

The World as Wittgenstein Found It

***The Tractatus Logico-Philosophicus* as a Model of Autistic Cognition**

Autistics think differently than non-autistics—dramatically so. Autistics do not form their fundamental cognitive framework around innate recognition of their human surroundings, as non-autistics generally do, but instead develop a cognition informed primarily by the patterns and structure to be found in the broader environment. This form of cognition presents daunting challenges: autistics experience developmental delays relative to their neurotypical peers, and autistics mostly struggle with lifelong difficulties managing the social aspects of human behavior and culture. But autistic cognition offers a significant compensation. With thought processes less grooved by remnant channels of age-old species need, autistics gain potential to grasp the world in a unique manner.

Some autistics can see features of their environment previously hidden to others, many can examine underlying laws and structure with a laser-like focus, and a few manage to cast their surroundings into entirely new and creative paradigms. Social scientists and biographers have begun to note that many of history's most innovative individuals—Da Vinci, Michelangelo, Newton, Beethoven, Yeats, Einstein and Turing, to name just a few—could be described as exhibiting autistic-like characteristics and behaviors, traits that may have played a critical role in their immense contributions. Not all autistics are able to conquer the challenges of their condition well enough to receive in good measure its compensatory benefits, but for those who can, their built-in proclivity to lateral thinking serves the human population well. The influence of autistic cognitive traits has been a major catalyst in man's dramatic leap from savannah-bound primate to questing knight of a massive universe.

In attempting to bring the features of autistic cognition into sharper focus, I can think of three different approaches to take. The first approach would be to turn to first-person accounts from autistics themselves. The autistic autobiographical literature has expanded greatly in recent years, with informative self-descriptions put forth by writers such as Temple Grandin and Donna Williams. These accounts serve as enlightening introductions to the autistic experience from within. The major drawback to relying upon first-person accounts is they come almost exclusively from functioning autistics—that is, those who have come to understand elements of neurotypical cognition well enough to incorporate such elements into their own thinking and lives, using these as the means to help bridge the gap to non-autistic acquaintances and audiences. Such incorporation of neurotypical thinking is crucial for allowing an autistic individual to gain meaningful traction in the human world, but it also leaves the functioning autistic less capable of rendering autistic cognition in its purest form. Pure autistic cognition would in theory be more accurately described by a person

with a more classic version of the condition, but alas, the characteristics of classic autism are such that the individual often faces a tremendous challenge conveying that experience to the rest of us.

The second approach to depicting autistic cognition would be to propose an unusual thought experiment. Imagine the entire world as a form of cognition, the broad surroundings—animate and inanimate elements both—as a living, developing thought process, then condense this representation down to the workings of one mind. This no doubt seems a strange notion, but in many ways it is this very strangeness that is the major advantage to the technique, for its unusual nature provides a sense of how vastly different is the quality of the autistic cognitive process from what we typically take for human thought. Autistics are the closest thing we have to true *tabula rasas*. Their early sensory experiences, less grounded by human-specific influences, are guided in large degree by the pattern and structure that stands out from the surrounding environment. These characteristics are evident in the rapt attention given by autistics to symmetries, repetition and literalness, and it might be as meaningful to say the world cognates through the autistic as it would be to say the autistic thinks about his world. The trouble with taking the world as a form of cognition is that the model is too overwhelming—no one mind, autistic or not, can reflect upon the entire surroundings, but instead absorb only limited portions of it. The world's immensity leaves inadequate foothold to condense the representation down to a detailed and applicable form.

What is needed finally is a technique that incorporates elements of both autistic autobiography and the world as a form of cognition, while at the same time avoiding the shortcomings of the above-mentioned approaches. What is needed is a model that can crystallize the essence of autistic cognition, in a relatively pure form, abstracting the complexities down to a framework recognizable within the confines of human language. This task at first glance would appear to be an overwhelming challenge, so it is with no small sense of awe and admiration I offer the suggestion the job has already been accomplished, accomplished with such literary bravura the result could pass as the twentieth century's most ambitious poem. The autistic cognitive model *par excellence* is Ludwig Wittgenstein's *Tractatus Logico-Philosophicus*.

