event's having the causal powers that it does. So interpreted 6 (of A2) says little more than what is already stated by 5. But one might also interpret 'causal relevance' so that a property was causally relevant if it were appropriate or useful to invoke it in the context of a causal explanation. Read in this latter

way, the inference from 5 to 6 becomes open to dispute, since it is far from obvious that only causally potent properties can be usefully invoked in causal explanations.

§ Van Gulick's View on Laws and Theories in General

*** "laws"**
___ Laws are counterfactual sustaining statements (or sentences) in theories.
___ Laws are statements or sentences in our theories of the world, not independent items among the furniture of the world itself.

*** "theories"**
___ They are organized systems of representation that can be used to structure our cognitive processes and guide our action.

And we must not forget this action-guiding function; we are not pure intellects but agents who must choose, plan, decide, and act to survive.

Theories and the laws they contain are cognitive constructs and that as such they are to be assessed pragmatically in terms of the roles they are designed or expected to fulfill.

§ Van Gulick's View on Causal Laws

Q: What then is the function of causal laws in our cognitive economy? How are they expected to contribute to the organization of thought and the guidance of action?
_____ We are biological organisms with needs, goals, and wants. Our ability to succeed in their satisfaction is enhanced by possessing an accurate representation of the environment with which we must interact to achieve those results. In addition to possessing means by which we can pick up information about our present situation and store information picked up in the past, we must be able to make reliable predictions about the future and form plans of action that will enable us to determine or at least influence how the future will develop.

1. **Causal laws provide us with a means of making such projections and of forming such plans of action. Like all laws of nature, they provide us with principles of connection within our representations of the world, establishing connections that mirror stable recurrent patterns in the represented world. As causal laws they specifically single out the independent variables in such patterns, the levers that can and must be pushed to produce desired changes.**

2. **What sorts of causal laws would it be useful to include in our representation of the world? Ideally we would like to have laws that were simple, reliable, and precise, that related properties that were determinate, easily detected, and important to our interests. However, such ideals are rarely available.**

3. In constructing causal explanations, precision must often be sacrificed in the face of pragmatic constraints on what we can detect or comprehend.

§ Van Gulick on Physical vs. Intentional Causal Explanations

1. The micro-physical explanation of ... why Tom's belief caused him to bring the canteen to his lips may indeed have a precision not possessed by intentional explanations of those same sequences of events. And the laws involved in the micro-physical explanation might be strict laws while those in the alternative explanations are not.

2. Intentional explanations may be less precise and reliable, but they have their own advantages and virtues. Most importantly they are available in practice. They relate properties we are readily able to detect and that are relevant to our interests, and their explanation of how those properties interact is one we can survey and comprehend.

3. Explanations that are not pitched at the right level of abstraction fail to classify events into the similarity classes relevant to our predictive needs.

§ The Debate with An Epiphenomenalist

Epiphenomenalist:
___ The real issue is whether or not mental properties are *causally potent*, i.e., whether or not they determine even partially the causal powers of events that have them.
___ It is still the underlying physical properties that are doing the real causal work; mental properties only appear to determine an event's causal powers.

Van Gulick:
___ Why should we accept the claim that it is only the underlying physical properties that are really doing any causal work?
___ If the epiphenomenalist holds this standard, then he will have to concede that none of the properties of the special sciences are causally potent.

*** [inequality]: a special privileged status for fundamental physical properties with respect to causal potency and this causal potency is not shared by the properties of the special sciences.**

I propose that the solution to this inequality is not to find a way of giving special science properties (including mental properties) the status claimed for physical properties but in showing that physical properties have no such special status; it's not a matter of raising the status of special science properties but of exposing the pretension of the specialness of the physical.

Special science explanations work because they classify objects and events so that they share predicable causal roles; they pick out recurrent, stable (if sometimes less than strictly deterministic) patterns of order in the world. Sometimes this is because
(i) the classification in explicitly based on causal role, (e.g. being a catalyst or a recessive gene)
and at other times it is because
(ii) the classification is based on features that guarantee a given causal role (e.g. being a certain atmospheric temperature inversion)
⇒ Q: Which of the two best fits intentional classification?
⇒ [(i) ?]

