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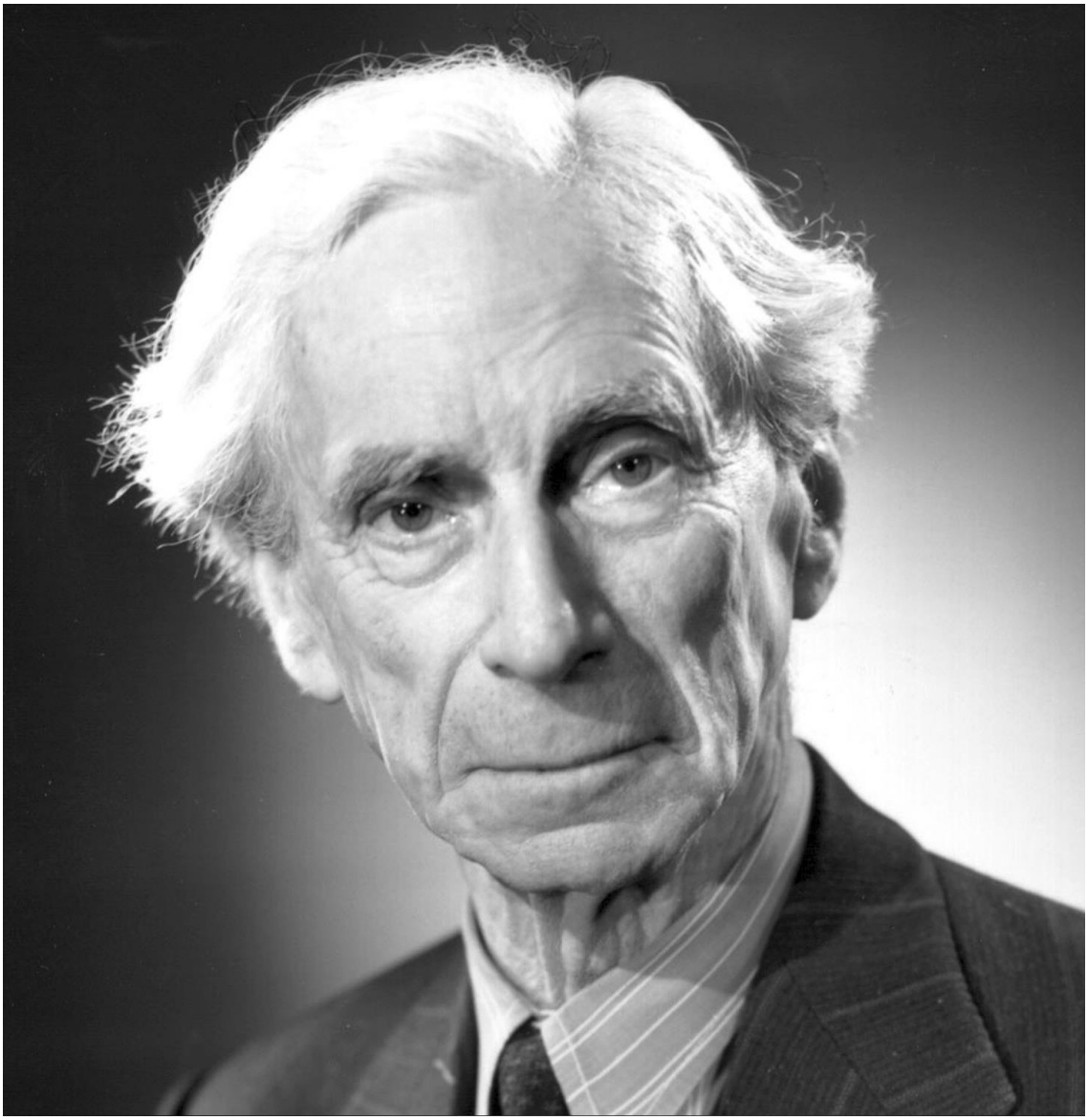

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Manuscripts may be submitted in Microsoft Word to the editor at his email address. Feature articles and book reviews should deal with Russell's life or works, written in scholarly or journalistic style. Articles generally should not exceed 3,500 words, and book reviews 1,000 words. Submissions should be made no later than August 31st and January 15th for the fall and spring issues, respectively. The editor collaborates with authors as necessary, and authors are invited to review suggested changes before publication. There are no guarantees of publication, and articles submitted may be held for future editions. Acceptance by the editor does not imply endorsement by the editor. The *Bulletin* aims to publish articles with various and sometimes contrasting views.

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The final page of the *Bulletin* gives the names of elected and appointed officers of the Bertrand Russell Society.

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From the Editor's Desk

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The Covid-19 pandemic remains a feature of daily life in the spring of 2021. Nevertheless, the Bertrand Russell Society continues to adapt to the global health crisis by conducting business and participating in a range of popular events on-line. On 12 December 2020, the Bertrand Russell Peace Foundation's Tony Simpson discussed the Treaty on the Prohibition of Nuclear Weapons scheduled to come into force after being adopted by its fiftieth country. January 2021 featured on-line launch events for volume 26 of the *Collected Papers of Bertrand Russell* and James Connolly's new book on Wittgenstein's critique of Russell's multiple-relation theory of judgement. Many Society members attended and participated in a workshop on 5-6 March co-sponsored by the BRS and the Bertrand Russell Research Centre on "Feminism and Philosophical Women in Russell's Circle". And on 27 March, the BRS sponsored a session on collecting books and pamphlets authored by Russell.

This issue of the *Bulletin* reflects the remarkable variety of approaches to the study of Bertrand Russell. First, the editor of volume 26 of the *Collected Papers*, Andy Bone, is interviewed, and he gives an account of the editorial process involved in producing the volume covering Russell's life and writings from 1950 to 1952. Gregory Landini provides the first article in this issue examining J.E. Littlewood's praise of elements of *Principia Mathematica*. Charles Pigden then discusses the features of his new course on Russell being taught at the University of Otago in New Zealand. Next, Giovanni Battista Ratti analyzes the significance of the notion of compossibility in Russell's metaethics. Andreas Vrahimis then compares the views of Russell and Moritz Schlick on the subjects of work and leisure. Finally, Eric Litwack provides an overview of Russell's views on automation using his 1951 essay "Are Human Beings Necessary?" as a starting point.

The 2021 annual meeting of the Bertrand Russell Society will take place on-line from 18-20 June and is being organized by BRS President David Blitz. Information about this meeting can be accessed at https://bertrandrussellsociety.org/meetings/.

The Nuts and Bolts of Editing the *Collected Papers*

Andy Bone has edited or co-edited four volumes of the Collected Papers of Bertrand Russell *and is to be the edition's new general editor. His most recent edited volume is* Cold War Fears and Hopes, 1950-52 *(*CPBR *26), which was published by Routledge-Taylor Francis at the end of 2020. The BRS staged a virtual book launch early in January, when Andy discussed some of Russell's writings from the period and elaborated the volume's principal themes. He has also published two "side projects" built around material pertaining to Russell's Australian lecture tour of 1950, one in this journal and the other in the latest issue of* Russell. *In this short piece, however, he is not concerned with Russell's international travels or his Cold War politics, but rather with answering some questions I put to him about the mechanics of editing a volume of the* Collected Papers. *I started by asking Andy:*

How does the whole process begin?

You are not the first to ask about the nuts and bolts of editing Russell—and, of course, you know a fair bit about this yourself. The volumes have become increasingly large—real "doorstoppers", in fact. We can thank Bertie for that. And they have many separate but interlocking editorial parts. In addition to the Russell text that is at the heart of the matter, there are introductory headnotes to each paper, then accompanying annotation and textual notation, plus two indexes, and a chronology of Russell's life and writings. How does one even begin? The first task is to assemble a draft table of contents, and *CPBR* editors fortunately have at their disposal the Blackwell and Ruja bibliography of Russell's writings. But all published volumes in the series have also included a number of previously unpublished writings, which, as a result, do not feature in this bibliography. So, editors also need to trawl through the manuscript holdings of the Russell Archives to ensure, as far as possible, that no Russell texts are left behind. These hitherto unpublished items exist not only in manuscript or typescript. There are also, for example, transcriptions of the many radio discussions in which Russell participated—of which several are in *Papers* 26. Some "texts" might be extant only in audio or (more rarely) video form.

Are there other kinds of archival and printed material that go into a CPBR volume?

The edition has an unapologetically "completist" mission and mandate, so, in addition to Russell's essays, articles and letters to editors, the volumes include a sometimes-

lengthy appendix section. These might contain Russell's own drafts and notes (for speeches, say), interviews, petitions and foreign-language texts (if the only English version is a translation supplied by the editors).

When the contents have been assembled—although additions have an unfortunate habit of appearing on the horizon quite late in the day—the editors have to organize them, perhaps tentatively, in a cogent and appealing fashion. The contents are usually arranged in topical parts with a chronological sequence within each part. There have been some exceptions to this general rule. For volumes 13 and 14, which showcase Russell's anti-war politics between 1914 and 1918, a chronological arrangement was maintained throughout. This works well in those cases, I think, because Russell was so deeply involved in pacifist protest almost to the exclusion of all else. "My whole nature was involved", as he later put it (*Papers* 28: 132). Thus, a strong and dramatic narrative thrust was imparted to the material simply by the way it was arranged, even before any detailed editorial work was applied to it.

But the Table of Contents can be something of a moveable feast. Papers can be dropped and added quite easily as the editorial work (contextual and textual) proceeds. Papers can also be moved around with a minimum of disruption and fuss—at least until the final pagination has been settled, which can only be done after all the editorial matter has been completed and the editor is satisfied that it will not be disrupted by, say, a long, late addition to a crucial headnote.

What considerations go into defining the start and end dates of a volume?

It is nice if a volume begins and ends with momentous events in Russell's personal or professional life. But that is not always possible. The parameters are sometimes set by the weight of his output as much as anything else. Establishing the chronological boundaries of all volumes well in advance is important, and rough calculations of these were made by Russell Centre staff some years ago. This became necessary when volumes in the non-philosophical half of the edition started appearing out of the numerical sequence started by volume 12. Volume 26 is a good case in point. 28 and 29 are in print, but not yet 25 or 27.

So, what is the next stage, after the papers and appendixes have been selected and a Table of Contents drafted?

The editor of *Cold War Fears and Hopes*, next to its file drawer in the Russell Centre and a mountain of discarded printouts from volume 26.

