## Meeting 1: Crash Course in Grounding (Pt. 1)

# I. Introduction: A Historical Example

In the Platonic dialogue bearing his name, Euthyphro offers up the following definition of piety:

(E) An act is pious iff all the gods love it,

to which Socrates famously responds, "Is the pious loved by the gods because it is pious, or is it pious because it is loved by the gods?" (*Euthyphro* 10a).

On one common (but not necessarily exegetically accurate) interpretation, this question poses the following fatal dilemma for Euthyphro's proposal:

• horn #1: A given act is loved by all the gods because it is pious.

problem: Then the gods are just detectors of piety, and we haven't really found what ultimately makes that act pious.

• horn #2: A given act is pious because it is loved by all the gods.

problem: Then either (a) the gods love that act because it possesses certain characteristics which are the true ultimate grounds of its piety, or (b) the gods' love is arbitrary and not the proper thing to ground piety.

A similar objection is thought by many secular philosophers to constitute a knockdown objection to all attempts to ground morality in the commands (or will, or wishes) of a divine being.

But what do we mean by 'because' in this argument? As it turns out, two different things.

- 1. The 'because' in horn #2 ("A given act is pious *because* it is loved by all the gods") cannot pick out any of the following:
  - the 'because' of casual explanation (since an act's piety does not have causal powers);
  - a necessitation relation (since Euthyphro intends (E) to be a necessary truth, so each side of the biconditional necessitates the other side, whereas we are looking for a relation that runs in only one direction);
  - a supervenience relation (for the same reason);
  - a relation of counterfactual dependence (for the same reason).

Rather, the 'because' on this horn seems to be picking out a distinctive variety of metaphysical dependence or constitutive explanation that has come to be known as *grounding*: the suggestion is that the gods' love is *what makes it the case* that the act is pious.

2. By contract, the 'because' in horn #1 ("A given act is loved by all the gods *because* it is pious") and in (a) on horn #2 ("A given act is loved all the gods *because* it has certain characteristics") do not invoke the 'because' of grounding.

An act's being pious (or possessing certain characteristics) is not *what makes it the case* that the gods love that act, in the way in which behaviorism or functionalism in the philosophy of mind might be thought to given an account of what makes it the case that someone counts as being in the mental state of loving something.

Rather, the 'because' at these stages of the argument seems to be picking out the 'because' of rationalizing basis (or *basing*, for short), which we find in sentences such as "I'm wearing a mask because it helps stop the spread of COVID-19" or "She believes that p because q."

So we can contrast the following three "becausal relations" (to use Roderick Firth's joking term):

the 'because' of causation (as in: "The worker died because Euthyphro's father threw him in a ditch");

the 'because' of grounding (as in: "Euthyphro's act is pious because all the gods love it");

the 'because' of basing (as in: "That god loves that act because it has such-and-such characteristics").

Moreover, it looks as if our common interpretation of the Euthyphro dilemma relies on some assumptions about how these 'because's relate to each other, such as:

- (A<sub>1</sub>) If p because *grounding* q, then not: q because *basing* p.
- (A<sub>2</sub>) If an act is pious because  $g_{rounding}$  the gods love it, and the gods love that act because  $h_{asing}$  it has characteristic C, then the act is pious because  $g_{rounding}$  it has C.

Our central topic in this seminar will be the nature of and interrelation between these "becausal relations" (which, on some views, are not even relations, but rather are connectives; more on this below).

side comment on terminology: I will be using the labels 'grounding' and 'basing' because those have become the canonical terms for the 'because' of constitutive explanation and the 'because' of rationalizing basis, respectively, but to an outsider these terms will seem puzzling. After all, they're using the same metaphor! Also, some authors use one to pick out the other (as when we speak of the ultimate basis of morality, thereby invoking grounding, or speak of the grounds of someone's belief, thereby invoking basing). But it's not clear what alternative terms would work better.

# II. Grounding: The Initial Case for Its Intelligibility

Let's start by discussing grounding.

(Note: some authors use 'ground' as the mass noun referring to our topic, but I prefer 'grounding'. To my ear, 'theory of ground' is bad English in the way that 'theory of truth-make' is bad English.)

There has been an explosion of research on grounding in the past decade, spearheaded by the oft-cited triplet of articles by Fine, Rosen, and Schaffer that we are reading this week and next.

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.

The main thesis of Schaffer's article: instead of pursuing a Quinean approach to metaphysics on which the central question is "What exists?" we should rather pursue a neo-Aristotelian approach to metaphysics on which the central question is "What grounds what?"

(Note that there is a third possibility here, on which both questions are important.)

But what is grounding?

The following are sentences that some (but not all!) authors take to pick out grounding:

- "Act A is pious *because* all the gods love it."
- "Act A is pious in virtue of the fact that all the gods love it."
- "Act A is pious *due to* the fact that all the gods love it."
- "The fact that all the gods love A grounds the fact that it is pious."
- "The fact that all the gods love A makes it the case that it is pious."
- "The fact that all the gods love A *explains why* it is pious."
- "All the gods love A, and that is the reason why it is pious."

