3. "Thus to speak a language is to commit ourselves to the double indeterminacy due to our reliance both on its formalism and on our own continued reconsideration of this formalism in its bearing on experience. For just as, owing to the ultimately tacit character of all our knowledge, we remain ever unable to say all that we know, so also, in view of the tacit character of meaning, we can never quite know what is implied in what we say."<sup>1</sup>

"Oh Star, the fairest one in sight! We grant your loftiness the right To some obscurity of cloud. It will not do to say of night, Since dark is what brings out your light."<sup>2</sup>

A curious thing about the formalised logical-lingual system, that science and philosophy operates in<sup>3</sup>, is a great irony that comes from a tension between the modern analytic traditions' quest to purify philosophy and scientific language<sup>4</sup> from metaphysics, and an indelible natural characteristic of language that could hardly ever be coerced into a fully-fledged formalism. In this short treatise on language, formalism and epistemic holism, I argue that Mr. Polanyi was right to assert that language carries a sense of "indeterminacy." Upon analysing the quote chosen as the starting-point of this essay (broken into two main statements), I will argue that language has a natural tendency (that keeps it from full formalism, desired by many in the analytic tradition). I will conclude that this tendency can point towards a type of "epistemic holism" being the most sensible system of arriving at truth as opposed to scientism, thus undoing the great divorce between the metaphysical and the scientific and granting language "some obscurity of cloud."

In the chosen quote, Mr. Polanyi reflects on what he asserts to be the two causes of the indeterminacy of language (I.) and points out the challenging nature of communicating or transferring knowledge (II.). Perhaps it is worth noting that while Mr. Polanyi, a brilliant

<sup>&</sup>lt;sup>1</sup> Polanyi, Michael, *Personal Knowledge. Towards a Post-Critical Philosophy*, The University of Chicago Press (2015), page 95.

<sup>&</sup>lt;sup>2</sup> Frost, Robert, "Choose Something Like a Star"

<sup>&</sup>lt;sup>3</sup> Although these two do not necessarily need to be treated as separate as it will later be discussed.

<sup>&</sup>lt;sup>4</sup> With "scientific language" meaning the language to be used In man's quest to arrive at knowledge about the world.

thinker, comes from a rigorous background in the philosophy of science. He elucidates a characteristic of language that would not have been welcome as far as the philosophers of science of his time were concerned. Most of the analytic thinkers expressed a stark desire to free language from any sense of mysticism or ambiguity, so that it could be used for gathering knowledge. While Mr. Polanyi himself only uses positive statements about language and formalism, not commenting on how language ought to work, he nevertheless sheds light on principle that fundamentally undermines the quest for developing a scientific language that lacks any indeterminism. It is crucial to realize that both of these statements are positive ones and they are about the method and precursor to humans' efforts to attain and communicate knowledge (language).

(I.) According to Mr. Polanyi, the two causes of indeterminism are (I.1.) our reliance on the formalism of language, and (I.2.) "our own continued reconsideration of this formalism in its bearing on experience."<sup>5</sup> The first cause seems straightforward enough, but the second one might need some explication. Let us imagine the act of the "continual reconsideration of this formalism"<sup>6</sup> as the operation of a constitutional court.<sup>7</sup> Such a court is tasked with examining, interpreting and sometimes rethinking the constitution of a country, essentially based on its effects on society. Just as a constitutional court would continually consider the correspondence of constitutional law to the well-functioning of society, in Mr. Polanyi's system, humans continually reconsider lingual formalism based on its "bearing on experience,"<sup>8</sup> meaning the effects of formalism on experience. (Mr. Polanyi would perhaps pre-eminently be concerned with the impact of lingual formalism on epistemic communication.)

(II.) The second main point Mr. Polanyi makes consists of two intertwined statements that both rest on the same premise. The statements are: (II.1.) that "we remain ever unable to say what we know"<sup>9</sup> and (II.2.) that "we can never quite know what is implied in what we say."<sup>10</sup> Their premise is the "tacit character of all our knowledge."<sup>11</sup> We

<sup>6</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Polanyi, Michael, *Personal Knowledge. Towards a Post-Critical Philosophy*, The University of Chicago Press (2015), page 95.

