On the Color Field Objection to Wittgenstein's Intelligibility Test

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Section 1: Introduction

In the *Tractatus*, Wittgenstein draws the limits to what can be expressed through language. The central argument is the *Intelligibility Test*. According to Wittgenstein, a statement is meaningful iff it passes the Intelligibility Test. In this paper I will defend Wittgenstein's intelligibility test from a common objection regarding the proposition *P*:

If A is red all over, the A is not green all over.

Section 2: Wittgenstein's Metaphysics

To explain the intelligibility test, I will need to explain parts of Wittgenstein's metaphysics. His metaphysics can be broken down into a few parts.

Objects: The metaphysical simples. They are unchanging and unfixed. They have no form; no shape, no size, not color etc. As Soames states "all possibility and change are understood in terms of the combinations and recombination of the same simple objects[1]".

States of Affairs: Arrangements of objects in a particular configuration.

Elementary Propositions: An assertion of a state of affairs. An elementary proposition must be independent of every other elementary proposition ("5.134: From an elementary proposition no other can be inferred[2]").

Wittgenstein viewed objects as necessary. As Soames states "Sections 2.0211 and 2.0212 are meant to provide an argument… for the claim that the process of decomposition and analysis must terminate at the metaphysically simple[3]".

Section 3: The Intelligibility Test

Suppose we delineate different types of *truth or falsity* as follows:

Necessary: S is a necessary truth if it is true and would true no matter what the world was like.	Analytic: S is an analytic truth if it is true only because of the meaning of its constituent terms and how they're combined.	Tautology: S is a tautology if it is true no matter what elementary propositions are true.

[1] Soames pg.205
[2] Wittgenstein *Tractatus*
[3] Soames pg.200

		Contradiction: S is a contradiction if it is false no matter what elementary propositions are true
Contingent: S is contingent if it is true but might have been false.	Synthetic: S is synthetic if it is true in virtue of some facts about the world.	Logically Contingent: S is LC if it is sometimes true and sometimes false depending on which elementary propositions are true.

Initially, each of these definitions of truth address different properties. The *necessary/contingent* distinction is a metaphysical difference, the *analytic/synthetic* distinction is a semantic difference, and the *tautology/logically contingent* distinction is a logical difference. In the *Tractatus*, Wittgenstein shows that if a statement *S* is necessary, it is also analytic and a tautology. This is the foundation of the *Intelligibility Test.* The argument is as follows:

A: The Argument of Equivalence

(A1) If S is a tautology, then S is an analytic truth

(A2) If S is an analytic truth, then S is a necessary truth.

(A3) If S is a necessary truth, then S is a tautology.

(A4, sub conc) Therefore, if something is analytic or necessary, then it is a tautology.

(A5, conc) If something is analytic, necessary, or a tautology then it can be discoverable as such based on its logical form alone.

Each premise is justified as follows:

(A1.1) If S is a tautology then S is true no matter what elementary propositions are true. This means S is true in virtue of its logical form alone. This is the definition of an analytic truth.

(A2.1) If S is an analytic truth the S is true only because of its logical form. This means S would be true no matter what the world was like. This is the definition of a necessary truth.

(A3.1) If S is a necessary truth then S is true and would be true no matter what the world is like. This means S is true no matter which state of affairs obtains. This means S is true no mater which elementary propositions are true. This is the definition of a tautology.

Note here that if (necessary = analytic = tautology) then (contingent = synthetic = logically contingent) by virtue of the delineations alone.

Since the world is composed entirely of states of affairs (arrangements of objects), every meaningful proposition must be decomposable into truth functions of elementary propositions (assertions of states of affairs). Therefore, every meaningful statement must either be:

(i) A truth function of elementary propositions (contingent, synthetic, logically contingent) and therefore knowable to be true or false through empirical investigation.

(ii) A tautology (and therefore necessary and analytic) or a contradiction.

Anything else is meaningless. This is the *Intelligibility Test*. Some applications of the test are as follows:

1.) P or ~P: This is tautology and therefore meaningful.
2.) *Sirius A* is the brightest star in the night sky: This is knowable through empirical investigation. It is contingent, synthetic and logically contingent. Therefore, it is meaningful.
3.) Murder is wrong: The state of the world (which elementary propositions are true) does not have any bearing on the truth of this statement. It is obviously not a tautology and is not a truth function of elementary propositions. Therefore, it is meaningless.

