

Bertrand Russell (1872–1970): calibrating the scientific productivity of a polymath

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Forty years after his death, the creativity of mathematician–philosopher Bertrand Russell remains unmatched. He also had the distinction of being the only mathematician to receive the Nobel Prize in Literature. Unfortunately, his bibliographers had lumped all of his ‘serial publications’ into a single basket and recorded about 2050 publications from 1890 to 1970. For a student of science history, a number count and the titles of Russell’s scientific publications (in peer-reviewed journals) may be of interest. I counted 110 of Russell’s single-authored publications (excluding book reviews) between 1890 and 1963. In addition, he has also authored 125 books.

In 1938, when Bertrand Russell began his one-year contract at the University of Chicago, USA as a visiting professor, three of his students (who later became professional philosophers) greeted him with the following limerick, scribbled on the blackboard:

Discouraged from saving the masses,
Defamed for depraving the lasses,
He kicked off his traces,
Came here – of all places –
Where he’s teaching this class – of all classes!

As Ray Monk (a recent biographer of Russell)¹ describes, ‘When Russell came in, however, he was no doubt preoccupied with what he was going to say, he saw only that the board was not clear and, without reading what was on it, simply wiped it clean’. Such a single-minded attention and devotion to the task at hand can be attributed as one of the characteristic features of Russell’s success as the polymath of the 20th century.

The year 2010 marked the following multiple anniversaries of Russell’s productive life: (i) the centenary year of publication of his magnum opus *Principia Mathematica*, co-authored with his tutor Alfred North Whitehead; (ii) 60 years since he received the Nobel Prize in Literature. He still remains the only mathematician to have received the Nobel Prize in Literature and (iii) 40 years since his death.

Prolific productivity

As a scholar and critic, Russell excelled in disciplines as diverse as mathematics, philosophy, pedagogy, sociology, jour-

nalism and political activism². In terms of sheer number, his productivity as a sole author will remain unmatched. This was aided by his longevity, curiosity as well as his gregarious and voracious appetite for reading. Russell had reminisced in his autobiography: ‘Alys and I were married on December 13, 1894. . . During this time my intellectual ambitions were taking shape. I resolved not to adopt a profession, but to devote myself to writing. . . With my first marriage, I entered upon a period of great happiness and fruitful work. Having no emotional troubles, all my energy went in intellectual directions. Throughout the first years of my marriage, I read widely, both in mathematics and in philosophy³’.

In 1978, on the prolific productivity of Russell, another biographer Ronald Clark⁴ concluded as follows: ‘Russell’s own works range in scale from the three-volume *Principia Mathematica*, written with A. N. Whitehead, to “My Own Philosophy”, a thirty-page essay written in 1946 and published in 1972; in time, from the *German Social Democracy* of 1896 to the third volume of his autobiography in 1969. The number of his books depends on where the line is drawn between book and extended pamphlet, but more than sixty were in print when he died. Papers, studies, monographs and newspaper articles by Russell on philosophy, pacifism, world affairs and social questions are numbered quite literally by the thousand. Bibliographies include that by Lester Denonn in *The Philosophy of Bertrand Russell*, 1944; and by Harry Ruja in Pears’s *Bertrand Russell: A Collection of Critical Essays*. The latest, now in preparation by Kenneth Blackwell and Harry Ruja, will contain more than 2,600 items.’

Assuming in good faith the number provided by Clark, before the publication of the Russell’s bibliography by Blackwell and Ruja^{5,6} in 1992, I designated Russell as one belonging to the elite group of Kilo Base Goliaths (KBGs) among scientists, who have authored more than 1,000 research publications^{7–9}. Volume II of Russell’s bibliography⁶, published in 1994, lists nearly 2050 serial publications (articles, reviews, statements, letters to the editor and approved interviews) as authored by Russell. After critically checking this publication, I opted to calibrate the status of Russell among the KBGs. There is no doubt that he was a prolific author. But, a majority of his publications appeared not in peer-reviewed journals, but in popular periodicals (weeklies, fortnightlies, monthlies and quarterlies) and newspapers. To earn a living, Russell voluntarily chose the eccentric path of publishing one or more books per year and also worked as a freelance journalist.

Table 1 shows a cumulative count of Russell’s books in decades. One can infer that he had published 125 books between 1896 and 1969. Table 2 provides a select list of most influential books authored by Russell, with their year of publication. A scrutiny of Volume II of Russell’s bibliography⁶ shows that he had also 110 single-author publications (excluding book reviews) in peer-reviewed journals between 1890 and 1963. To peer-reviewed journals (mostly to *Mind* and *Athenaeum* [later *Nation* and *Athenaeum*]), Russell also contributed 94 substantial book reviews between 1895 and 1958.

