

My Philosophical Development

B. Russell

June 18-19, 2009

I recall reading a long time ago when I was still a teenager, about Russell and his friends finally discarding idealistic garbage and once again allowing themselves to believe that the grass was green after all. I forgot where I read it (in retrospect I would love to learn when I first became aware of Russell, I suspect it must have been around 1967), it might have been in the anthology 'The World of Mathematics', but as everything else connected with Russell, it made a very deep impression on me at the time, and I have for years wanting to reread it and thus once again relive the same kind of relief, be it vicariously, that it gave such a suggestive expression for. Thus when I few weeks ago encountered the above title in a London bookstore, I was pretty sure that I would find the passage in it. And indeed I was not disappointed.

To begin from the beginning. Russell as a teenager was a solitary boy who wished to attain secure knowledge, in particular as to religious belief and ultimately to the existence of God. I myself at the same time entertained similar ambitions, maybe not geared towards religious certitude, that would have been an earlier obsession, but about the certitude of knowledge per se. Like Russell I had no literature to guide me, only my own curiosity. It would certainly be presumptuous of me to make a comparison with the great future philosopher, yet I too had by my own thinking come to some conclusions, horrifying as I found them, on the tenuous connection between your sensual impressions and the existence of an independent external reality. While Russell committed his thoughts to paper, conveniently preserved to be reproduced in the book some seventy years later, I made no such attempt at all, terrified as I was by my intellectual forays to the point of doubting my own sanity. Still what counts is a certain temperamental affinity, and I can find no other reason than that to explain the fascination I found for the man, and my willingness to identify with him deeply. In a way his example indicated a way out of an adolescent depression that had suppressed me for many years¹. Also at the time, the philosopher was still alive, and fascinatingly very old, which certainly added to the appeal.

Russell quickly lost his belief in, as he puts it, free will, immortality and finally God himself; but he did not lose the desire for belief, just like in the case of love, the object of desire simply changed. In the case of Russell to mathematics and the passion to achieve absolute certitude in that discipline. Mathematics had always fascinated him, as it is bound to fascinate every budding philosopher, both as a purely mental activity, which nevertheless exercises an uncanny influence on the world around us, thus showing the power of pure thought, so gratifying to those drawn to philosophical inquiry, and also as to its aesthetic timeless qualities. The adulation for mathematics would be with Russell for

¹ In particular I remember his remark (no doubt false and insincere as I have in retrospect been led to conclude) that he himself had been unhappy until the age of 15 or so, when he realized that he was not the center of the universe. I took it to heart and thought of it as excellent therapeutic advice.

many years, and he would wax lyrically about its supreme beauty and timeless Platonic character. Eventually though there would be a disaffection, maybe partly due to the specious influence of Wittgenstein and his own fruitless struggle with its foundations, and he would think of mathematics as just a sequence of tautologies, which to a sufficiently powerful intelligence (not unlike that of demonic mind imagined by Laplace?) would appear totally trivial.

In many ways Russell for all his precocity was a late bloomer. The mathematical education he received was not up to par, especially when it came to rigor, the most fascinating aspect of mathematics in the eyes of a philosopher; but the subject was exciting enough allied to his own youthful enthusiasm to ride over such obstacles. However, the exclusive emphasis at the University on the Tripos Examination, reduced the study of mathematics to a series of cheap tricks, which disgusted him no end. In his fourth year he turned to philosophy and as the fashion was he absorbed Kant and became something of a Hegelian. In retrospect he consider what he wrote on philosophy in the 90's to have been gibberish, the turning point in his intellectual development being the attendance at the 1900 congress in Paris, where he came into contact with Peano.

At about this time he made, what he in retrospect considers his main contribution to logic and as a definite advance on the ancients, namely the suggestion that relations should be thought of external, and in no way reflect intrinsic properties of the two entities brought into a relation. This did away with the traditional subject-predicate emphasis and the infinite regression such involved as to the interpretation of relations. In his own personal case followed a rejection both of monism and Hegelian idealism, leading to the liberation of which I have already referred to in the beginning² It lead to a honey-moon in writing his principles of mathematics, during which he every day learned something new and significant, building up to a buoyant optimism. This would not endure, the foundations of mathematics suffered a severe set-back with the anomalies connected with the liberal use of Cantorian set-theory, one of which, and the simplest and most widely-known, discovered by Russell himself, and bearing his name. Russell is honest about it, the paradox is already implicit in Cantors celebrated proof that there is no 1-1 correspondence between a set and its power-set as a typical application of his diagonal principle. What Russell simply did was to apply this to the set of all sets, which clearly was the biggest cardinal conceivable? The outcome is the well-known Russell set. To resolve this contradiction in mathematics taxed him for the next few years. What was at stake was not just some ad-hoc sweeping-under-the-rug procedure, in addition to overcome the paramount problem of the contradiction itself, was the need to do so in a way that did not infringe upon traditional mathematics, and ideally to find a solution which in retrospect would be so natural as to suggest that this was what one would have expected all along. Russell eventually came up with a solution, namely the theory of Types, and although it did the job, it nevertheless had the appearance of a technical cop-out, acting as a censorship against self-reference. It seems

² To appreciate the significance of this maybe seemingly trivial modification, we may refer to Russell's metaphor of the Post Office, which classifies its customers both geographically and alphabetically, the customers remaining unchanged but the relations being different. In likewise manner, Russell suggested, mind and matter are constituted by the same 'stuff' the difference lies simply in which way that stuff is related to itself.

as if it did hamper much of his erstwhile enthusiasm for mathematics as a truly Platonic enterprise. In essence it recognized a dynamic hierarchy of thought. Once one refers to a totality of thought, this is ossified, and thoughts on it, cannot become part of it, but become a higher kind of thought, and so on, just like the transfinite cardinals of Cantor, which ultimately may be less about mathematical objects than reflecting the propensity of thought to feed endlessly on itself.