Actually, while all of the above is proceeding, the material can be typeset. This is where the Russell Centre's Arlene Duncan comes into her own—applying the house styling and other typographical hallmarks of the edition with great skill. Many but not all readers will know that not only is the editorial content of a *Collected Papers* volume generated in the Russell Centre, but also most production and design elements of the books. When ready we dispatch camera-ready copy to the publisher. For the first time, with volume 26, this was in the digital form of a PDF. But prior to this we proceeded along more traditional lines (which are no longer available), by supplying hard copy for photographic reproduction before printing. Ideally, a Russell paper will be typeset from its copy-text. But before the relevant documentary material is scrutinized closely this editorial determination may be tentative. "Copy-text" is a somewhat ambiguous and even contested term in textual editing. In respect of the *Collected Papers* it means, for all intents and purposes, merely the version of a text in which Russell's habitual or mechanical scribal habits—his paragraphing, punctuation and capitalization—are most faithfully reflected. So, a manuscript is usually regarded as more reliable than a typescript, and a typescript more reliable than a printed work. If the only textual

records of a Russell paper are previously published versions of it, reprints in Russell's own collections of essays (if any) are preferred as copy-texts over newspaper and periodical publications. Often, however—and especially in the "Edith" era after 1952, when Russell's fourth wife diligently took his dictation and prepared (and preserved) his typescripts—*CPBR* texts survive in both pre-publication and published forms.

If there are multiple versions of a paper, a textual record of variants between these different versions needs to be compiled and then prepared for the textual notes. The Russell Centre has had many capable students over the years who have excelled at collating one version of a text with another and gathering the raw data from which the editor (or specialist textual editor) can construct textual notes and make decisions as to which readings should or should not be incorporated into the paper at hand. The copy-text version is rarely presented "lock, stock and barrel" unaltered. The text as it appears in the volume often includes readings introduced at later stages of the writing or publishing process—so long as we are confident that those readings are authorial. Editorial judgment must come into play in the latter regard. Newspapers often tinkered with Russell's text in ways that he did not authorize. Usually this was a case of his submission being simply "cut for length", but sometimes his writings were bowdlerized, and he occasionally complained as a result (see, for example, his response to the editorial treatment of the article published as "What's Wrong with Americans" in the popular illustrated magazine *Look* [**73** in *Papers* 26]).

I would be the first to admit that the textual note section of a Russell volume is not always the most scintillating of reads. But it is necessary, I think, as the edition aspires to be "critical". Plus, the textual notes often *do* reveal significant second thoughts or other matters of broader interest. Anything on that level of importance, however, would probably also be moved "up" by the editor into the paper's headnote.

What else goes into a headnote?

These components of the volume do various things. If Russell is reviewing a book, say, the headnote will include a potted bio of the author under his critical gaze. There may be information about the political or social cause that Russell is addressing, and any number of other possibilities, really. Short of the general introduction, headnote production involves the most rounded research and often draws on the relevant secondary literature as well as the archival record. There is a fair bit of boilerplate content in these short (and sometimes not so short) introductions to individual papers:

brief identifications of the publication in which the Russell writing appeared, plus the associated publication and reprint "metadata" (again, the Blackwell and Ruja bibliography is an essential tool in that regard); the archival trail from manuscript to typescript and (sometimes) page proofs; records of payment received (if any); and publishing correspondence between author and editor. Sometimes the latter is a little sparse, in which case one might focus more on the contents of a paper. Often, however, Russell can be allowed to speak for himself. When Russell was in political protest or campaign mode, there is significant duplication of content from paper to paper. Thus, it is not necessary or even advisable to be exhaustive in every such headnote. There are usually standout papers ("Man's Peril" from volume 28 was one such with which I have dealt) in which themes raised by Russell on multiple occasions can best be dealt with at length more selectively.

What about the annotations?

Russell's range of allusion was so vast that annotating him provides an excellent window onto his mind. The annotation work can be stimulating, enjoyable—and frustrating. The annotations are probably the most labour-intensive part of the enterprise, in the sense that so many of his references are *sui generis* that identifying them does not necessarily contribute much to the sum total of editorial understanding of the volume as a whole. There is much futile snark hunting involved as well, for stray bibliographical references most notably. In the course of this work, numerous negative results are compiled, although the spread of digital newspaper repositories and other online resources (the British parliamentary debates, for example) has significantly eased or at least simplified this editorial burden. You might remember that reference in volume 21 to a popular song, "Could Lloyd George Do It?" That was really elusive, if I recall correctly; I remember the student who had been assigned that bit of detective work being especially jubilant when she cracked it.

What were the particular challenges of editing the recently published volume?

Volume 26, which covers Russell's writings during a transitional phase in his political thinking about the Cold War, lacks the sort of clear, central focus that stands out by sharp contrast with, say, the two First World War volumes. This was definitely a challenge in editing *Cold War Fears and Hopes*—not so much in dealing with the various texts in isolation but in trying to find thematic unity to tie all of the material together. In

the end I gave up and decided to make the transitional nature of this short period (of just under two years, from the start of his Australian lecture tour late in June 1950 until the eve of his eightieth birthday in May 1952) the defining element. Russell was moving away from his occasionally hawkish defence of the West in the immediate post-war years towards the dissenting politics of anti-nuclear protest. But the movement in this direction—towards Pugwash and CND—cannot be charted smoothly from his mid-century writings. I hate to say it, but I am sensing a similar difficulty with volume 16 (*Labour and Internationalism, 1922–25*), to which my attention has lately returned (I am a co-editor of the volume with Nick Griffin and the editor of this *Bulletin*). However, I am confident that we shall find a suitably suggestive and relevant hook on which to hang Russell's frequently interesting writings from *that* period—an interlude of sorts between the biographically and politically significant trips to Soviet Russia and China (covered in volume 15), and the equally critical Beacon Hill School years (a central focus of the in-progress volume 18).

In *Praise* of Littlewood's Praise

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The Cambridge mathematician J.E. Littlewood praised *Principia Mathematica*, writing the following with Russell in mind (Littlewood, 1990, p. 128):

> He had a secret craving to have proved *some* straight mathematical theorem. As a matter of fact there *is* one: "$2^{2^{\mu}} > \aleph_0$, if is infinite". Perfectly good mathematics. (This weakness is very common with people who take the Mathematics Tripos and then switch, e.g., John Maynard Keynes, to some extent F. P. Ramsey, and possibly R. B. Braithwaite.)

The comment seems unjust even as a soft criticism since Russell's switch, unlike the others, was long after his Tripos and the completion of the first three volumes of *Principia*. Searching for what Littlewood had imagined, Boolos, in "On the Advantages of Theft over Honest Toil," writes (Boolos, 1998, p. 261):

> What, then, did Russell achieve? The answer may be found by reflecting on the "perfectly good" piece of mathematics reflected in Littlewood's remark. The proposition, and its proof, found in volume II at *124.57, constitute, I want to claim, the mathematical core of the theory of natural numbers given in *Principia Mathematica*. … Never forget that the natural number form not merely an infinite totality, but one that is *Dedekind* infinite.

A class is Dedekind infinite (i.e., a *reflexive class*) in that it can be mapped one-to-one onto one of its proper subclasses. A class is Frege infinite (i.e., an *inductive class*) in that it is not a member of any natural number (inductive cardinal).[1] In their book *The Development of Logic*, the Kneales assume that it is a mathematical necessity that there

[1] A class is a member of natural number *n iff* it has *n*-many members.

are infinitely many natural numbers as abstract particulars. They write (Kneale & Kneale, 1962, p. 143):

> It is essential for mathematics that there should be no end to the sequence of natural numbers, and so Russell finds himself driven to introduce a special axiom of infinity.

Boolos agrees with the Kneales. They know fully well, however, that there is no axiom of infinity in *Principia*. There is a *wff* called *Infin ax*, and it appears as antecedents of some theorems. Its appearance, according to Boolos and the Kneales, abandons Logicism, for its presence admits that there are mathematically essential features of natural numbers that are non-logical. Boolos holds that in failing to prove infinity, *Principia's* Logicism cannot support *its own* thesis that the mathematical core of the theory of natural numbers is their Dedekind infinity. I want to explain, in as non-technical a way possible, how strikingly far away from understanding *Principia* Boolos's comment is.

Boolos disparages what he takes to be *Principia's* lack of toil in not arriving at the Dedekind infinity of natural numbers while, at the same time, accepting that it is the "mathematical core" of the theory. He cites the following theorem of *Principia*:

> *124.57 $\vdash \mu \in \mathrm{N_oC}$ –NC induct $\supset 2^{2^{\mu}} \in$ NC refl.

This says that, where μ is an *infinite* cardinal (i.e., a homogeneous cardinal and not an *inductive* cardinal) then $2^{2^{\mu}}$ is Dedekind infinite. (Later we shall see that in this theorem the relative type of $2^{2^{\mu}}$ is higher than that of 2^{u} which is higher still than that of μ.) In his effort to try to make *124.57 serve his critical purposes, Boolos, interprets *124.57 incorrectly. He writes (1998, p. 262):

> After decoding, the theorem states that if x is an infinite set (with cardinal number α), then the set of natural numbers (which has cardinal number $\aleph_0$) can be mapped one-one into the power set $\wp\,\wp x$ of the power set $\wp x$ of x (which thus has cardinal number $2^{2^{\alpha}}$; thus $\aleph_0 \leq 2^{2^{\alpha}}$), that is that $\wp\,\wp x$ is Dedekind infinite.

Boolos regards $\aleph_0$ as defined in *Principia* as the number of natural numbers. In truth, that is how Cantor defined it but *not* how *Principia* defined it.

Dedekind infinity is central to the *Principia's* definition of $\aleph_0$, but not to NC induct (the natural numbers). Whitehead and Russell are explicit (*PM*, vol. 2, p. 260):

> Cantor defines $\aleph_0$ as the cardinal number of any class that can be put into one-one relation with the inductive cardinals. This definition assumes that $\nu \neq \nu +_c 1$, when ν is an inductive cardinal; in other words, it assumes the axiom of infinity; for without this, the inductive cardinals would form a finite series, with a last term, namely Λ. For this reason, among others, we do not make similarity with the inductive cardinals as our *definition*. We define $\aleph_0$ as the class of those classes which can be arranged in progressions, *i.e.*, as D"Prog. We then have to prove that $\aleph_0$ so defined is a cardinal, and that if it is not null, it is the number of inductive numbers.

The fact that *Principia* does not prove that the natural numbers are Dedekind infinite (or Frege infinite) is not at all a failure. It is simply a consequence of *Principia's* embracing the revolution within mathematics against abstract particulars in its branches. According to the revolution, mathematicians are studying relations and thereby they are doing logic when they do mathematics. *Principia* denies that infinity of abstract particulars is essential for mathematics—once mathematics is properly conceived as the study of relational structures. Of course, even without infinity, *Principia* gets the theorem that the Frege infinity of the natural numbers is readily equivalent to its Dedekind infinity. But more to the point, we only get:

*123.34 $\vdash$ *Infin ax* $\supset \aleph_0 = \mathrm{Nc}$ ' NC induct

If no inductive cardinal is Λ, then the inductive cardinals (natural numbers) form a progression and are Dedekind infinite and $\aleph_0$ is their cardinal number. More exactly, it says that if *Infin ax* (which assures the *Frege infinity* of natural numbers) then $\aleph_0$ is the cardinal number of the natural numbers. Moreover:

*123.43 $\vdash \exists!\aleph_0 .\supset. \mu \in N_oC \text{ induct } \supset_\mu \aleph_0 > \mu)$.

