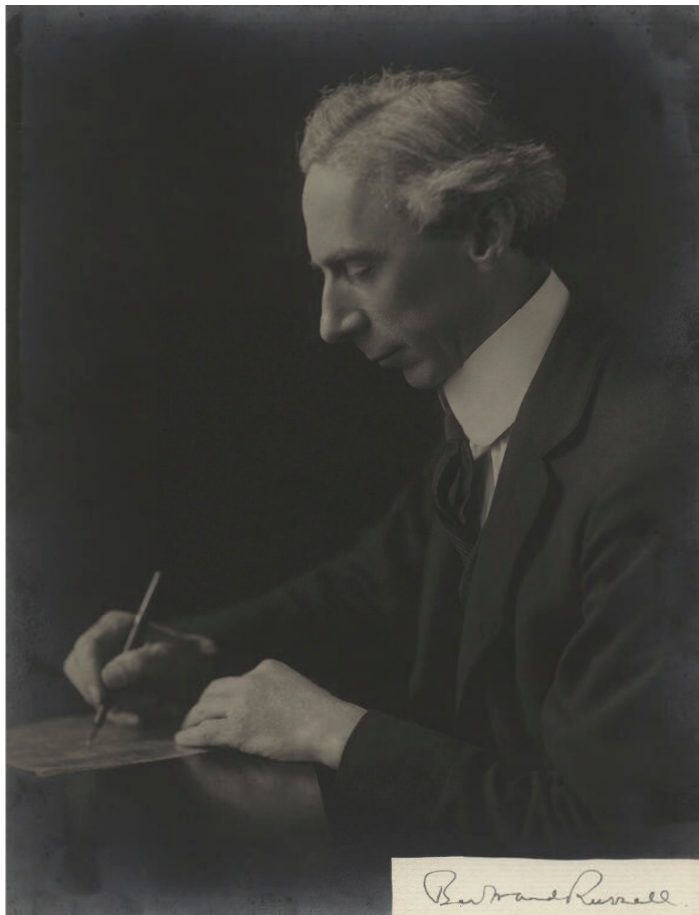


THE BERTRAND RUSSELL SOCIETY BULLETIN

In this issue

- Register now for the 2022 BRS Annual Meeting
- Jovana Davidovic on Ukraine, Zelenskyy, and Russell
- Thom Weidlich on Russell and Keynes
- David Blitz on Russell's one-sentence book
- Gregory Landini on some new work on infinity
- A Jourdain-inspired Transcription Contest
- The Bertrand Russell Limerick Contest



mid-late 1910s, Source: Hugh Cecil Saunders via *National Portrait Gallery*

Register now for the 2022 annual meeting!

BY LANDON D. C. ELKIND

1 Our 49th (and 1st hybrid!) annual meeting

The Bertrand Russell Society 2022 and 49th Annual Meeting will be held in-person at McMaster University in Hamilton, Ontario. It will be a hybrid meeting that also includes online-only participants and presentations by Zoom. We are excited for our first hybrid meeting as we broaden and enrich the community of scholars and activists interested in Russell studies and in promoting the causes for which Russell advocated.

2 Schedule and speaker information

The conference events will begin on Friday evening, June 3rd, with a welcome party at the Bertrand Russell Research Centre, generously sponsored and organized by McMaster University's Libraries. Talks will occur on June 4th from morning through late afternoon on June 5th. The Board meeting and Membership meetings will occur on Saturday or Sunday as well. An up-to-date schedule will be posted here shortly: <https://russell.humanities.mcmaster.ca/brsmeeting.htm>.

Speakers and abstracts will also be posted here: <https://bertrandrussellsociety.org/papers/>.

3 Register by May 13th!

So that we can get accurate numbers for the annual meeting, please register by May 13th at this link: <https://bertrandrussellsociety.org/annual-meeting-registration/>.

Regular registration is \$100 (C\$120); students and limited income registration is \$60 (C\$80).

4 Online-only attendees must also register (but it's free!)

Online-only attendees must register to get the Zoom link; online-only registration is free but a suggested donation of \$10 will help us cover the conference costs are welcome. Use the registration link above.

5 Zoom Software

Online-only participants will need to download Zoom, a free online video conferencing software that is easy to use and readily allows for dozens of simultaneous connections. Presenters must be BRS members (attendees do not need to be BRS members)

Please also note that you must be a member of the Bertrand Russell Society to present at the annual meeting. This applies to online and in-person speakers. Attendees who are not giving a talk can still attend without being a BRS member. You can check your membership status here: <https://russell.humanities.mcmaster.ca/brsmembers.htm>.

You may join (or renew membership in) the BRS, and see the many benefits of membership, at this link: <https://bertrandrussellsociety.org/join/>.

6 On-campus accommodations are available now

On-campus accommodations may be booked separately through McMaster University. Bookings can be made at this link: <https://hotel.mcmaster.ca/affordable/>.

Reservations (off-campus or on-campus) will need to be made independently of the BRS, but most BRS presenters typically reserve a room in Les Prince Hall (in case you are wondering where most folks usually stay during the conference). All conference events will be on campus, so on-campus accommodations come with easy (walkable) access to the venue.

7 Travel and on-campus restrictions

Travel restrictions for entry into Canada (or for re-entry into the U.S.) are not of course in our control; please be aware that these restrictions may change without notice or warning. Canada's up-to-date requirements for travelers can be found here:

<https://travel.gc.ca/travel-covid/travel-restrictions/covid-vaccinated-travellers-entering-canada>.

Up-to-date (re-)entry requirements for the United States can be found here:

https://travel.state.gov/content/travel/en/international-travel/before-you-go/covid-19_testing.

McMaster University may also have its own restrictions for on-campus visitors and guests. These restrictions may also change without notice or warning. McMaster University's up-to-date requirements can be found here: <https://covid19.mcmaster.ca/>.

8 Land Acknowledgment

McMaster University recognizes and acknowledges that it is located on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the “Dish with One Spoon” wampum agreement.

9 Questions?

You may contact us at <https://bertrandrussellsociety.org/contact/>.

Ukraine, Zelenskyy, and Russell: Just War Aims at Sustainable Peace

BY JOVANA DAVIDOVIC

There have not been many wars, in recent history, which have been so clearly just as the Ukrainian war of self-defense against Russian aggression. It is wars such as this one that give even the most dedicated pacifists pause; it is wars such as this one that push absolute pacifists over to contingent pacifism. Contingent pacifists believe that war is horrible and should be avoided at nearly all costs, leaving space for the possibility that in the most terrible of circumstances war could be just. Many great thinkers, including Bertrand Russell, were committed to contingent pacifism, or what he called “relative political pacifism.” But pacifism isn’t simply about the avoidance of war, it is, as Russell knew well, also about avoidance of the horrors of warfighting.

Russia’s blatant and unprovoked aggression against Ukraine’s sovereignty probably wouldn’t have been enough for most contingent pacifists to proclaim that Ukraine should engage in war, but the unprovoked aggression coupled with the horrors Russian military is leaving in their wake, is. War crimes, crimes against humanity, and general disregard for human life make this a quintessential example of a just cause for war. Even the most committed contingent pacifist would agree: in absence of diplomatic alternatives, Ukraine has a just cause for war.

Now a just war needs more than a just cause. A war is only just when, in addition to being fought for the sake of a just cause, it is fought justly and in ways that aim at sustainable peace. Ultimately, a war’s only “real justification [is] in the balance of good which it is to bring to mankind” (Russell, “The Ethics of War,” *The International Journal of Ethics*, 1915). As Russell points out, wars cause death and suffering to soldiers, they cause death and suffering to innocent civilians, wars breed hatred, they cause suffering to those that have lost loved ones, as

well as causing great economic harm, which in turn befalls the least fortunate most often. And in addition, “the greatest [of the evils of war]” is that they breed “hatred, injustice, and the repudiation of truth.” All these harms – the physical, emotional, and social ones, must be considered when waging war, both because they are bad in themselves, but also because they make the process of peace-making after war ends difficult. As President Zelenskyy of Ukraine reminded us, a few short days before the war began “War is a big disaster, which has a high price. People lose money, reputation, quality of life, freedom. But the main thing is that people lose their loved ones, and they lose themselves.” Like Russell, Zelenskyy is aware that having a just cause for war is not enough, one has to try to do the best one can to minimize the suffering war causes, and that means fighting in a way that minimizes harm and that makes future peace possible.

The Ukrainian people and President Zelenskyy of Ukraine have not only fought bravely against an unjust aggression, but have consistently and in the face of grave injustices and horrors attempted to fight in ways that will make sustainable peace possible. The commitment to fighting the war in ways that are honorable, and that minimize the horrors of war and make sustainable peace possible is exemplified in Zelenskyy’s actions everyday. From refusing to vilify the Russian people, to insisting on fighting in just and morally permitted ways, to continually and consistently seeking diplomatic solutions, Zelenskyy and Ukraine have shown commitment to fighting this war justly and with a mind to peace. These (not vilifying, fighting justly, and seeking diplomatic solutions) are all key for fighting in a war that not only has a just cause, but that is a truly overall just war, one that makes true and long-lasting peace possible.

Russell’s views on war stress some of these key points, most centrally the view that one

of the great harms of war and mobilizers for war is the vilification of the enemy. Russell was particularly disturbed by the fact that war is commonly fed by shaping an image of the enemy as evil, and attributing the suffering to the enemy, and not the war itself. Discussing the horrible events in Belgium during WWII Russell suggests that the suffering in Belgium was commonly, deliberately and wrongly attributed to the Germans, and not to war, “making men desire to increase the area and intensity [of conflict].” President Zelenskyy is all too aware of this worry and has consistently sought to speak to the Russian people and separate them from the Russian leadership and military. Zelenskyy addressed Russian people on several occasions, each time in Russian language, calling for peace, calling for an armistice, and doing so in a humanizing and an empathetic way. “Who will suffer the most from it- the people, who doesn’t want it the most- the people, who can stop it- the people, and I know those people are among you,” Zelenskyy said talking to the Russian people.