Ludwig Wittgenstein was almost certainly autistic. Several notable psychiatrists, such as Christopher Gillberg in *A Guide to Asperger Syndrome*, have written extensively about the evidence backing this assertion. We can content ourselves here with just the highlights:

- Wittgenstein did not begin to talk until he was four years old. He continued to display language difficulties and peculiarities—a slight stammer, odd prosody, persistent trouble with spelling—that eased slowly only as Wittgenstein gained adulthood.
- His childhood is described as one with essentially no close friendships. Away at school, he regarded his classmates as crude and alien, and they in turn thought him odd, in part because of his insistence on addressing them with formal speech.
- He took frequent pains to maintain a level of social isolation, both in the large-scale manner of long habitations in barren settings, and also in the day-to-day routines that served as miniature getaways, such as taking his meals almost exclusively in his rooms at Cambridge, avoiding the small talk at high table.
- The relationships of his adult years were often tense and fragile. Sudden breaks occasioned by perceived slights or by Wittgenstein's brusque manner were a frequent theme. Although Wittgenstein maintained some contact with his family members, he never seemed particularly close to any of them and was often annoyed at their occasional intrusions.
- He required sameness in routine—a repetitive style of dress, the same meal served again and again, insistence on a particular form of American detective story or Western film genre for entertainment.
- His approach to work was compulsively focused. Over his lifetime, he displayed deep knowledge and ability in a series of narrowly defined interests—in engineering, mathematics, logic, music and architecture. He would return again and again to a favorite passage of literature or to a musical work that inspired him, but showed little interest in gaining a broad knowledge in any particular field, including philosophy.

Those who knew Wittgenstein personally, admirers and critics alike, almost unanimously describe him as atypical in manner and character. Much of Wittgenstein's biography¹ reads like the zigzagging journey of a man who both required and feared solitude, and his was certainly one of the more curious and uncommon lives from the annals of the twentieth century. His restless philosophizing, as much irritation as resulting pearl, comes across as an obsessive attempt to unearth the very root of mankind's connection to its universe—a challenge, it would seem, particularly irresistible to this driven autistic.

A brief history of the development of the *Tractatus* shows it to be the work of an intensely focused, brutally naïve and mostly isolated young man. Following an adolescent academic career that was undistinguished at best, and in the midst of a three-year stint of mostly unsuccessful aeronautical

engineering research, Wittgenstein stumbled upon Bertrand Russell's *Principles of Mathematics*. The obsessive pull of the book's subject matter and its unresolved questions culminated finally in Wittgenstein, at the age of twenty-two, showing up suddenly and unannounced at the door of Russell's Trinity College rooms at Cambridge University. Russell recognized almost immediately Wittgenstein's immense eccentricity, overwhelming self-absorption and unrelenting drive in tackling what Russell considered to be logic's, and therefore philosophy's, most vexing problems. In less than two years time at Cambridge, Wittgenstein sketched out the core of his theory on symbolic logic, and then over the following three years—first in a self-imposed, spur-of-the-moment exile along a Norway fjord, and then as an enigmatic-to-his-comrades soldier in the World War I Austrian army—he wrote down most of the remaining remarks and ideas that would find eventual entry into the *Tractatus*.

Upon pulling together the final manuscript in the summer of 1918, Wittgenstein dropped philosophy all together, relinquished his recently inherited and enormous wealth, became a generally unpopular elementary school teacher, and did not return to formal philosophizing for more than a decade. The *Tractatus*, defying considerable odds and hurdles, was published in both German and English versions in the early 1920s, and the work quickly attained its enduring aura of befuddlement, curiosity and vague admiration. In one of the stranger incidents from the *Tractatus* history, the work was accepted for Wittgenstein's Ph.D. thesis upon his return to Cambridge in 1929, and at its perfunctory defense, Wittgenstein is described as having ended the session by clapping both Russell and G. E. Moore on the back, saying, "Don't worry, I know you'll never understand it," betraying both Wittgenstein's extreme tactlessness and his unerring perception.