<sup>&</sup>lt;sup>7</sup> It might be of significance that the idea of constitutional courts originates from the same Hans Kelsen, that set out to establish "pure law," through the elimination of metaphysics from legal thinking. (Later, at the time of the Nurnberg trials, Radbruck successfully reintroduced a sense of natural law to legal philosophical thought.)

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.

shall accept this premise as true, but it is nevertheless important to realize that it might need further explanation.

In a sense, the domain (or set) containing pieces of knowledge is inside the (larger) domain (or set) of beliefs. Accepting Theaetetus's third (and sufficient) definition of knowledge, one has to conclude that knowledge is a justified true belief. (See Bertrand Russel's argument against knowledge simply being a true belief.)<sup>12</sup> The causal element that turns a belief into truth, so to speak, is *logos* meaning an underlying proof, or justification. But if this *logos* were also to be a piece of knowledge itself, it would also have to have another *logos* (or proof) attached. This creates a causal chain of knowledge that according to the laws of logic, can only be remedied by having a starting *logos* (or a starting set of *logoi*). This is what the sciences and mathematics all rely on: an axiom or a set of axioms, which are not proven by their very nature. Thus, this train of thought provides evidence for the "tacit character of all our knowledge."<sup>13</sup>

Mr. Polanyi's aforementioned assertions (II.1. and II.2.) are really two sides of what one could call a soft restatement of Gorgias' assertion that even if a person could arrive at truth, he or she could not communicate it. Indeed, due to the interpersonal nature of language (language is never in itself, but it is always a code from someone to someone), a communicator will always have to rely on his abilities to carry out the act of communication sufficiently, as well as on his or her subject' aptitude to properly receiving and understanding the message.

In our examination of Mr. Polanyi's significant statements, a clear sense of naturality shines through, while it is also clearly visible that, according to Mr. Polanyi, language inherently carries a sense of uncertainty. Taking the presupposition of the analytic tradition, that 'scientific language' ought to be fully formalised and fully precise, we shall examine what could be called "the second Babel."

If Mr. Polanyi's assertions are right, then formalized language has forsaken the scientist (or the analytic philosopher), because it is its very characteristic of being formalized that causes its indeterminacy, thus causing it to elude his or her grasps. Polanyi's realization might be described with the apocalyptic image that Alasdair McIntyre opens his 1981 masterpiece, *After Virtue*. Mr. McIntyre applies the image of the loss of

<sup>&</sup>lt;sup>12</sup> Suppose that a person was sitting in a room equipped with a dysfunctional clock. It is twelve o' clock. The clock shows it's twelve o' clock, even though it had stopped working. The said person can have the true belief that it is twelve o' clock, but this belief can hardly be called knowledge as it lacks sufficient justification.

<sup>&</sup>lt;sup>13</sup> Polanyi, Michael, *Personal Knowledge. Towards a Post-Critical Philosophy*, The University of Chicago Press (2015), page 95.

humanity's scientific progress to the loss of our ethical expressions and notions, which had previously enabled us to have discourses on moral philosophy. For our purposes, this allegory could be borrowed, resembling the loss the formalized language as the paradigm for attaining and communicating knowledge. From the analytical tradition's point of view, it might be a great tragedy to humanity, striking it as a second Babel. But from another perspective, it becomes apparent how after such a tragedy, language would again start to be naturally developed. Before moving on to discussing what could be called "holistic natural language," it is important to briefly discuss important precedents in the analytic tradition, dealing with the philosophy of language and that of science.

In his Tractatus Logico-Philosophicus, Wittgenstein ruled out metaphysics and aesthetics from language, as well as everything that is transcendental, which was an effort leading away from language's previous naturality. Otto Neurath, representing a kind of scientific holism, expressed that the truth of a statement can be determined by its coherence with already verified statements and not by its correspondence to the state of facts in the world. For Hans Reihenbach of the Berlin Circle, it was evident that scientific statements needed to be probabilistically proven or disproven in order to determine their logical value. Rudolf Carnap (Logik der Forschung, 1928) and Karl Popper (Der Logische Aufbau der Welt, 1935) both agreed that scientific statements had to pass the test of intersubjective criteria, but while Carnap's method was verification, Popper's was the falsification of the statements converted into universal statements (Allsatz). While Carnap's demarcation criteria was between sensible and non-sensible statements, Popper's distinguished true statements from false ones. Willard Van Orman Quine asserted scientific holism, where new claims are evaluated in the context of the whole of science (similar to Neurath), but he also acknowledged the legitimacy of metaphysics and considered the whole of philosophy to be under the rubric or "science."

