Quine and Wittgenstein

Similarities and Common Misconceptions

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Abstract

Quine and late Wittgenstein have often found themselves being compared for similarities and dissimilarities, we can attribute the allure of this subject to both philosophers being similar advocates of holism and conceptual relativity despite taking on different subject matters. Pieranna Garavaso attempted an inquiry of this type, where she compares Quine’s view on holism, relying mainly on “Two Dogmas of Empiricism”, with Wittgenstein’s *On Certainty*. Garavaso shows in her survey that there is a high level of correspondence between *On Certainty* and “Two Dogmas of Empiricism” but ultimately concludes that despite any actual agreement between Quine and Wittgenstein, their views end up ultimately incompatible. I will argue that this is wrong; Quine’s conception of holism, and Wittgenstein’s conception of holism found in *On Certainty* are compatible, and even complementary. I will begin my text by giving a short presentation of Quine’s “Two Dogmas of Empiricism”. I will then raise the similarities, and dissimilarities between the two texts before giving my final argument against the supposed conflict between them.

*Keywords*: Holism, Two Dogmas of Empiricism, On Certainty, Quine, Wittgenstein.
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Glossary

This section is mainly for people who lack the necessary context and could therefore get lost in the technical terms, this section should therefore be of use. These definitions are stipulative and are defined based on the context in which the terms are used. This glossary also covers some of the abbreviations I use for brevity.

**Hold come what may**  Quinian terminology for a belief which one holds regardless of any opposing evidence.

**EEWS**  “On Empirically Equivalent Systems of the World”.

**Holism**  In the context of this essay, “holism” refers to our beliefs not being separately confirmable or infirmable, excluding certain exceptions. That is, a belief is under normal circumstances only testable when taken as part of a web of beliefs.

**Language game**  For Wittgenstein, the speaking of language is a form of activity akin to a game with varying rules, and this type of activity can manifest itself in numerous ways. A language game is in short, a manifestation of language use, and the actions in which language is woven.

**Paradigm**  There are multiple iterations of the meaning of “paradigm”, but in the context of this essay, the term refers to an accepted pattern or model used within the practices of science and philosophy.

**Pragmatism**  In the context of Quine’s epistemic system, “pragmatism” refers to the method of considering the practical consequences of a hypothesis or theory. Practical consequences
being considerations concerning e.g., the potential undermining of a system of beliefs when choosing between different theories or adopting beliefs. Any variant of the non-technical term “pragmatic” used in this essay is in this sense referring to the same considerations of practicality found in the definition of the technical term “pragmatism” i.e., Being “pragmatic” or “pragmatically inclined” means to act, usually in the practice of devising theories, with certain practical considerations towards one’s web of beliefs.

SLS “The Scope and Language of Science”.

TDE “Two Dogmas of Empiricism”.

1. Two Dogmas of Empiricism and On Certainty

“Two Dogmas of Empiricism” (TDE) is a critique of the synthetic/analytic distinction and radical reductionism and is in essence a critique of the unshakeability which we might attribute to certain statements, that is, statements which one would hold come what may. Wittgenstein’s On Certainty gives a critique of G. E. Moore’s common-sense knowledge claims, where Wittgenstein argues that there are some propositions, or beliefs, which are beyond doubt, and are therefore nonsensical to make knowledge claims about. By shedding light on these fundamental propositions, Wittgenstein uncovers an entire system of interconnected propositions where these particular propositions function as the fundamental pillars. Then, because of the fundamental status of these propositions, we are therefore required to hold them undoubtedly relative to our system of propositions. In doing this, Wittgenstein reaches a similar conclusion of holism and conceptual relativity to that found in “Two Dogmas of Empiricism”. In order to display the agreements, and consequent disagreements, between On Certainty and “Two Dogmas of Empiricism”, I will begin by giving a quick summary of “Two Dogmas of Empiricism”, before engaging in any comparison between the two texts.
1.1 Two Dogmas of Empiricism

Quine, in his famous paper “Two Dogmas of Empiricism”, engages in a critique of what he recognizes as two inherently flawed beliefs, or dogmas, of the empiricist tradition. The first belief is that analytic and synthetic statements are distinct. The second belief is that of reductionism, i.e., the belief that meaningful statements are equivalent to statements which refer to immediate experience.¹ Quine recognizes the dichotomy between analytic truths, i.e., statements which are true in virtue of meaning independently of fact,² and truths which are synthetic, i.e., statements which are true in virtue of fact, as a distinction which should be abandoned.³ If Quine is right, then not only is the assumed distinction between synthetic and analytic statements lacking grounds for justification, the split between natural science and speculative metaphysics which one might attribute in part to the analytic/synthetic divide is upheld in virtue of this false belief.⁴ In order to highlight the presumed baselessness underlying the belief in the analytic/synthetic divide, Quine attempts to bring to light the circularity which permeates the various definitions of analyticity in full display. Consequently, if one is unable to properly define the notion of analyticity, then there is little reason to maintain any sort of divide between synthetic and analytic statements.⁵

The inquiry ultimately concludes with Quine being unable to draw any non-arbitrary distinction between synthetic and analytic statements, and he resumes by attacking the closely related dogma of radical reductionism, and the influence it has had on the empiricist tradition. In short, radical reductionism is the belief that every meaningful statement is held to be translatable into a statement (true or false) about experience.⁶ This radical form of reductionism is however, mostly abandoned, but despite it’s eventual dissipation one can find its influence still traceable in the thoughts of many empiricists. That influence being most

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² There are multiple formulations of “analyticity” e.g., The “containment” criterion, “Cognizability in accordance with the principle of contradiction” and so on, Quine settles for the least vague of the alternatives. For a more thorough analysis of the different variations of analyticity see: Proops, Ian (2005).
⁴ Ibid. P. 20.
⁵ Ibid. P. 34.
⁶ Ibid. P. 36.
apparent in the belief that any (synthetic) statement can be further confirmed, or infirmed (invalidated), based on an array of sensory qualities being present. This belief is conjoined with the idea that any statement taken in isolation from any other statement, can be confirmed or infirmed at all. Furthermore, we find in this lingering form of reductionism a mutual support for the synthetic/analytic distinction:

“The dogma of reductionism, even in its attenuated form, is intimately connected with the other dogma: that there is a cleavage between the analytic and the synthetic. We have found ourselves led, indeed, from the latter problem to the former through the verification theory of meaning.”