Why did Russell opt to publish in periodicals and newspapers, rather than in peer-reviewed journals? More than

Table 1. Cumulative count of books by Bertrand Russell in decades

Period	Number of published books	Comments
1896–1900	3	
1901–10	4	Includes <i>Principia Mathematica</i> ^a
1911–20	18	
1921–30	21	
1931–40	13	Includes <i>The Amberley Papers</i> ^b
1941–50	13	
1951–60	28	
1961–69	25	Includes <i>The Autobiography</i> ^c

^aThree volumes (co-authored with A. N. Whitehead) counted as one book.

^bTwo volumes (co-authored with his third wife Patricia Spence) counted as one book.

^cThree volumes counted as one book.

Table 2. A select list of most influential books by Russell

Year of first publication	Book
1903	<i>Principles of Mathematics</i>
1910–13	<i>Principia Mathematica</i> (three volumes)
1928	<i>Sceptical Essays</i>
1929	<i>Marriage and Morals</i>
1930	<i>The Conquest of Happiness</i>
1932	<i>Education and the Social Order</i>
1938	<i>Power; a New Social Analysis</i>
1940	<i>An Inquiry into Meaning and Truth</i>
1945	<i>A History of Western Philosophy</i>
1950	<i>Unpopular Essays</i>
1957	<i>Why I am not a Christian and Other Essays</i>

one reason can be attributed to this. First, in the first half of the 20th century, the number of available scientific journal outlets was less and their publication lag-time was relatively wide. This might have hampered Russell’s prolific pen, who as a pledged pedagogue, could not tolerate such publication lag. Secondly, Russell’s career path was of an eccentric type. At the age of 24, he had a 5-year fellowship (1896–1901) at the Trinity College, Cambridge University. Then, he served a 6-year period (1910–1916) as lecturer in the college. From 1916 to 1938, he did not hold a regular academic position. Between 1938 and 1944, Russell held short-term contract positions at the University of Chicago, University of California at Los Angeles, the Barnes Foundation (Philadelphia), and Rand School of Social Science (New York), before he returned to the Trinity College, as a Fellow.

On the financial difficulties he faced in USA in 1940, due to the vilification of the ‘earnest tax payers’ of New York, Russell had reminisced in his autobiography as follows: ‘A typical American

witch-hunt was instituted against me, and I became taboo throughout the whole of the United States. I was to have been engaged in a lecture tour, but I had only one engagement, made before the witch-hunt had developed. The Rabbi who had made this engagement broke his contract, but I cannot blame him. Owners of halls refused to let them if I was to lecture, and if I had appeared anywhere in public, I should probably have been lynched by a Catholic mob, with the full approval of the police. No newspaper or magazine would publish anything that I wrote, and I was suddenly deprived of all means of earning a living’¹⁰.

Nobel Prize for Literature

At the age of 78, Russell received the announcement on 10 November 1950, that he was the recipient of the Nobel Prize in Literature. He was duly pleased to receive the cash award of 11,000 pounds, because, as he noted later, ‘I had given 10,000 pounds of my Nobel prize cheque for a little more than 11,000

pounds to my third wife and I was now paying alimony to her and to my second wife as well as paying for the education and holidays of my younger son’¹¹. The Nobel Prize in Literature nomination records, as studied by Svensen¹², revealed that Russell received his prize on his first nomination, a distinction that he shared with nine other laureates, during the period 1901–1950. What was rather unusual was that Russell received only one nomination from Eugen N. Tigerstedt¹³ (former professor of Swedish literature), University of Helsinki, Finland, among the 79 nominations accepted for that year.

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3. Russell, B., *The Autobiography of Bertrand Russell, Vol. I (1872–1914)*, George Allen and Unwin, London, 1967.
4. Clark, R. W., *The Life of Bertrand Russell*, Penguin Books, Middlesex, 1978.
5. Blackwell, K. and Ruja, H., *A Bibliography of Bertrand Russell, Vol. I, Separate Publications, 1896–1990*, Routledge, London, 1994.
6. Blackwell, K. and Ruja, H., *A Bibliography of Bertrand Russell, Vol. II, Serial Publications, 1890–1990*, Routledge, London, 1994.
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8. Sri Kantha, S., *Med. Hypotheses*, 1992, **39**, 159–163.
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10. Russell, B., *The Autobiography of Bertrand Russell, Vol. II (1914–1944)*, George Allen and Unwin, London, 1968.
11. Russell, B., *The Autobiography of Bertrand Russell, Vol. III (1944–1967)*, George Allen and Unwin, London, 1969.
12. Svensen, B., *The Nobel Prize in Literature: Nominations and Reports 1901–1950*, 2004; http://nobelprize.org/nobel_prizes/literature/articles/svensen/
13. The nomination database for the Nobel Prize in Literature, 1901–1950; http://nobelprize.org/nobel_prizes/literature/nomination/nomination.php?action=show&show_id=1146

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