A THEORY OF CORRESPONDENCE

ABSTRACT

A common view of *truth* is that whatever is true reflects the way the world is. That is, truth consists in a relationship between that which is true and the world (or parts of it). This relationship is typically called *correspondence* (hence, *the correspondence theory of truth*). But philosophers have so far failed to spell out in precise terms just what the relation of correspondence *is*. Only a handful of proposals have been offered, and each of these makes use of undefined technical terms. Therefore, in this essay, I will offer a precise analysis of the correspondence relation. The analysis is valuable because it explains *how* a proposition could correspond to something as well as *why* propositions correspond to the things they do.

A THEORY OF CORRESPONDENCE

"In what is the agreement of the thing (fact) and the statement (proposition) supposed to consist, given that they present themselves to us in such manifestly different ways?" (Heidegger 1967, p. 180)

§1. THE VALUE OF AN ANALYSIS

similarity could explain how propositions built up out of terms (or concepts) might systematically correspond to facts that are built up out of things to which those terms (or concepts) refer. (There are proponents of CTT who do not accept Then it would seem that there ought to be an explanation as to why that proposition corresponds to something built up out of a *cat* and a *mat* rather than to (say) something built up out of a tree and shoe. An analysis of correspondence would provide such an explanation.

Thus, an analysis of correspondence would have these two values: it would help explain *how* a proposition could correspond to something, and it would help explain *why* propositions correspond to the things they do.

§2. FACTS AND PROPOSITIONS

To give an analysis of correspondence, it will help to have an account of its relata—that is, of propositions (or truth-bearers) and of facts, the things to which propositions correspond. Elsewhere, I offer a theory of propositions and facts that can act as a foundation for a correspondence theory of truth.² Here I will review the essential components of that theory.

A fact is an *arrangement* of things.³

as properties and relations. For example, there is an arrangement consisting of the number 6 bearing the relation of greater than to the number 4. In general, any related things from any ontological category form an arrangement (assuming the related things don't include the very arrangement they constitute).⁴

Turn now to propositions. I suggest that propositions are also arrangements: they are arrangements of individual essences (properties that can be essentially had by something and not possibly had by any other thing).⁵ This means that the *unity* of a proposition is the same as the unity of a fact. It also means that, propositions, like facts, do not form a *sui generus* ontological category but are reducible to the more familiar category of mereological sum.⁶

A potential stumbling block to this account of propositions emerges by my use of individual essences. Some philosophers are skeptical that there are such things (e.g., see Menzel 2008). But the good news is that we may make use of surrogates by defining 'individual essence' in terms of 'singular proposition' as follows:

'<u>x</u> is an individual essence' $=_{def}$ '(<u>x</u> is a singular proposition about something, such that <u>x</u> is true if and only if what <u>x</u> is about exists'.

Then we can think of an "individual essence" as "exemplified by x" by virtue of its being true and intuitively about x. Therefore, singular propositions of a certain sort may play the role of

⁴ More precisely: $(\forall \underline{x}s \ (\neg \exists \underline{y} \ (\underline{y} \ is one of the \underline{x}s and (\underline{y} \ is an arrangement of the \underline{x}s or (\exists \underline{z} \ \underline{z} \ is part of \underline{y} and \underline{z} \ is an arrangement of the \underline{x}s)))$ $(\exists \underline{y} \ (\underline{y} \ is an arrangement of the \underline{x}s))$. This assumes that all things are related in some way (such as by non-identity).

⁵ '<u>x</u> is an individual essence' $=_{def}$ ' $\exists y (y \text{ exemplifies } \underline{x}, (y \text{ exists } y \text{ exemplifies } x)$

individual essences. Moreover, proponents of CTT of all stripes may benefit from the thought that propositions are arrangements of *certain* things (be they arrangements of words, brain states, or whatever), as an analysis of correspondence in terms of relations between arrangements might well be adaptable to different ontological frameworks. For ease of presentation, I will treat propositions as simply arrangements of individual essences.

This account of propositions allows us to give the following analysis of what it is for a proposition to be *about* something:

(About) '<u>x</u> is about <u>y</u>' =_{def} ' $\exists \underline{p}$ (<u>p</u> is a part of <u>x</u>, <u>p</u> is an individual essence, and (<u>p</u> is exemplified <u>y</u> exemplifies <u>p</u>)'.

In other words, a proposition is about a thing if and only if it contains one of that thing's individual essences.⁷

This concludes my review of propositions and facts.

§3. THE NATURE OF CORRESPONDENCE

It is now time to offer an analysis of the correspondence relation. I will begin with a nontechnical statement of the analysis. It is this: a proposition corresponds to an arrangement if and only if the arrangement's main parts exemplify the proposition's parts in the right order. Here's a more precise statement: a proposition P corresponds to an arrangement A if and only if (i) A's main parts—that is, its proper parts that aren't themselves proper parts of proper parts of that Now for the technical statement:

(~) 'x

particular mat, say, *being the actual mat Peter bought last Tuesday*.⁸ According to our theory of facts, there is also an arrangement that consists of Tibbles bearing the *on* relation to the mat. Call this arrangement A. Then, according to our theory of correspondence, P corresponds to A because (i) the parts of A exemplify the (main) parts of P—i.e., Tibbles exemplifies *being Tibbles*, and the mat exemplifies *being the actual mat Peter bought last Tuesday*—, and (ii) A's existence logically necessitates P.

Next consider a mathematical proposition: the proposition that 3 > 2. That proposition is an arrangement of individual essences of the numbers 3 and 2, and the arrangement it corresponds to is an arrangement of the numbers themselves. Both arrangements are abstract, but the arrangement of numbers might be considered more fundamental, as it is the arrangement that grounds the truth of the proposition that 3 > 2. The proposition corresponds to the arrangement in question because the parts of the proposition are exemplified by the parts of the arrangement of numbers, and, the sheer existence of this arrangement of numbers logically necessitates the proposition.