Another key element of fighting the war justly and aimed at peace is consistent and

clearly communicated desire to seek diplomatic solutions. Zelenskyy and the Ukrainian leadership have done that repeatedly. As Zelenskyy puts it “Our goal is peace, peace for Ukraine, safety for our people and for that we are willing to talk with anyone, in any format, and on any platform.”

Even in the wake of horrendous war crimes and crimes against humanity in the city of Bucha, when Zelenskyy said it’d be hard to keep talking with Russia, Zelenskyy nonetheless sustained a narrative of long-term peace, in addressing the U.N. Security Council. He acknowledged of course that sustainable and long-lasting peace must be a just peace-a peace which comes only after those responsible for the worst of crimes are held to account.

President Zelenskyy has played a key role in not just leading Ukraine in a war that has a just cause, but he is thoughtfully and intentionally leading Ukraine through a war that is fought justly and that could one day lead to long-lasting peace, making it the kind of war even a contingent pacifist like Russell could and would support.



3 April 2022, Source: The Presidential Office of Ukraine via *Wikimedia Commons*

How Much Did Keynes Influence Russell's Economic Views?

BY THOM WEIDLICH

In November 1922, the great British economist John Maynard Keynes returned to England from a trip to Berlin, where he was advising the government on the depreciation of the German mark. At the High Table of King's College at Cambridge, Keynes regaled his fellow diners with a remark that German physicist Max Planck, originator of the quantum theory, had made to him in Berlin only days before.

Planck told Keynes that "in early life he had thought of studying economics, but had found it too difficult!" One of Keynes's fellow diners was Bertrand Russell's friend Goldsworthy Lowes Dickinson. "That's funny," Lowes Dickinson replied, "because Bertrand Russell once told me that in early life he had thought of studying economics, but had found it too easy!"¹

We know that Russell had an interest in economics and that he did write about it. But given his friendship, or at least knowledge by acquaintance, with Keynes, I was curious about how much the great economist might have influenced Russell's economic thinking. As we'll see, the answer is not easy to get at. But before we address that, I will touch on the relationship between the two men and what we can say about Russell's economic views.

Russell and Keynes, two leading lights of twentieth-century Western intellectual life, knew each other for nearly half a century, though Keynes was Russell's junior by eleven years. In a May 1903 letter to Alys, Russell implies he would meet Keynes for the first time at a lunch the next day with Lowes Dickinson (Russell had just turned 31 and Keynes was about to be 20).² In his autobiography, Russell says he first met Keynes through his father, the philosopher and economist John Neville Keynes.³

Russell and Maynard Keynes both were of course connected to Cambridge University and were both active members of the Apostles debating society. They were also both members of the Bloomsbury Group of writers and artists.

Or at least, Russell was a Bloomsbury hanger-on. (There's a famous photo of Russell, Keynes, and Lytton Strachey at Garsington, Ottoline Morrell's house that was a country retreat for Bloomsbury.)

We also have the great story of Russell running into Keynes in Cambridge in August 1914, just after the war broke out; Keynes was rushing to borrow his brother-in-law's motorcycle to travel down to London to give the government financial advice. "Why don't you go by train?" Russell asked. "Because there isn't time," Keynes replied.⁴ Keynes ended up riding in the sidecar as his brother-in-law drove.⁵

Yet, as far as I can tell, surprisingly little has been written about the relationship between Russell and Keynes. Even Robert Skidelsky's three-volume biography of the economist doesn't have an extended discussion of their relationship. But we can glom onto a few things.

First, it's clear that Russell and Keynes admired each other's intellect. Keynes at first studied mathematics and philosophy, eventually focusing on probability. In the preface to *The Problems of Philosophy* (1912), Russell recognized Keynes's contribution with regard to probability and induction, just as in his preface to *A Treatise on Probability* (1921), Keynes noted Russell's influence. In his autobiography Russell writes that he discussed many parts of Keynes's book with him while he was working on it, though he "had no contact with him in his economic and political work."⁶

Just as *Principia Mathematica* attempted to provide a logical basis for mathematics in general, *A Treatise on Probability* tried to provide a logical basis for the mathematics of probability. Russell said of Keynes's *Treatise* that "the book as a whole is one which it is impossible to praise too highly."⁷

But Russell wasn't such a great admirer of Keynes's personality. The relationship between the two men was in fact a little uneasy. Their relationship was "rarely close and often troubled,"

according to J. E. King in a two-part article on Russell's economics in the *Russell* journal.⁸ After Russell and Keynes dined together in 1915, Russell wrote to Ottoline Morrell that Keynes was "hard, intellectual, insincere" and that D.H. Lawrence "likes him but can't get on with him; I get on with him, but dislike him."⁹ Ottoline, who became close to Keynes during World War I, wrote that Russell "obviously doesn't like him very much."¹⁰

In an interview in 1958, twelve years after Keynes's death, Russell listed Keynes as among the most interesting people he ever met.¹¹ But, he said, Keynes (and also Lytton Strachey) were a bad influence over the Apostles in that they only wanted to be "clever and elegant without wanting to 'do good.'" Russell said Keynes was "a cold fish really. And he was always just as interested in showing up fools as he was in correcting errors." He added: "Keynes could be really cruel, you know. There was a satanic element in him."

But, again, respect for intellect. In his autobiography (where he does have a few pages on Keynes), Russell wrote:¹²

Keynes's intellect was the sharpest and clearest that I have ever known. When I argued with him, I felt that I took my life in my hands, and I seldom emerged without feeling something of a fool.

What did Keynes think of Russell? We have surprisingly little on this. In his essay "My Early Beliefs," Keynes discusses the shallowness of the conversation he and his friends had on the question of values before the Great War. He writes:¹³

Our comments on life and affairs were bright and amusing, but brittle — as I said of the conversation of Russell and myself with [D. H.] Lawrence — because there was no solid diagnosis of human nature underlying them. ...

Bertie in particular sustained simultaneously a pair of opinions ludicrously incompatible. He held that

in fact human affairs were carried on after a most irrational fashion, but that the remedy was quite simple and easy, since all we had to do was to carry them on rationally.

We know that, in 1937 when Russell was in difficult economic straits and searching for a job, Ottoline had asked Keynes to help him out financially, but the now-famous and rich economist was, in Ottoline's words, "very unsympathetic and unhelpful." Russell wrote to her: "I don't know about Maynard. In what way do you think he could or would help me? It would have to be a large sum to make up for never being able to speak ill of of [sic] him again!"¹⁴

So what about Russell's views on economics? Russell did in fact write about economics, but those writings are somewhat scattered, much in the way his writings on metaethics are. His economic views tended to be rolled into his internationalist outlook, his political ideas, and his moral concerns — in that sense he truly wrote on political economy. Russell evolved from being, briefly, an imperialist (until the Boer War, or rather his famous conversion over Mrs. Whitehead's suffering), a free trader in the early 20th century (he was very involved, including giving speeches, in the hot free-trade debate of 1904), and then a guild socialist during World War I.

We have an example of his free trade bona fides from a 1909 letter he wrote to Keynes, a letter in which he mostly discussed logic. He tacks onto the end: "I received a communication purporting to be from you inviting me to join the Camb. Univ. Free Trade Assoc. I thought I was a member already. If not, I am willing to join if the subscription is small."¹⁵

Of course, we know that Russell read economists early on and that the first chapter of his first book, *German Social Democracy* (1896), was on Marx. In *Freedom versus Organization* (1934), he discusses economics, certain economists, and economic history. King writes that in the mid-1890s Russell "taught himself economic theory, both neoclassical and main-

stream.”¹⁶

Russell really did torture himself in the 1890s over whether to become an economist or a philosopher. That was because he saw economics as an important underpinning of politics. He wrote that he “decided that politics could not be intelligently pursued without the help of economics.” In 1894, Alfred Marshall, of Cambridge, one of the most influential economists of the day (Keynes would become a student of his), provided him with a reading list on the subject. In early 1895, he studied economics for two months at the University of Berlin. He considered writing his Fellowship dissertation on economics, but in the end non-Euclidean geometry won out.¹⁷

It wouldn't be a stretch to say that when Russell and Keynes met, Russell knew more economics than Keynes did. Keynes's interest in the subject really got going only around 1914. He didn't study it as an undergraduate, and his only formal training was postgraduate work with Marshall for one term. He probably didn't read Marshall's *Principles of Economics*, a seminal book, until 1905. He started reading Adam Smith only in 1910. He of course would have been familiar with economic concepts through his father.¹⁸

But it's generally agreed that, perhaps echoing the Lowes Dickinson quip, Russell's interest in economics waned. He “seems to have taken little or no interest in subsequent developments” in economic theory after his immersion in the 1890s, King writes.¹⁹

King also writes that “[b]etween 1889 and 1918 perhaps one percent of Bertrand Russell's written output was devoted to economics, broadly defined, and it is difficult to imagine that much more than one percent of his waking hours were given over to thinking about economic issues.”²⁰

Other writers echo this view. In his essay on Russell's political and economic philosophy in the Schilpp volume, philosopher V. J. McGill notes that Russell is primarily concerned with the concept of power, including condemning monopoly capitalism, but also fearing state so-

cialism. “Of the details of economic theory one hears very little,” McGill writes.²¹

McGill notes that Russell doesn't explore the thought of many economists in depth. The exception, again, is Marx. In *German Social Democracy*, Russell strongly critiques Marx's theories of value, surplus value, wages, and the concentration of capital. So here, of course, Russell is addressing technical economic questions.

An essay in which he explores technical subjects is “The Modern Midas,” which Harpers published in February 1933 (it's also included in *In Praise of Idleness*). This is a very funny essay in which Russell bemoans the general lack of economic knowledge and hilariously derides the gold standard.

As for the former, Russell writes:²²

The ordinary citizen is struck dumb with awe when he is told about gold reserves, note issues, inflation, deflation, reflation, and all the rest of the jargon. He feels that anyone who can converse glibly about such matters must be very wise, and he does not dare to question what he is told.

This is so, he believes, because of the biased way economics is taught:²³

It is a remarkable fact that, in spite of the importance of economics to every man, woman, and child, the subject is almost never taught in schools[,] and even in universities is learnt by a minority. Moreover, that minority do not learn the subject as it would be learnt if no political interests were at stake. There are a few institutions which teach it without plutocratic bias, but they are very few; as a rule, the subject is so taught as to glorify the economic status quo.