This says that if $\aleph_0$ is not empty, then every natural number μ is less than $\aleph_0$. Clearly, *Principia* is studying the relation '*progression*' and the nature of $\aleph_0$ without commitment to abstract particulars.

Principia's section *124 is called *Reflexive Classes and Cardinals*. The focus of the section is not Dedekind infinity as an allegedly "mathematical core" of the natural numbers. The focus is to arrive at a theorem concerning the extent to which one can, without relying on *Mult ax*, show that if a class is *Frege infinite* then it is *Dedekind infinite*. The issue of the *Mult ax* (equivalent to the axiom of choice and the well-ordering theorem) was certainly in Littlewood's memories, and it is worth mentioning in this regard the following comments he made concerning Philip Jourdain's work on the topic of its proof (Littlewood, 1990, p. 129):

> I had to go away for a painful two days at P. E. B. Jourdain's death-bed. Jourdain had for some time thought he had a proof of the Multiplicative Axiom (or Axiom of Choice), and would have died happy if it were accepted. When discussing with Russell the difficult of dealing with this, I rashly opened my mouth with a suggestion, and in the end it was I (and I think Dorothy Winch) who paid the visit. Jourdain expounded his latest version verbally, and I took the line that there was a new point involved which I should have to think over carefully, for say a day. Jourdain instantly said: "My dear man, you know perfectly well you can tell in 10 minutes whether a proof is right or wrong." I brazened it out—only thing to do—and I suppose all went as well as one could hope. It was no good lying…

If we keep *Mult ax* front and center, we can get a better grasp on what Littlewood meant to be praising about *Principia*.

Littlewood's intent was to highlight a straight mathematical theorem concerning the relation between *Frege infinite* and *Dedekind infinite*. It is well known that one can easily prove (*124. 232) that if a class is *Dedekind infinite* then it is *Frege infinite*. The converse direction, however, is impossible to prove—or so it appears—without

adopting *Mult ax* (which is equivalent to Zermelo's axiom of choice). Immediate from *124.57 *Principia* arrives at

$$*124.58 \vdash 2^{\mu} \in \text{NC refl} \supset_{\mu} \mu \in \text{NC refl} :\supset: \text{N}_{\text{o}}\text{C} - \text{NC induct} = \text{NC refl}.$$

The significance of the above is nicely explained as follows (*PM*, vol. 2, p. 279):

> The above proposition gives another hypothesis which would enable us to identify the two definitions of the finite if it could be proved, namely
>
> $$2^{\mu} \in \text{NC refl} \supset_{\mu} \mu \in \text{NC refl}$$
>
> or, what comes to the same thing,
>
> $$\text{Cl}\,'p \in \text{Cls refl} \supset p \in \text{Cls refl}.$$

I'm convinced that it was *this* result that Littlewood meant to praise.[2]

It remains to consider why Littlewood offered the following which seems rather more than a little distracting, even if we know the background context of his praise. Littlewood wrote:

$$2^{2^{\mu}} > \aleph_0, \text{ if } \mu \text{ is infinite.}$$

No such theorem explicitly appears in the work. *Principia* does have the following theorem:

$$*124.23 \vdash \mu \in \text{NC refl} \equiv \mu \geq \aleph_0$$

This says a class μ is Dedekind infinite if and only if it is greater than or equal to $\aleph_0$. Putting *124.23 together with *124.57, one might imagine getting the following by substituting identicals:

$$\mu \in \text{N}_{\text{o}}\text{C} - \text{NC induct} \;.\supset.\; 2^{2^{u}} \geq \aleph_0 \,.$$

[2] It is quite intuitive that if 2^{μ} is Dedekind infinite, then μ is Dedekind infinite. Indeed, it is quite intuitive that if Cl 'p (the class of all subclasses of p) is Dedekind infinite then so is p. *Mult ax* is not intuitive at all.

The above says that if μ is Frege infinite, then the reflexive cardinal 2^{2^u} is greater than or equal to $\aleph_0$. This looks close to what Littlewood said. It is odd, however, that Littlewood put > instead of $\geq$.

The situation requires clarification with respect to relative types else it is very misleading. What, one may ask, is the relative type of 2^{2^u} in the clause $2^{2^u} \geq \aleph_0$ Now we expect:

$$\mu \in \text{NC induct} \bullet 2^\mu \neq \Lambda \,.\, \supset_\mu .\ 2^\mu > \mu \,.$$

The clause $2^\mu \neq \Lambda$ is important. Where μ is a natural number we might well have $2^\mu = \Lambda$. If monism were true, then $2^3 = \Lambda = 8$. And even where μ is not a natural number and is Frege infinite, if the relative type of μ is the *same* as that of 2^{2^u} and 2^u, it may be false that $\mu < 2^u < 2^{2^u}$. *Principia* has only:

$$2^{2^u} \neq \Lambda \,.\supset.\ \mu < 2^u < 2^{2^u}.$$

At the same time, *Principia* also has:

$$117.661 \vdash \mu \in \text{N}_\text{o}\text{C induct} \,.\, \supset_\mu .\, 2^\mu > \mu$$
$$\textit{i.e.}\ 117.661 \vdash \mu \in \text{N}_\text{o}\text{C induct} \,.\, \supset_\mu .\ (2^\mu)_{t\prime\sigma} > \mu_\sigma \,.$$

I've added the subscripts make it clear that $(2^\mu)_{t\prime\sigma}$ is of a higher relative type than μ_σ. Cantor's power-class theorem raises the relative type. That is, Cl 'α (the power-class, *i.e.* the class of all subclasses of α) is of the next higher relative type above that of α. Thus:

$$*117.66 \vdash \text{Nc 'Cl '}\alpha > \text{Nc'}\alpha \ ^{3}$$

Principia has the following:

$$*116.72 \vdash \text{Nc 'Cl '}\alpha = 2^{Nc'\alpha}$$

[3] *Principia* has *117.66 and relies on Whitehead's worrisome definition *117.03 which I reject. See Landini (2015).

The identity sign forces the same relative type. But in substituting identicals, one must watch out for:

$$2^{Nc'\alpha} > \mathrm{Nc}\,'\alpha\,.$$

This is very misleading because it doesn't show the raised relative type of $2^{Nc'\alpha}$. The upshot is that, where μ is Frege infinite, if one is to have $2^{2^u} > \aleph_0$ one needs to raise the relative type of 2^{2^u} in accordance with Cantor's power-class theorem.[4]

In summary, I hope to have said something in *praise* of Littlewood's praise. His focus was on an important discovery about the relation between Dedekind infinity and Frege infinity that is independent of *Mult ax*. Those who, like Boolos, reject the revolution in mathematics miss such gems of toil in the work. Focused on an alleged problem with *Infin ax*, Boolos writes (1998, p. 269):

> … if Russell made it plain that he did not consider the axiom of infinity to be a truth of logic… what becomes of the project of showing arithmetic to be a development of logic, of logicism?

What Whitehead and Russell plainly say in *Principia* is that "… the axiom of infinity cannot (so far as appears) be proved *a priori*" (*PM*, vol. 2, p. 183). That is plainly *not* the thesis that *Infin ax* (for every simple type, including the lowest) is known to not be a truth of logic. The point is simply that it is epistemically unwarranted to proclaim that *Infin a*x (for lowest simple type) is an axiom of logic. There is no embarrassment that the epistemic possibility of *monism* is mentioned in *Principia* many times (vol. 1, *24, p. 216; vol. 2, pp. 8, 325). *The epistemic possibility of monism is fully compatible with monism being logically impossible*.[5] Whitehead, in fact, suggests in *Principia's* vol. 2 that he thinks *Infin ax* might (epistemically) be a logical truth even in lowest simple type. He says (*PM* vol. 2, pp. *vii*, *xxx*) that the number of individuals in one simple type does not determine the number of individuals in any higher simple type. Whitehead had a strong logical

[4] In his introduction to *Principia's* vol. 2, Whitehead warned about the substitutional of identicals in the context of the unruly ambiguities of relative types.

[5] In his 1919 *Introduction to Mathematical Philosophy* (p. 203), Russell suggests that he knows that the infinity of individuals of any simple type is not logically necessary! That is certainly epistemically unwarranted.

intuition that there are infinitely many *individuals* (universals) in *every* simple type (including the lowest). All the same, since our epistemic access to logical truth (and falsehood) is limited, there remains an epistemic possibility of *monism* (at least in lowest simple type). And this answers Boolos's important question. What becomes of *Principia's* logicist project is that it reveals that mathematics is more secure than any metaphysician's reveries of an infinity of abstract particulars governed by non-logical metaphysical necessities. Mathematics is more epistemically foundational than any such metaphysics precisely because it is studies relations independently of any logical contingencies of their exemplification. The significant honest toil conducted in *Principia* makes it the flagship of the revolution *within* mathematics. It has no patience for metaphysicians (not even Frege) imposing abstract particulars upon mathematical ontology.

The irritation Boolos and the Kneales have for *Infin ax* occurring as an antecedent clause is, however, understandable. Whitehead felt it too. The irritation does not expose a flaw. But it makes the honest toil in *Principia* (especially its vol. 3) rely more and more on Whitehead's strange convention AT (see *PM*, vol. 2, p. 287) which implores readers to find a high enough relative type of classes to make his theorems come out true! Happily, there remain important avenues for the development of *Principia* that are still unexplored—avenues that would remove the irritation. There is one I should discuss here. In *Principia*, a version of Cantor's power theorem is provable concerning simple types of *individuals*:

$$**Cantor^{Indiv} \quad \sim(\exists\beta)(\ \beta_{x^t} \approx V_{x^{(t)}}\ ).$$ [6]

This says that no class β_{x^t} of *individuals* (each member of which is equal to or not equal to the *individual* x^t) is similar to the universal class $V_{x^{(t)}}$ of *individuals* (each member of which is equal to or not equal to the *individual* $x^{(t)}$). *Principia* omits proof since it never restores simple type indices. Now consider:

$$\textit{New Axiom } **105 \quad \alpha_{x^{(t)}} \not\approx V_{x^{(t)}} \supset (\exists\beta)(\ \beta_{x^t} \approx \alpha_{x^{(t)}}).$$

[6] I use the expression ≈ for similarity, *i.e.*, equinumerosity. *Principia* used sm.