The *Tractatus* reads unlike any book before or since. You begin to suspect this simply thumbing through its pages once or twice, and you might easily confirm the suspicion reading only the first and last sentences:

- 1 The world is all that is the case.
- 7 What we cannot speak about we must pass over
 in silence.²

The *Tractatus* is a short book by philosophy standards—less than a hundred pages in length—yet the immense compression of its ideas means that a careful reading (and re-reading) is going to take at least several days, not just a few hours. Herein lies the first hint that the *Tractatus* is making its presentation from an autistic point of view. Nearly all its statements are put forth as declarative assertions, in a tone that leaves an impression of

having walked in upon a reciting of the harmony of the spheres. There is scarcely any attempt at defense, development, argument or persuasion. Persuasion is a social activity; it is a means by which two or more members of a community can bring their ideas into alignment, in a spirit of respectful cooperation. Wittgenstein in the *Tractatus* not only eschews persuasion entirely, he treats it as something that cannot be meaningfully attempted. The truth of the book's assertions, as is suggested in its preface, is unassailable and determined by inspection—take it or leave it as you wish and at your own peril, the author would appear to say. We can assume Wittgenstein would not have been very helpful on a book tour.

The *Tractatus* is more revealing as a work of abstract autobiography than it is as a treatise on symbolic logic or language. Such a statement goes against the grain of the usual scholarly approach, which more typically regards the book as concerned primarily with the foundations of logic and mathematics, an extension of the treatments given those subjects by Bertrand Russell and Gottlob Frege near the turn of the century. The remarks in the *Tractatus* on topics such as psychology, ethics, aesthetics, death, God, solipsism and the mystical are often treated by reviewers with a kind of awkward embarrassment, as though the statements had wandered in by accident and were conspicuously out of place (although not without a certain charm of their own). It is indeed true that a good portion of the *Tractatus* is devoted to Wittgenstein's radically unique development of propositional logic, but he himself leaves numerous clues that this technical material serves only as a foundational support for a much higher purpose. The preface, for instance, hardly mentions the topic of logic, and is completely silent on the subject of mathematics. In a letter to a potential publisher, Wittgenstein describes the *Tractatus* as consisting of two halves—the written half containing that which can be meaningfully said, and an unwritten second half, consisting of those topics which are the most important but which cannot be meaningfully put into words, only shown through delineation. It seems reasonably certain that this unspoken second half has little to do with propositional logic.

In the *Tractatus* itself, as the book nears its climax, Wittgenstein's remarks on logic increasingly take a back seat to ideas that come across more forcefully, almost to the point of sounding emotional. In one of the book's more personally revealing moments, Wittgenstein notes:

5.631 If I wrote a book called *The World as I found it*, I should have to include a report on my body, and should have to say which parts were subordinate to my will, and which were not, etc., this being a method of isolating the subject, or rather of showing that in an important sense there is no

subject; for it alone could *not* be mentioned in that book.

For me, the *Tractatus* is exactly the type of book Wittgenstein hints at in this passage, differing only in that Wittgenstein's reports on his physical and environmental surroundings are transformed into broad abstractions, so that the resulting framework becomes universally representative. From nearly every page, Wittgenstein speaks in a manner that suggests this is how the world looks to him, this is how he has found it, how it reflects through him, with some of the world capable of being meaningfully described with thoughts and language, and some of it, perhaps its most important elements, not. Unable with precise sense to *describe* himself and his worldview, Wittgenstein attempts to *show* it by building a structured representation—a model—with logic as the foundation and propositions as the scaffolding. If the resulting depiction does not appear to the typical reader to be in any way a familiar form of self-description, it is because Wittgenstein's cognitive perception of his world is in fact in no way typical—it is nearly purely autistic.

The *Tractatus* maintains complete silence on the subject of human relationships. Humans scarcely get mentioned in the book other than when Wittgenstein briefly invokes a name (Russell, Frege, Hertz, etc.) to attribute an idea to someone. In truth, there is only one character in the *Tractatus*—the world.

Autistic cognition is like that. Whereas most human beings are born with an innate ability to recognize human features in their surrounding environment and will form a cognitive framework containing a strong social element, autistics generally lack this ability, and as a consequence end up constructing a cognitive paradigm in which the human and social components mostly go missing but for which the broader environment plays a vital role. When a neurotypical newborn opens her eyes, she sees first and foremost mom and dad and the other humans in the surroundings; she picks out human voices from the auditory background, and has a natural affinity for the smell of people and the touch of their skin against her skin. Thus begins a lifelong process whereby her familiarity with her own species and its members becomes the primary shaper of her thoughts and being. By contrast, when the autistic newborn first opens *her* eyes, ears and other senses, she experiences an undifferentiated world, with nearly all sensory input placed on an equal footing. Other humans are of course part of that world, but do not hold a place of priority. Nothing holds a place of priority. The *Tractatus* itself asserts this characteristic by stating that all propositions have equal value. Every feature in the environment has equivalent potential to be an informative, shaping component of autistic

cognition, and thus for autistics, right from the start, the world indeed is all that is the case.