That is, our idea that some statements can be confirmed, or infirmed, based on the presence of specific sense datums have led us to contrast synthetic statements with those statements which are believed to be true regardless, i.e., analytic statements. Truth being generally conceived as the product of language and a factual component has almost invited the idea that for any statement to be true, it too would have to consist of a linguistic and factual component. Given this notion of truth, an empiricist would hold the factual component of a statement as a collection of confirmatory experiences, whereas when the linguistic components are all that matters in a statement, a true statement is analytic.

“My present suggestion is that it is nonsense, and the root of much nonsense, to speak of a linguistic component and a factual component in the truth of any individual statement.”

Rather, it is the entirety of science which is doubly dependent on language and experience, and this dependence cannot be found in the statements of science taken in isolation. Furthermore, it is only as a part of this whole that statements are liable to adjustment in the face of sense experience.

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7 Ibid. P. 38.
8 Ibid. P. 38.
9 Ibid. PP. 38 - 39.
10 Ibid. P. 39.
11 Ibid. PP. 38 - 39.
1.2 Quine’s holism

Quine having done away with the synthetic/analytic distinction and radical reductionism advocates for a form of holism in turn. This is also where we find the first mention of what Quine describes as our system of statements. Following suit of previous authors who have attempted a similar inquiry, that is, to compare On Certainty and “Two Dogmas of Empiricism”,12 I will begin by giving a quick recap of Quine’s thoughts on our system of statements found in “Two Dogmas of Empiricism” before engaging in any comparison with Wittgenstein. It is worthwhile to mention that Quine never explicitly distinguishes between propositions and statements when discussing his system of statements, but given that a statement must express a proposition which is either true or false (in some context) in order to be truth-apt, I take him as referring to our propositions forming systems, and not statements themselves.

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience.13

Quine describes the totality of our beliefs (and the statements which express those beliefs) as constituting a holistic system, where each statement is differentiated simply by the role they play in the totality of this system. Ultimately, there are no intrinsic differences between analytic statements e.g., statements of logic, and synthetic statements i.e., empirical statements, both are, epistemically speaking, equals; Our holding statements of logic come what may is merely a pragmatic preference on our part, that is, we wish to shake the totality of our system of statements as little as possible.14 This is because the components of this system are statements, and the statements constituting this system are bound by different

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14 Ibid. P. 41.
relations of logical interconnectedness, in this manner we find that abandoning certain statements affects the system in varying ways.\textsuperscript{15} For example, we can imagine that abandoning an inferential rule of propositional logic such as modus ponens would have a palpable effect on a wide majority of the statements of our system, because every claim derived from any premise relying on the inferential rule of modus ponens would have its truth-value reconsidered. Another type of statement central to our system of statements, owing its widespread connectedness to other statements in virtue of different rules of inference, but not being a rule of logic itself, could be a statement such as “there are external objects”. Abandoning a belief of this type would force us to revise every statement relating to this initial statement, many of those concerning the physical world. Furthermore, we can imagine that abandoning a belief of this type would alter the way we understand and talk about physical objects. It follows that a decision to revise a statement of this type would lead to an uprooting of a large part of our system of statements, if not the entirety of it.

With these consequences in mind, despite the fact that any statement is liable to abandonment, one might be more inclined to revise a less central statement (the statements closest to the surface of this network being statements about physical objects) given the miniscule impact it would have on the totality of the network e.g., imagine a situation where we previously thought that our bike was red, but this turned out to be due to the lighting being poor and on closer inspection it turns out to be orange. This is a situation where we are left with a plethora of choices regarding the statements we wish to change. In a pragmatic manner, we could simply abandon the statements about our assumption that the bike appeared to be red. A change of beliefs of this kind is intuitive, since we are not under the presumption that physical objects, under normal circumstances, have the tendency to change colours at random. By doing this then one can avoid affecting one's system of statements in any notable measure, because only the statements connected to the initial assumption that the bike was red would be affected. We are therefore not obliged to revise any central idea of the colour red or of the physical and/or chemical properties of physical objects. If instead we were to consider an alternative route, then we could e.g., reconsider the statements making up our belief that objects do not change colours at random. It would be fair to assume that a revision of this type would affect a large portion of one’s system of statements, being at odds even

\textsuperscript{15} Ibid. P. 39.
with one’s common sense. Once a statement is abandoned, or revised, a change of truth-value will be redistributed across a portion of one’s system of statements varying in size with regards to the locality of the statements being revised. At best, one will not have to change any statements whatsoever, at worst, one would be forced to reconsider the entirety of the system. Because the central statements of this system are so unaffected by its boundary conditions, that is, experience, when we abandon those statements which we feel are most closely connected to observations i.e., statements about physical objects, we are left with a lot of choice as to which statements we wish to change. In this manner, certain statements will leave the totality of the system relatively unshaken compared to the revision of a statement which is located closer to the centre of this system.

The holistic nature of this system can be attributed to the fact that it does not allow any statement taken in isolation to be reviewed, i.e., because a statement such as “this is a cat” is connected to a plethora of other statements, that is, both through rules of inference and other statements which are related to it (statements making up one’s general conception of what a cat is for example). When we then test the statement “this is a cat” for truth or falsity, we would also have to look at the connected statements being affected, akin to a ripple effect taking place. As it stands, we can only review statements for truth or falsity when they are taken as part of the whole, that is, when part of the totality of the system.

1.3 Similarities

Having given a general idea of Quine’s holism, let us look at a similar idea of epistemological holism present in Wittgenstein’s text On Certainty.

141. “When we first begin to believe anything, what we believe is not a single proposition, it is a whole system of propositions.” 16

142. “It is not single axioms that strike me as obvious, it is a system in which consequences and premises give one another mutual support.” 17

225. “What I hold fast to is not one proposition but a nest of propositions.” 18

17 Ibid. P. 21.
18 Ibid. P. 30.
410. “Our knowledge forms an enormous system. And only within this system has a particular bit the value we give it.”

These passages from *On Certainty* describe a general picture of a system of propositions similar to the system of statements described by Quine. That is, where Quine’s statements would form, or be adopted into a system, Wittgenstein describes a similar view where our propositions form entire systems. Each proposition interconnected to another through mutual support of logical interconnectedness e.g., through various rules of deduction and inductive reasoning. This mutual support is found in how we only adopt propositions in a bunch e.g., with the belief that a person has climbed a mountain comes further beliefs connected to the initial one. One such belief could be that the mountain has existed long enough for this person to have been able to climb it. Both this belief and the belief that a person has climbed this mountain give each other mutual support because they could not figure without the other. Furthermore, it is only in the whole of this system that propositions are susceptible to testing, that is, a requirement for testing a proposition for truth or falsity is that we must consider the system that the proposition are part of. Given the inclination of propositions to form entire systems, and the mutual dependency between these propositions, it follows then that we are unable to test propositions for truth or falsity when isolated from the system which they constitute.