To which we can add, not much has changed. And also that Russell clearly did have

strong economic views that even underpinned his satire.

Then there is the gold standard, about which he writes:²⁴

Of all reputedly useful occupations, about the most absurd is gold-mining. Gold is dug out of the earth in South Africa, and is conveyed, with infinite precautions against theft and accident, to London or Paris or New York, where it is again placed underground in the vaults of banks. It might just as well have been left underground in South Africa.

Interestingly, we have a similar quip about the gold standard from Keynes in a 1914 article he wrote while working for the Treasury in the war effort: “If it proves one of the after effects of the present struggle, that gold is at last deposed from its despotic control over us and reduced to the position of a constitutional monarch, a new chapter of history will be opened. Man will have made another step forward in the attainment of self-government. ...”²⁵

And what about Keynes’s influence on Russell’s economic ideas? I think we can argue, if only by reading between the lines, that Keynes did influence Russell’s economic outlook. In fact, it would seem odd that Russell would not be influenced by knowing so intimately one of the greatest living economists. Russell must have learned from Keynes just by talking to him.

Yet, according to Richard Deacon’s book on the history of the Cambridge Apostles, Russell probably didn’t learn much about Keynes’s economics from that group’s discussions — because they rarely talked about economics. Deacon is a little contradictory about this. He writes that Keynes’s “papers to the Society were in the main nothing whatsoever to do with economics” and that, in terms of the Apostles’ discussions in general, “there is little real evidence that any positive or serious attention was given ... to economic matters.”²⁶ Yet, he writes that, in the early 1900s, “such issues as Free Trade versus

Protection ... aroused more interest in the Society than the storm clouds gathering all over Europe”, and “Though Keynes was anti-Fabian, Fabianism became a vital topic in Apostolic circles.”²⁷

Of course, Russell was sympathetic to the Fabians, who advocated an evolutionary path to socialism. Russell was a member of the Fabian Society for a time. In terms of Keynes’s opposition, in March 1926 Russell had lunch at the home of Fabian leaders Sidney and Beatrice Webb, where, he wrote to Dora, “Keynes gave them an elementary lecture on economics, to which they listened meekly.” This is an example of Russell hearing Keynes discuss economics. Nick Griffin writes that “[t]he exchange may not have been so one-sided as Russell suggests, since Keynes became more sympathetic to the Fabians as a result”.²⁸ although Robert Skidelsky attributes this to Keynes reading Beatrice Webb’s autobiographical memoir *My Apprenticeship* after this meeting.²⁹

Russell himself ceded economic expertise to Keynes. In his autobiography, he writes of the economist:³⁰

I do not know enough economics to have an expert opinion on Keynes’s theories, but so far as I am able to judge it seems to me to be owing to him that Britain has not suffered from large-scale unemployment in recent years. I would go further and say that if his theories had been adopted by financial authorities throughout the world the great depression would not have occurred. There are still many people in America who regard depressions as acts of God. I think Keynes proved that the responsibility for these occurrences does not rest with Providence.

So clearly Russell viewed state intervention in the economy as rational.

In fact in (probably) 1934, Russell wrote a short article called “Prosperity and Public Ex-

penditure” that wasn’t published until it appeared in *Mortals and Others*, the 1975 collection of essays edited by Harry Ruja. In this essay, Russell explains why government should spend money during a depression and why austerity doesn’t work. This of course reflects Keynes’s views set forth in his *General Theory of Employment, Interest and Money* two years later (though he first posited combatting unemployment through public-works spending in 1924).³¹

Although King says Russell wasn’t really well read in economics, he does note that his journalism in the 1930s shows a strong interest in macroeconomics “derived in part from Hobson and, in all likelihood, also from Keynes.”³² On the other hand, Ray Monk claims that in the early 1930s Russell wrote almost nothing on economics and that his analysis of the Great Depression was trivial and too international in outlook.³³

King writes:³⁴

... Russell’s interpretation of the Depression is in essence Keynesian. I find it hard to believe that he read any of Keynes’s technical economic works, least of all the *Treatise on Money* or the *General Theory*, but Keynes too was a great popularizer and Russell would certainly have been aware of the general arguments set out in books like *The Economic Consequences of the Peace* and in his journalism.

I myself find it hard to believe Russell *didn’t* read the *General Theory*. And yet, according to Ken Blackwell, Russell’s library contains *The*

Economic Consequences of the Peace (which Russell discusses in his autobiography), but Ken couldn’t “find evidence that he read Keynes’s economic writings.”³⁵ Ken notes, of course, that the two men would have spoken to each other.

We can also say that Russell influenced Keynes’s economics. This is because Keynes’s own economic views relied heavily on his views about probability — on the difficulty of predicting the economic future. So to the extent *Principia Mathematica* influenced Keynes’s interest in probability, and probability theory influenced Keynes’s economics, we can say Russell influenced Keynes’s economics.

There are more parallels between Russell and Keynes in the economic realm, including the language they used. For example, King says Russell’s writing on scarcity are similar to Keynes’s and there are “fascinating echoes of Keynes’s phrasing in several of Russell’s works.” Here he quotes both men’s opposition to the gold standard, which Russell called “barbaric” and Keynes called a “barbaric relic.” After World War I, Russell wrote (in 1922), “Our trade is depressed because our customers are ruined... We must forgive our enemies or starve,” while Keynes wrote “... the policy which will best promote immediate friendship between nations will not conflict with the permanent interests of the benefactor.”³⁶

So as we can see, there were parallels between the two men with regard to their economic views and expressions. Russell remained the economic amateur, mostly interested in its political and moral aspects, while Keynes was the economic professional hoping to save the world from ignorant ideas about how an economy functions. In their own ways, they were trying to save the world from fools.

Notes

¹John Maynard Keynes. *Essays in Biography* (London: Macmillan and Co., 1933), p. 191, footnote 2, and R. F. Harrod, *The Life of John Maynard Keynes* (New York: Harcourt, Brace and Company, 1951), p. 137.

²Bertrand Russell, *The Selected Letters of Bertrand Russell: The Private Years: 1884-1914* (vol. 1), ed. Nicholas Griffin, 2d ed. (London and New York: Routledge, 2002), p. 258, letter 121 (May 26, 1903).

³Bertrand Russell, *The Autobiography of Bertrand Russell, 1872-1914* (Little Brown, Atlantic Monthly Press, 1967),

NOTES

p. 86. (Hereafter, *Autobiography*, Vol. 1.)

⁴*Autobiography*, Vol. 1., p. 87.

⁵John Maynard Keynes, *The Collected Writings of John Maynard Keynes. Volume XVI: Activities 1914-1918: The Treasury and Versailles*, ed. Elizabeth Johnson (Cambridge: Cambridge University Press, Macmillan, rpt. 2012), p. 3.

⁶*Ibid.*

⁷Robert Skidelsky, *John Maynard Keynes Volume 2 The Economist as Saviour 1883-1920* (Allen Lane. The Penguin Press, 1992), p. 67.

⁸J. E. King, "Popular Philosophy and Popular Economics: Bertrand Russell 1919–70," *Russell: The Journal of Bertrand Russell Studies*, 27 (winter 2007–08): 193–219, 205. (Hereafter, King II.)

⁹Bertrand Russell, *The Selected Letters of Bertrand Russell: The Public Years: 1914-1970* (vol. 2), ed. Nicholas Griffin (London and New York: Routledge, 2001), pp. 34-5, letter 255 (March 8, 1915).

¹⁰Ottoline Morrell, *Ottoline at Garsington: Memoirs of Lady Ottoline Morrell 1915-1918* (London: Faber and Faber, 1974), p. 50.

¹¹Kenneth Harris, *Kenneth Harris Talking To* (London: Weidenfeld and Nicolson, 1971), pp. 114-15.

¹²*Autobiography*, Vol. 1, p. 88.

¹³John Maynard Keynes, *The Collected Writings of John Maynard Keynes. Volume X: Essays in Biography*, ed. Elizabeth Johnson (New York: Macmillan, 1972), p. 449.

¹⁴Bertrand Russell, *Selected Letters*, vol. 2, p. 344, letter 423 (Feb. 15, 1937) and footnote 4.

¹⁵Russell to Keynes, July 4, 1909, BRACERS No. 118754, The Bertrand Russell Archives.

¹⁶King II, p. 214.

¹⁷Bertrand Russell, *The Collected Papers of Bertrand Russell, Vol. 1: Cambridge Essays 1888-99* (London: George Allen Unwin, 1983), Part VII, "Political Economy," "General Headnote," pp. 306-7; quoting Bertrand Russell, "A Turning Point in My Life," *The Saturday Book*, Leonard Russell, ed. (London: Hutchinson, 1948), 8: 142-6.

¹⁸Robert Skidelsky, *John Maynard Keynes 1883-1946: Economist, Philosopher, Statesman* (London: Penguin Books, 2003), p. 125.

¹⁹King II, p. 214.

²⁰J. E. King, "Bertrand Russell on Economics, 1889–1918," *Russell: The Journal of Bertrand Russell Studies*, 25 (summer 2005), 5–38, 38.

²¹V. J. McGill, "Russell's Political and Economic Philosophy," in Paul Arthur Schilpp, ed., *The Philosophy of Bertrand Russell* (Evanston, Ill.: Library of Living Philosophers, Inc., 1946), p. 581.

²²Bertrand Russell, "The Modern Midas" (1933), in *In Praise of Idleness and Other Essays* (London: George Allen Unwin, 1935), pp. 78-79.

²³*Ibid.*, pp. 79-80.

²⁴*Ibid.*, p. 60.

²⁵Skidelsky, *John Maynard Keynes 1883-1946*, p. 177.

²⁶Richard Deacon, *The Cambridge Apostles: A History of Cambridge University's Elite Intellectual Secret Society* (New York: Farrar, Straus Giroux, 1985), pp. 64, 78.

²⁷*Ibid.*, pp. 79-80.

²⁸Bertrand Russell, *Selected Letters*, vol. 2, pp. 254-5, letter 367 (March 20, 1926); Griffin is p. 255, footnote 7.

²⁹Skidelsky, *John Maynard Keynes 1883-1946*, p. 379.