The autistic's cognitive world is not only egalitarian in the broadest possible sense, it is also highly structured. Completely undifferentiated sensory experience would be too chaotic to navigate meaningfully. Autistic cognition, to make developmental progress in this world, must begin to focus attention on the environmental features that stand out from the remainder. From the initial sensory background of mostly random noise, the foreground that begins to emerge is one heavily weighted with elements that contain inherent structure and form—symmetries, repetitions, elementary patterns. The autistic child's early stereotyped activities, such as lining up toys, spinning wheels, twirling, repetitive humming, etc.—these reveal an almost overwhelming need to hone in on environmental experience that contains simple form. From this beginning, the autistic individual will go on to assimilate environmental features displaying more complexity. By school age, the need to find pattern in the world reveals itself most frequently as an obsessive subject of study—categorization of all the dinosaurs, memorization of world capitals, complete baseball card collections organized by career statistics, and so on. In adulthood, a functioning autistic's highly structured view of his world will lead most frequently to careers notable for their organizational characteristics, such as computer programming, tax accounting or library science, although by this time, some autistics have become so adept at incorporating nearly any level of structural complexity that in truth all forms of human activity are now open for mastery—thus we see autistics making marks even in such fields as literature and philosophy. The important thing to note in observing this progression from perseveration on simple elements of symmetry and repetition in early childhood to a proficiency with the more complex, rule-oriented activities of adulthood, is that at each point along the way, the autistic's cognitive framework is shaped and advanced most fundamentally by the underlying structure it uncovers from the surrounding world.

The *Tractatus*, in composition and content, is themed through and through with structure. This is made evident first in the numbering scheme applied to all the remarks in the book; each remark's number ties it structurally to the rest. Remarks 5.121 and 5.122, for instance, elaborate on 5.12, which in turn comments on 5.1, and so forth, the result being a tree structure of remarks, with the main topics at the trunk and the most detailed elaborations at the farthest leaves. Most readers ignore this numbering scheme and read the remarks straight through, but if the remarks were organized and linked as Wittgenstein has suggested, say on a gigantic wall poster, then at just one glance the work's insistence on the importance of form would be obvious. I might suggest that looked at in this manner,

the *Tractatus* would remind more than a few observers of the synaptic connections in a human brain.

What makes Wittgenstein's contribution to the philosophy of logic so innovative is his relentless insistence on the fundamental essence of form. The initial statement of this subject comes right at the book's beginning, in the assertions that the world's structure—its *facts* and *states of affairs*—is more basic than the world's substance—its *objects* and *things*:

- 1.1 The world is the totality of facts, not of things.
- 2.011 It is essential to things that they should be possible constituents of states of affairs.
- 2.0141 The possibility of its occurring in states of affairs is the form of an object.
- 2.0231 The substance of the world *can* only determine a form, and not any material properties....

This argument is repeated in a different key in remarks outlining the characteristics of thought and language, where objects can only be named and that only for the purpose of being simple elements within structured propositions, where the true sense lies:

- 3.3 Only propositions have sense; only in the nexus of a proposition does a name have meaning.
- 3.1431 The essence of a propositional sign is very clearly seen if we imagine one composed of spatial objects (such as tables, chairs, and books) instead of written signs. Then the spatial arrangement of these things will express the sense of the proposition.

This last remark, along with all these assertions outlining the relative importance of structural relationships over that of substance, brings to mind a common problem that occurs with young autistics. When confronted with a familiar room in which the furniture has been rearranged, they often react in a strong and negative fashion, in some cases melting down emotionally while demanding the room be returned to its prior arrangement. The objects themselves have not been altered—all the same sofas, chairs, lamps and tables are still in view—but the objects are not what is important to the autistic mind, it is their arrangement, their structure, that makes all the difference. For an autistic, a change in structure is a dramatic change to the world.