105. “All testing, all confirmation and disconfirmation of a hypothesis takes place already within a system. And this system is not a more or less arbitrary and doubtful point of departure for all our arguments: no, it belongs to the essence of what we call an argument. The system is not so much the point of departure, as the element in which arguments have their life.”

Our system of propositions is the platform in which any process of testing gains its effectiveness; This system gives us the standard measure of truth and falsity, without a system of this sort then terms such as “true” or “false” are meaningless and any consequent process of testing propositions for truth or falsity is equally so. The meaning of terms, such as “true” and “false”, are only properly defined when part of the process which is language usage. Or, in other words, understanding is having the ability that one exercises when and in

19 Ibid. P. 52.
20 Ibid. P. 16.
21 For Wittgenstein, meaning is defined as use, see: Wittgenstein (1953)
using language. We should note that any term in order to have any meaning whatsoever depends on its being part of language, and language is dependent on a pre-established system of propositions. This is because the ability to engage in language is dependent on us believing in some fact, that is, having a system of propositions. Any belief that we possess is only initially adopted as a bunch, naturally giving shape to a system through relations of interconnectedness between beliefs. This system expanding with conceptions of the meaning of different terms as we engage in language. One's conception of truth and falsity being adopted in a similar manner, have their meanings defined only when part of a system, initially adopted through engaging with a community of language users. If we do not believe in anything, i.e., we lack a system of propositions, as absurd as this might be, a consequence of this is that we would have no conception of the meaning of any term because we would be unable to engage in language. It follows then that we would have no idea of what it would mean for a proposition to be true or false. As it stands, because truth and falsity are only properly defined when part of a language, and language itself is dependent on a system of propositions, it seems apparent then, that the process of deriving truth or falsity from a proposition is equally dependent on a prior system of propositions. Without a standard measure of truth and falsity, it seems strange how a process of testing such as e.g., the hypothethico-deductive model would even come about.

When we look at the general structure of Wittgenstein’s system, we find a similar usage of the analogy of ‘mythology’ to describe the propositions that we hold come what may:

95. “The propositions describing this world-picture might be part of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules.”

144. “The child learns to believe a host of things. I.e. it learns to act according to these beliefs. Bit by bit there forms a system of what is believed, and in that system some things stand unshakeably fast and some are more or less liable to shift. What stands fast does so, not because it is intrinsically obvious or convincing; it is rather held fast by what lies around it.”

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22 This is a reformulation of Wittgenstein’s “meaning as use”, one which I consider more concise than the idiomatic saying used by Wittgenstein, see: Putnam, Hilary (1999).

24 Ibid. P. 21.
To give a general outline, the propositions which we hold come what may, either logical or extralogical e.g., propositions such as “my body exists” and deductive rules of inference, are described as rules of a system. How we become aware of these rules is often not through a deliberate learning process of each fundamental proposition. Rather, we often draw, as a consequence, our belief in these fundamental propositions simply because most of the propositions which hold as true, and those that are not, are dependent on the validity of these rules. These rules are not held fast because they are intrinsically convincing, rather, they are held fast because of the mutual dependency they have with the surrounding propositions. The consequence of believing a set of propositions is that one, often unconsciously, adopts a central belief which one must hold come what may, e.g., if I am told that someone walked across the street to greet me, then the consequent belief that this person did not phase through the pavement is a consequence of my belief that this person actually did cross the street. No one has taught me that people do not phase through concrete objects, but it is a belief which I must hold regardless, and through my initial belief is a consequence that follows. Wittgenstein uses the flux of a river as an analogous description of this relation amongst propositions in the system;  

96. “It might be imagined that some propositions, of the form of empirical propositions, were hardened and functioned as channels for such empirical propositions as were not hardened but fluid; and that this relation altered with time, in that fluid propositions hardened, and hard ones became fluid.”

97. “The mythology may change back into a state of flux, the river-bed of thoughts may shift. But I distinguish between movement of the waters on the river-bed and the shift of the river itself; though there is not a sharp division of the one from the other.”

98. “But if someone were to say “So logic too is an empirical science” he would be wrong. yet; this is right: the same proposition may get treated at one time as something to test by experience, at another as a rule of testing.”

99. “And the bank of that river consists partly of hard rock, subject to no alteration or only to an imperceptible one, partly of sand, which now in one place now in another gets washed away, or deposited.”

We see that the epistemically unfounded nature of some beliefs that we hold with a strong degree of unshakeability are described as part of a mythology. Unfounded in the sense that they are held fast without being subject to rational scrutiny and mythologized in the sense that they are considered more epistemically justified than other beliefs, bordering on

25 Ibid. P. 15.
revisionary immunity. The keyword here is bordering, because no statement is immune to revision, but some statements seem deceptively so given their firm place in our system. Continuing, this mythology makes up the riverbed, but as our system of propositions alters, then this riverbed may degrade and turn to sand before being swept away with the currents. Propositions are distinguished by their different degrees of unshakeability, this unshakeability being a result of their placement in the totality of the system. However, the transformation of the riverbed into sand before being swept away with the currents, and the hardening of the sand into riverbed, is a process which changes as we adopt new beliefs, just as in Quine’s holistic system where statements are constantly being rearranged to accommodate new beliefs. Furthermore, as in the case of Quine, in Wittgenstein’s example there is no real theoretical division between different types of propositions, only differing degrees of unshakeability. Any statement can be held fast, and any statement can be revised given proper circumstances. However, one should note that the possibility of revising any set of propositions making up Wittgenstein’s mythology is only possible in the sense that no proposition is immune to revision. This does not in turn mean that a proposition of this type could be in any conceivable way revised outside the mere potentiality of it happening. That is, the proposition that I will not phase out of existence at random is so fundamentally intertwined with our way of being i.e., our human ‘form of life’, that this proposition could only face the possibility of being revised in the case that we do actually begin to phase out of existence at random. We could imagine that if facts had been different then so would our system of propositions, and those propositions that we hold fast in our current system would not be as sturdy.26

Now, the fundamental propositions of our system of propositions are essential in that they allow for other sets of propositions to be assessed for truth or falsity, and they are often

26 According to Wittgenstein, most philosophical rules, such as those of logic e.g., the law of excluded middle, are malleable in the sense that any hardness, or steadfastness, of rules such as these are ‘infused’ by the practical purpose we give them. I would highly recommend anyone interested in Wittgenstein’s thoughts on the malleability of logic to see Peter Railton’s “A Priori Rules: Wittgenstein on the Normativity of Logic” (2000).
referred to as ‘hinge propositions’, in that they act, analogously, as the hinges on a door which allows it to turn.\textsuperscript{27}