³⁰*Autobiography*, Vol. 1, p. 87.

³¹Skidelsky, *John Maynard Keynes 1883-1946*, p. 343 (citing a Keynes article in the *Nation* on May 24, 1924).

³²King, II, 205.

³³Ray Monk, *Bertrand Russell, 1921-1970: The Ghost of Madness* (London: Jonathan Cape, 2000), p. 167.

³⁴King, II, p. 208.

³⁵Kenneth Blackwell to author, email, Nov. 26, 2019.

³⁶Last two quotes, King II, p. 208, citing Russell Papers 15: 393, 397, and Keynes 1919, p. 179.

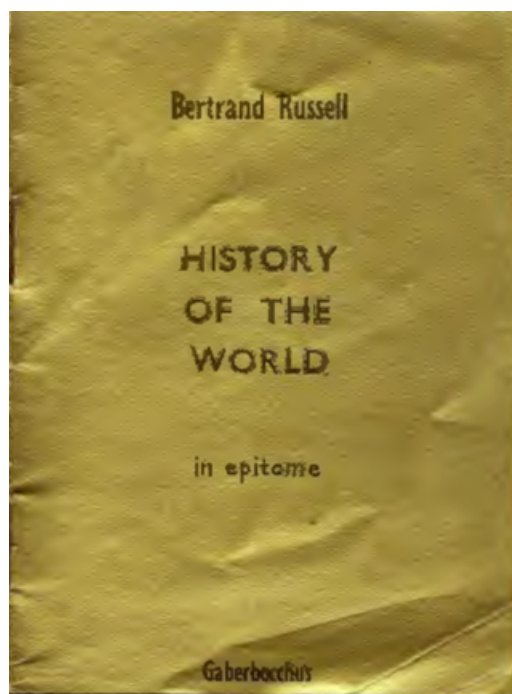


Figure 1: Bertrand Russell, *History of the World* (cover)

Russell's *History of the World in Epitome*, Stephanie May, and Norman Cousins

BY DAVID BLITZ

The longest work of which Russell is author – in this case co-author with Alfred North Whitehead – is *Principia Mathematica* at three volumes, with a title sharing the first two words of the master work by Isaac Newton. Another publication by Russell also has an imposing title: *History of the World in epitome* (1962, item A123 in Blackwell and Ruja's *A Bibliography of Bertrand Russell*), though its sub-title, "For use in Martian infant schools", indicates that something else than a major historical work is involved. Indeed, it contains just one sentence, though a significant one warning the world about the nuclear arms race: "Since Adam and Eve ate the apple, Man has never refrained from any folly of which he was capable." – followed by what is just a sentence fragment, but essential to the content of the piece: "The End". This essay will trace the story of the publication of this pamphlet in its context. In terms of content, there are a number of unusual aspects to

this pamphlet:

1. It is the shortest separate publication by Russell, who as we know was otherwise capable of rather lengthy exposition; consider in comparison the three volumes of *Principia Mathematica*;
2. It is one of two publications by Russell to be fully illustrated by Franiszka Themerson and published by Gaberbacchus Press – the other being a more light hearted work: *The Good Citizen's Alphabet*, where Russell himself appears as "P for Pedant";
3. It contains Russell's second most pithy comment, after the statement following proposition 107110•643 of *Principia Mathematica* proving, on page 83 of Volume II, that " $1 + 1 = 2$ ": "The above proposition is occasionally useful."

In terms of publication, there are also a number of unusual aspects to this pamphlet:

1. Its text, that is to say the full sentence and the concluding “The End”, first appeared in the *Hartford Courant* of May 16, 1960, in an article entitled “Bloomfield May Home from Anti-Nuclear Trip”, quoted by Stephanie May, a Connecticut anti-nuclear activist, two years before its official publication to celebrate Russell’s 90th birthday. (C60.12 in Blackwell and Ruja’s *Bibliography*)
2. It was read in full by Norman Cousins, head of the US Committee for a SANE Nuclear Policy, to a mass SANE rally held on May 22, 1960 at Madison Square Garden in New York City, with Mrs. Eleanor Roosevelt, Walter Reuther, the president of the Auto Workers Union, the Governor of Michigan and various Broadway and Hollywood celebrities present, including Harry Belafonte and Orson Bean.
3. Its full sentence appeared on the dust-jacket, front cover of a book by Cousins, in 1961, a year before its official publication, with the full quote as the opening paragraph of the book.

That’s quite a bit of work for a single sentence. Russell was adept at many forms of expression: first and foremost the written word, but also symbolic formulae in his more youthful days, and in his later years: radio broadcasts, record albums, and film appearances, what we today refer to as audio-visual productions. The use of graphic illustration in his work is limited to two productions, *History of the World* and *The Good Citizens Alphabet* both of them illustrated by Franciszka Themerson and produced by the Gaberbocchus press.

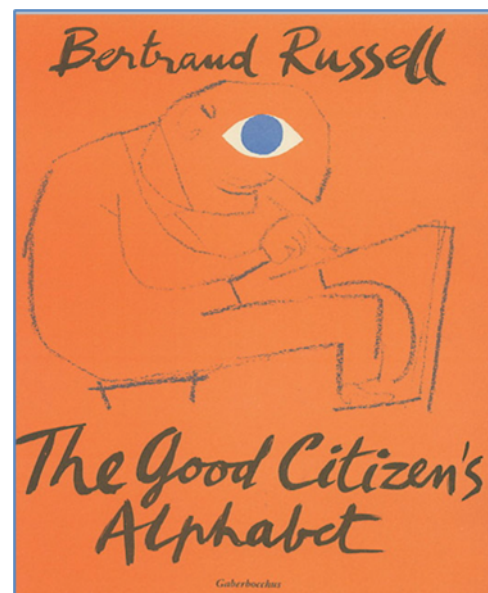
The History of the World in Epitome, for use, as noted, in infant Martian schools, is part of Russell’s effort to ban the bomb. In its pages we see the mythical Adam and Eve partaking of the apple in the first double page. Note that both

eat the fruit, with the snake facing Adam, perhaps the real instigator of the whole mess, despite the claim otherwise in Genesis. The second double page illustration features two generals with their airborne minions, symmetrically arrayed in combat along with soldiers armed with bayonets. In the right hand panel there appears to be a businessman “riding” a worker, perhaps a reference to their exploitation.

The full sentence of text is presented over four pages embossed in gold color (as is the cover—page breaks are indicated by ‘//’):

Since Adam and Eve ate the apple //
man has never refrained //
from any folly //
of which he was capable.

The next to last page is not an illustration, but the photo of a mushroom cloud, followed by the phrase “The End” – not just a conventional conclusion to a story, but, should the two superpowers of the time collide in thermonuclear war, the end of humanity.



The illustrator was Franciszka Themerson (1907-1988), a Polish artist who lived briefly in Paris just before World War II and then fled to



Figure 2: Bertrand Russell, *History of the World*

London as the Nazis advanced, where she subsequently came into contact with Russell. Themerson, along with her husband Stefan Themerson (1910 – 1988) founded the Gaberbocchus press, the name chosen as a Latinized version of Lewis Carroll's *Jabberwocky* (see the *Wikipedia* entry on Themerson for more details). Russell had collaborated with the Themersons on another satirical project, *The Good Citizens Alphabet*, which appeared earlier in 1953. This pamphlet had a 2-page introduction and 24 pages of the alphabet (H and I appear together on a single page, as do Q and R). Russell himself appeared under "P for Pedant":



Russell did not often use humor to describe what we today would term nuclear omnicide, though he did so on another occasion: an amusing article "Planetary Effulgence" (C59.17 in the Blackwell and Ruja's *Bibliography*) which appeared in the *New Statesman* in 1959, just before the writing of *History*. Mars, like Earth, is divided into two competing superpowers, the Alphas and the Betas, each of which sends scientific delegations to our planet, which they find in ruins and devoid of human life after a nuclear war between the Earthian As and Bs. The delegations find to their consternation that what the As and Bs said of themselves were identical (each was good), and what they said of each mirror images (the other was evil). They

conclude that there was no real difference between the two sides, but each also informs their government that the only policy to win is to be stronger than their opponent.

A few years later, scientific delegations from Jupiter, itself divided into warring Alephs and Beths, visit Mars, to find it, like the Martians had found the Earth, now desolate and devoid of life. (It is likely that this unfortunate fate of the Martians motivated Russell to subtitle *History of the World* with "for use in Martian infant schools", to warn the Martian children what their parents were about to do.) The Jovian Alephs and Beths then adopt the same policy as the Martians, each side aiming to be the stronger in order to win, but before they could proceed with their own plans to mutual assured destruction, they each receive a message "from a moving finger": "I am sorry that I was so half-hearted at the time of Noah", signed "Cosmic President". Both sides react by hiding this warning from their respective populations. Left unsaid by Russell: visitors from Saturn would soon discover a lifeless Jupiter. To quote Kurt Vonnegut, who had seen more than enough of man's destruction of man: "And so it goes".

To return to our pamphlet: it was intended as a non-commercial work to be distributed in celebration of Russell's 90th birthday, for a man who had written and published his own obituary at age 80. Naturally, he penned the text himself, self-celebrating the occasion with a warning to all. Now, to its curious first publication in the *Hartford Courant*, reputed to be the oldest newspaper in continuous publication in the U.S. As the 1960s dawned, Russell received a letter dated December 31, 1959 on the letterhead of the Connecticut Committee for a Sane Nuclear Policy. The Committee for a Sane Nuclear Policy, abbreviated as SANE, was founded in the US in the spring of 1957, about the same time as the CND in Great Britain. It was headed by Norman Cousins, the editor of *Saturday Night*, a well respected literary-political monthly review.

10 Stephanie May and the Hartford Courant

The letter to Russell was written by Stephanie May, who was the co-chair of the Connecticut section of SANE, along with Dr. Walter Landauer, Professor of Genetics at the University of Connecticut. Stephanie May was a co-plaintiff with Russell in the “Fallout Suit” which she, along with Linus Pauling and others (including the Quaker David Walden who initiated the idea in 1956) had filed on April 4, 1958 against both the United States in the US District Court for Washington, and simultaneously, the Civil Division of the Soviet Supreme Court. The lawsuit demanded that both superpowers stop atomic testing due to the deleterious effects of fallout on the civilian populations of both countries, and as carried along by thermal currents, the rest of the world. Stephanie May was planning to visit England early in 1960, to visit her husband John’s parents living near London who had not yet seen their grandchildren, Geoffrey, then 3 years old and Elizabeth, two years older.