Physical explanations work for the same reason; physical classifications also group objects sharing common causal roles.
⇒ Equality

Epiphenomenalist:
___ The causal roles associated with special science classifications are entirely derivative from the causal roles of the underlying physical constituents of the objects or events picked out by the special sciences. It is the physical properties that are doing all the real work.

***** Van Gulick's Reply:**
___ This is not quite true, however. The events and objects picked out by the special sciences are admittedly composites of physical constituents. But the causal powers of such an object are not determined solely by the physical properties of its constituents and the laws of physics, but also by the organization of those constituents within the composite. And it is just such <u>patterns of</u> <u>organization</u> that are picked out by the predicates of the special sciences.
___ In a way this is just a reminder that physical outcomes are determined by the laws of physics together with *initial boundary conditions*.
___ Special science predicates pick out stable recurring sets of such boundary conditions. By doing so they isolate a level of <u>causal order</u> and <u>regularity</u> in the natural world.

- **Some features of these patterns:**

1. **Such patterns are recurrent and stable features of the world.**
2. **Many such patterns are stable despite variations or exchanges in their underlying physical constituents.**
3. **Many such patterns are self-sustaining or self-reproductive in the face of perturbing physical forces that might degrade or destroy them (e.g. DNA patterns).**
4. **Such patterns can affect which causal powers of their constituents are activated or likely to be activated.**
5. **The selective activation of the causal powers of its parts may in many cases contribute to the maintenance and preservation of the pattern itself.**

§ Van Gulick's View on the Status of Higher-order Properties

Higher-order patterns can have a degree of independence from their underlying physical realizations and can exert "downward causal influences" without requiring any objectionable form of emergentism by which higher-order properties would alter the underlying laws of physics.

Higher-order properties act by the *selective activation* of physical powers not by their *alteration*.

There is a very real sense in which the constituents of the pattern are organized as they are because of the pattern. It is because of the existence and persistence of the pattern that the particular constituents of its instances were recruited and organized as they are.
___ Many such patterns may be (all but) inevitable features of our world. They are among the stable states of order; because of their persistence and self-sustaining character, if given enough time they naturally emerge from the disorderly flux of nature. Their existence is far from accidental.

*** Properties of special sciences are not reducible to physical properties because of:**
(i) the opened-ended possibilities for multiple physical realization,
(ii) the criteria for applying special science predicates may be anchored in our discriminatory cognitive abilities in ways that make them sufficiently indeterminate to prevent any exact match-up with precisely specified sets of physical properties.

[Conclusion]:
___ Thus we can say that the causal powers of a composite object or event are determined in part by its higher-order (special science) properties, and not solely by the physical properties of its constituents and the laws of physics.

A3. The Argument from Lack of Individual Supervenience **(Fodor) ___ attempts to show that so-called *wide* intentional properties are not causally potent.**

1. **The wide content properties of a person's mental states do not supervene on her intrinsic or individualistic properties (i.e. on those properties that she would share with any molecule-for-molecule duplicate of herself).**
2. **The causal powers of a person's mental states supervene on her intrinsic or individualistic properties (she has a given causal power if and only if any molecule-for-molecule duplicate of her would also have that power).**

∴ 3. A mental state's causal powers must be completely determined by some set of properties other than its wide content properties. (1, 2)
∴ 4. A mental state's wide content properties do not even partially determine its causal powers. (3)
∴ 5. Wide content properties are not causally potent. (4)
∴ 6. Wide content properties are not causally relevant; they are epiphenomenal (from 5).

A4. Extension of A3 **___ draw a further conclusion about psychological method and the proper mode of individuating states in scientific psychological theory.**

7. Psychological explanations (at least those of the sort produced by a psychology of cognitive or intentional processes) are causal explanations.
∴ 8. Thus the states and processes appealed to in such psychological explanations should be type-individuated in terms of their causal powers. (7)
∴ 9. Our psychological theories of cognitive or rational processes should not individuate states in terms of their wide content properties.

§ Van Gulick's Critique of A3 and A4
___ see his 'Metaphysical Arguments for Internalism and Why They Don't Work'

Main claim:
___ Many causal powers relevant to psychology, such as whether or not an organism s able to pick up information need to be individuated widely.