This says that if no class β_{x^t} of individuals is similar to a class $\alpha_{x^{(t)}}$ of individuals of next higher simple type, then it must be because the class $\alpha_{x^{(t)}}$ is similar to the universal class $V_{x^{(t)}}$. I believe that Whitehead would be sympathetic to new axiom **105. It completely obviates all the irritations concerning *Infin ax*. In particular, it obviates his appeal to his convention AT and his introduction of "NC ind" (vol 2, *126.01) which he came finally to admit "is not strictly a correct idea" (*PM,* vol. 3, p. 252) insofar as NC ind is not strictly a class, because ever class must be confined within some one type" (*PM*, vol. 3, p. 265). (NC induct, in contrast, is perfectly fine.) Indeed, **105 secures the infinity of the class of natural numbers—if we go up sufficiently high in relative type. In fact, **105 yields this:

$$\vdash_{**105} \text{Inf } V_{x^{((t))}}.$$

This says that the universal class of individuals of simple type $((t))$ is Frege infinite. This holds for every simple type t, but the lowest it yields is Inf $V_{x^{((o))}}$. At the same time, new axiom **105 is a friendly amendment because it agrees with Whitehead and Russell's position that because our epistemic access to logic is limited it is unwarranted to add any axiom that would secure a proof of the infinity the universal class V_{x^o} of *individuals* of lowest type. New axiom **105 neither yields the infinity V_{x^o} nor the infinity of $V_{x^{(o)}}$. This is as it should be. However, from new axiom **105, one *can* arrive at:

$$\vdash_{**105} (\exists x^o, y^o)(\ x^o \neq y^o) \supset \text{Inf } V_{x^{(o)}}.$$

If there are (contingently) at least two individuals of lowest simple type, then we are assured contingently of the infinity of $V_{x^{(o)}}$. This is also a very amicable result. The empirical *census* of individuals of lowest type that would be needed to assure Inf $V_{x^{(o)}}$ is quite a bit easier to conduct than Whitehead thought (*PM*, vol. 2, pp. *x, xxx*, 183).

Works Cited

Boolos, George. (1998) "The Advantages of Honest Toil over Theft," in ed. Richard Jeffrey, *Logic, Logic, and Logic: Essays by George Boolos* (Cambridge: Harvard University Press), pp. 255-274.

Kneale, William, & Martha Kneale. (1962) *The Development of Logic* (Oxford: Oxford University Press).

Landini, Gregory. (2015) "Whitehead's (*Badly*) Emended *Principia*," *History and Philosophy of Logic*, 37, pp. 114-169.

Littlewood, J. E. (1990) *Littlewood's Miscellany*, ed.. by Béla Bollobás (Cambridge: Cambridge University Press).

Whitehead, Alfred. and Russell, Bertrand (PM). *Principia Mathematica* (Cambridge: Cambridge University Press, second edition1925; first edition vol. 1, 1910, vol. 2, 1912, vol. 3, 1913). Pagination is to the second edition.

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Ethics, Logic, Pacifism and Truth: A New Course on Russell

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1. Introduction: Confessions of a Russell Buff.

As readers of the *Bulletin* may be aware, I've been a Russell buff for many years. Like many another, it was Russell's writings (especially the *Autobiography*) that first got me interested in Philosophy as a teenager. I went up to Cambridge in 1976, thinking, under Russell's influence, that I *might* like to become a philosopher, and decided within two months that I loved Philosophy so much that, if I possibly could, I would like to keep doing it for the rest of my life. But it was the Cambridge philosophy of Russell and Moore that I fell in love with, not the Cambridge philosophy of the 1970s. Bernard Williams was the dominant figure in those days and though his 'at homes' were both enjoyable and instructive, I always considered him to be vastly overrated, not least by himself. Anscombe never appealed to me (for reasons I develop in my (1988) paper 'Anscombe on "Ought"') and anyway she alienated unserious slugabeds such as myself by putting on her lectures at an ungodly hour in the morning. The non-Cambridge philosophers that I admired and studied – Quine, Putnam, Popper and Kripke – were very much the kind of post-Russellians who were also propter Russellians, often addressing themselves to 'matters arising' from the Russellian agenda. However, my PhD (conducted at La Trobe University, Melbourne, Australia) was devoted to meta-ethics, and although, as I have argued, Russell had a lot more to say about meta-ethics than some have supposed, he was only *one* of the many voices that I considered in what ended up as a defence of the error theory. (Moore was right about the meaning of moral claims but wrong in supposing that there were non-natural facts to make them true.)

Fast forward to 1988 and my first (and indeed only) permanent post at the University of Otago, Dunedin, New Zealand. I was hired to teach ethics (broadly conceived) and, partly as a consequence, my teaching drifted away from Russellian concerns. In the 1990s I taught courses on introductory ethics, on meta-ethics, on Hobbes and Hume, on the Philosophy of Religion, on Nussbaum's *The Fragility of*

Goodness and on Elster's *Making Sense of Karl Marx*. (With the exception of the first, these were second-, third- or fourth-year courses.) At the same time I was developing a strong research interest in Russell through my work on the Russell-l email list, culminating in my *Russell on Ethics* of 1999. Thus my research was moving *towards* Russell just as my teaching was moving *away* (though then, as now, I had other research interests, such as the Logic of Is and Ought and the Philosophy of Conspiracy Theories). I did consider using *Russell on Ethics* as the basis for a course on ethical theory, but I thought that such a course would be a little too eccentric since I then had rather hidebound ideas of what a philosophy graduate – and especially an aspiring philosopher, going on to further study – needed to know.

Part of the problem with teaching early Analytic Philosophy in the nineties and the early noughties was the lack of a suitable text-book. It is possible at an elite university such as Cambridge to teach the history of analytic philosophy from the original texts themselves, but at a less selective university such as Otago, students tend to need a little more help. Volume 1 of Scott Soames' *Analytic Philosophy in the Twentieth Century* (2003) came as a godsend. Soames' summaries and expositions tend to blur into rational reconstructions, and some complain that these are marred by too much Soamesian rationality and not enough historical reconstruction. But in my view, it is better if students have a perhaps oversimplified and perhaps over-Soamesified idea of what Russell, Moore and Wittgenstein were on about, rather than no idea at all. At all events, I taught a Soames-based course with moderate success from 2007 till 2016. But the course never seemed to generate as much enthusiasm as my other staple, a 'Why Be Moral?' course ' which begins with Plato and Bradley but pursues the topic through the works of Russell, Lenin, Wilde, Dostoevsky, Laclos, Shakespeare, and Jane Austen. Why not? The answer was born in on me when I went on a half-year Sabbatical which enabled me to assign some of my teaching to a deputy. I was surprised at my own eagerness to unload the Wittgensteinian sections onto my colleague, which made me aware of just how much I had come to dislike teaching Wittgenstein. Like many another, I succumbed to the hypnotic power of Wittgenstein's prose when I studied him as a young man, producing essays that sounded like a Wittgensteinian pastiche. But I have long considered Wittgenstein's philosophy to be both fatally flawed and morally obnoxious, since it largely consists in consigning what he disapproves of to the dustbin of meaninglessness on the basis of bogus semantic theories (as in the

Tractatus) or dodgy rhetoric (as in the *Investigations*). But if you feel that way about what you are teaching, you probably shouldn't be teaching it.

However, there was still much of value in the course. After all, it dealt at length with the Russellian topics that had kindled my passion for Philosophy when I studied them at Cambridge long ago. So I decided to rejig it by cutting out the Wittgenstein, some of the Moore and most of the Logical Positivism, together with Quine's 'Two Dogmas' (though *not*, importantly, Quine's 'Truth by Convention'). In lieu of all this I substituted a set of questions on Russell as an activist and social thinker. We now address the writings that inspired my interest in Russell when I read them as a teenager in the early seventies before I ever went up to Cambridge.

But isn't the course now a bit eccentric, not quite the kind of thing that an aspiring young philosopher needs to know if she or he is to begin writing up-to-the-minute articles for *Analysis* or *Philosophical Studies* after going on to graduate school? Answers:

1) There is still plenty in the course to educate such a person, with questions on logic (classical, intuitionist and paraconsistent), meta-ethics, normative ethics, metaphysics, epistemology, the philosophy of language, the philosophy of mathematics and the nature of truth.

2) If that's not enough, she can get up-to-date instruction from my colleagues, especially the thoroughly modern Alexander Miller, author of the best-selling texts *Philosophy of Language* and *Contemporary Metaethics* who teaches courses on both.

3) Of course most of my students *won't* be going on to graduate school anyway, and for them a course which helps them to understand the issues of the present by understanding the issues the recent past will be of obvious educational value. Plus they get to sharpen their wits by discussing technical philosophic issues of great pith and moment.

4) The course as reconfigured contains substantial dollops of Politics and Economics, thus catering to an increasing segment of our clientele, namely those pursuing the sixteen-paper major in Philosophy, Politics and Economics as opposed of the nine-paper major in straight Philosophy. I was the principal architect of the PPE programme and for a long time its administrative chief. Since there are now more PPE majors at Otago than Philosophy majors, I plan most of my courses with their interests very much in mind.

2. **The Course**

Most of my papers are thirteen-week affairs with two two-hour sessions per week (though usually with a coffee-break). We usually kick off with a five-minute student presentation on the topic of the day. I give an impromptu lecture addressed to the presentation which ideally broadens out via Q&A to a general discussion led by me. This encourages the students to speak up which they are otherwise less likely to do. It also keeps me on my toes and prevents me from getting stale, as though I know what the students are likely to be talking about, I don't know precisely what they are going to say, which means that I have to adapt. Most of my students do a decent job with their presentations, many an excellent one, but by now I am adept at making a silk purse out of the occasional sow's ear. In my second- and third-year courses, students are incentivised but not coerced into giving presentations which are worth no more than 5% of the final grade (3% in the Russell course). The presentation topics double as essay questions and students are allowed to write their essays on the topics that they discussed in their presentations. Sometimes I take a more didactic approach with a set-piece lecture assisted by PowerPoint, especially when presenting formal material. But I prefer, on the whole, *not* to do this since it tends to tie me too closely to the PowerPoint script, as well as discouraging student participation. However, I do make extensive use of the whiteboard. My general aim is not only to lead the students through the philosophical questions under discussion and to stimulate critical thought but to open doors to new vistas of learning (historical, literary, cultural and scientific). To paraphrase the poet Pope:

Placed at the door of learning, youth to guide
I keep that door conveniently wide.

Nowadays all my classes are essay-only affairs, with three longish essays and no final exam. A major feature of my teaching is the use of detailed coursebooks to aid the students in private study (nowadays available electronically). These typically include lengthy annotated bibliographies (28 pages in the case of the Russell course), a detailed set of essay and presentation questions, each with its own bibliography, hints as to how to go about answering the questions, potted biographies of famous philosophers, chronologies (to provide students with a bit of historical background), notes on knotty topics, and extended essays and papers mostly by me. The

coursebook for PHIL 239/339 comes in at 290 pages and consists mostly of my Russell-related papers together with extracts from useful debates on the Russell email lists.

