

Rosen on Grounding

I. The Initial Case for the Intelligibility of Grounding Talk

The main thesis of Rosen's article: grounding talk should not be dismissed as unintelligible or obscure, and much is gained by incorporating it into our analytical toolkit.

Some examples of philosophical claims involving grounding talk that don't appear to be gibberish (p. 110):

- "The dispositions of a thing are always grounded in its categorical features."
- "If an act is wrong, there must be some features of the act that *makes* it wrong."
- "If it is against the law to keep a tiger as a pet in Princeton, there must be some constellation of non-legal facts in virtue of which this is so."
- "There are no brute semantic facts. If Jones means *addition* by '+', there must be some array of non-semantic facts in virtue of which this is what he means."

Some examples of philosophical positions and proposals that can be framed using the idiom of metaphysical dependence, and that appear to be worth discussing (pp. 111-112):

- *semantic normativism* ("meaning is normative"): Every semantic fact ultimately obtains in virtue of some collection of normative facts (e.g. facts about the norms of correctness for assertoric utterances).
- *metaphysical naturalism*: Every path in the grounding tree of every normative and/or intentional fact is naturalistic, where:

A fact's *grounding tree* specifies the facts in virtue of which it obtains, the facts in virtue of which those facts obtain, etc.; and

A *path* in a grounding tree is *naturalistic* iff there is a point beyond which every fact in that path is non-normative and non-intentional.

- F is an *intrinsic property* iff, as a matter of necessity, for all x :

If x is F in virtue of $\varphi(y)$ —where $\varphi(y)$ is a fact containing y as a constituent—then y is a part of x ; and

If x is not-F in virtue of $\varphi(y)$, then y is a part of x .

(The second clause is supposed to ensure that the property *being lonely* [i.e. not co-existing with any contingent object wholly distinct from itself] does not count as intrinsic.)

- Some philosophers think the aim of ontology is not to say what exists, but rather to say what *really* exists, or what exists in the most fundamental sense. One way of capturing this idea is to propose:

A fact is *fundamental* (or *brute*) iff it does not obtain in virtue of any other facts.

A thing is *fundamental* iff it is a constituent of a fundamental fact.

worry #1: I don't see the motivation for thinking that grounded facts are "less real" than the facts which ground them.

worry #2: The second definition isn't quite right. According to Scanlon, facts of the following form are brute: [Fact F is a reason for agent X to have attitude A in circumstance C]. It shouldn't follow from this that X, A, and C are fundamental. The obvious fix is to say instead:

A thing, x , is *fundamental* iff the fact [x exists] is fundamental.

II. Doubts about the Idioms of Dependence

Rosen takes the intelligibility and philosophical interest of his initial battery of examples to shift the burden onto skeptics about grounding: they must provide *positive reasons* why talk of metaphysical dependence is unclear and/or unsuitable for demanding philosophical purposes.

Some doubts of this sort which skeptics might have:

- *doubt #1*: Talk of metaphysical grounding is obscure or unintelligible, because we do not have a reductive account of what it comes to: we cannot say in more basic terms *what it is* for one fact to obtain in virtue of another.

Rosen's reply: Grounding talk is (semantically) *primitive*. But this doesn't mean that it is obscure or unintelligible. After all, the same is true of (talk of) metaphysical necessity/possibility.

- *doubt #2*: We have no explicit method of determining whether one fact is grounded in another, and there are many hard questions about the extension of the grounding relation that we cannot answer.

Rosen's reply: Again, the same is true of metaphysical necessity/possibility.

- *doubt #3*: Grounding talk is always dispensable in practice in favor of the idioms of modal metaphysics—entailment, supervenience, the apparatus of possible worlds, etc.

Rosen's reply: This is not true. (He cites the sorts of reasons we went over last week.)

- *doubt #4*: Despite its superficial intelligibility, the notion of grounding is ultimately *confused* (i.e. there are several distinct relations of grounding/dependence in the vicinity that are being conflated) or *incoherent* (i.e. every attempt to set out the principles that govern it leads to absurdity or incoherence).

Rosen's reply: Let us attempt to lay out the principles that govern the grounding relation and its interaction with other important philosophical notions. If the notion of grounding is confused or incoherent, we should get some inkling of this as we proceed.