(~) allows us to handle the notorious negative existential propositions. For example, we

corresponding to something. Since there are no sums that contain Socrates (assuming Socrates doesn't exist), the negation of <Socrates doesn't exist> fails to correspond to anything.

I will now point out three desirable consequences of (~). First, (~) guarantees that a true proposition corresponds to an arrangement whose parts (or constituents) are things that the proposition is *about*. This is just what proponents of CTT have traditionally wanted (see Russell 1912, pp. 127-8; Moore 1953, pp. 276-7; cf., Merricks 2007, p. 173). Proponents of CTT are inclined to think that, for example, whatever <the cat is on the mat> corresponds to, it must, in some sense, contain a cat and a mat. Principle (~) implies tha

(E)'s non-logical primitive terms are 'is possible' and 'is a proper part of'. I assume that these are familiar, pre-philosophical terms and that we may treat them as primitives here.

(E) assumes that propositions have parts. This makes sense given our analysis of propositions as mereological sums: conjunctive propositions would then be sums of their conjuncts.⁹ The proposal also seems consistent with our ordinary talk about propositions. For example, one might say, "*part* of what Joe said is false," where what Joe said is a complex proposition. So, a proponent of CTT who adopts our metaphysical framework may welcome (E) and thereby evade the charge that (~) is circular.

§5. CONCLUSION

I analyzed the correspondence relation using terms that are pre-philosophically intuitive. This is the first complete analysis to date, and thus its implications are worthy of further investigation.

REFERENCES

Englebresten, G. (2006). Bare Facts and Naked Truths: A New Correspondence Theory of Truth.

APPENDIX

Definition of 'Arrangement'

- (1) '<u>x</u> is an arrangement of the <u>ys</u>' =_{def} ' $\exists \underline{y} \underline{s} \exists \underline{R} \underline{s}$ (the <u>R</u>s are binary relations and <u>x</u> is a mereological sum of the <u>ys</u>, such that <u>x</u> is not one of the <u>ys</u> and $\exists \underline{z}$ (<u>z</u> is a proposition that entails a way in which the <u>ys</u> stand in the <u>R</u>s, such that <u>z</u> entails <<u>x</u> exists>, and <<u>x</u> exists> entails <u>z</u>))', where
- (2) '<u>x</u> is a proposition that entails a way in which the <u>y</u>s stand in the <u>R</u>s' $=_{def}$ '<u>x</u> is a proposition, and
 - (i) $\forall \underline{r}$ (if \underline{r} is one of the <u>R</u>s, then $\exists \underline{y} \exists \underline{z}$ (\underline{y} is one of the \underline{y} s, \underline{z} is one of the \underline{y} s, and \underline{x} entails $\langle \underline{y} \rangle$ stands in <u>R</u> to $\underline{z} \rangle$),
 - (ii) $\forall \underline{z}$ (if \underline{z} is one of the \underline{y} s, then $\exists \underline{r} \exists \underline{w}$ (\underline{r} is one of the \underline{R} s, \underline{w} is one of the \underline{y} s, and ((\underline{x} entails <w stands in \underline{r} to z>) or (\underline{x} entails <z stands in \underline{r} to w>))))'.¹⁰

Identity Conditions

- (3) $(\forall \underline{x} \ s \ (\neg \exists \underline{y} \ (\underline{y} \ is one of the \underline{x} \ s and \ (\underline{y} \ is an arrangement of the \underline{x} \ s or \ (\exists \underline{z} \ \underline{z} \ is part of \ \underline{y} \ and \ \underline{z} \ is an arrangement of the \ \underline{x} \ s)))$ $(\exists \underline{y} \ (\underline{y} \ is an arrangement of the \ \underline{x} \ s)).$
- (4) $(\forall \underline{x} \forall \underline{y} \text{ (if } \underline{x} \text{ and } \underline{y} \text{ are arrangements having the same parts and } \underline{x} \text{ exists if and only if } \underline{y} \text{ exists, then } \underline{x} = \underline{y})$

Summation Principle

(Sum) $(\forall \underline{x}s)$ if the $\underline{x}s$ are propositions, then $\exists \underline{y} (\underline{y} \text{ is a proposition, } \underline{y} \text{ is a sum of the } \underline{x}s,$ and \underline{y} the conjunction of the $\underline{x}s$.

Entails

To show that our definition of 'entails' has the correct extension, it suffices to show that

Theorem E: \forall (<u>x</u>)(<u>y</u>) (Entails) \Leftrightarrow (Correct Extension), where

(Entails) = \forall (w) if w is a maximal proposition that contains x, then w contains y (our definition),

¹⁰ By '<u>x</u> is a proposition', I mean that <u>x</u> is the sort of thing that a person may believe, assert, deny, and so on. It's also the sort of thing that can logically necessitate (entail) something. I assume that this description of '<u>x</u> is a proposition' is pre-philosophically intuitive. (That isn't to say that propositions cannot be further analyzed.)

contains). If (Correct Extension) is true, then x entails y. Therefore, w^* entails y (by transitivity of entailment). Therefore, w^* entails the conjunction of w^* and y (because it entails both conjuncts). w^* is possible (by definition). No possible proposition entails an impossible proposition. Therefore, the conjunction of w^* and y is not impossible. Therefore, that conjunction is possible, which contradicts the previous statement that it is impossible. Therefore, the supposition that Lemma 2 is false is itself false. Therefore, Lemma 2 is true.

Theorem E follows from Lemma 1 and Lemma 2.

Q.E.D.