May noted that they would be England during Easter, “so we’ll be able to take part in the Aldermaston march”, organized by the CND from London to the airbase where US nuclear weapons were stored. Moreover, the family planned to stay at a guest house in Wales, at Dolwyddelan, which, she noted was just 25 miles from Penryhydreudraeth, wherein resided the English philosopher and anti-nuclear campaigner. Could she visit him at that time?

Russell responded on January 4, ever ready to meet a kindred spirit, requesting only that she call in advance to make sure that he was not in London when they arrived in Wales. He indicated that “I have also read the work of the Committee for a Sane Nuclear Policy which seems to me so admirable”, and he thanked her for the pictures of sculptures she had made of her two children. (May was a talented sculptor, and after the death of Eleanor Roosevelt, made a sculpture of her that was awarded to SANE honorees).



At the visit, held in Wales, Russell autographed two books for his visitor, and had a photograph taken of the two together. The children remained at the guest house, and so missed the occasion, although they subsequently visited a castle and a resort town, which Elizabeth mistook for Disneyland.

Bloomfield Woman Joins In British H-Bomb March

A crusader from Connecticut, Mrs. Stephanie May, Bloomfield, was among the 40,000 anti-H-bomb peace marchers who walked 34 miles to a rally in England Monday in protest against nuclear weapons.

An Associated Press story, datelined London, quoted Mrs. May as saying, “I was thrilled at the whole thing. If enough people keep on doing this, then somebody’s bound to take notice.”

Left Week Ago

The Bloomfield housewife and mother was said to have taken her five-year-old daughter Elizabeth along on the long march.

A neighbor of the Mays, Mrs. Clarence Nelson, 111 Duncaster Rd., said Monday night that the May family left on the Queen Mary about a week ago for a five-week stay in England, with John W. May’s parents, who live in England. The couple’s other child, Geoffrey, about 3, also is along on the trip.



MRS. STEPHANIE MAY
write us off as a bunch of cranks any more.”

Stephanie May’s trip was covered by the *Hartford Courant*, which had previously noted her anti-nuclear activities, terming her “Bloomfield’s Crusading Housewife”, subtitled “One-woman anti-H bomb drive takes heavy toll of housework” (Dec. 8, 1957). Mainstream journalism was so simple and explicitly sexist then. Two and a half years later, the *Courant* titled an article about May’s recent trip to England and Wales where she met Russell: “Bloomfield

Woman Joins in British H-Bomb March” (April 19, 1960), upgrading her from “housewife” to “crusader” and recounting her participation in the Aldermaston march along with 40,000 others. Her daughter Elizabeth joined her in the march, which would make Elizabeth a very young anti-nuclear activist. A follow-up article (which misstates May’s last name in its title as Mays) appeared on May 11, 1960, “Bloomfield Mays Home from Anti-Nuclear Trip”. May, respecting Russell’s request, focused not on his comments about individuals, but on a “single sheet of paper” she had seen on Russell’s desk. The Hartford Courant article continued that the sheet of paper was “the unpublished manuscript of a history of the world by one of the world’s most influential philosophers and educators, Lord Bertrand Russell. Learning that it had never been published, Mrs. May asked to copy it. This is how it read:” And of course, you know what it said, so I won’t repeat the quote here (see reproduction of that part of the article, op[psote). And so the first publication of the text of the pamphlet appeared in the *Hartford Courant*, page 8A (first column).

May, including a five day hunger strike against Soviet nuclear tests, which she conducted in October 11-15, 1961 in front of the offices of the Soviet UN delegation in New York City, where she was joined by her husband John, an executive at a Hartford insurance company.



Mrs. May Begins Hunger Strike Against Reds' Nuclear Tests

Subsequently, apparently dissatisfied with the political climate in the US during the Nixon period, and looking for a desirable environment for the children, she and her family moved to Cape Breton island in Nova Scotia, Canada. Her son Geoffrey still lives there; her daughter Elizabeth became a political leader in the Green Party of Canada.



There is much more to say about Stephanie



John May joins wife, Stephanie, near Russian UN headquarters.

Elizabeth May is now Member of the Canadian Parliament for the Saanich-Gulf Islands in British Columbia. She previously served as leader of the Green Party of Canada. She is a

noted environmentalist and the author of numerous books, including *How to Save the World in Your Spare Time* (Key Porter Books, 2006), *Global Warming for Dummies* (co-authored with Zoe Caron, John Wiley and Sons, 2008) and *Losing Confidence: Power, Politics and the Crisis in Canadian Democracy* (MacLelland and Stewart, 2009). Most recently she published a combination autobiography and political manifesto, *Who We Are: Reflections on My Life and Canada* (Greystone, 2014).

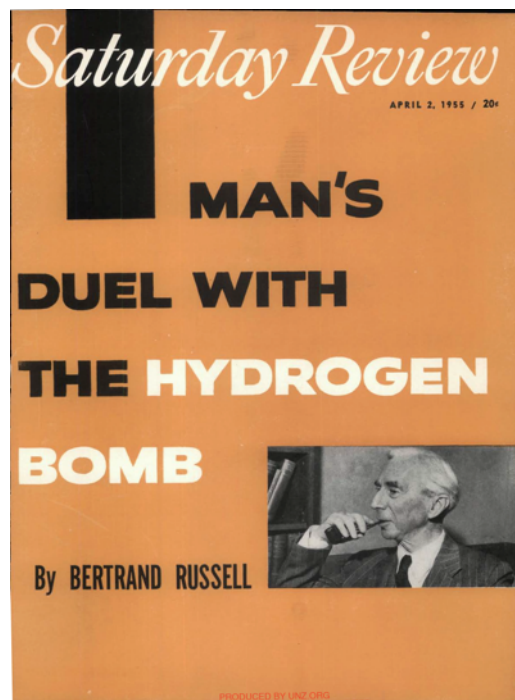
11 Norman Cousins and SANE

Norman Cousins did much to draw attention to Russell's one sentence warning from the *History of the World in Epitome*. Cousins (1915-1990) was the long-time editor of the *Saturday Review* (1920-1986), a literary-political review, published from 1940 – 1971, with a maximum circulation of 600,000 in the last year of Cousins' editorship. Cousins wrote numerous editorials for the review, and is best known to the public for his book, *Anatomy of an illness: As Perceived by a Patient* (1979), in which he argued that laughter (or what he termed "laughter therapy") had helped him overcome a serious medical condition and would work for others. The book was made into a TV movie in 1984 starring Ed Asner as Cousins. (<https://youtu.be/0LwKd68S15I>)

The *Saturday Review* featured reviews of many of Russell's books and devoted the cover and lead article to his 1954 "Man's Peril with the Nuclear Bomb", retitled "Man's Duel with the Nuclear Bomb" for the occasion (issue of April 2, 1955).

Cousins' anti-nuclear activism paralleled in some ways that of Russell, and as noted previously, he was among the founders and long-time leader of SANE. SANE was the main organization in the US mobilizing anti-nuclear activists, using means such as ads in the New York Times (a famous one involving Dr. Spock) and rallies at Madison Square Garden, about which

more below. Cousins was a supporter of Pres. John Kennedy, and acted as an informal intermediary during negotiations in 1962-63 with Khrushchev over the Limited Test Ban Treaty following the Cuban Missile Crisis.



SANE was further radicalized by the war in Vietnam, and in November 1965 organized the largest anti-war demonstration to that time, eventually breaking with its official non-partisan stance to support Sen Eugene McCarthy in his ill-fated campaign for President in 1968. SANE opposed the Reagan era Star Wars initiative and in 1982 organized with a sister organization, the Nuclear Weapons Freeze Campaign an anti-nuclear weapons demonstration in NYC estimated at 1 million participants. SANE eventually merged with Freeze in 1983 to become Peace Action, which exists today.

The link between Russell's *History of the World* and Norman Cousins was Stephanie May, who communicated the existence of the pamphlet to him. Elizabeth May, in a recent email on this subject, said:

When my mother and father visited Lord Russell in Penrhyndeudraeth in 1960, he told her he had something in his study he wanted to show

her. She always recounted how he bounded the stairs, taking them two at a time. He must have been in his late 80's at the time. And once in his study, he handed her a single piece of paper – “History of the World (for use in Infant Martian schools)”...and gave it to her.

Mum was thrilled with it and once home in the states, told Norman Cousins, then editor of the Saturday Review, that she had an unpublished manuscript from Bertrand Russell. Norman couldn't wait to see it, as I recall. He has just finished a book on the threat of nuclear war for which he had not yet confirmed a title. He named the book, “In Place of Folly” and it opened with the Russell “manuscript.” (Email of June 8, 2018)

A public rally of SANE was held at Madison Square Garden in mid May 1960, at which time Cousins communicated Russell's text. The meeting occurred just after the May 1, 1960 U-2 incident at the very end of Pres. Eisenhower's term, when Francis Gary Powers was shot down in a spy plane over the Soviet Union. This ended prospects for a US-Soviet Summit meeting scheduled for Paris and increasing tension between the two superpowers. In her letter of May 22, 1960 to Russell, Stephanie May quoted from Cousins' address to the sell-out crowd:

“Bertrand Russell has just written a new book. It is entitled *The History of the World*. I hope you will read it. No, better still, I will read it to you now...’Since Adam and Eve ate the apple, man has never refrained from any folly of which he was capable. The end.’ Now, I don't think it should end right there I think we must start a new chapter...” And then he launched into his speech. It was a very effective opening.