341. “That is to say, the questions that we raise and our doubts depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn.”\textsuperscript{28}

342. “That is to say, it belongs to the logic of our scientific investigations that certain things are indeed not doubted.”\textsuperscript{29}

456. “If, therefore, I doubt or am uncertain about this being my hand (in whatever sense), why not in that case about the meaning of these words as well?”\textsuperscript{30}

As noted, these types of propositions are necessarily exempt from doubt. That is, for once we doubt a hinge proposition, such as the proposition that there are external objects, expressions which are intertwined with the meaning of the expression ‘doubt’, such as ‘evidence’ and ‘justification’, will alter, if not suffer a complete loss of meaning.\textsuperscript{31} Our system of propositions owes the shape of its overall structure to the different hinge propositions acting as columns on which it stands on. The form of any proposition which we adopt into our system will naturally be decided by the ontology which we have constructed of our world, this ontology being a product of our hinge propositions. That is, any belief that we would draw from our experience with the physical world will only be entertained given certain fundamental beliefs e.g., our belief in the existence of the external world. A belief will only be adopted in a manner which does not oppose or undermine certain fundamental beliefs, such as our belief of the external world. In this regard, what has allowed ideas of ‘justification’ and ‘evidence’ to manifest in their conventional form is a presupposed idea of there being an external world containing external objects. We could perhaps imagine that, in an alternative system of propositions where external objects are considered as mere myth,

\textsuperscript{27} Wittgenstein never coined the term "Hinge proposition", rather, it is something which came about much later by scholars of Wittgenstein. See Daniele Moyal-Sharrock’s Understanding Wittgenstein’s On Certainty for a more thorough exposition of Wittgenstein’s conception of ‘hinge propositions’.

\textsuperscript{28} Wittgenstein. On Certainty, 1969, p. 44.

\textsuperscript{29} Ibid. P. 44.

\textsuperscript{30} Ibid. P. 59.

\textsuperscript{31} Ibid. p. 59.
that what we would consider the meaning of terms such as ‘evidence’ would differ radically from the conception we have now.

On a surface level, it should be apparent now that there are sufficient amounts of agreements between Quine’s “Two Dogmas of Empiricism” and Wittgenstein’s On Certainty to justify a comparison. For brevity, we can summarise it at such: (1) Propositions form entire systems. In the case of Quine, because he refers to statements as being confirmable or infirmable entities, I interpret his talk of statements forming systems as referring to the propositions expressed by the statements, given that statements themselves are not truth-apt. (2) There is no theoretical divide between propositions, there is simply a differing degree of ‘unshakeability’ distributed amongst different propositions relative to their role in the system, (3) Some propositions, such as rules of logic, mathematical propositions and some extralogical propositions, are more central to our system of propositions and system of statements.\(^32\) They are however subject to abandonment given the right circumstances, those circumstances being pragmatic considerations on Quine’s part. That is, even the law of excluded middle, which one might rightly consider a central statement in one’s system of statements, has had revisions proposed in order to simplify quantum mechanics.\(^33\) The problem which arises when abandoning a central statement is that of accommodating consequent changes in the system, but this problem is ultimately a question of whether it is more beneficial to maintain a belief given the consequences that follows (problematic changes in the system). Whereas for Wittgenstein, fundamental propositions are only revised when changes in our system of propositions occur. Unlike changes prompted by pragmatic considerations in Quine’s system of statements, changes in one’s system of propositions are more connected to cultural shifts, such as changes in community-wide intersubjective beliefs. However, I would estimate that our most fundamental beliefs are so ingrained in our human way of acting (which I believe is the reason why some beliefs are shared amongst most, if not all humans), such as the belief in our own physical density, that the revision of beliefs of this type becomes a near impossibility. For example, we do not contemplate whether we will be able to traverse a flight of stairs out of fear that we will phase through it, but what might

\(^{32}\) I must thank Garavaso for her concise summary of the similarities between Quine and Wittgenstein, the structure which I have used here is in part inspired by her.

change this instinctive way of acting is perhaps if we began to actually phase through physical objects.

1.4 Dissimilarities

For Quine, our tampering with our system of beliefs is often described as a choice e.g., our holding statements about physical objects as “germane” to sense experience is described as a relation reflecting “the relative likelihood, in practice, of our choosing one statement rather than another for revision in the event of recalcitrant experience.”\textsuperscript{34} Furthermore, the guiding impulse which rules which statements we decide to revise is described as an inclination towards brevity and simplicity.

“But I have been urging that this difference is only one of degree, and that it turns upon our vaguely pragmatic inclination to adjust one strand of the fabric of science rather than another in accommodating some particular recalcitrant experience. Conservatism figures in such choices, and so does the quest for simplicity.”\textsuperscript{35}

Whereas for Wittgenstein it seems less a matter of pragmatic inclination and more a process of “inheritance”.

94. “But I did not get my picture of the world by satisfying myself of its correctness; nor do I have it because I am satisfied of its correctness. No: it is the inherited background against which I distinguish between true and false.”

The ‘inheritance’ of a system of propositions is not a process of acknowledged revision, rather, a system of propositions is adopted as one interacts with the world. This process is not a product of rationality, as described previously, our system of propositions manifests itself out of the interaction between our animal instincts and the process of learning about one’s surroundings and engaging in communal practices.\textsuperscript{36}

358. “Now I would like to regard this certainty, not as something akin to hastiness or superficiality, but as a form of life. (That is very badly expressed and probably badly thought as well.)”

\textsuperscript{34} Quine. “Two Dogmas of Empiricism”, 1951, p. 40.
\textsuperscript{35} Quine. “Two Dogmas of Empiricism”, 1951, p. 43.
359. “But that means I want to conceive it as something that lies beyond being justified or unjustified; as it were, as something animal.”

A system of proposition acts like a lens in which one perceives the world and through it one is able to test what is false and what is true. Consequently, one could not choose which system of proposition to subscribe to because the process of doubting is one which presupposes an initial system of propositions.

273. “But when does one say of something that it is certain? For there can be dispute whether something is certain; I mean, when something is objectively certain. There are countless general empirical propositions that count as certain for us.”

274. “One such is that if someone's arm is cut off it will not grow again. Another, if someone's head is cut off he is dead and will never live again. Experience can be said to teach us these propositions. However, it does not teach us them in isolation: rather, it teaches us a host of interdependent propositions. If they were isolated I might perhaps doubt them, for I have no experience relating to them.”