According to Russell one of the lasting contributions of *Principia Mathematica*, on which he toiled until 1910 with his collaborator Whitehead, was the reduction of number to logical symbols, thus making for greater economy and stripping the concept of number of its mystical Platonic character. However, many, if not most mathematicians are not particular happy with his notion of number as the classes of equipotent sets, as a description maybe but hardly as the last word on its ontology. Already Pierce claimed in the previous century that the integers were more basic than logic itself. *Principia Mathematica* turned out not only to be provisional (the two authors had been forced to include certain axioms that they hoped later to dispose of) but something of a dead-end. The forbidding presentation in an artificially created symbolic language found few readers³. It has been conceived as a book not of mathematics but logic, logic applied to mathematics, but Russell complains that people have not realized that it contains many purely mathematical inventions. That might be true, and it might also be true that those purely mathematical tidbits are more interesting than the logical ambition, yet as mathematics it is marginal, mostly concerned with arithmetical operations on structured sets, i.e. those with specified relations (such as order-relations). It is also noteworthy that Russell never refers to Gdel, who supposedly showed the folly of the enterprise. Most likely he never made any serious attempt to penetrate the work of Gdel, having lost interest in the foundations of mathematics after the completion of the work. *Principia* had its critics, externally by the formalists in the Hilbert school and the intuitionists of Brouwer, and internally by Wittgenstein. The early Wittgenstein had quite an influence on Russell, especially *Tractatus*, which he found a major work, in spite of Wittgensteins tendency to mysticism and aphoristic expression bound to exasperate the serious reader. Ramsay developed Wittgensteins criticism, without resorting to the idiosyncracies of the latter, and his early death is but to be deeply regretted⁴.

As noted Russell lost interest in abstract pursuits after *Principia*. In his autobiography he refers to the intense mental application it involved, and which one he was never more able to sustain. Then the First World War intervened, and the horror and sacrifices it involved made his own pursuit seem rather trivial. As we all know he engaged himself in the anti-war moment, and when he after the war resumed his philosophical investigations, it was with other means and other subjects. Under the influence of Whitehead he had become convinced that the logico-mathematical approach also could work for modern physics. His attempts in this regard have had much less influence than his activities as a mathematical logician that constituted his scientific credentials. Most remarkable in this context may be

³ Three being Poles, according to the junior author, readers that perished under Hitler to boot; and the remaining three being Texans.

⁴ Ramsay believed in the truth of the Axiom of Choice, referred to by Russell as the axiom of selection, which is implicit in his Ramsay theory

his eventual rejection of sense-data and the acceptance of a more direct relation between the internal and external doing away with the subject altogether following the suggestion of William James, a philosopher whose espousal of Pragmatism he found incredibly silly⁵ In addition to pursuing philosophy, more or less half-heartedly, he became a public figure, turning out lucidly written books appealing to a large audience on softer subjects, an activity which must have gratified him. But of this there is no mention in the present book, in which he at the end attaches a few polemical rebuttals. As he noted, he was once a philosopher in fashion, now in his eighties, he is considered antiquated; yet he cannot really understand why, and he turns against the modern fashionable philosophy and their emphasis on ordinary language. A most frivolous occupation he thunders, involved with how silly people can say even sillier things. He takes exception to the trivialization of philosophy away from the foundational questions and ignoring modern science⁶. He puts much of the blame of this on the later Wittgenstein whose development he found tragic likening him to a Pascal and a Tolstoy, both of whom abandoned their true callings to pursue trivial projects betraying their unique gifts.

As an appendix to the book an essay aborted by the premature death of its author Alan Wood is given. An essay whose incompleteness seems to have inspired Russell to his undertaking of writing the book. According to Wood Russell was once likened by Lytton Strachey to a circular saw, namely one in which the teeth moved in all directions, but which nevertheless cut a straight line. Russell's forays into philosophy was ultimately a failure according to Wood, but a glorious failure. In fact the only kind of progress available to the philosopher, according to him, seems to be the one connected to failure. Positive results are exceedingly hard to come by, ultimate results simply impossible; but a failure at least shows the impossibility of certain paths to pursue. Russell himself might have resented his choice of career, would not becoming a scientist have been far more satisfying? Science deals with what we know and can know, while philosophy with what we cannot. Thus, according to Russell, the ultimate ambition of philosophy would be to make itself superfluous.

June 19, 2009 **Ulf Persson:** *Prof.em, Chalmers U.of Tech., Göteborg Sweden ulfp@chalmers.se*

⁵ James had time to respond to Russell just before his relatively early death. He considered the attack by Russell (and others) as just silly and a gross misrepresentation of his views. When he expressed those in more detail, the response of Russell was simply that they were even sillier than he had at first thought. Of course the way James defended pragmatism was remarkably crude and open to the most obvious of attacks, by simply identifying the true with the expedient leading to a whole array of obvious contradictions.

⁶ Similar attacks were launched by Gellner, with the blessings of Russell, a book reviewed elsewhere in this collection