3. A Detailed Syllabus

The next section consists of my Essays and Presentation questions for each of the twenty-six teaching sessions. PHIL 239/339 is a 200-300 split-level course, the two courses being taught concurrently, but with stricter criteria of assessment and tougher questions for the upper-level students. The easier 200-level questions are marked with a ^ and the tougher 300-level questions with a *. 200-level students can trade up by attempting the tougher 300-level questions, but the 300-level students cannot trade down. Some questions dealing with logic or the philosophy of mathematics (as opposed to say ethics or politics) are marked with marked with a #. All students are required do at least one #-marked essay (that is, at least one out of the three). We generally discuss one or two out of the several possible questions in any given session.

I have omitted the bibliographies in order to keep this article within a reasonable compass, but two recent books deserve a shoutout: John Ongley and Rosalind Carey's *Russell: A Guide to the Perplexed* and Russell Wahl's *The Bloomsbury Companion to Bertrand Russell,* both of which are excellent for pedagogic purposes. I have added the occasional comment in square brackets.

Session 1: Russell, Life and Works. Housekeeping, 'Do's' and 'Don't's.

[There are no specific questions for the first session. I explain to students what they need to do in order not to annoy me when I'm marking their essays, and outline my referencing conventions (which I am fairly relaxed about though I like page references wherever possible); all delivered in as minimally ogreish a manner as I can manage. I dilate on Russell's Life and Works which is, of course, fun to do. To explain Russell's social milieu I recite large chunks of Hilaire Belloc's 'Lord Lundy, Who was too freely moved to tears and thereby ruined his political career', including the following from Lord Lundy's Ducal Grandfather:

We had intended you to be
The next Prime Minister, but three,

The stocks were sold, the press was squared,
The middle-class was quite prepared
But as it is, my language fails,
Go out and govern New South Wales!

Being the next Prime Minister but three was rather what Granny had in mind for Bertie and at the time it was a not unreasonable aspiration, though of course not the foregone conclusion, even for a Whig aristocrat like Russell, that Belloc makes it out to be. (After all the 8th Duke of Devonshire never quite made it to the top spot though he came close several times.)]

Session 2: Duty versus Interest – Idealism, God and the Metaphysics of Morals

1.^ What did Sidgwick mean by the 'Dualism of Practical Reason and why did he consider it a problem?

2.^ Explain how Russell tries to resolve Sidgwick's problem of the Dualism of Practical Reason with the aid of Hegelian Metaphysics. Does he succeed?

3.* Explain and discuss Russell's argument that (Hegelian) Philosophy can provide no 'consolations'. Does this affect his earlier argument that (Hegelian) Philosophy can resolve the Dualism of Practical Reason? And does this argument refute Absolute Idealism?

4.* Is there a non-Hegelian solution to Sidgwick's Problem of the Dualism of practical Reason? Discuss with reference to recent work on this topic. [Here I cite De Lazari-Radek and Singer's *The Point of View of the Universe: Sidgwick and Contemporary Ethics*.]

5.* In 'Greek Exercises', the teenage Russell develops what is nowadays known as an 'Evolutionary Debunking Argument', to cast doubt on conventional morality and defend utilitarianism. De Lazari-Radek and Singer do the same thing in *The Point of View of the Universe.* Is the De Lazari-Radek/Singer argument an improvement on Russell's? Do either of these arguments succeed in vindicating utilitarianism as against conventional morality? Or do Evolutionary Debunking Arguments cast doubt on *all* moralities whether conventional or otherwise?

Session 3: Russell and Marx 1

1.^ Explain the key features of Marxism as understood by Russell in *German Social Democracy,* ch. 1, *Roads to Freedom,* ch.1 and/or *Freedom and Organisation.* Does Russell understand Marx and Engels correctly?

Session 4: Russell and Marx 2: Russell's Critique of Marx

1.^ Outline and discuss Russell's criticisms of orthodox (Second International) Marxism. Do they succeed?

2.* Compare and contrast Russell's criticisms of orthodox (Second International) Marxism with those of Eduard Bernstein. Do either Russell's or Bernstein's criticisms succeed?

3.* G.A. Cohen's *Karl Marx's Theory of History: A Defense* was designed in part to defend something like orthodox (Second International) Marxism against the criticisms of analytic philosophers such as Russell. Does it succeed?

Session 5. Truth – Analytic Correspondence versus Hegelian Coherence

1.* Explain and discuss Russell's critique of 'The Monistic Theory of Truth' as advocated by the Neo-Hegelian philosopher Harold Joachim. Does Russell succeed in discrediting Absolute Idealism?

2.^ Explain and discuss Russell's Critique of the Coherence Theory of Truth. Does it succeed?

Session 6: Democracy and Votes for Women

1.^ Outline and discuss Russell's Arguments for Democracy in general and Votes for Women in particular.

2.* Compare and contrast Russell's Arguments for Women's Suffrage with those of his secular godfather, John Stuart Mill.

Session 7: Russell, Moore and Meta-ethics.

1.* Outline and discuss Russell's pre-*Principia* efforts to arrive at a meta-ethic. Was Russell trying to meet a set of constraints that cannot be met? [I refer students to my 'Russell's Moral Philosophy' in which I contend that he was.]

2.^ Does Moore succeed in showing that goodness is a non-natural property?

Session 8: Russell, Moore and Consequentialism

1.* 'The assertion "I am morally bound to perform this action" is identical with the assertion "This action will produce the greatest amount of good in the Universe" … this fundamental point is demonstrably certain.' *Is* this 'fundamental point' as

'demonstrably certain' as Moore thinks it is? Discuss with reference to Russell. [Apart from the original texts I refer students to my 'Russell's Moral Philosophy'.]

Session 9: Logic, and the Non-Existent

1.#^ Explain and discuss the young Russell's belief that there are things which do not exist even though they have being.

2.#^ '"A is not" must always be either false or meaningless. For if a were nothing it could not be said not to be; "A is not" implies that there is a term a whose being is denied and hence that A is. Thus unless "A is not" be an empty sound it must be false – whatever A may be, it certainly is.' (Russell, *The Principles of Mathematics*) Discuss.

3.^# 'Carnivorous cows don't exist.' Explain how Russell's logic allows us to understand this claim as a) meaningful and b) true without supposing that carnivorous cows have some kind of being or subsistence.'

4.#* 'The Creature from the Black Lagoon does not exist.' Explain how Russell's theory of definite descriptions allows us to understand this claim as a) meaningful and b) true without supposing that the Creature has some kind of being or subsistence. [As the examples suggest, I am still heavily reliant on Soames for this session.]

Session 10: Logic and Definite Descriptions: The (Non-Existent) King of France

1.#* (a) The present King of France is bald.

(b) The present King of France is not bald.

Claims (a) and (b) appear to be contradictories. According to the Law of Excluded Middle [p v ~p], given any two contradictory claims one is true and the other false. But there is no present King of France. So neither (a) nor (b) appears to be true. Explain and discuss Russell's solution to this problem.

2.#* 'The only words one does use as names in the logical sense are words like "this" or "that"' (*PLA.*) Explain and discuss Russell's reasons for this odd doctrine.

3.#* 'The names that we commonly use, like "Socrates", are really abbreviations for [definite] descriptions: not only that, but what they describe are complicated classes of classes systems of classes or series' (*PLA.*) Explain and discuss Russell's reasons for this odd view.

4.#* 'There are no logically proper names and there are no descriptions (in [Russell's]

sense).' Outline and discuss Strawson's critique of Russell's views in 'On Denoting' in the light of Russell's reply. [I thought I should put this in, although I take a dim view of Strawson in general and 'On Referring' in particular.]

Session 11. Russell versus James: Pragmatism, and the Will to Believe.

1.^ 'Our passional nature not only may but lawfully must decide an option between propositions whenever it is a genuine option that cannot be decided on rational grounds' ('The Will to Believe') Outline and discuss William James' view in the light of Russell's critique.

Session 12: Russell versus James: Is Truth What It Pays to Believe?

1.^ 'To say that "A exists" may be true even if A does not exist is to give meaning to "truth" which robs it of all interest' (*PE*). Does Russell succeed in discrediting James's pragmatist conception of truth?

2.* 'James is not trying to define the confused concept of truth that we actually employ but to replace that concept with something more useful. Hence the criticisms of Moore and Russell are beside the point.' Discuss. [Here I refer students to R.M. Gale's *The Philosophy of William James*.]

Session 13: Logical Atomism and the External World

1.#^ Are physical objects logical constructions out sense-data? Discuss with reference to Russell.

2.#* 'Russell tried to construct physical objects out of sense-data. But the logic at his disposal was not powerful enough to do the job.' Discuss with special reference to counterfactuals. [Here I refer students to Soames.]

Session 14: Logical Atomism and Negative Facts

1.^ "If I say 'There is not a hippopotamus in this room', it is quite clear that there is some way of interpreting that statement according to which there is a corresponding fact and that fact cannot be merely that every part of this room is filled up with something that is not a hippopotamus' (*PLA*). Must we posit negative facts to serve as the truthmakers for negative truths? [I refer students to Cheyne and Pigden (2006) 'Negative Truths from Positive Facts'.]

2.* 'You cannot ever arrive at a general fact by inference from particular facts however numerous' (*PLA*). Russell argues from this to the thesis that there must be general facts for general truths to correspond to. Must we postulate general facts (perhaps partly constituted by negative facts) in order for claims such as 'All men are mortal' to be true?

3.* According to Alan Musgrave Idea-ism (the thesis that we only perceive our ideas or perceptions) leads to Idealism (the thesis that material objects do not have a mind-independent existence but are in some sense *made out of* our ideas or perceptions). Discuss with reference to Russell. [I refer my students to the works of my former chief, Alan Musgrave, particularly his excellent *Common Sense, Science and Scepticism* (1993).]

Session 15: Can Mathematics Be Reduced To Logic?

1.#^ The key thesis of logicism is that mathematics can be reduced to logic. What does it mean to reduce mathematics to logic? And what is the philosophical point of the exercise?

NOTE: The question of *Russell's* original motivations for adopting logicism is much more complex than most of the above readings would suggest. See Session 16: 4. *However* for the purposes of *this* question you can take Russell to be the later Russell who thought that the truths of mathematics were in some sense analytic, tautological or linguistic.

2.#^ Explain and discuss Russell's definitions of *0, number* and *successor*. Does he really succeed in defining these concepts in terms of pure logic?