The remaining *Tractatus* development of propositional logic is not the usual dry rendering of a technical topic—it plays more like a set of variations on

these themes of structure and form. There comes first the picture theory of meaning, Wittgenstein's exposition of how thoughts and language gain sense by sharing pictorial form with what they represent, propositions reaching out to reality like a ruler laid against it. Later on, there is the invention of truth tables and truth polarity diagrams—visual representations designed to highlight the forms of tautologies and contradictions. Generally in the *Tractatus*, Wittgenstein remains abstract and is not forthcoming with concrete examples, but he does provide a scintillating one when highlighting not only the ubiquitous nature of underlying form but also the way in which that form ties together seemingly different elements of the world:

4.014 A gramophone record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same internal relation of depicting that holds between language and the world. They are all constructed according to a common logical pattern....

4.0141 There is a general rule by means of which the musician can obtain the symphony from the score, and which makes it possible to derive the symphony from the groove on the gramophone record, and, using the first rule, to derive the score again. That is what constitutes the inner similarity between these things which seem to be constructed in such entirely different ways....

The employment of a music metaphor seems almost overabundant here, music being the art form demonstrating at its purest the power of taking something of the world's substance—its sound—that would be meaningless in chaotic arrangement, but when linked into organized form, not only gains meaning, it often takes flight. The same could be said of Wittgenstein's development of his theory of logic within the *Tractatus*. The overwhelming need to arrange the world's randomness into predictable and organized form is the very beginning and the very essence of meaningful life for the autistic mind.

Logic in the *Tractatus* is given its final statement when Wittgenstein outlines the general form of propositions and operations in remarks 6 and 6.01. Although the symbolism might at first appear to be terse and cryptic, the idea being expressed is actually quite simple: using these general forms, all complex propositions can be constructed, precisely and organically, out of the simple propositions. Such an approach mirrors that of the autistic developmental process, from its uncovering of elementary pattern in childhood to its ever-building complexity of fact formulated in maturity.

More importantly, this constructed rendering of the world both determines its range and sets the limit on that which can be meaningfully said and thought. Unlike non-autistics, who can be described as having access from birth to well-established templates of human and social convention, and who therefore can be seen as more open to concepts assumed to be given or self-evident, autistics tend to take the world only as it literally comes to them and as it can be constructed from its elementary facts. This distinction between what can be assumed and what can only be experienced was often the subject of some amusing, yet intense debates between Russell and Wittgenstein, an argument that spills over at times into the *Tractatus* and Russell's introduction to it. Russell in his later years would often tell the story of how he would put on a great show of looking under all his chairs and opening all his desk drawers, trying to get Wittgenstein to accept the proposition that there was not a rhinoceros in the room, or at other times making three ink splashes on a piece of paper and asking Wittgenstein to agree that there were now at least three objects existing in the world, that at least that much was self-evident. Wittgenstein would never budge. It was not the absent rhinoceros or the three marks on the page he was objecting to, it was the notion that things could so easily be described as self-evident or that the world might be rolled up into a nice, neat package and talked about as though it were a non-constructed, given thing. Such a stance might appear to some as overly obstinate, but Wittgenstein's earnestness can be assumed from the fact he went to such great lengths to formalize his position.

With the self-evident and non-constructed propositions placed out of bounds, the *Tractatus* assigns many of philosophy's traditional routes of inquiry to the waste bin of nonsense. Wittgenstein describes philosophy not as a body of doctrine, but as an activity, a practice of elucidation.

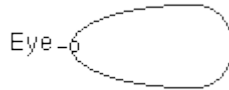
6.53 The correct method in philosophy would really be ... whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions....

Included among these signs that Wittgenstein proclaims are seldom, if ever, given proper meaning are those related to talk of a subject, soul and human mind. The *Tractatus* elucidation on these topics comes complete with metaphor and picture:

5.641 ... What brings the self into philosophy is the fact that 'the world is my world'....

5.632 The subject does not belong to the world: rather, it is a limit of the world.

- 5.633 Where *in* the world is a metaphysical subject to be found? You will say that this is exactly like the case of the eye and the visual field. But really you do *not* see the eye. And nothing *in the visual field* allows you to infer that it is seen by an eye.
- 5.6331 For the form of the visual field is surely not like this



That simple picture, with its eye removed, by analogy represents the entire world, with no subject contained within it but defined instead by its boundary—an image of the world as a form of cognition.