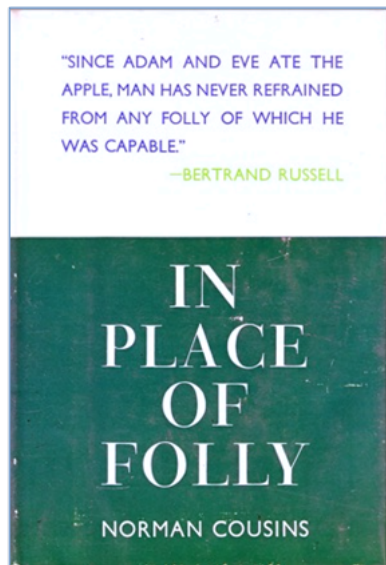
Russell addressed the meeting in a two-page statement summarizing the points he had made in “Man's Peril”: “War is ancient institution which has existed for at least 2,000 years. It was always foolish, but in the past the human race managed to live with it. Modern ingenuity has changed this. Either Man will abolish war, or war will abolish man.” He continued, warning about the danger of all types of weapons of mass destruction: “For the present it is nuclear weapons that cause the greatest danger, but bacteriological or chemical weapons may, before long, offer an even greater threat.” And he concluded “If we had secured the abolition of nuclear weapons our work would not be done. It will never be done until we secure the elimination of war.” (Message of Greeting to the Meeting at Madison Square Garden, May 19, 1960, page 1 of the statement)

Norman Cousins summed up his own views on the nuclear danger the following year in his 1961 book, *In Place of Folly*, published by Harper and Brothers in New York. The dust-jacket, that ever essential component of 20th-century books, and for modern first editions, up to 90% of the value, featured Russell's full sentence on the front cover, and a quote, also including the term “folly” from Albert Schweitzer on the back cover: “We must muster the insight ... and the courage to leave folly and face reality”. Cousin's first chapter, “A Primer on Nuclear Warfare” began: “A one sentence account of the human race has been written by Bertrand Russell”, after which the full text is reproduced again, including the concluding “The End”.

Cousins continued:

The folly now clearly within the reach of man is the decimation of the human species and, indeed, the rejection of many of those vital environmental conditions that make life on this planet possible. ... The purpose of this book is to contend that the world and everything in its can still be made safe for man. He can be at peace: he can be free: he can grow. In place of folly there can be

sanity and purpose. (page 11)

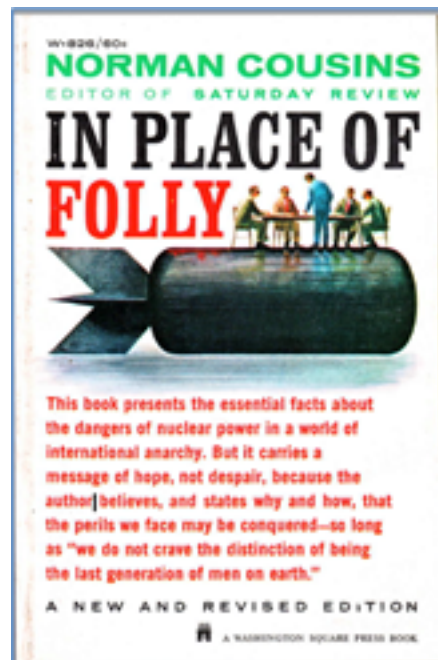


Russell, in response to a letter from Stephanie May on the rally, and the subsequent march by thousands of attendees to the UN building: “It is amusing that Norman Cousins recited my *History of the World* at a Madison Square Rally” (lette of June 6, 1960). BRACERS for its part lists some 55 letters between BR and Cousins. In January and February Russell responded favorably to Cousins’ request to reproduce Russell’s speech at Manchester on nuclear disarmament, and on August 12 gave his permission for Cousins to quote the History: “I am entirely willing that you should quote my *History of the World* in toto, by which I mean that you should not omit the last two words, namely, ‘THE END’. These words are an essential part of what I have to say.” Russell received a copy of the book, apparently from a third party, Clarence Horich, and noted: “It was very kind of you to send me Norman Cousin’s [sic] book *In Place of Folly* which I am reading with interest.”

Two paperback editions of Cousins’ book were issued, for those interested in such matters bibliographic. The first was a “Special Edition for the National Committee for a Sane Nuclear Policy”, also in 1961, with the cover dust jacket from the previous hard cover (front and rear) reproduced in black and white on the covers of

the paperback. This is the edition I first came upon in a second hand bookstore, assuming, incorrectly, that it followed the publication of Russell’s work, rather than preceded it. I have recently come across a second paperback edition published in 1962 by Washington Square Press, in a reduced size format, and called a “new and revised edition”.

The book still has 18 chapters, but re-ordered, with one replaced. But sadly, the quote from Russell has disappeared, both on the front cover and in the first chapter, though the quote from Schweitzer remains on the back cover.



Here is a hypothesis: Just after the 1960 Madison Square Garden rally, SANE was accused of harboring communists by Sen. Dodd, Democrat of Connecticut. Cousins wished to avoid a confrontation on this issue and even called for the resignation of the SANE organizer, Abrams who had been accused. The 2nd edition of *In Place of Folly* came out in 1962; its 2nd printing which I have examined is dated November, just after the October Cuban Missile Crisis. Russell, as we know, was highly critical of Kennedy for intensifying the crisis with the naval quarantine, and praised Krushchev for resolving it by removing the missiles. This may have caused Cousins to remove references to Russell, supposing that the first printing was in late October. This could be

confirmed by evidence in the SANE archives at Swarthmore College.

12 Conclusion

What then can we make of *History of the World* today, and its protagonists: Russell, Stephanie May and Norman Cousins? Today, as then, nuclear weapons persist as a danger to humanity, with some new states at the table: besides the five nuclear powers grandparented in by the Non-Proliferation Treaty of 1970, at least four other countries have entered the game: Israel, India, Pakistan and N. Korea; while some others have left: Canada, giving up its possession of US weapons, South Africa, destroying its A-bombs as apartheid was about to collapse. The three former Soviet republics that had Soviet-era weapons stationed on their territory – Ukraine, Kazakhstan, and Belarus – returned them to Russia as the successor state to

the USSR.

In January of 2021 the International Treaty on the Prohibition of Nuclear Weapons (TPNW) entered into force with 59 countries as signatories. However, no nuclear weapons power signed on; both the US and Russia have explicitly opposed the treaty, and no NATO member has agreed to it. At the same time we witness renewed testing of nuclear capable missiles by North Korea. The US withdrawal from the Joint Comprehensive Plan of Action with Iran by the former Trump administration has placed Iran once again on the path to an atomic bomb. Other countries may follow suit, including Saudi Arabia should Iran succeed in weapons production.

As a consequence of both the danger of nuclear weapons, and the hope for their abolition, we need more Russells, more Mays and more Cousins who can analyze and combat the danger of nuclear weapons. We have a moral responsibility to continue their work.

Principia and z-Principia: Some new work on Infinity

BY GREGORY LANDINI

In 22 March 1911, Russell visited Paris and delivered two lectures on his logical work. One of them was “Sur les axiomes de l’infini et du transfini”. In the paper he wrote:

It is therefore possible that, by modifying the theory of types, the axiom of infinity would become unnecessary.

What changes might he have had in mind when it comes to “modifications of the theory of types? Here are some alternatives:

1. (Whitehead 1911; Landini 2022) Do not change *Principia’s* formal grammar $x^{(t_1, \dots, t_n)}(x^{t_1}, \dots, x^{t_n})$ of simple types of individuals, and do not change its impredicative axiom schemas *12.1.11. Instead, a new axiom motivated by new perspective on Whitehead’s notion that the number of individuals of one simple type does not determine the number in the next higher which may be infinite.

2. (Wittgenstein 1922) Change the grammar of *Principia’s* simple types to allow the formation of complex predicates, but limited by orders (ramification), while embracing full extensionality that allows, e.g., ${}^n f^{(t)}(x^{n+m} x^t)$, as a well-formed (wff), where the order index n can be lower than the order index $n + m$. Add a strong axiom of extensionality:

$$({}^a x^t)({}^b f^{(t)}({}^a x^t) \equiv {}^{b+c} g^{(t)}({}^a x^t)) \cdot \supset \cdot \varphi({}^b f^{(t)}) \equiv \varphi({}^{b+c} g^t).$$

3. (Elkind 2022) Change the grammar of *Principia* to *z-Principia* where one has indefinitely descending simple types. This allows: $y^{(z \pm p_1, \dots, z \pm p_n)}(x^{z \pm p_1}, \dots, x^{z \pm p_n})$, where p is any (positive) natural number. And we have the axiom:

$$y^{(z+p)} = y^{z+p+1}.$$

Next add an axiom z**107:

$$(\eta)(\eta \in NC \text{ induct} \supset (\alpha)(\alpha_{x^{z+p}} \in \eta \supset (\beta_{x^{z+p-1}} \text{ sm } \alpha)))$$

In an effort to get a firm grasp on these techniques, let’s start with the simple type grammar of *Principia* (PM) itself. There is controversy at every turn. But we accept the following account of simple types:

1. o is the lowest simple type index;
2. If t_1, \dots, t_n are simple type indices, then (t_1, \dots, t_n) is a simple type index;
3. There are no other simple type indices.³⁷

Simple type indices adorn all individual variables, and all variables are individual variable. The individual variable x^t is a predicate variable if $t \neq o$. And $x^{(t)}, x^{((t))}, x^{(t_1, t_2)}$, etc., are themselves individual variables of various simple types. Typical ambiguity of simple type allows that we can rewrite any theorem upward in simple type. Thus for example, consider the axiom

$$*10.1 \quad (x)\varphi x \supset \varphi y, \text{ where } y \text{ is free for } x \text{ in the wff } \varphi$$

i.e.,

*10.1 $(x^t)\varphi x^t \supset \varphi y^t$, where y^t is free for x^t in the wff φ .

The typical ambiguity enables one to raise the t to (t) or to $((t))$ and so on.

The primitive signs of *Principia* are the individual variables along with brackets and connective connectives \sim , \vee , and the sign \exists for the existential quantifier. Simple type indices do the work of marking which variables are bindable predicate variable. Atomic wffs look like this:

$$x^{(t_1, \dots, t_n)}(x_1^{t_1}, \dots, x_n^{t_n}).$$

With simple type indices, there is no need to use $\varphi^{(t_1, \dots, t_n)}(x_1^{t_1}, \dots, x_n^{t_n})$ with $\varphi^{(t_1, \dots, t_n)}$ as a predicate variable. It is only with the suppression of simple type indices that this becomes necessary, and thus *Principia* uses the exclamation and $\varphi!$ as a bindable predicate variable and writes the above as:

$$\varphi!(x_1, \dots, x_n).$$

It is a beautiful technique. But it is something of challenge to uncover it from the work because it dared to explain by ostension the simple type notations on its individual variables all the while using a technique of simple type ambiguity.