3.#* Outline Russell's proof that he can derive *most* of Peano's axioms from purely logical principles with aid of his definitions of *0, number, inductive number and successor***.**

4.#* Explain why Peano's Axiom 3 (Russell's version) or Axiom 4 (Soames's version) might fail without the Axiom of Infinity.

Session 16: Logic, Paradox and the Theory of Types

1.#* "'Numbers are classes of classes, and classes are logical fictions, so that numbers are, as it were, fictions at two removes, fictions of fictions. Therefore you do not have, as part of the ultimate constitution of your world, these queer entities that you are inclined to call numbers' (*PLA*). The trouble is that Russell replaces classes with

propositional functions which, considered as part of the 'ultimate constitution of the world', are nearly as problematic as classes. " Discuss.

NOTE. Consider the following arguments:

a) John is fat. Therefore there exists an x [John] such that x is fat.
b) John is fat. Therefore there exists a φ [being fat] such that John is φ.
c) John is fat. Therefore there exists a class α [eg. the class of fat things] such that John is a member of α.
d) John is fat. Therefore there exists a Ψ that applies to the same things as *being fat* [maybe, but not necessarily, *being fat* itself] such that John is Ψ.
e) There are 400 million fat people. Therefore there is a class – the class of fat people – which has the property of having 400 million members.
f) There are 400 million fat people. Therefore there is a propositional function co-extensive with 'being a fat person' – possibly 'being a fat person' itself – such that it has the property of applying to 400 million things.

Roughly, Russell accepts arguments a), b) and d) as logically valid, but only accepts c) if it is understood as a *notational variant* of argument d). Similarly, Russell only accepts inference e) if it is understood as a *notational variant* of inference f). Hence for Russell, although it is OK to *talk* about classes, they are not ultimately real, though he is inclined to 'quantify over' – and hence, according to Quine, *assume the existence of* – propositional functions. Quine's complaint is that Russell underestimates his metaphysical commitments because propositional functions double as *linguistic entities* – 'a propositional function is nothing: it is merely a schema' or an '*expression containing an undetermined constituent*' (*PLA*) – and the supposed *entities* such as attributes, properties and relations – for which such expressions stand. Quine, on the other hand, accepts a) as logically valid, rejects b) and d) as invalid, but accepts c), though he regards it as an inference which is not *logically* valid but which only holds if set theory – which assumes the existence of real sets or classes – is true. He accepts sets reluctantly because they are indispensable to mathematics, which in turn is indispensable to science.

2.#^ What is Russell's Paradox and why does it pose a problem for the logicist project?

3.#^ Outline and discuss the Simple Theory of Types explaining the need for an Axiom of Infinity. Does Russell's Solution to his own Paradox compromise the logicist project?

4.*# In 1912, two years *after* the publication of *Principia Mathematica* which contains his reduction of mathematics to logic, Russell wrote: 'Kant, who had been educated in the rationalist tradition … perceived [note the success word!] that … all the propositions of arithmetic and geometry, are 'synthetic', *i.e.* not analytic: in all these propositions, no analysis of the subject will reveal the predicate' (*PP).* Thus in 1912 he still believed that the truths of mathematics were synthetic. Since he also believed that the truths of mathematics are truths of logic, he must have believed that the truths of logic were similarly synthetic. Since the truths of logic and mathematics were in his opinion a priori, he believed that the truths of mathematics were synthetic and a priori. This is Kant's key thesis about the truths of mathematics. Yet in *MPD* Russell wrote: "the primary aim of *Principia Mathematica* was to show that that all of pure mathematics follows from purely logical premises and uses only concepts definable in logical terms. This was of course an antithesis to the doctrines of Kant, and initially I thought of the work as a parenthesis in the refutation of 'yonder sophistical Philistine,' as George Cantor described him."

a) How can Russell have regarded *Principia Mathematica* as a parenthesis of in the refutation of the sophistical philistine when he agreed with the sophistical philistine's central thesis?

b) Is Russell's view of logic as synthetic a priori sensible one?

5.#* What is the Paradox of the Liar and was Russell right to suppose that it posed a problem for the logicist program?

6.*# 'If you apply [the Ramified Theory of Types] to the person who says "I am lying", you will find that the contradiction has disappeared because you will find that he will have to say what type of liar he is. If he says "I am asserting a false proposition of the first type" as a matter of fact that statement, since it refers to the totality of propositions of the first type, is of the second type. Hence it is not true that he is asserting a proposition of the first type and he remains a liar' (*PLA*). (That is, his statement is just false and not also true.) Outline *Russell's* solution to the Liar and other semantic paradoxes and compare and contrast it with *Tarski's*. Do either of these solutions succeed?

7.#* Compare and contrast Russell's attempt to resolve his paradox via a Theory of Types with Zermelo's approach via axiomatic set theory. Which is best?

Session 17: Russell, The Great War, & Pacifism

1.* Russell argues on utilitarian grounds that most wars (though not all wars) are unjust. Just War Pacifists contend that actual wars, at least in the modern era, are never (or hardly ever) just since they don't meet the traditional criteria for being a just war. Compare and contrast Russell's antiwar arguments in *Justice in Wartime* with those of some prominent Just War Pacifist (that is, somebody who accepts a variation on traditional just war theory but argues that the traditional criteria preclude all or most *modern* wars).

NOTE: What is truly shocking – indeed appalling – about 'The Ethics of War' is Russell's post facto endorsement of racist wars of ethnic cleansing – bordering on genocide – in New Zealand and America. The best that can be said for him here is that this sort of racist imperialism was common at the time and that he subsequently changed his tune. [To a New Zealand audience, about 10% of which is of partially Maori descent, Russell's tacit approval in *Justice in Wartime* of wars of ethnic cleansing against indigenous peoples is particularly shocking and needs to be addressed.]

2.^ Outline and discuss Russell's argument the most modern wars are wrong and that World War I in particular was wrong.

3.^ Summarise and discuss Russell's critique of British foreign policy during the run-up to World War I, especially as contained in his essay 'The Policy of the Entente'. Was Russell right in thinking that Britain bore some share of responsibility for the cataclysm of World War I?

4.* Compare and contrast Russell's critique of British foreign policy in the run-up to World War I with the analysis of a recent historian.

5.* In 'War and Non-Resistance' Russell argues that in modern conflicts between 'civilized' nations, a policy of disciplined non-resistance is better even than a war of self-defence. Is he right about this?

6.* Irrespective of the rights and wrongs of *beginning* the War, in the 'Cardiff Speech' Russell argued (as of July 1916) that there was not 'now any good and valid reason why this war should continue to be prosecuted' and that it was 'now perfectly possible and compatible with both the safety and the honour of the nations at present

at war with each other to enter on negotiations for peace' (a peace on the basis of the *status quo ante* with no indemnities and no annexations).

a) Was Russell right in thinking that such a peace would have been better both for the vanquished *and for the victors* than fighting to the finish?

b) If he *was* right why didn't any of the contending parties aggressively pursue a peace policy? Why did they press on to either catastrophic defeat or a very Pyrrhic and disastrous victory?

Session 18: Russell, Socialism and UBI

1.^ Outline and discuss either a) Russell's critique of capitalism or b) his sketch a socialist alternative or c) both, in one or other of:

The Principles of Social Reconstruction

Political Ideals

Roads to Freedom

2.* In *Roads to Freedom*, Russell suggests the idea of a 'vagabond's wage', the forerunner of what is now known as Universal Basic Income. Is this a good idea? Discuss with reference not only to Russell but to recent proposals for UBI. [I recommend Guy Standing's recent book.]

Session 19: Non-Cognitivism and the Error Theory

1.* 'My point is that the word "good" does not stand for a predicate at all, but has a meaning only in the sense in which descriptive phrases have meaning, i.e. in use, not in isolation; further that, when we define it as nearly as possible in accordance with the usage of absolutists, *all* propositions in which the word "good" has a primary occurrence are false' (*RoE*). Outline and discuss Russell's version of the Error Theory.

2.^ In about 1913 Russell ceased to believe in Moore's non-natural property of goodness vacillating between emotivism, the error theory and a rather half-hearted naturalism for the rest of his life. What were his arguments for rejecting the Moorean 'good' and (in so far as they can be reconstructed) do they actually cast doubt on the existence of this property?

3.* Compare and contrast Russell's version of the error theory as outlined in 'Is There an Absolute Good' with that of J.L Mackie as outlined in chapter 1 of *Ethics: Inventing Right and Wrong*'. Which is the best theory and is either of them correct?

Session 20: Russell Non-Cognitivism and Commitment

1.^ Are moral judgments in the true/false game or are they really expressions of emotion, disguised optatives or disguised imperatives?

2.* Compare and contrast Ayer's argument for emotivism with the Russellian argument suggested by Pigden in 'Two Arguments for Emotivism and a Methodological Moral '. Is either of these arguments a success?

3.* Compare and contrast Russell's version of non-cognitivism with that of either A.J Ayer or R.M. Hare. Is either of them a success?

4.^ 'I am accused of inconsistency, perhaps justly because, although I hold ultimate ethical valuations to be subjective, I nevertheless allow myself emphatic opinions on ethical questions' (*RoE*). Is belief in emotivism incompatible with moral commitment? If emotivisim *were* incompatible with commitment, would this constitute an objection to emotivism?

Session 21: Russell's Critique of Bolshevism

1.^ Outline and discuss Russell's critique of *Bukharin's Historical Materialism: a System of Sociology.* Does Russell succeed in rebutting the chief claims of Bukharin's system?

2.* Russell's *The Practice and Theory of Bolshevism* (as its title suggests) criticizes both Bolshevik practice and Bolshevik theory. Outline and discuss Russell's criticisms of either

a) Bolshevik practice, or
b) Bolshevik theory, or
c) both.

Do Russell's criticisms succeed?

Session 22: Russell: Appeasement and World War II

1.^ In the run-up to World War II, Russell maintained his pacifist line arguing for a left-wing version of Chamberlain's policy of appeasement. However, he subsequently changed his mind coming out in support of the War a) in a letter to Kingsley Martin, the editor of the *New Statesman* and b) in a letter to the *New York Times*. Outline and discuss Russell's arguments a) for pacifism in the late 1930s and b) for endorsing the War in 1940.

2.* Compare and contrast Russell's utilitarian arguments for endorsing World War II with Anscombe's 'Just War' reasons for opposing it.

Session 23: Realism, Verificationism and Causality.

1.*# 'What if the universe was to end in universal death? It was nonetheless unruffled and magnificent. But now all this has shrunk to be no more than my own reflection in the windows of the soul through which I look out upon the night of nothingness. The revolutions of nebulae, the birth and death of stars, are no more than convenient fictions in the trivial work of linking together my own sensations, and perhaps those of other men not much better than myself. No dungeon was ever constructed so dark and narrow as that in which the shadow physics of our time imprisons us, for every prisoner has believed that outside his walls a free world existed; but now the prison has become the whole universe. There is darkness without, and when I die there will be darkness within. There is no splendour, no vastness, anywhere; only triviality for a moment, and then nothing. Why live in such a world? Why even die?' (*Autobiography*)

So said Russell in a moment epistemic and metaphysical despair. But it was not the shadow physics of his time that imprisoned him in this solipsistic dungeon but features of his own philosophy.