Some examples of individual grounding claims that some philosophers endorse:

- "The weather is either sunny or rainy in virtue of being sunny."
- "That insignia is red in virtue of being crimson."
- "The dispositions of a thing are always grounded in its categorical features."
- "The fact that an act fails to maximize overall happiness grounds the fact that it is wrong."
- "The Director of Undergraduate Studies's decision to have PHIL 256 meet on Wednesdays plus his authority to decide the matter made it the case that PHIL 256 meets on Wednesdays."
- "Some complex constellation of social facts makes it the case that it is illegal to have a pet tiger in Princeton, NJ."
- "The set {Socrates} exists because Socrates exists."
- "The proposition <Snow is white> is true because snow is white."

(One issue of debate, which we'll get to later in the semester, is whether all of these sentences pick out the same type of dependence, or whether instead we should be grounding pluralists.)

Some examples of philosophical positions that can be formulated using grounding (from Rosen, pp. 111–12):

- *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.

Some examples of plausible connections between grounding and other important philosophical notions:

- *connection to absolute fundamentality: x* is fundamental (or brute) iff *x* is ungrounded.
- connection to relative fundamentality: If x grounds y, then x is more fundamental than y.
- *connection to necessity*: If the fact that  $p_1$ , the fact that  $p_2$ , . . . , and the fact that  $p_n$  together (fully) ground the fact that q, then it is necessarily the case that if  $(p_1 \& p_2 \& . . . \& p_n)$ , then q.

(Actually, we'll see next week that some philosophers dispute this last one.)

• connection to metaphysical reduction (Rosen's Grounding-Reduction Link): If being F reduces to being G (i.e. what it is to be F is to be G, i.e. being G is the real definition of being F), then, necessarily, for all x, if x is F, it is F in virtue of being G.

(In "Real Definition," Rosen uses this connection to offer a real definition of real definition in terms of grounding and essence.)

Grounding enthusiasts such as Rosen and Schaffer take the intelligibility and philosophical interest of examples like these to shift the burden onto grounding skeptics: they must provide *positive reasons* why talk of metaphysical dependence is unclear and/or unsuitable for rigorous philosophical theorizing.

In reply to the worry that we have no explicit, universally accepted method of determining whether one fact is grounded in another, Rosen et al. typically offer a companions-in-guilt response: the same is true of *necessity* and *possibility*, yet we are comfortable theorizing in terms of them.

#### III. Can Grounding Be Analyzed?

Both Rosen and Schaffer insist that grounding is *primitive*, but it is unclear what they mean by this.

Are they saying that grounding is metaphysically irreducible (i.e. it doesn't have a real definition)? That it is conceptually unanalyzable? That it is methodologically primitive (i.e. we can treat it as a primitive for the purposes of theory construction)? Probably all three.

In particular, it is crucial to their purposes that grounding cannot be analyzed in terms of supervenience, entailment, counterfactual conditionals, or the apparatus of possible worlds.

As the term is used now, 'supervenience' is a philosopher's term of art for a relation of necessary covariation between two sets of properties (or facts). The core idea (which can be formalized in many different ways):

Set of properties A supervenes upon set of properties B just in case no two things can differ with respect to their A-properties without also differing with respect to their B-properties.

Two common ways of arguing that grounding is not the same as supervenience:

1. the argument from formal structure (Schaffer, p. 364): Grounding is irreflexive (nothing grounds itself) and asymmetric (no two things ground each other), but supervenience is reflexive and non-asymmetric. So grounding is not supervenience.

(This argument, though widely endorsed, is not terribly convincing: it's powerless against the proposal that for *x* to ground *y* is for it be the case that *y supervenes on x, but not vice versa.*)

2. the argument from fineness of grain (Schaffer, p. 364; Rosen, pp. 113–14): The grounding relation can draw distinctions between necessarily co-obtaining facts and necessarily co-extensive properties, but the supervenience relation cannot. So grounding is not supervenience

Some examples that are typically taken to illustrate this point (where '[p]' is shorthand for 'the fact that p'):

- Fine's example: [{Socrates} exists] supervenes on [Socrates exists] and vice versa, whereas [{Socrates} exists] is grounded in [Socrates exists] but not vice versa.
- Rosen's example: The debate about legal positivism can be interpreted as a debate over whether the legal facts are wholly grounded in the social facts or instead grounded in the social facts plus the moral facts. But if the basic moral facts are necessary, then the legal facts supervene on the social facts iff they supervene on the social plus moral facts.

A similar argument can be used to argue against the following proposals (where ' $p \rightarrow q$ ' is shorthand for the counterfactual conditional 'If it were the case that p, then it would be the case that q'):

$$[p] \text{ grounds } [q] =_{df} \sim p \longrightarrow \sim q.$$
 
$$[p] \text{ grounds } [q] =_{df} (\sim p \longrightarrow \sim q) \& \sim (\sim q \longrightarrow \sim p).$$

The lesson that Schaffer draws from this second argument: "supervenience is an intensional relation, whereas grounding is hyperintensional" (p. 364). But this misuses the word 'hyperintensional'. Linguistic expressions, not relations, are extensional/intensional/hyperintensional.