279. “It is quite sure that motor cars don't grow out of the earth. We feel that if someone could believe the contrary he could believe everything that we say is untrue, and could question everything that we hold to be sure. But how does this one belief hang together with all the rest? We should like to say that someone who could believe that does not accept our whole system of verification. This system is something that a human being acquires by means of observation and instruction. I intentionally do not say learns”.

Our system of propositions is given to us through the different ways in which we learn about our surroundings, and any language game we engage in is only played with this system as its background. We could describe our system of proposition as constituting the rules which themselves make up our language games, and because we do not get to choose our own system of propositions, so too are our language games restricted in this manner, we are only able to engage in the different language games which our system of propositions allows. Because of this, some language games are meaningless in that they do not follow the presupposed rules of the system of propositions e.g., as was seen previously, doubt is meaningless when applied to the most fundamental propositions in our system of propositions.

317. “This doubt isn't one of the doubts in our game. (But not as if we chose this game!)”

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At first glance, we find the most palpable dissimilarities between Quine’s system of statements and Wittgenstein’s system of propositions amounting to deliberate choice, or lack thereof. Quine believes that there is a latitude of choice as to which statements we choose to revise when doing so, even in the case where we decide to revise the most central statements in the interior of the system. Whereas Wittgenstein believes that any change taking place in the system is only prompted when we adopt new beliefs, but that this adoption of beliefs is often not deliberate on our part. In short, Wittgenstein advocates for change in our system of propositions as a gradual process, and not something prompted by rational decision making where deliberate decisions are made with regards to which belief to hold. When we then consider the pragmatic configuring taking place in Quine’s system of statements when revising statements, which would be the result of a process of rational decision making, it seems that Quine and Wittgenstein would be at odds with regards to nature of our system of beliefs.

“Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system.”

Wittgenstein would agree with Quine on this matter, but the crux of the matter concerns the process which would prompt those adjustments.

2. Disagreements with Garavaso

After having raised the similarities and dissimilarities between “Two Dogmas of Empiricism” and On Certainty, Garavaso concludes that Wittgenstein’s conception of how we come to adopt our system of beliefs, being a process rarely consisting of deliberate choice, as a more applicable model than the one postulated by Quine. She states, that for Quine, explicitly acknowledged beliefs and pragmatic reason guide our choices in our system of beliefs,

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39 Garavaso, p. 266.
whereas Wittgenstein conceives of no such empirical and psychological basis for our system of beliefs.\textsuperscript{40} I believe that this is a hastily drawn conclusion; If one wishes to reconcile Quine and Wittgenstein’s holistic approaches to knowledge, then one would be well advised to look beyond "Two Dogmas of Empiricism". In Quine’s essays "On the Scope and Language of Science” (SLS) and "On Empirically Equivalent Systems of the World” (EESW) we find further arguments which properly presents the demarcation and application of Quine’s system of statements. Confusing the breadth of Quine’s system of statements to where it would impede on Wittgenstein’s system of propositions, that is, thinking that Quine and Wittgenstein’s systems are meant to encompass the totality of our beliefs, and therefore is at odds due to their different conception of these systems, is a reasonable misunderstanding. I would grant that this is a mistake which can be undone by focusing on some of the arguments present in these later texts. When we then inflate the arguments found in “TDE”, “EESW” and “SLS” what we find is a plausible theory of scientific configuring and progression. Quine’s advocating of holism in the system of statements, his idea of systems being introduced in science as a development of common-sense, and the relation of experiential underdetermination of these systems which corresponds to pragmatic decision making, are congenial to the actual evolution and practice of science throughout the ages. Furthermore, by extending our scope beyond “TDE” in this manner we find a more appealing theory of holism due to its congeniality with the actual workings of science. In order to accurately highlight the congeniality of Quine’s theories with that of science, I will be relying on Thomas Kuhn’s \textit{The Structure of Scientific Revolutions} (1962) as the authority on this subject, that is, on the nature and structure of science’s progression. Furthermore, I believe that by comparing some of the arguments presented by Quine with Kuhn’s highly esteemed work will provide a deeper insight into Quine’s theory of holism. This comparison should also help to differentiate Wittgenstein from Quine even further. As it stands, it is only a choice between two competing systems if we believe that both models are meant to represent our general system of knowledge and beliefs. As we shall see, this is not the case.\textsuperscript{41}

\textsuperscript{40} Ibid. P 266.

\textsuperscript{41} I want to properly acknowledge the intellectual debt that I have to Roger F. Gibson. Had it not been for his text “Quine, Wittgenstein and Holism” (2000) then it would have taken me a while longer to find the relevant texts and gain the necessary knowledge of these texts for my purposes. Furthermore, it was only through Carnap and his "Empiricism, Semantics and Ontology” (1950) that I gained the necessary context, and consequent ease of understanding, for my reading of Quine’s” Two Dogmas of Empiricism” (1951).
2.1 Common sense as grounds for scientific inquiry

We could grant that Wittgenstein’s system of propositions, and the process of inheritance through which we adopt certain beliefs, as a plausible theory of how we (we in this manner meaning people in general) come to adopt different systems of beliefs. More often than not, it is rarely a choice to believe in the existence of physical objects, it is simply a conclusion that we end up assuming when we learn about the world. However, whereas Wittgenstein’s system of proposition will touch upon common-sense beliefs, for Quine, the demarcation of the system of statements is that of science. That is, the very reason why science trumps over common-sense in its accuracy of describing the world is through the introduction of systems.

The early stages of science’s development are marked by an emergence of systems. That is, by establishing a specific body of beliefs, making up a general theory of joint theoretical and methodological practices, and then using it as point of departure for scientific inquiry, early scientists were given a more focused and effective way of researching phenomena. Eventually leading to a complete dissipation of the earlier methods used in scientific research, which, lacking the guidance of accepted, pre-established methods of scientific practices would allow for a plethora of different descriptions of the same phenomena.  

“"The scientist begins with the primitive sense of evidence which he possessed as layman, and uses it carefully and systematically.""  

“"Our latest question was, in brief, how science gets ahead of commonsense; and the answer, in a word, is 'system'. The scientist introduces system into his quest and scrutiny of evidence.""  