Now Russell himself explored Wittgenstein's Tractarian ideas for altering *Principia* rather thoroughly in his Introduction and Appendix B to the 1025 second edition of *Principia*. He found it to be a dead end. It does, he thought, capture the ancestral and mathematical induction. But Russell concluded that his experiment on behalf of Wittgenstein's Tractarian views fails to recover Analysis and Cantor's work. (See Linsky, *The Evolution of Principia Mathematica* (Cambridge 2011) and Landini (2012) review.) It should be noted that Whitehead didn't not want this Wittgensteinian experiment included in the 1925 second edition and vehemently disavowed it in a 1926 letter to Mind.³⁸ Indeed, in his 1929 *Process and Reality*, Whitehead explicitly disavowed both of Russell's introductions.³⁹

There is evidence in *Principia* itself that Whitehead contemplated the idea of keeping *Principia's* grammar intact but adding some new and well-motivated axiom concerning the relations between simple types of individuals. In comments after *120.5 we find (*PM*, vol. 2, p, 218):

$$\Lambda \in \mathbf{t}\alpha \cap \text{NC induct} \supset \Lambda \in \mathbf{t}\beta \cap \text{NC induct},$$

where α and β are any two objects of any two types. To prove this proposition would require assumptions as to the interrelation of various types, which have not been made in our previous proofs.

What sort of assumptions? Notice that by the transposition, we have:

$$\Lambda \notin \mathbf{t}\beta \cap \text{NC induct} \supset \Lambda \notin \mathbf{t}\alpha \cap \text{NC induct}.$$

And of course we have:

$$\mathbf{V}_{\mathbf{t}_o\alpha} \notin \text{Cls induct} \equiv \Lambda \notin \mathbf{t}\alpha \cap \text{NC induct}$$

$$\mathbf{V}_{\mathbf{t}_o\beta} \notin \text{Cls induct} \equiv \Lambda \notin \mathbf{t}\beta \cap \text{NC induct}.$$

Thus, putting these together we get:

$$\mathbf{V}_{\mathbf{t}_o\alpha} \notin \text{Cls induct} \supset \mathbf{V}_{\mathbf{t}_o\beta} \notin \text{Cls induct}.$$

And now we can see that what Whitehead contemplates is this:

$$**120.5 \text{ C } V_{x^t} \notin \text{Cls induct} \supset V_{x^{(t)}} \notin \text{Cls induct}$$

i.e.,

$$\text{Frege Inf } V_{x^{(t)}} \supset \text{Frege Inf } V_{x^t}$$

I call this ****120.5 C** because Whitehead discussed it in the comments he made after ***120.5**. This is an interesting comment because it suggests the Whitehead might have been at one time contemplated just such an axiom. But it was naturally rejected on grounds of lack of epistemic self-evidence. Without better access to further features of the structure of simple types, Whitehead came to reach the conclusion that epistemically the relationship here seemed unknowable. In earnest to avoid restoration of simple type indices, Whitehead did not explore such matters further.

In order to state theorems where relative types play a role, *Principia* makes use of the following definitions:

$$*63.02 \text{ } \mathbf{t}_o\alpha = \text{df } \alpha \cup -\alpha.$$

$$*63.01 \text{ } \mathbf{t}x = \text{df } \iota'x \cup -\iota'x$$

$$*63.04 \text{ } \mathbf{t}^2x = \text{df } \mathbf{t}tx$$

$$*65.01 \text{ } \alpha_x = \text{df } \alpha \cap \mathbf{t}x$$

$$\text{i.e. } \alpha_{x^t} = \text{df } \alpha \cap \mathbf{t}x^t$$

$$*65.02 \text{ } \alpha(x) = \text{df } \alpha \cap \mathbf{t}tx$$

There are also variants for classes

$$\text{cls}^*65.01 \text{ } \alpha_\mu = \text{df } \alpha \cap \mathbf{t}\mu$$

$$\text{cls}^*63.01 \text{ } \mathbf{t}\mu = \text{df } \hat{\xi}(\xi = \mu \vee \xi \neq \mu)$$

$$\text{cls}^*63.04 \text{ } \mathbf{t}^2\mu = \text{df } \mathbf{t}t\mu$$

These are just universal classes. If we restore simple type indices to ***63.01** and apply definitions of singleton and union, we have

$$\mathbf{t}x^t = \hat{y}(y = x^t \vee y \neq x^t).$$

We see that $\mathbf{t}x = V_x$, and restring simple type indices this is $\mathbf{t}x^t = V_{x^t}$. I use boldface to distinguish relative type notation from simple type indices. The relative type notation $\mathbf{t}x$ should never be conflated with the notation using a simple type indexed individual variable x^t . Relative type notations vanish with the no-classes and no-relation-e (relations in extension) theories and must not be conflated with simple type indices which may be suppressed under conventions of typical ambiguity.

We can see that Whitehead left open the question as to whether some other axiom might be epistemically warranted by logical intuition which would assure that V_{x^t} is Frege-infinite (*i.e.*, not a member of any inductive cardinal) or even Dedekind infinite (*i.e.*, mapped one-to-one onto a proper subclass of itself). His openness to the issue comes from his recognition that the following is a theorem in *Principia*:

$$\text{Cantor-Indiv. } \vdash \sim (\exists\beta)(\beta_{x^t} \text{ sm } V_{x^{(t)}}).$$

This is never proven in the work because the proof requires the restoration of simple types— which is something Whitehead and Russell vowed not to do. Whitehead was,

however, rather explicit about the matter in the opening of vol. 2. He remarks (*PM*, vol. 2, p. *vii*):

It is to be observed, further, that, given the number of individuals, there is nothing in our axioms to show how many predicative functions of individual there are, i.e. their number is not a function of the number of individuals; we only know that their number $\geq 2^{Nc'Indiv}$ where “Indiv” stands for the class of individuals.

Whitehead is telling us that the number of individuals (of one simple type) may be any number greater or equal to 2 to the number of individuals of the next lower simple type. That does *not* parallel the situation of classes. Compare:

$$h*116.72 \vdash N_0c'Cl'\alpha = 2^{N_0c'\alpha}$$

$$\vdash N_0c'V_{x^t} \geq 2^{N_0c'V_{x^t}}$$

This is a very important, and yet wholly unsung, result.

Whitehead and Russell do say repeatedly that *Principia's* axioms do not preclude even a monism in lowest simple type. It is found in vol. 1, notes to *22.351, *24.1, *24.52, *50.33; and in vol. 2. pp. 8, 40, 325; and monism is alluded to in vol. 3, comments after *256.101. (See also comments at *120.03, *101.4, and p. 183.) But the point is that monism (in lowest simple type) is epistemically possible even if it is logically impossible. This is not to say that monism is logically possible! The point in *Principia* is only that our epistemic access to logical truth is limited and thus one cannot be justified in adding an axiom assuring the Frege infinity of V_{x^t} . Oddly, Russell in his 1919 *Introduction to Mathematical Philosophy*, Russell claims he knows, by the history of (his) failures at proof, that the infinity of the universal class V_{x^t} of individuals of lowest type is not logically true. That is completely unjustified too. Let's put Russell's 1919 claim aside. In fact, I have found consistently with *Principia's* stand that any axiom must be well motivated by issues orthogonal to the issue of infinity:

$$\text{Axiom **105} \vdash \sim (\alpha_{x^t} \text{ sm } V_{x^t}) \supset (\exists \beta)(\beta_{x^t} \text{ sm } \alpha_{x^t}).$$

The axiom says that if a class is not similar to the universal class V_{x^t} , then there is some class β_{x^t} of individuals of lower simple type that is similar to α_{x^t} . This assures that the only case where α_{x^t} is sufficiently great for the descending cardinal to be empty is when α_{x^t} is similar to the universal class V_{x^t} . The new axiom **105 has important consequences. We get:

$$\begin{aligned} &\vdash_{**105} \text{Frege Inf } V_{x^t} \\ &\vdash_{**105} \text{Infin ax } (x^t) \\ &\vdash_{**105} \text{Frege Inf } V_{x^t} \supset \text{Dedekind Inf } V_{x^t} \\ &\vdash_{**105} \text{Dedekind Inf } V_{x^t} \\ &\vdash_{**105} \exists! \aleph_0(x^t). \end{aligned}$$

And since any class that is Dedekind infinite is thereby Frege infinite, the axiom **105 will provide

$$\vdash_{**105} \text{Frege Inf } V_{x^t} \equiv \text{Dedekind Inf } V_{x^t}$$

All the same, the axiom **105 is well-motivated by considerations of descending cardinals. Such results are precisely what Whitehead hoped for.

Since the new axiom **105 yields the Frege infinity of V_{x^t} . We must be sure that its motivation comes from an independent quarter. Indeed, one might well wonder whether one could add the following:

$$\text{**107 } (\eta)(\eta \in \text{NC induct} \supset (\alpha)(\alpha_{x^{(t)}} \in \eta \supset (\exists\beta)(\beta_{x^t} \text{ sm } \alpha_{x^{(t)}}))).$$

This candidate axiom **107 yields only the weaker Frege infinity $V_{x^{(t)}}$.

$$\vdash_{\text{**107}} (\eta)(\eta \in \text{NC induct} \supset V_{x^{(t)}} \notin \eta)$$

Proof:

1. Suppose $\eta \in \text{NC induct} \bullet V_{x^{(t)}} \in \eta$
 2. $(\exists\beta)(\beta_{x^t} \text{ sm } V_{x^{(t)}})$ 1, **107
- impossible by Cantor-Indiv.