Wittgenstein's analysis denying the simple subject appears both to anticipate and to demonstrate today's most frequently cited explanation for the autism pathology—theory of mind deficit. This hypothesis was first put forth by researchers Simon Baron-Cohen, Alan M. Leslie and Uta Frith in a landmark 1985 paper in which its authors describe, complete with compelling experimental evidence, how most autistics are fundamentally delayed or impaired in their ability to ascribe various forms of thought and belief—a mind, in other words—to other humans and even to themselves. Theory of mind deficit remains one of the more highly influential descriptions of autism in today's medical and research practice.

In the only section of the *Tractatus* that gives consideration to what we might regard as typical human thought, Wittgenstein sharply dismisses the prevailing view of his day, in a manner setting off a forward echo to the present day theory of mind studies:

- 5.541 At first sight it looks as if it were also possible for one proposition to occur in another in a different way. Particularly with certain forms of proposition in psychology, such as 'A believes that *p* is the case' and 'A has the thought *p*', etc. For if these are considered superficially, it looks as if the proposition *p* stood in some kind of relation to an object *A*. (And in modern theory of knowledge (Russell, Moore, etc.) these propositions have actually been construed in this way.)
- 5.542 It is clear, however, that 'A believes that *p*', 'A has the thought *p*', and 'A says *p*' are of the form "*p*" says *p*': and this does not involve a correlation of a fact with an object, but rather the correlation

of facts by means of the correlation of their objects.

- 5.5421 This shows too that there is no such thing as the soul—the subject, etc.—as it is conceived in the superficial psychology of the present day....
- 5.631 There is no such thing as the subject that thinks or entertains ideas....

Wittgenstein's argument is so compact it has been the subject of debate as to how best to interpret it, one candidate being that the entity *A* simply drops out in the logical analysis of the proposition. An alternative view is that the analysis of *A* thinking the proposition *p* is just as complex as (and sharing pictorial form with) the analysis linking the proposition *p* to what it depicts in the world—thus rendering *A* far too complex to be captured with simple words like *mind* or *soul*. Either way, the *Tractatus* language is clear in that the judgment of *A* is not relevant in the determination of what is and what is not the case. If the *Tractatus* can be understood as a model of cognition, it is a cognition that does not possess a theory of mind.

Perhaps beguiled by assertions that traditional analysis on topics such as soul, mind, good and evil is doomed to fail as nonsense, the schools of philosophy that have most frequently embraced the *Tractatus* have included those, such as the Logical Positivists, who have felt that language and philosophy should be restricted to explorations wandering no farther than the realm of the natural sciences, no farther than that which can be dispassionately verified through sense experience or experiment. But Wittgenstein never showed much agreement or tolerance with this position, and for anyone who has read the closing pages of the *Tractatus* with seriousness, this will come as no surprise. Although the *Tractatus* does formally outline a world limited by that which can be meaningfully represented in language, Wittgenstein proclaims with near religious fervor that there is nothing cold, lifeless or merely scientific about this limited world—far from it:

- 6.41 The sense of the world must lie outside the world....
- 6.52 We feel that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched....
- 6.522 There are, indeed, things that cannot be put into words. They *make themselves manifest*. They are what is mystical.
- 6.43 ... The world of the happy man is a different one from that of the unhappy man.

For autistics, the external world forms the locus of their mode of perception, and thus carries the load of all the tension, emotion, drama, charm and mystery of a complex life form. Or to turn the picture around, because of the way in which environmental experience so fundamentally shapes and informs autistic cognition, autistics tend to have a heightened sense of the world's immanence—calming and meditative at times, but godlike and thundering at others, and mystical always. This experience of the world as self is, by Wittgenstein's logic, impossible to analyze and a tremendous challenge to represent. That the *Tractatus* makes the attempt to capture the experience in its entirety is remarkable, and that it nearly succeeds is nothing short of miraculous.