III. Rosen's Ontological Assumptions and Notation

assumption #1: Grounding is a *relation* between *facts*.

So for Rosen, "A is F in virtue of B's being G" is shorthand for "The fact that A is F obtains in virtue of the fact that B is G."

assumption #2: Facts are "structured entities built up from worldly items—objects, relations, connectives, quantifiers, etc.—in roughly the sense in which sentences are built up from words" (p. 114).

For example, according to Rosen, if the proposition that p is distinct from the proposition that q , then the fact that $p \vee \neg p$ is distinct from the fact that $q \vee \neg q$.

Rosen's notation:

$[p]$ =_{df} the fact that p

$\langle p \rangle$ =_{df} the proposition that p [Rosen often writes " p " where he should write " $\langle p \rangle$ " if he were being fastidious about use/mention issues]

$[p] \leftarrow [q]$ =_{df} $[p]$ is fully grounded in $[q]$ =_{df} $[p]$ obtains entirely in virtue of $[q]$

$[p] \leftarrow \Gamma$ =_{df} $[p]$ is fully grounded in the facts in set Γ , taken collectively

$[p] \leftarrow [q]$ =_{df} $[p]$ is partially grounded in $[q]$ =_{df} $[p]$ obtains in part in virtue of $[q]$

Partial grounding can be defined in terms of full grounding:

$[p] \leftarrow \Delta$ =_{df} for some set of facts Γ , $[p] \leftarrow \Gamma$ and $\Delta \subseteq \Gamma$

IV. Rosen on the Logic of Grounding

Kit Fine makes the following useful distinction:

the pure logic of grounding: The study of what follows from (and what entails) grounding claims, without considering the content or internal structure of the facts that ground or are grounded.

the impure logic of grounding: The study of what follows from (and what entails) grounding claims, when the content and internal structure of the facts that ground and are grounded are taken into consideration.

Within the pure logic of grounding, Rosen endorses the following claims (pp. 115-116, 118):

- *strong asymmetry:* For any facts $[p]$ and $[q]$, if $[p] \leftarrow [q]$, then not: $[q] \leftarrow [p]$.

Why? “When we cite grounds for $[p]$, we cite facts that are strictly prior to $[p]$ in a certain explanatory order. If $[q]$ plays a role making it the case that p , then $[q]$ must be ‘more fundamental’ than $[p]$, in which case $[p]$ cannot play a role in making it the case that q .”

worry: Either this is just a bald restatement of strong asymmetry, or it amounts to assuming that we have distinct “layers” of facts that explain each other in a strict ordering.

- *strong irreflexivity:* For any fact $[p]$, not: $[p] \leftarrow [p]$.

Why? (i) It is entailed by strong asymmetry. (ii) “Just as no fact can make itself obtain, no fact can play a role along with other facts in making itself obtain.”

- *non-connectedness:* Not: for any facts $[p]$ and $[q]$, $[p] \leftarrow [q]$ or $[q] \leftarrow [p]$. [Best term for this?]

Why? Plausibly, [5 is prime] neither grounds nor is grounded by [Wolverines are fierce].

- *non-monotonicity:* Not: for any facts $[p]$ and $[q]$ and any set of facts Γ , if $[p] \leftarrow \Gamma$, then $[p] \leftarrow [q], \Gamma$.

Why? “Intuitively, if p [sic] is grounded in Γ , then every fact in Γ plays some role in making it the case that p ” (p. 116). Note that this reasoning seems to entail something even stronger:

strong non-monotonicity: For any facts $[p]$ and $[q]$ and any set of facts Γ such that $[q] \notin \Gamma$, if $[p] \leftarrow \Gamma$, then not: $[p] \leftarrow [q], \Gamma$.

- *strong transitivity:* For any facts $[p]$ and $[q]$ and any sets of facts Γ and Δ , if $[p] \leftarrow [q], \Gamma$ and $[q] \leftarrow \Delta$, then $[p] \leftarrow \Gamma, \Delta$.

(Note: the version of the paper I had you read mistakenly says “...then $[p] \leftarrow [q], \Gamma, \Delta$ ” in the consequent of the conditional. This was corrected in the published version.)