Furthermore, Quine is in this manner already presupposing a sufficient ground of common-sense knowledge for his system of statements. Common-sense being the predecessor and point of departure for scientific inquiry is essentially the reason for why we do not look for evidence to verify beliefs of this kind. Congenial to Wittgenstein, scientific inquiry requires that we accept our common-sense beliefs, such as those concerning the 

44 Ibid. P. 6.
existence of the external world in order to pursue any further knowledge about the world. Both the layman and the scientist share the common ground of knowledge brought in virtue of common-sense, and one does not replace these fundamental beliefs with those of science. The underdetermination of the scientist's empirical methods of testing and verifying hypotheses with the ontological stance of physicalism is not a reason to doubt the knowledge which even the layman possesses. That is, the lack of empirical evidence we have for the existence of the physical world is not a sufficient reason to doubt it, rather it would be a fallacy to inquire in this manner.

“We cannot significantly question the reality of the external world, or deny that there is evidence of external objects in the testimony of our senses; for, to do so is simply to dissociate the terms ‘reality’ and ‘evidence’ from the very applications which originally did most to invest those terms with whatever intelligibility they may have for us.”

Our fundamental worldview is a product of “surface irritation and internal conditions”. That is, our complete understanding of the world emanates from our being influenced by the physical forces of this world, such as light striking one’s retinas and sounds being absorbed by one’s ears, and the internal conditions of a person which allows him to engage in turn with the world e.g., through the utterances of sounds and one’s own modulation of thoughts. One’s ability to interact with the world in this manner is a product of having assimilated a part of one’s own community, and having done some thinking on one's own. We find the source of our worldview in this combination of external and internal conditions, and one's conception of 'evidence' and 'reality' is equally dependent on this development.

We imbibe an archaic natural philosophy with our mother's milk. In the fullness of time, what with catching up on current and making some supplementary observations of our own, we become clearer on things. But the process is one of growth and gradual change: we do not break with the past, nor do we attain to standards of evidence and reality different in kind from the vague standards of children and laymen. Science is not a substitute for commonsense, but an extension of it. The quest for knowledge is properly an effort simply to broaden and deepen the knowledge which the man in the street already enjoys, in moderation, in relation to the place things around him. To disavow the very core of commonsense, to require evidence for that which both the physicist and the man in the street accept as platitudeous, is no laudable perfectionism; it is a

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46 Ibid. P. 1.
pompous confusion, a failure to observe the nice distinction between the baby and the bath water.

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What we find is that Quine’s system of statements is superimposed on a basis of common-sense knowledge, and is in this manner not in opposition to Wittgenstein’s system of propositions. Our understanding of basic common-sense beliefs is not given to us through a deliberate process of choosing and not choosing which belief to hold. Rather, our worldview which is constituted by these fundamental beliefs, and which we acquire almost as a feature of our existing in correspondence with the world around us, is congenial to Wittgenstein’s conception of how we come to develop our system of propositions. It is in science, which is the breadth of Quine’s system of statements, where we find deliberate decisions as being made e.g., to choose between scientific theories. Furthermore, the habit of holding certain statements as come what may e.g., analytic statements, which Quine criticizes, is common practice in science, since it might be more valuable to hold fast to a belief in the face of opposition rather than risk the chance of undermining core practices used in periods of scientific configuring.48 However, both Quine and Wittgenstein would agree that it would be wrong to look for evidence of one’s common-sense beliefs when the very process of weighing evidence in an empirical manner in order to derive truth or falsity is a process which has its grounds of justification in these very fundamental beliefs.

2.2 Pragmatism in the system of statements

I believe a proper analysis of Quine’s pragmatism requires one to take into account the relation between hypothesis and observation, and how this relates to science as a whole. That is, pragmatic decision-making figures given the relation between scientific theorizing and observation, which is a form of one-way implication. Whereas a hypothesis will imply its observable consequences, the observable consequences will not imply the hypotheses. This is what Quine refers to when he states that science is partly underdetermined by experience.49


This relation of underdetermination leaves us with a plethora of choice as to which theory one wishes to believe in, and any decision between equally valid theories, or hypotheses, is a decision permeated by an inclination towards clarity and simplicity. I would grant that making deliberate, pragmatic choices is consistent with the configuring of scientific and philosophical language, and the consequent theories of these enterprises.

The hypotheses are related to observation only by a kind of one-way implication; namely, the events we observe are what a belief in the hypotheses would have led us to expect. These observable consequences of the hypotheses do not, conversely, imply the hypotheses. Surely there are alternative hypothetical substructures that would surface in the same observable ways.  

When we then combine the doctrine of underdetermination with Quine’s holism we find that it is only jointly as a theory that scientific statements imply the observable consequences of a hypothesis or theory. However, Quine advocates for a more moderate account of holism in “EEWS” than the one he advocates for in “TDE”; Even if the different branches of science are connected, mainly through logical and mathematical components, Quine states that “little is gained by saying that the unit is in principle the whole of science, however defensible this claim may be in a legalistic way.”

Science is neither discontinuous nor monolithic. It is variously jointed, and loose in the joints in varying degrees. In the face of a recalcitrant observation we are free to choose what statements to revise and what ones to hold fast, and these alternatives will disrupt various stretches of scientific theory in various ways, varying in severity.  

So rather than the whole of science being the unit which is in a potential relation to observation, as was postulated in “TDE”, we find that different observations and those theories or hypotheses which we accommodate into our system will disrupt different stretches of our system of statements in varying degrees. Furthermore, a statement’s susceptibility to tests of observation also varies in degree, that is, some statements are separately susceptible to tests of observations. An observation statement, such as “this is water”, can be considered a statement which is taught by being conditioned to certain patterns of proximal sensory stimuli, i.e., a process such as being taught the meaning of terms through ostensive teaching can condition us to react in a manner to sensory stimuli, such as being taught that "water"

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50 Ibid. p. 313.  
51 Ibid. p. 315.  
52 Ibid. p. 314.
refers to a specific pattern of sensory stimuli constituting the appearance of a transparent fluid.\(^5^3\) Therefore, an observation statement of this type could be separately infirmed or confirmed in light of empirical testing. It is not until we link this statement to theoretical language, such as “water is H2O“ that we are forced to consider it as part of a minor or major network of interlocked statements.\(^5^4\)