The story of the *Tractatus* ends in a long coda, notable for being perhaps still more brilliant than the exposition. Wittgenstein was not yet thirty when he finished the work, and had lived until that age in a series of circumstances not socially typical, settings that in many ways had helped preserve the intensity of his autism. This would change over the following decade. Wittgenstein found himself more frequently interacting with his human surroundings—trying to persuade publishers to take on the *Tractatus*, working as a schoolteacher in rural Austria, consulting for various Cambridge and Viennese philosophers, and even making the acquaintance of a potential mate. As happens so often with functioning autistics who are attempting a deeper foray onto the customary paths of human society, Wittgenstein found himself more often than not uneasily failing in these efforts, and was being forced to face in all its immediacy the fundamental friction that existed between his own nature and that of the average man. For some autistics, such moments of revelation can be paralyzing and debilitating, while for others, they can be the source of further growth and inspiration. In a most impressive way, Wittgenstein fell into the latter category.

Upon being persuaded to return to Cambridge near the age of forty, Wittgenstein began reassessing portions of the *Tractatus* that now seemed increasingly unsatisfactory to him. After a few initial attempts to patch things up in a small way, Wittgenstein embarked on a radically new approach. To him, those portions of his philosophy now most in need of renovation were those related to the absolute insistence on the use of logic and formal structure as the basis for an ideal language, one that could reflect the essence of the entire world—a world that was now less stridently *his* world. In his posthumously published masterpiece, the *Philosophical Investigations*, Wittgenstein devotes the early part of the work to a critique of his use of symbolic logic and picture theory of meaning in the *Tractatus*, in many ways faulting his earlier model as being not so much incorrect as being too precise, too pure and too limited for the

purpose at hand. The critique builds to a crescendo at remark 107 of the *Investigations*, a passage that serves not only as the call ushering in all of Wittgenstein's later philosophy, but also can be read as the heartfelt cry of a man shedding enough of his autistic armor to make contact with a mostly uncertain human world:

The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a *result of investigation*: it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming empty.—We have got on to slippery ice where there is no friction and so in a certain sense the conditions are ideal, but also, just because of that, we are unable to walk. We want to walk: so we need *friction*. Back to the rough ground!³

Wittgenstein's rough ground turned into twenty plus years of further philosophical inquiry. Although he would touch on technical topics such as the foundations of mathematics, more and more frequently Wittgenstein's attention turned to psychology, human language and human understanding. How strange and how revealing that the philosopher who in his youth had developed a formally precise cognitive model devoid of a theory of mind, would in his maturity deliver some of philosophy's most potent insights into the concepts of knowledge, language, meaning, belief, certainty and doubt. Many scholars are quick to assume that Wittgenstein's later philosophy stands as a repudiation of the *Tractatus*; but looked at through the lens of Wittgenstein's history and his autism, the later philosophy would be more meaningfully described as an enhancement to the *Tractatus*, a fleshing out as it were, the placing of a more substantive human form onto what had been a bone-clean, but not fully functioning frame. The result is a complete lifetime of philosophical work that is transcendent—transcendent of all typical forms of human thought, and transcendent of pure autistic cognition, as well.

Despite deep respect for the *Tractatus*, I would remain hesitant to recommend it as reading to most people—I think the majority would still find it more bewildering than enlightening. No one need feel *too* bad about this, it is after all an unusual and challenging read.

But for those who, like me and not just a few others, have found the book at one time or another to be irresistibly fascinating without being able to quite say why, I might offer this essay as an alternative approach to its pages, one that places the reader more squarely behind Wittgenstein's own eyes—the eyes of an autistic. Viewed from this perspective, one can almost hear Wittgenstein's inner voice—in his rooms at Cambridge, in the

Norwegian isolation, and amidst the insanity at the Eastern Front—demanding into his notebooks, *here I am, myself as my constructed, structured world, no matter how strange that may seem*. His is a vision that in one sense is exceedingly unfamiliar, and in another is as common as the accumulated knowledge of all mankind. Autistic cognition is an open window onto a very expansive world, and thus serves, along with the *Tractatus*, as a source of light for all humanity.

Notes

[1.](#) Ray Monk's 1990 work *The Duty of Genius* is the most informative Wittgenstein biography written to date, and has an added advantage in that Monk was apparently unaware when he wrote it of the possibility for Wittgenstein's autism, so the book does not say Wittgenstein was autistic, but succeeds brilliantly in *showing* it on nearly every page.

[2.](#) *Tractatus* translations by D. F. Pears and B. F. McGuinness.

[3.](#) Translation by G. E. M. Anscombe.