I put forward that the same reasoning which supports strong transitivity also supports:

even stronger transitivity: For any facts $[p]$ and $[q]$ and any sets of facts Γ and Δ , if $[p] \leftarrow [q], \Gamma$ and $[q] \leftarrow \Delta$, then $[p] \leftarrow \Gamma, \Delta$ and $[[p] \leftarrow \Gamma, \Delta] \leftarrow [[p] \leftarrow [q], \Gamma], [[q] \leftarrow \Delta]$.

- *the entailment principle:* For any fact $[p]$ and any set of facts Γ , if $[p] \leftarrow \Gamma$, then $\Box(\wedge\Gamma \supset p)$.

(Note: $\wedge\Gamma$ is the conjunction of all the propositions that correspond to the facts in Γ .) When we get to the applications portion of the course, we’ll see that this principle is controversial.

Rosen remains uncommitted as to whether the grounding relation is *well founded*, in the sense that “every [grounded] fact ultimately depends on an array of basic facts, which in turn depend on nothing” (p. 116).

Within the impure logic of grounding, Rosen endorses the following claims (p. 117):

- (\vee) If it is true that p , then $[p \vee q] \leftarrow [p]$.

But what if we have the following: $[p \vee q] \leftarrow [(p \& r) \vee (q \& \neg r)]$? Then if (\vee) holds in this particular case with regard to $[(p \& r) \vee (q \& \neg r)]$, and if $\langle p \rangle$ and $\langle q \& \neg r \rangle$ are both true, we may well have a counterexample to (\vee) holding in general.

- (\exists) If it is true that $\varphi(a)$, then $[(\exists x)\varphi(x)] \leftarrow [\varphi(a)]$.

In many cases, this seems true. But I'm not convinced that we should assume it to be true in all cases. (For example, maybe this fails for [Something exists and not nothing].)

- ($\&$) If it is true that $p \& q$, then $[p \& q] \leftarrow [p], [q]$.

Again, this seems true in many cases, especially when $\langle p \rangle$ and $\langle q \rangle$ have nothing to do with one another. But I'm not convinced we should assume it to be true in all cases.

For example, maybe [Phil. 151z meets on Tuesdays] is entirely grounded in [Phil. 151z meets on Tuesdays and Thursdays], which in turn is entirely grounded in [The Head Tutor decided that Phil. 151z meets on Tuesdays and Thursdays]. By strong asymmetry, this would be a counterexample to ($\&$).

Rosen denies that a universal truth is grounded in all of its instances taken together (p. 118). (Here he appeals to the entailment principle and to the assumption that there are contingent entities.)

Rosen spends some time describing three different ways in which universal facts might be grounded in facts that are not themselves universal (pp. 119-121). But it is worth noting that, in the first two of these ways, the facts which ground universal facts *contain* universal facts within them, and in the third way, appeal is made to at least one ungrounded universal fact.

V. The Grounding-Reduction Link

Rosen proposes the following connection between (metaphysical) *reduction* or *analysis* and grounding:

Grounding-Reduction Link: If $\langle p \rangle$ is true and $\langle p \rangle$ reduces to $\langle q \rangle$, then $[p] \leftarrow [q]$.

Some examples of this link at work:

If ABCD is a square, and if for it to be the case that ABCD is a square just is for it to be the case that ABCD is an equilateral rectangle, then [ABCD is a square] is grounded in [ABCD is an equilateral rectangle].

If HCl is an acid, and if for it to be the case that HCl is an acid just is for it to be the case that HCl is a proton donor, then [HCl is an acid] is grounded in [HCl is a proton donor].

If Fred is a bachelor, and if for it to be the case that Fred is a bachelor just is for it to be the case that Fred is an unmarried male, then [Fred is a bachelor] is grounded in [Fred is an unmarried male].

This requires Rosen to adopt a fine-grained conception of facts according to which [Fred is a bachelor] and [Fred is an unmarried male] are distinct facts.

(Somehow he thinks he can do this while still holding that *the property of being a bachelor* is identical to *the property of being an unmarried male*. I found this bit rather murky.)

What I don't understand: once we've gone this far, and once we've stressed that the sense of reduction at issue is a metaphysical (rather than semantic or conceptual) one, why don't we just *identify* (rather than link) this sort of reduction with grounding? Are there any cases in which $[p]$ is entirely grounded in $[q]$, but $\langle p \rangle$ does not (metaphysically) reduce to $\langle q \rangle$?