Given that Quine is offering a plausible theory on the nature and progression of scientific practices, one might grant that this restricted conception of holism is more agreeable with the actual workings of science. That is, science is not monolithic, it is rather an enterprise consisting of differing degrees of integration amongst its different parts.\(^5^5\) The multitude of different fields in science all adhere to different paradigms akin to the rules in which their theorizing has as its point of departure. Therefore, practitioners of highly different fields are often educated through exposure to highly different books relevant to their field of study. In fields where there is a close degree of resemblance and scientists are taught similar, or even the same theories and laws of their field, there often exists a difference of employment of these conceptual tools.\(^5^6\) When we then consider periods of 'normal science', which we can define as ”research firmly based upon one or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice".\(^5^7\) We find that during these periods most of the work done is focused on the actualization of the solutions offered by a specific paradigm to some acute problem, which the previous period of normal science and corresponding paradigm was unable to solve.\(^5^8\) Then, because paradigms are highly idiomatic to the field in which they are conceived, that is, paradigms are introduced as solutions to specific problems and are further maintained because they do this better than any competing theory, we can see how different fields of science are highly separated in virtue of their occupation with the idiomatic solutions offered by the paradigm introduced. This paradigm being introduced in part as a response to problems stemming from an inadequacy in the previous period of post-paradigmatic normal

\(^5^3\) Ibid. P. 314.
\(^5^4\) Gibson, Roger F. “Quine, Wittgenstein, and holism”, In: Knowledge, language and logic: questions for Quine. Springer, Dordrecht, 2000, p. 82.
\(^5^5\) Thomas Kuhn. The Structure of Scientific Revolution, 1963, p. 49.
\(^5^6\) Ibid. PP. 48 – 49.
\(^5^7\) Ibid. P. 10.
\(^5^8\) Ibid. P. 23.
Science is akin to an elaborate maze consisting of passages connected to each other in what might seem random at times. Some sections of the maze link to each other more than others, but each passage has been constructed out of necessity by the persons lost inside of it, often linking to other sections by chance. Most importantly, the overall pattern of the maze was not established prior to persons navigating through its interior design. Quine’s moderate holism is a better reflection of the divisionary relation between different fields of science.

2.3 Layman’s habit of pragmatism

Given that pragmatism is prevalent in science, part as a result of the underdetermination of science with experience, when we then look for the root cause of our pragmatic inclination, we find, according to Quine, that cause as belonging to our core sensibility of common-sense.

“Science is a continuation of common sense, and it continues the common-sense expedient of swelling ontology to simplify theory.”

“The favouring of the seemingly simpler hypothesis is a lay habit carried over by science. The quest of systematic simplicity seems peculiarly scientific in spirit only because science is what it issues in.”

That is, our method of simplifying our dealings with experience, and consequent theories, is a common-sense habit carried over to science. This is the reason why we might consider pragmatism to be a feature belonging to the systematic configuring of scientific inquiry. In science, one will often simplify one’s dealings with experience through different arrays of categorization and positing e.g., physical objects are posited to make it easier to theorise about sense experience, usually showing favour to the simpler of the theories. This habit is found as an innate feature of our common sense but has perhaps found its most congenial environment in the practices of science. Furthermore, if we understand the method of ’swelling ontology to simplify theory’ as a feature of our common sense, we can understand

the quote about revision of empirical statements as a further statement about our fundamental core sensibilities, that is, common-sense.

“A recalcitrant experience can, I have already urged, be accommodated by any of various alternative re-evaluations in various alternative quarters of the total system; but in the cases which we are now imagining, our natural tendency to disturb the total system as little as possible would lead us to focus our revisions upon these specific statements concerning brick houses or Centaurs”63

‘Natural tendency’ meaning the tendency to simplify theory which, as described by Quine, is a feature which belongs to our common-sense. When we then look at Wittgenstein’s idea of how we come to adopt our system of propositions, and in virtue of what ability, then in a likewise manner we find something akin to common-sense, however, less rational and more primal. It is what Wittgenstein describes as our ‘animal instincts’, that is, the instinct in which we (irrationally) adopt and maintain certain beliefs. 64

Then, would it be inconsistent to subscribe to Wittgenstein’s idea of our animal instincts acting as the sensibility in which we adopt and maintain certain beliefs, while agreeing with Quine’s conception of common-sense, which has a similar role as a fundamental sensibility in which beliefs are managed? I would suggest that it is not. We can perhaps understand Quine’s common-sense as concerning itself with consciously reviewed beliefs, whereas some of the habits of common-sense, such as the inclination towards pragmatism, is something intuitive. Common-sense is something that is consulted when choosing and devising theories, and the pragmatic feature of it is most palpable when looking at the broader picture of our scientific progression. We find in this manner a consistent habit of systematic simplicity. The subtler aspect of our pragmatic inclination can be found in how we hold certain beliefs to a lesser standard of epistemic justification, such as come what may beliefs where there are none, in order not to ‘shake’ our system of statements. Not to say that this is subtle in every manifestation, given that deliberate choices are often made in order to not undermine certain scientific practices; It is common in science that anomalous results are often ignored, or explained away, especially if an anomaly shows a flaw in a frequently used scientific tool.65

On the other hand, our animal instincts which has allowed our system of propositions, or

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63 Quine. “Two Dogmas of Empiricism”, 1951, p. 43.


Weltbild, to manifest, is not a key factor when deciding between scientific theories where one might hold pragmatic intentions. Our animal instincts have as its object of survey the more passive aspects of our understanding of the world; It is in this manner, not a rational sensibility because the beliefs which we hold in virtue of these instincts are not maintained out of any rational consideration. It is after all an unfounded way of acting which grounds our most basic beliefs.66 This is where we find the biggest differences between common-sense and animal instincts, that is, one is a rational sensibility, the other is not. However, there are certain intuitive aspects of common-sense, such as its inclination towards pragmatism, and its acting as our internal condition which allowed man, in accordance with the external conditions of the world i.e., the physical forces of one's surroundings, to form a base understanding of the world. This is considerably similar to Wittgenstein’s animal instincts. I would grant that we could subscribe to both Quine’s conception of common-sense, and how our pragmatic tendencies are carried over into science in virtue of this sensibility, and Wittgenstein’s idea of our animal instincts helping us form, and maintain a base understanding of the world. Even better, Wittgenstein’s On Certainty gives plausible explanations as to the nature of our core sensibilities, such as common sense and animal instincts, where Quine barely offers an elaboration on these aspects of our understanding. Quine’s lack of in depth explanation in this area is understandable however, given that both Wittgenstein and Quine’s texts that I have surveyed are dealing with different subject matters, despite crossing paths in their deceptively similar ways of formulation.

Continuing, we find that Wittgenstein does state that there are scenarios where a system of propositions will be tempered by some inherent inclination towards simplicity.