Accordingly, we get:

$$\vdash_{\text{*107}} \text{Infin ax}(x^{(t)}).$$

Note that to add an axiom **107 is not just another way of adding $\text{Infin ax}(x^{(t)})$ itself as an axiom. That is because it relies on the substantive theorem Cantor-Indiv. Nonetheless, the motivation for **107 comes *solely* from the quest for an infinity proof. Thus **107 is unacceptable as an axiom. Note that **105 entails **107, for we get:

$$\vdash_{\text{**105}} (\eta)(\eta \in \text{NC induct} \supset (\alpha)(\alpha_{x^{(t)}} \in \eta \supset (\exists\beta)(\beta_{x^t} \text{ sm } \alpha_{x^{(t)}})))$$

Proof:

1. Suppose $\alpha_{x^{(t)}} \in \eta \bullet \eta \in \text{NC induct}$
 2. Frege Inf $V_{x^{(t)}}$ **105
 3. $\sim (V_{x^{(t)}} \text{ sm } \alpha_{x^{(t)}})$
 4. $(\exists\beta)(\beta_{x^t} \text{ sm } V_{x^{(t)}})$ 5, **105
- impossible by Cantor-Indiv.

The motivation for axiom **105 comes, not from a desire to get infinity of the inductive cardinals (at least of high enough relative type), but from the fact that Whitehead recognized that descending relations of similarity and Cantor's power class theorem undermine Hume's Principle. We can discover a new axiom by investigating Cantor's diagonal methods in the context of the fact that with non-homogeneous relations-e 'sm' of similarity, some descending cardinals are empty. *Principia's* section *105 of vol. 2 is devoted to *Descending Cardinals*. *Principia's* sections *100-*106 bravely face the implications of Cantor's diagonal methods for descending cardinals. We might have expected to have the following as a theorem:

$$\text{Hume's Principle } \text{Nc}'\alpha = \text{Nc}'\beta \equiv \alpha \text{ sm } \beta.$$

Of course, for homogenous and ascending cardinals we get:

$$\begin{aligned} \vdash \text{N}_0\text{c}'\alpha = \text{N}_0\text{c}'\beta &\equiv \alpha \text{ sm } \beta && \text{(see *103.14)} \\ \vdash \text{N}^i\text{c}'\alpha = \text{N}^i\text{c}'\beta &\equiv \alpha \text{ sm } \beta && \text{(see *104.232).} \end{aligned}$$

But descending cardinals do not obey. Whitehead must surely have been well aware of this when, in vol. 1, section *73 on 'similarity' (equinumerosity) he wrote (*PM*, vol 1, p. 455):

Two classes α and β are said to be similar when there is a one-one relation whose domain is α and whose converse domain is β . We express “is similar to” by the notation “sm .” When two classes are similar, they have the same cardinal number of terms; it is this fact which gives importance to the relation of similarity.

Conspicuous by its absence is a biconditional. And in vol. 2, we find (*PM*, vol. 2, p. 15):

$$*100.321 \vdash \alpha \text{ sm } \beta \supset \text{Nc}'\alpha = \text{Nc}'\beta \dots$$

Note that $\text{Nc}'\alpha = \text{Nc}'\beta \supset \alpha \text{ sm } \beta$ is not always true. ... For if the Nc concerned is descending, and α and β are sufficiently great, $\text{Nc}'\alpha$ and $\text{Nc}'\beta$ may both be Λ .

Hume’s Principle has false instances. This arises because of the fact that

$$*105.27 \vdash \Lambda \in \text{N}_1\text{C}.$$

That is, Λ is a descending cardinal number. This follows from:

$$*105.26 \vdash \text{N}_1\text{c}'\text{t}\alpha = \Lambda$$

$$\text{i.e., } \vdash \text{N}_1\text{c}'\text{V}_\alpha = \Lambda.$$

$$**125.26 \vdash \text{N}_1\text{c}'\text{V}_{x^{(t)}} = \Lambda$$

$$\text{i.e., } \vdash \text{Nc}(\beta_{x^t})'\text{V}_{x^{(t)}} = \Lambda.$$

It is all a consequence of Cantor’s power-class theorem. Where descending sm is involved it can happen that *no* class of the lower relative type of ξ is similar to $\text{Cl}'\xi$. That is the key to motivating new axiom ****105**. Whitehead noting that the descending cardinal $\text{Nc}'\alpha$, where is “sufficiently great,” may be empty. He leaves open the conditions under which is sufficiently great. The new axiom ****105** decides the matter. The only case where $(\exists\beta)(\beta_{x^t} \text{ sm } \alpha_{x^{(t)}})$ is when $\sim (\alpha_{x^{(t)}} \text{ sm } \text{V}_{x^{(t)}})$, i.e., when the class α of individuals is not similar to the universal class V of individuals (of the same simple type).

Elkind’s *z-Principia*, however, rehabilitates the idea of an axiom ****107** transforming it into a well-motivated **z**107** for his system of indefinitely descending simple z -types. That is Elkind, offers:

$$\text{z**107} \quad (\eta)(\eta \in \text{NC induct} \supset (\alpha)(\alpha_{x^{z+p}} \in \eta \supset (\exists\beta)(\beta_{x^{z+p-1}} \text{ sm } \alpha)))$$

Of course, **z**107** is not well-formed in the grammar of *PM*. Indeed, z -Cantor-Indiv is stronger in z -*PM* than Cantor-Indiv is in *PM*, for it is:

$$\text{z-Cantor-Indiv} \vdash \sim (\exists\beta)(\beta_{x^{z+p-1}} \text{ sm } \text{V}_{x^{z+p}}).$$

This new axiom for the system z -*PM* yields the theorem:

$$\vdash_{\text{z**107}} \text{Frege inf } \text{V}_{x^t}$$

Now in z -*PM* there is the Scaling Rule that in any theorem one can raise or lower the simple z -type. This is quite important and yields results strikingly different from what can be obtained if we add ****105** to *PM*. We get:

$$\vdash_{**105} \text{N}_0\text{c}'\text{V}_{x^t} \geq \aleph_0$$

$$\vdash_{**105} \text{N}_0\text{c}'\text{V}_{x^{(t)}} \geq \aleph_1$$

Elkind's zPM with its axiom $z^{**}107$ and scaling rule yield quite remarkable results such as the following:

$$\vdash_{zPM+z^{**}107} N_0c'V_{x^{z+p}} > \aleph_0$$

$$\vdash_{zPM+z^{**}107} N_0c'V_{x^{z+p}} > \aleph_1$$

Note that we didn't have to raise the zPM simple z-type! That is because we can scale any theorem up or down in simple z-type. *Mirabile Dictu*. It is quite remarkable that such results can be proved in the object language of Elkind's zPM. These results, however, are welcome and expected in light of the implications of z-Cantor-Indiv z-types

It must be emphasized that there is no proper translation from *Principia's* simple type grammar into zPM grammar, and neither is there a translation the other way. The Scaling Rule of zPM and the Elkind axiom $z^{**}107$ have no proper analogs for *Principia's* grammar of simple types. Unfortunately, it has sometimes been thought that with *Principia's* technique of ambiguity of simple types, one could capture theorems of an indefinitely descending grammar of simple z-types by rewriting them in a way that is high enough in *Principia's* simple type hierarchy. But this is misguided. Every *Principia* simple type index codes for the lowest simple type. No zPM index codes for a lowest—there being none to be found. There is no viable way to translate and thereby compare the two systems. Indeed, I fear that the two systems may be incommensurable. But their existence shows how living a work *Principia* still is. There remains important new work to be done.

Jourdain's Logic Exercise

BY GREGORY LANDINI

In Philip Jourdain's amusing book, *The Philosophy of Bertrand Russell*, there is an engaging passage about the power of the new logic to clarify what, in English, seem to be confusing expressions such as the famous "Deceased Wife's Sister Act" according to which no one was permitted to marry his deceased wife's sister. Jourdain writes (p. 28):

...the relation of parent to child P and the three classes of males, females, and dead people, we can define wife (female who has the relation formed by taking the relative product of P and \bar{P} to a male), "sister", "deceased wife", and "deceased wife's sister", in terms of these ideas and the fundamental notions of logic. ... it must be remembered that, on the other hand, we always reduce the number of symbols in any propositions by increasing the number of definitions in the preliminaries to it. ...from the point of view of logic, we may say that the apparently simple is most often very complicated and, even if it is not so, symbolism will make it seem so, and thus draw attention to what might otherwise easily be overlooked.

As we can see, Jourdain takes " x is a wife of y " to be definable as " x is female and y is male and they both parent someone" i.e. $Fx \bullet My \bullet xP\bar{P}y$. But he forgot that he needs the notion xMy for x marries y . There is also an elephant in the room— the problem of capturing what it is to be deceased which requires notations for time. A Russellian should hold that the class of dead people is empty. Let's put that aside.

Transcription Contest: Put in symbolic notation:

No one marries his deceased wife's sister.

Hx : x is a person

Fx : x is female

xPy : x parents y

Dy : y is deceased;

xMy : x marries y .

Hint: $(\forall y)(Fy \bullet Dy \bullet yP\bar{P}x)$
says the deceased wife of x .

Limerick Contest

BY LANDON D. C. ELKIND

In the last issue we announced two Russellian limerick contests. Here are the submissions so far. You still have a chance to submit your own! Send it to Gregory Landini or to me by the end of August.

Submission (not for contest)

BY GREGORY LANDINI

Russellian love was precarious
Peter's knitting always nefarious
With Ottoline: infamy
With Dora: polygamy
These all, relations multifarious.

Sensibilia of Ceclia

BY QUOTED IN RONALD CLARK'S *The
Life of Bertrand Russell*

Said Lord Russell to Lady Cecilia
I would so much like to feel ya
Your data excite me
It sure would delight me
To sense your unsensed sensibilia

Limerick Submission

BY TIMOTHY MADIGAN

There once was a fellow named Russell
Philosophy's own Charlie Hustle
In public and print
He never did stint
To demonstrate intellectual muscle

Limerick Submission

BY JOHN LENZ

There was an old logician named Bertie
Who seemed to be, nay was, rather flirty.
Certainty was not his only quest,
As many fine ladies indeed could attest;
In truth some find his multiple-relations
theory plain dirty.

Have an idea for contributing to the Bulletin, whether by you or someone else? Write to the editor! See the footer for a link to contact us.