Explain

1) how The Philosophy of Logical Atomism (which substituted logical constructions out of sense-data for inferred entities) tended towards solipsism and

2) how Russell managed (just about) to emancipate himself from this prison by substituting inferred entities (defined as the causes of our sense-data) for logical constructions.

2.^# Russell rejected the concept of causality in 1913 but by 1948 he had revived it.

a) Analyse his arguments in each case.

b) Was the old Russell right and the younger Russell wrong or vice versa?

3.*# In *IMT*, Russell seems to argue roughly as follows: If verificationism were correct and if truth were redefined as an epistemic concept, then there would be some unverified but in-principle-verifiable propositions, that were neither true nor false. In this case, the Law of Excluded Middle would fail which means that the correct logic would be the intuitionistic logic rather than classical logic. But the Law

of Excluded Middle does not fail for unverified but in-principle-verifiable propositions. So verificationism is false.
Explain and discuss Russell's arguments. Does he succeed in refuting verificationism?
NOTE: I am inclined to read Russell's argument as going something like this.

1) If verificationism (for 'empirical' propositions) is correct, then there is no viable non-epistemic conception of truth (for 'empirical' propositions) .
2) If verificationism (for 'empirical' propositions') were correct and truth (for 'empirical' propositions) were defined or redefined as an epistemic concept, then there would be some unverified but in-principle-verifiable propositions that were neither true nor false.
3) If there were some unverified but in-principle-verifiable propositions that were neither true nor false, the Law of Excluded Middle would fail for unverified but in-principle-verifiable propositions.
4) If the Law of Excluded Middle were to fail the correct logic would be intuitionistic logic rather than classical logic.
5) But the Law of Excluded Middle does *not* fail for unverified but in-principle-verifiable propositions. (Russell 'snow on Manhattan Island' example.)
So
6) Verificationism is false
and
7) We have no sound verificationism-based argument for accepting intuitionistic logic.

Query: would Russell's argument look more plausible had he considered a proposition about the future such as Dummett's 'A city will never be built on this spot'?
4.^# Outline and discuss Russell's critique of verificationism in his paper 'Logical Positivism'. Does he succeed in refuting verificationism?

Session 24: Paradox and Contradiction: Ramifications, Ramsey and Tarski.
1.#* a) Are the semantic paradoxes fundamentally different in kind from the (so called) logical paradoxes? b) Is a Tarskian hierarchy of languages the correct solution for the Semantic paradoxes and Simple Type Theory the correct solution for the

logical or set-theoretic paradoxes? Discuss with special reference to Russell, Ramsey and Tarski.

2.#* 'Perhaps it is so hard to solve the Paradox of the Liar because no genuine solution exists. Perhaps there just are true contradictions!' Discuss with reference to Priest. [Otago is now a stronghold of paraconsistent logic as my colleague Zach Weber is a leading spokesman. I myself have been a fellow-traveller for nearly forty years.]

Session 25 . The Retreat from Pythagoras

1.^# **'**Our conclusion is that the propositions of logic and mathematics are purely linguistic and that they are concerned with syntax. … This conclusion, if valid, may be regarded as an epitaph on Pythagoras.' So says Russell in 'Is Mathematics Purely Linguistic', though it was a conclusion he found to be distasteful. Is Russell right about this? Discuss with reference to Quine's (sometimes implicit) criticisms in 'On What There Is' and 'Russell's Ontological Development'.

2.#* Are the truths of logic true by linguistic convention? Discuss with reference to Quine's 'Truth by Convention'

3.#* Our conclusion is that the propositions of logic and mathematics are purely linguistic and that they are concerned with syntax. … This conclusion, if valid, may be regarded as an epitaph on Pythagoras.' So says Russell in 'Is Mathematics Purely Linguistic', though it was a conclusion he found to be distasteful. Gödel thought that Russell was wrong to retreat from Pythagoras and that mathematics was *not* purely linguistic. According to Russell who had a series of discussions with him, Gödel 'turned out to be an unadulterated Platonist, and apparently believed that an eternal 'not' was laid up in heaven, where virtuous logicians might hope to meet it hereafter'. Was Russell right or wrong about this? Discuss in the light of Gödel's arguments in 'Russell's Mathematical Logic' and 'Is Mathematics Syntax of Language?'

4.*# Explain how Gödel's Incompleteness Proof puts paid to the Logicist Program.

Session 26: Russell and the Nuclear Threat

1.^ Explain and discuss Russell's analysis of the nuclear threat and his ideas for what to do about it as outlined in either a) *Common Sense and Nuclear Warfare* or b) *Has*

Man a Future, with special emphasis on Russell's arguments for unilateral *British* disarmament.

2.* Following Hobbes, Russell thought that the international state of nature is a state of war, cold if we are lucky, hot if we are not. He also thought that even if mutual disarmament could be negotiated, in the event of a hot war, the contending parties would be likely to rebuild their arsenals. Consequently, the only long-term strategy for avoiding nuclear war would be for the contending parties to unite under a World Government with a monopoly of nuclear force, thus putting a stop to both the international state of nature and the ensuing state of war (a Hobbesian solution to a Hobbesian problem). Discuss both Russell's analysis of the problem and the solution he suggests. Is the international sate of nature necessarily a state of war? And if it is, can the contending parties trust each other sufficiently to set up an International Sovereign?

3.* Compare and contrast Russell's attitude outwards the problem of nuclear weapons with that of a more recent philosopher from among the suggested readings

4.* In 1994, Ken Blackwell, the Russell archivist, asked the following question:

In a well-known essay published in 1948, Russell made a three-way prediction.

> "Before the end of the present century, unless something quite unforeseeable occurs, one of three possibilities will have been realized. These three are:
>
> i. The end of human life, perhaps of all life on our planet.
>
> ii. A reversion to barbarism after a catastrophic diminution of the population of the globe.
>
> iii. A unification of the world under a single government, possessing a monopoly of all the major weapons of war
>
> I do not pretend to know which of these will happen, or even which is the most likely. What I do contend, without any hesitation, is that the kind of system to which we have been accustomed cannot possibly continue."

Let's agree [Blackwell went on] that the mere absence of competing Great Powers and the overwhelming military strength of the U.S. at present (1994) does not count as world unity. How, then, did Russell's prediction fail?

What is the answer to Blackwell's question?

Supplementary Questions (available to write about but not covered in class).

Supp 1.^* In *Powe*r, Russell argues that one of the principal problems facing the world is that of 'naked power'. 'Most of the great abominations of history are connected with naked power', he declares, and 'if human life is to be, for the mass of mankind, anything better than a dull misery punctuated by periods of sharp horror, there must be as little naked power as possible' (Russell 1938: 106). Now, power is naked if those who are subject to it do not recognize it as morally legitimate. Naked power occurs when the subjects do not subscribe to the morality handed down by the rulers. This can happen for two reasons: either a) because the subjects subscribe to a different morality (as when the rulers are foreign conquerors or the subjects are heretics); or b) because the subjects – perhaps under the influence of something like 'the subjectivity of values' – cease to have strong moral beliefs. 'A form of power which has been traditional becomes naked as soon as the tradition ceases to be accepted. It follows that periods of free thought and vigorous criticism tend to develop into periods of naked power. So it was in Greece and Renaissance Italy.' Thus moral criticism of the kind Russell indulged in, whether at the normative or the meta-ethical level, can have disastrous results, leading to a collapse of traditional authority and a calamitous slide into a period of naked power. Things get really bad, according to Russell, when the doctrine of Thrasymachus (the anti-hero of Plato's *Republic*) becomes widely accepted and people come to believe that 'justice is the advantage of the stronger' (meaning the rulers or the ruling class). 'Whenever this view is generally accepted, rulers cease to be subject to moral restraints, since what they do is not felt to be shocking except by those who suffer directly. Rebels equally ... need not be afraid that ... ruthlessness will make them unpopular' (*Power*). It is notable that the opinions of Lenin and Bukharin were remarkably similar to those of Thrasymachus. To be precise they seem to have thought either that morality is compounded of falsehoods (though falsehoods which tend to favour the interests of the ruling class) or that it can be defined as what serves the interests of the proletariat (or if you are a bourgeois, of the bourgeoisie). Thus the actions of (say) Franco in massacring his socialist opponents may have been wrong from the Bolshevik point of view, but they were not shocking, since he was merely doing what, according to his own definition of 'right', was the right thing to do. But the real problem is that Russell's own position is precious close to that of Thrasymachus. His writings are studded with Thrasymachean remarks ('morality is disapproval of the community for those who act against the holders of power'), though these are usually not

intended to be taken quite literally. Indeed, the theory of *Power* implies that what *passes* for justice will often be to the advantage of the stronger, though this is not what 'justice' *means*.

How does Russell propose to deal with the calamitous consequences of his own doctrines?

Supp 2.^* Russell wrote extensively about sexual ethics, but his own love-life was a series of train-wrecks with passionate relationships which were often followed by acrimonious separations until he reached the age of 80, at which point he managed to settle down into a reasonably happy marriage. Why was Russell's love-life such a disaster area? Was it just a chapter of accidents or was there some cause in Russell's nature or Russell's philosophy that made these broken hearts?

Supp 3.*^ Compare and contrast Russell's critique of theistic religions in general (and Christianity in particular) with those of Ayer and Flew and their intellectual allies

Supp 4.*^ Did Russell have a 'Philosophy of History' and if so was it broadly correct? Discuss in the light of Hook's 'Bertrand Russell's Philosophy of History' and Russell's Reply.

Supp 5.^ Outline and discuss Russell's critique of conventional ethics and his ideas for a radical alternative in *Marriage and Morals.*

4. Coda: So How Did it All Go?

I would like to be able to say that the course has been a stunning success. But the truth is it hasn't really had a fair trial. The first time around in 2018, I was not properly prepared and was composing the course book as I went along, keeping one jump ahead of the class with the aid of handouts. So it was not as successful as I generally expect my classes to be. I had, of course, set aside several weeks to do course prep, but somebody floated a plan for the reform of the BA at Otago which struck me as potentially disastrous. I therefore devoted what would have been my course-prep time to composing a detailed critique, designed kill it dead. This took a lot of time and energy. The second go-round in 2020 was derailed by Covid. The course was due to run in the second semester, by which time prompt action on the part of the New Zealand government had successfully eliminated the virus. Thus in the first couple of weeks I was teaching my students face-to-face. However an

outbreak in Auckland meant that a Level-2 Alert was imposed in Dunedin. This allowed face-to-face teaching but only with stringent social distancing requirements, which were difficult to meet in the classrooms to which I had been assigned. I therefore reverted to Zoom which entailed a big drop off in student 'attendance'. Nonetheless the class went relatively well, with an average final mark of 79.85 for PHIL 239 and 77.85 for PHIL 339, which is a B+ in our marking system. But I can't be sure that I met my goals of inspiring some part of the passion I feel for Russell in my students. However I'm hoping for better things when I run the class again properly in what I hope will be the post-Covid world of 2022.