With a precise understanding of the analytic traditions many successes, while also noting most analytical thinkers' misstep of disregarding metaphysics and "metaphysical language" as not being worthy (or useful) for humanity's quest for truth, I propose to extend Quine's scientific holism and adapt it to language to answer the phenomena well stated by Polanyi.

When comparing his economic system to the system of language, Friedrich von Hayek clearly understood its inherent and healthy naturality. Language is formed by all people who participate in it. Sometimes take on new meanings or become overused. Then thinkers like Heidegger invent new ones to brake out of the confines of these natural processes. To reverse Hayek's allegory, just as a free economy is built up and continually changed by the people wo participate in it, so does language work as a self-regulating natural human (or animal) phenomenon.<sup>14</sup>

Although, in his history of philosophy, even Fr. Frederick Copleston SJ notes that some might be tempted to assert the impossibility of metaphysics based on Kant's theory of categories, Kant himself engages deeply with metaphysical topics, which are some of the most important aspirations of philosophy. Since Saul Kripke has successfully proven the legitimacy of metaphysics as a way of describing reality and arriving at knowledge, by disproving the identity theory propagated by reductive materialism, it is reasonable to reproclaim metaphysics as part of philosophy.<sup>15</sup> Philosophy meaning the human effort for arriving at knowledge about the world (and leading a reflective life based on our access to truth), containing science, metaphysics and every noble effort of mankind that is useful in granting people some kind of access to truth.

The fitting language model that could be used alongside this holistic "Philosophy" is the natural language that enables myriads of expression styles, ranging from formal to informal, from poetic-metaphysical to analytical-scientific. This way, Mr. Frost's "obscurity of cloud" that previously appeared as barrier to communication, becomes a unique characteristic of the natural holistic language<sup>16</sup>, exacerbating the human person's chances to arrive at sufficient knowledge of the truth. Indeed examining, analysing and understanding new claims from different points of view (e. g. both metaphysical and scientifical) only enhances our ability to access truth. To support this claim, one would only have to think about Thomas Samuel Kuhn's 1962 book, *The Structure of Scientific Revolutions*, where he asserts that new scientific paradigms start from theories that are at first often widely disregarded. By enabling language to naturally blossom in its manysidedness, even granting legitimacy to lingual spheres previously disregarded (like metaphysical language), society gains an opportunity, growing ever greater, for sound

C1: C-fiber firing does not equal pain.

 <sup>&</sup>lt;sup>14</sup> Animals also have their oral communication system, although most often not as sophisticated as humans'.
<sup>15</sup> Kripke's argumentation described briefly:

P1: "C-fiber firing" and "pain" are rigid designators.

P2: "If they are rigid designators, then they have to be equal in all possible worlds (necessarily).

P3: "It is possible to imagine that pain occurs, but C-fiber firing does not.

C2: The identity theory is false.

Kripke has also successfully dealt with the counter-argument which presented a claim that is only similar in appearance to the one about pain and C-fiber firing. (i. e. water equals H2O)

<sup>&</sup>lt;sup>16</sup> Which is the "Star" according to this Frostean allegory.

"philosophical" discoveries (meaning the holistic sense of "philosophy" previously discussed).

In this essay on language, formalism and epistemic holism, Michael Polanyi's quote served as the starting point. After carefully analysing Mr. Polanyi's assertions and examining the rich analytical tradition's developments in the philosophy of language and that of science, I argued for a holistic sense of "philosophy" paired with a natural holistic language, promulgating a system of epistemic holism as the most adequate method for arriving at sufficient knowledge, ultimately providing the best chance for the human person to assert his or her access to truth.