

The British Wittgenstein Society Wittgenstein Sixty Years On

The Man who Described the Universe: a view on the enduring beauty of Wittgenstein's ideas

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Sixty years after his death, Ludwig Wittgenstein still provides an archetype for transcendent genius. The enduring beauty and elegance of his ideas can be seen in two simple remarks in the *Tractatus* which form a microcosm of the man's entire philosophical work. In these two sentences, we see that Wittgenstein accomplished something that no single person has accomplished since: he was the man who described the universe.

It can be argued that all human intellectual activity is part of a collective effort to describe the universe around us. According to Edward O. Wilson's theory of consilience, all the disparate branches of human knowledge are actually a single unified web which, perceived as one rhizomatic whole, completely describes the universe. Like the blind men touching the elephant, the various disciplines of human knowledge describe the same universe in different ways: art and literature describe it through subjective experience and emotions; science and mathematics through observable, repeatable data and logical derivations. All subjects aim towards a point where "the world will somehow come clearer and we will grasp the true strangeness of the universe. And the strangeness will all prove to be connected and make sense." (Wilson, 1998: 12)

In his short story *The Library of Babel*, Jorge Luis Borges presents a library in which the books collectively describe the universe.

These examples made it possible for a librarian of genius to discover the fundamental law of the Library. This thinker observed that all the books, no matter

how diverse they might be, are made up of the same elements: the space, the period, the comma, the twenty-two letters of the alphabet. He also alleged a fact which travellers have confirmed: In the vast Library there are no two identical books. From these two incontrovertible premises he deduced that the Library is total and that its shelves register all the possible combinations of the twenty-odd orthographical symbols (a number which, though extremely vast, is not infinite)...
(Borges, 1964)

Borges' 'total library' uses twenty-four characters and the space to describe everything that it is possible to describe using language. Not only does the library provide perfect descriptions of the universe but by its high-infinite nature it also provides millions of imperfect descriptions, descriptions of the description, and the proof of the falsity of the perfection descriptions. Like the conflicting scientific theories of general relativity and quantum mechanics, Borges' library describes the universe complete with all its chaos and beautiful contradictions: the dissonance that must accompany the harmony.

In *The Library of Babel*, it took a 'librarian of genius' to deduce that the universe can be described using a finite number of symbols and notations: it takes something more than genius to provide the notation in a couple of sentences in an 80 page book.

6.001 – What this says is just that every proposition is a result of successive applications to elementary propositions of the operation $N(\bar{\xi})$.

6.002 – If we are given the general form according to which propositions are constructed, then with it we are also given the general form according to which one propositions can be generated out of another by means of an operation.

These two remarks in Wittgenstein's *Tractatus Logico-Philosophicus* (2001: 70) appear without any kind of preamble or elaboration. Yet they are among the most profound in the entire book for their far-reaching implications and logical succinctness. In the almost blasé style of the *Tractatus*, the two remarks point out that negation – N being the negation operator and $(\bar{\xi})$ being a set of propositions – is the fundamental idea from which every other proposition or set of propositions can

be constructed through successive logical derivations. Russell describes it in his introduction as 'an amazing simplification of the theory of inference': "The method of generation which has just been described enables Wittgenstein to say that all propositions can be constructed in the above manner from atomic propositions and in this way the totality of propositions is derived." (in Wittgenstein, 2001: xvii) All that is required to derive the totality of propositions, to build a complete description of the universe from scratch, is the idea of 'not'. That a thing can either be or not be: that is the answer.

Wittgenstein saw that the fundamental constituent of the universe was the simple idea of negation – no, not, -, ~, ¬. Using only 'not', it is possible to construct entire systems of logic and language that describe the universe perfectly, imperfectly, and everything in between. In the sixty years since his death, no-one has come close to Wittgenstein's ability to see past the veil of the world and parse everything down to one fundamental concept. Philosophers, scientists, and artists struggle to describe the universe with systems of ever-increasing complexity: in two sentences, Wittgenstein provides the means for a complete description of everything that has ever existed, will ever exist, and will not ever exist.

This idea is one of the most elegant, logical, and beautiful in Wittgenstein's whole body of work. It is characteristic of his writings that the idea is presented in two short cryptic sentences: often to the annoyance of scholars after him, he saw no need to expand his writing beyond necessity; no need to devote volumes to an idea that it is possible to communicate in a few words. Consider the Kürnberger quote that provides the motto of the *Tractatus*: "...and whatever a man knows, whatever is not mere rumbling and roaring that he has heard, can be said in three words." sixty years on, no-one else has made the claim that the problems of philosophy can be solved in 80 pages and certainly no-one else has come as close to making this statement true.

However, it is also characteristic of Wittgenstein that he would come to see the flaws in this seemingly flawless idea. *Philosophical Investigations* (Wittgenstein, 2001) is a chronicle of the failings of human language: its myriad imperfections and arbitrary nature; its ability to delude us into seeing the world in a particular way. Wittgenstein saw the problems of his perfect idea: that human language and human logic can

never hope to describe a universe containing things beyond our capacity for understanding – philosophical things, mystical things, things that must be passed over in silence. As Chesterton (1904: 88) put it, “Man knows that there are in the soul tints more bewildering, more numberless, and more nameless than the colours of an autumn forest... Yet he seriously believes that these things can every one of them, in all their tones and semi-tones, in all their blends and unions, be accurately represented by an arbitrary system of grunts and squeals.”

Ludwig Wittgenstein was a man who stared at the chaotic flux of the universe and tried to describe it even as it shifted, waxed, and waned before his eyes. In the *Tractatus*, he saw the sheer logical perfection of a universe parsed down to the fundamental idea of negation; in the *Investigations*, he forced his eye towards the messy, pluralistic complications of the real world. Before Borges conceived his total library, Wittgenstein imagined a simpler version. Before Wilson conceived of consilience, Wittgenstein saw the connections between everything and wrote about music, science, religion. Sixty years after his death, Wittgenstein’s writings till describes a universe of elegant simplicity and beautiful contradictions.

References

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