92. However, we can ask: May someone have telling grounds for believing that the earth has only existed for a short time, say since his own birth? Suppose he had always been told that,- would he have any good reason to doubt it? Men have believed that they could make rain; why should not a king be brought up in the belief that the world began with him? And if Moore and this king were to meet and discuss, could Moore really prove his belief to be the right one? I do not say that Moore could not convert the king to his view, but it would be a conversion of a special kind; the king would be brought to look at the world in a different way. Remember that one is sometimes convinced of the correctness of a view by its simplicity or symmetry, i.e, these are what induce

one to go over to this point of view. One then simply says something like: ‘That's how it must be.’

This is a situation where we find something similar to Quine’s common-sense, and Wittgenstein’s animal instincts both being invoked. One might be convinced of a view because of its simplicity and symmetry, and the consequent beliefs that one might draw from being convinced of such a view will shape one’s system of propositions. The consequent beliefs will not be adopted into one’s system of propositions in a rational manner, it will simply be a matter of accommodating the view that one has been convinced of. If we imagine the archaic science of some ancient land, then the supposed ability of kings to make it rain could be considered an approximated attempt at a scientific theory. In other words, this type of theory could be considered a rational attempt at explaining a phenomenon through systematic accommodation in order to bring about a coherently structured understanding of the world. Its appeal as a convincing theory could then be attested to our natural inclination towards pragmatism. A consequent belief, such as “rain exists” would then be adopted into our system of beliefs, even if left unacknowledged, in virtue of our animal instincts.

2.4 Scientific Heritage and Pragmatism

I feel it necessary to discuss a specific passage from “Two Dogmas of Empiricism” which was left out by Garavaso. I believe it offers a much needed context to Quine’s system of statements, and when combined with the rest of the passages I have mentioned in this essay, provides a fuller picture of Quine’s thoughts on science.

“Each man is given a scientific heritage plus a continuing barrage of sensory stimulation; and the considerations which guide him in warping his scientific heritage to fit his continuing sensory promptings are, where rational, pragmatic.”

When we ‘warp’ our scientific heritage, e.g., through theorising, and when done in a rational manner, then our decisions are inclined towards pragmatism. In other words, when we make

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acknowledged, revisionary attempts at theorising, a procedure we find in the realm of science and philosophy, then we will naturally devise our theories to be as simple and concise as possible, and under normal circumstances,\textsuperscript{69} without undermining any of the core concepts or tools that is important to the research as a whole.

Then, because our system of statements is tempered by the pragmatically inclined decisions we make in our configuring and testing of scientific theories, and the evolution of our scientific heritage is a continuous process in virtue of these systems being chronologically altered, it then follows that the progress of science as a whole, and ultimately the shifting of scientific paradigms would occur in a similar manner. There are two conclusions which I would draw from the passage quoted: The first one, and perhaps the least plausible, is that Quine holds our scientific heritage as an all-encompassing body that is dynamically evolving, this process being perpetually shaped by the pragmatic considerations of scientists. Picturesque as this theory of our scientific progression may be, a look at the history of science should be enough to make one disagree. Science does not evolve dynamically, and the most consistent and continuous aspect of it is perhaps its constant demolishing and remodelling of previously accepted bodies of beliefs. As paradigms are often removed when there are more anomalous results piling up than answers offered, and the consequence is a destruction, or banishment of the defective paradigm. It is out of this destruction that a new paradigm is introduced, however, as destruction would imply, it is not built upon the previous paradigm, it is a complete remodelling.\textsuperscript{70} Consider the overtaking of the Copernican system, replacing the previous Ptolemaic system; As this latter system was unable to conform with contemporary observations, it got needlessly complex as astronomers made adjustments to it, eventually leading to a necessary replacement in the form of Copernican heliocentrism.\textsuperscript{71} Overall, the evolution of science is a sporadic process, and only dynamic in it’s consistent reconstruction.

My other interpretation leaves Quine in a more favorable position: Our scientific heritage is dynamic in the sense that it is continuous, even when reconstructed it is never fully

\textsuperscript{69} Normal circumstances being periods of normal science.

\textsuperscript{70} THURÉN, Torsten. Vetenskapsteori för Nybörjare, Malmö: Liber. 2007, p. 137.

\textsuperscript{71} Thomas Kuhn. \textit{The Structure of Scientific Revolutions}, 1963, p. 66.
abandoned, and pragmatism figures even in the overtaking of paradigms and abandonment of previously held beliefs. This I could grant is much more congenial to the actual evolution of science. However, whether our scientific heritage has developed surrounded by an overarching presence of pragmatism remains a question in need of verification, and requires a much deeper survey than the one I am currently engaged in. It is likely however, that ever since the dawning of unified bodies of methodological and theoretical beliefs in the early development of science - offering a much more efficient approach to science in virtue of its systematic consistency\textsuperscript{72} - scientists have inherited a specific mindset, yet general for all fields, of doing science, and this mindset is the type of pragmatism you usually find in enterprises of any theoretical work, such as science and philosophy.

\textbf{3. Conclusion}

There are apparent similarities between “Two Dogmas of Empiricism” and “On Certainty”, and ultimately one might be inclined to hold them as incompatible. In the case of Garavaso, she considered the most glaring incompatibilities between Quine and Wittgenstein as concerning their different conceptions of our system of beliefs. She states, that for Quine, explicitly acknowledged beliefs and pragmatic reason guide our choices in our system of

\textsuperscript{72} Thomas Kuhn. \textit{The Structure of Scientific Revolutions}, 1963, pp. 16 – 17.
beliefs, whereas Wittgenstein conceives of no such empirical and psychological basis for our system of beliefs. As I have shown, the breath of Quine’s system of statements and Wittgenstein’s system of propositions do not impede on each other. Quine is already presupposing a basis of common-sense knowledge for his system of statements, with this basis not being guided by any explicit rationality. Furthermore, Quine’s system of statements concerns enterprises such as that of science and philosophy, and the pragmatism he advocates for is consistent with the type of pragmatic decision-making that figures in these fields. I would hold Wittgenstein's conception of our system of propositions, and "animal instincts" as a good theory of our undeliberate adoption and maintaining of common-sense beliefs. These beliefs do influence our scientific configuring by making up the basis in which science has as its point of departure, but the influence exerted by these beliefs remains a passive aspect of our way of acting, and ultimately our understanding, but in this regard are not something we deliberately consult when engaging in the practices of science and philosophy. It should be apparent then, that Quine and Wittgenstein are less in direct opposition to each other, but rather are engaged in different spheres even if it so happens that they occasionally bump shoulders, so to speak.

Bibliography


73 Garavaso, p 266.


Quine, W. V. 'Main Trends in Recent Philosophy: Two Dogmas of Empiricism', *The Philosophical Review*, vol. 60/no. 1, (1951), pp. 20-43.