- "... because \_\_\_\_" is hyperintensional in its "..." slot iff substituting an expression for "..." with necessarily the same truth value can lead to a change in truth value of the overall sentence.
- "... because \_\_\_" is intensional in its "..." slot iff substituting an expression for "..." with different possible truth values but the same actual truth value can lead to a change in truth value of the overall sentence.
- "... because \_\_\_\_" is *extensional* in its "..." slot iff substituting an expression for "..." with a different actual truth value can lead to a change in truth value of the overall sentence.

## IV. Grounding: Some Theoretical Choice Points

When we turn to theorizing about the nature of grounding itself, we immediately face some choice points:

• Is grounding itself a form of explanation, or is it a dependence relation that "backs" or "underwrites" a distinctive form of metaphysical explanation (without itself being that form of explanation)?

The standard terminology for this distinction (from Raven's survey piece "Ground"):

unionism: Grounding is itself a form of explanation (more specifically, is itself a distinctive form of metaphysical explanation).

*separatism*: Grounding is distinct from metaphysical explanation, but they are linked in that metaphysical explanations are always "backed" by the obtaining of some grounding relation.

Compare: many (but not all!) authors think that causation is not itself a form of explanation, but rather is a dependence relation that "backs" a distinctive form of causal explanation.

Thus separatists (such as Schaffer) usually deny that 'explains' and 'because' can be used to directly pick out grounding, whereas unionists (such as Fine and Rosen) allow that they can be so used.

(I myself have unionist sympathies, so I'll often slide into assuming it on these handouts.)

• Is grounding a relation, or is it a connective?

In sentences of the form "The fact that p grounds the fact that q," grounding appears to be a relation.

In sentences of the form "q because p," grounding appears to be a connective (in the way in which 'and' and 'only if' pick out connectives in sentences of the form "p and q" and "p only if q").

relationism: Grounding is a relation, so sentences of the form "q because p" are shorthand for "The fact q obtains because the fact that p obtains" (a sentence expressing the obtaining of a certain two-place relation using the two-place predicate "... obtains because \_\_\_\_ obtains").

*connectivism*: Grounding is a connective, so sentences of the form "The fact that p grounds the fact that q" are shorthand for "q because p."

Rosen and Schaffer are relationists, whereas we'll see next week that Fine is a connectivist.

(Correia & Schnieder call these positions 'the predicational view' and 'the operational view', but I dislike this terminology. First, the fundamental distinction here concerns the nature of grounding itself, not the nature of the language we use to pick it out, so what is at issue is whether grounding is a relation, not whether the word 'grounds' is a predicate. Second, although connectives can be thought of as two-or-more-place operators, in the way in which relations can be thought of as two-or-more-place properties, it's just clearer to use the term 'connective', especially when we're drawing a contrast with 'relation'.)

• If grounding is a relation, what ontological category of entities does it relate?

Rosen takes grounding to be a relation among facts. (This is the standard relationist view.)

Schaffer takes grounding to be a relation among *entities of arbitrary ontological category*.

Schaffer's brief defense of this assumption: we think the same is true of identity, so why is this so crazy? (Note that this rationale doesn't give us cross-categorical grounding truths.)

His motivation for making such an assumption: he wants grounding to specify the relation between a substance and its modes.

But Rosen can account for that, by taking 'x grounds y' to be shorthand for either '[x exists] grounds [y exists]' or '[x has property P] grounds [y exists]' whenever x and y are not facts.

Connectivists often insist that a virtue of their view is that they don't face any analogous questions about the ontological category of entities on which the grounding connective acts, and in particular don't need to commit themselves to an ontology of facts.

I completely disagree with this point. Just as we can ask about the ontological category of entities on which conjunction acts (by which I mean, conjunction itself, not the term 'and' or the concept AND) and give answers such as propositions or states of affairs, so too can we ask about the ontological category of entities on which grounding itself acts, if it is a connective.

We'll also see that when connectivists such as Fine offer a semantics for the 'because' of grounding, they tend to do so in terms of an ontology of facts.

• What is the "adicity" of the grounding relation (or connective)?

If grounding is a two-place relation with a slot for the grounds and a slot for the grounded, there are three relevant options here (assuming the relata are facts):

grounding as a one-one relation: It is always a single fact that does the grounding, and it is always a single fact that is grounded.

grounding as a many—one relation: A collection of facts (possible consisting of one fact on its own) does the grounding, but it is always a single fact that is grounded.

grounding as a many—many relation: A collection of facts (possibly consisting of one fact on its own) does the grounding, and a collection of facts (possibly consisting of one fact on its own) is what is grounded.

Similarly, connectivists can take the connective picked out by the 'because' of grounding to be either a one-one, a one-many, or a many-many two-place connective.

Most relationists take grounding to be at least a many-one relation, if not a many-many relation.

The standard argument against taking it to be a one—one relation: we want to say that [p & q] is grounded in [p] and [q], taken together.

Dasgupta argues for the many-many view in "On the Plurality of Grounds," and Litland has explored its logic in several papers.