Now consider the statement, *P*:

If A is red all over, then A is not green all over.

This is obviously a necessary truth. It is true no matter how the world is arranged. Since it is a necessary truth it must be discoverable through its logical form alone (see: (A5)). It is not clear how this is possible. Consider the obvious first stab at symbolizing *P*[4]:

$$\Lambda x(Rx \rightarrow \sim Gx)$$

R: is red all over

G: is green all over

This is obviously not a tautology. Furthermore, it is not clear how *P* could be symbolized is any way in which it turns out to be a tautology. One might assume that *P* includes tacit premises. Perhaps a tacit premise that an object can only be covered entirely by a single color? However, this seems much stronger

than the original claim. Such an assumption must be strongly justified. Furthermore, this does not guarantee that the argument is tautologous. This is the problem: how can we maintain these three claims?

1.) P is a necessary truth

2.) P is true in virtue of its logical form

3.) If something is analytic, necessary, or a tautology then it can be discoverable as such based on its logical form alone (A5).

Section 5: Response

Soames[5], Folgelin[6], and Wittgenstein[7] himself were all troubled by the proposition *P*:

If A is red all over, then A is not green all over.

Earlier in the paper, I stated the *Intelligibility Test* as follows:

Every meaningful proposition must either be:

(i) A truth function of elementary propositions (contingent, synthetic, logically contingent) and therefore knowable to be true or false through empirical investigation.

(ii) A tautology (and therefore necessary and analytic) or a contradiction.

A simpler form of the test can be restated as such:

A statement S is meaningful iff it is the truth function of atomic propositions.

I will call this the *Simple Intelligibility Test*. Here, I have removed the clause regarding tautologies and contradictions. This is because tautologies and contradictions are also truth functions of atomic propositions. Consider the function y = 3x/x. The value of y is still a function of the value of x. Tautologies mirror this property. A tautology is still a truth function of elementary propositions.

P passes the *Simple Intelligibility Test* because it is a truth function of elementary propositions. However, to say that *P* passes the *Simple Intelligibility Test* is not to say anything about whether *P* is logically contingent or a tautology. But if *P* passes the test, what is the concern? P passes the test because it is logically contingent. We have applied the test correctly. Critics argue that *P* should pass the test because it is obviously a tautology and not logically contingent. They argue that the failure to categorize *P* as a

[5] Soames *Wittgenstein*
[6] Folgelin *Wittgenstein* pg.92,93
[7] See above

tautology, when it must be since it is intuitively necessary, points to a failure of the test. I find this argument wholly unconvincing. The metaphysics upon which the test is built are definitively unintuitive. Objects, the fundamental building blocks of reality, are entirely unknowable. Elementary propositions, assertions of the fundamental organization of objects, are entirely unknowable. Under these conditions, the true logical structure of any statement is unknown. Consider the following argument:

C: The Argument of Hidden Logical Form

(C1) Elementary proposition are unknowable.

(C2) Every meaningful proposition is a truth function of elementary propositions (*Simple Intelligibility*)

(C3) Therefore, the logical structure of any proposition (the elementary propositions upon which it is truth functional) is entirely unknowable.

If *P* is in fact a tautology, then it follows from (C3) that we will never know the logical form which makes it such. In fact, this suggests that even the logical form of statements such as *P or ~P*, which are intuitively obvious tautologies, are not tautologies for the same reasons we assume them to be. To truly confirm a tautology as such, one would have the know the elementary propositions upon which the tautology is truth functional, and that is impossible.

Critics also suggest that *P* points to difficulty in applying the test. These criticisms appeal to argument C. They argue that since logical form is always hidden, it is impossible to determine whether a given proposition passes the test. In this case, I fail to see this argument. The test provides an answer unambiguously. *P* is undeniably a truth function of elementary propositions. Again, critics are pointing to the fact that the statement passes the test for the wrong reason. However, this is not a valid reason to discount the test. If (C3) is true, then the mechanics of the test are unknown to us. We can only apply the test by categorizing a given proposition as (i) true by formal calculations alone or (ii) empirically verifiable, or (iii) meaningless, to the best of our ability. There are no ontological commitments to categorizing a given proposition in either three categories. Since the metaphysical simples and their arrangements are unknowable, it is appropriate to treat the *Intelligibility Test* as a black box, for which the inner workings are unknown and unimportant. In a world where the fundamental components which make up reality are hidden, this is wholly appropriate.