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Some Remarks on Russell's Theory of Compossibility in Ethics

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The logical notion of compossibility seems to have pride of place in Bertrand Russell's writings on metaethics. Though Russell is almost universally recognized as a supporter – if not one of the founding fathers – of emotivism, experts have recently highlighted a qualifying twofold ingredient in Russell's emotivism:[1] viz. his willingness to allow for the rationality of ethical inferences and the possibility of counting on a criterion to determine whether a certain moral system is better than another. There are quite a few passages where Russell stresses the importance of the notion of compossibility for theoretical ethics.

In what probably is his last take on the matter, for instance, Russell affirms:

> There is one approximately rational approach to ethical conclusions which has a certain validity. It may be called the doctrine of compossibility. This doctrine is as follows: among the desires that a man finds itself to possess, there are various groups, each consisting of desires which may be gratified together and others which conflict. You may, for example, be a passionate adherent of the Democratic Party, but it may happen that you hate the presidential candidate. In that case, your love of the Party and your dislike of the individual are not compossible. Or you may hate a man and love his son. In that case, if they always travel about together, you will find them, as a pair, not

[1] See C. Pigden, "Russell's Moral Philosophy", *The Stanford Encyclopedia of Philosophy* (Fall 2018 Edition), Edward N. Zalta (ed.), [https://plato.stanford.edu/archives/fall2018/entries/russell-moral/], and M.K. Potter, *Bertrand Russell's Ethics* (London: Continuum, 2006). In older works, such as H. Bear, "Bertrand Russell on Ethics", *The American Journal of Economics and Sociology*, 1955, 15/1, 108-112, and L. Aiken, *Bertrand Russell's Philosophy of Morals* (New York: The Humanities Press, 1963), 162, compossibility is mentioned but not taken as a crucial notion for Russell's metaethical proposal. In a 1963 letter to Professor Aiken, Russell achingly observes, "I gather that you do not think much of the idea of compossibility among objects of desire, but I do not quite know why." The letter to Aiken can be read in B. Feinberg and R. Kasrils (eds.), *Dear Bertrand Russell. A selection of his correspondence with the general public, 1950-1968* (London: George Allen & Unwin, 1969), 130.

> compossible. […] The man who wishes to be happy will endeavor to make as large groups as he can of compossible desires the rulers of his life.[2]

Some years before, in 1954, Russell had written:

> Borrowing a term from Leibniz, I call a number of desires "compossible" when all can be satisfied by the same state of affairs; when they are not compossible, I call them incompatible. […] The desires of those who feel benevolently to each other are compossible, but those who feel reciprocal malevolence have desires that are incompatible. It is obvious that there can be a greater total of satisfaction of desire when desires are compossible than where they are incompatible. Therefore, according to our definition of the good, compossible desires are preferable as means. It follows that love is preferable to hate, co-operation to competition, peace to war, and so on. […] Right desires will be those that are capable of being compossible with as many other desires as possible; wrong desires will be those that can only be satisfied by thwarting other desires.[3]

The importance of the notion of compossibility for Russellian metaethics cannot be exaggerated. In his life-long struggle "between what I felt and what I found myself compelled to believe",[4] compossibility, though being regarded as unable to provide an ultimate solution to ethical matters,[5] allows one to undertake two tasks, which are to be regarded as paramount in theoretical ethics. First, it provides the foundations for a logic of value judgments. Second, it offers a criterion to rank moral systems according to a certain rational hierarchy. Let me elaborate on these two features in this order.

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[2] *The Autobiography of Bertrand Russell, 1944-1967, volume III* (London: George Allen & Unwin, 1969), 33-34.
[3] B. Russell, *Human Society in Ethics and Politics* (London: George Allen & Unwin, 1954), 47-48.
[4] *Ibidem*.
[5] *The Autobiography of Bertrand Russell, 1944-1967,* 34: "Viewed theoretically, such a doctrine affords no ultimate solution. It assumes that happiness is better than unhappiness. This is an ethical principle incapable of proof. For that reason, I did not consider compossibility a basis for ethics." This view is confirmed by K. Blackwell, *The Spinozistic Ethics of Bertrand Russell* (London: Routledge, 1985), 228, n. 6.

(a) *A logic for value judgments*. The foundations of a logic of value judgments are easily set.[6] What we need to build such a system of logic is a set of definitions regarding entailment and contradiction between value judgments. Russell provides for it. Being value judgments expressions of desire, and satisfaction the logical value of such expressions, a value judgment A is entailed by another value judgment B if and only if A cannot be fulfilled or satisfied unless B is also fulfilled or satisfied. On this view, for instance, the value judgment "Would that nobody stole from their neighbor!" is entailed by the value judgement "Would that everyone respected their neighbor!", for the latter cannot be satisfied unless the former is fulfilled. That is to say that the proposition "Everyone respects their neighbor" cannot be true unless the proposition "Nobody steals from their neighbor" is true.

At the same time, value judgments can also contradict one another, in so far as they cannot be simultaneously fulfilled. "Would that everyone desired that homosexuality be admissible!" and "Would that everyone desired that homosexuality not be admissible!" contradict each other, because they cannot be simultaneously fulfilled.

A similar strategy was used, more generally, in deontic logic to build up a logic of norms.[7] For instance, the norm "Obligatory (p∨q)" is entailed by the norm "Obligatory (p)", for the former is satisfied whenever the latter is satisfied. This is granted by the fact that "p" logically entails "p∨q". At the same time, "Obligatory (p)" and "Obligatory (~p)" – i.e. "Forbidden (p) – cannot be jointly fulfilled, so that they are to be held as incompatible.

This strategy has been criticized because a state of affairs "p", on this view, satisfies both the norm "Obligatory (p)" and the norm "Permitted (p)". More specifically, one can show that "p" entails "Obligatory p" and, by contraposition, "Not-obligatory p" (that is "Permitted ~p") entails "~p". In turn, the latter is equivalent to say that "Permitted p" entails "p". By hypothetical syllogism, then, "Permitted p" entails "Obligatory p", which is contrary to our intuitions about prescriptive language, where the opposite seems true. At the same time, since "~p" satisfies both "Obligatory (~p)" – i.e. "Forbidden (p)" – and "Permitted (~p)", there is no way of distinguishing between

[6] Here I am indebted to C. Pigden (ed.), *Russell on Ethics. Selections from the Writings of Bertrand Russell* (London: Routledge, 1999), 133-134.

[7] See the seminal A. Hofstadter and J.C.C. McKinsey, "On the Logic of Imperatives", *Philosophy of Science*, 6, 1939, 446–457.

the two cases, so that the logic of satisfaction impoverishes the possibilities of prescriptive language, by reducing it to only two cases, "Obligatory (p)" and "Forbidden (p)".[8]

It is not my intention to fully retort here to such criticisms. I will limit myself to pointing to an available reply.[9] One can indicate the fact that the logic of satisfaction may have some shortcomings in reconstructing the purported behavior of deontic modalities, but this is not the main aim of such a logic. Rather, this proposal aims at reconstructing the inferences one can carry out with the content of norms, once deontic modalities are understood as pragmatic operators (i.e. indicators of illocutionary force), rather than quasi-propositional entities. If norms are reconstructed as the union of a pragmatic operator (such as "!" for promulgation and "¡" for repeal) and a propositional content (such as "pay taxes" or "respect your neighbor"), it is easy to see that the logical import of norms rests mainly on the propositional side of the matter. Norms collide when their contents are not compossible. "!Pay taxes" and "!Not pay taxes" are incompatible for "Paying taxes" and "Not paying taxes" are not compossible states of affairs. In turn, "!Pay taxes" entails "!Pay income taxes", for if "Paying income taxes" is not true, "Paying taxes" cannot be true either. One can observe that the same authority or subject can at the same time promulgate and repeal the same propositional content. This is no logical conflict proper. We can call this case one of pragmatical ambivalence, similar to what happens when one says, "It's raining but I don't believe it".

The same pragmatic-oriented strategy can be used to address value judgments in Russell's theoretical ethics and refine it slightly. There are incompatible value judgments (when the desires they express are not jointly fulfillable) and there are entailed value judgments (when a desire cannot be satisfied unless the other is also satisfied). Moreover, situations of ambivalence may also be envisaged, where someone desires a certain state of affairs and rejects (or despises) it at the same time.

(b) *Compossibility as a criterion of choice between sets of value judgments*. From the quotations we have begun with, one can infer that Russell holds that one is better off in having a larger set of compossible desires than having a narrower set of compossible

[8] For a recent discussion, see P.E. Navarro and J.L. Rodríguez, *Deontic Logic and Legal Systems* (Cambridge: Cambridge University Press, 2014), 54-55.

[9] C.E. Alchourrón and E. Bulygin, "The Expressive Conception of Norms", in R. Hilpinen (ed.), *New Studies in Deontic Logic* (Dordrecht: Reidel, 1981), 95-124. See also A. Kristan, "In Defence of the Expressive Conception of Norms", *Revus*, 22, 2014, 151-172.

desires. He also seems to maintain that a set of moral judgments is better than another if it contains a larger number of compossible desires.

Russell is not quite clear in what he means by "large".[10] Neither is he totally explicit on the technicalities of such a comparison between sets of value judgments. However, it can be argued that at least two theses can be drawn from his premisses: (i) one regarding individual preferences, and (ii) the other concerning general preferences (or, better put, the ranking of different set of preferences). Both theses have a clear utilitarian ring (concerning, as they do, individual people's happiness and measuring sets of value judgments on that rod). Russell appears here to be, as it were, a sort of "utilitarian emotivist".

First thesis: one is both cognitively and practically better equipped ("happy" is Russell's word), from an ethical point of view, if one endorses the least possible number of moral ambivalences and moral contradictions. As we have seen, the former – moral ambivalences – derive from desiring and despising the same state of affairs at the same time (or at different times, without having made one's set of desires a coherent whole).[11] By contrast, the latter – moral contradictions – derive from having incompatible (i.e. not jointly satisfiable) desires, that is from simultaneously desiring incompatible states of affairs. Russell's examples referring to one person's attitudes or desires generally refer to situations of moral ambivalences (e.g. love/hate) rather than moral contradictions proper. It might be observed that moral ambivalences can only be changed (*ceteris paribus*) by modifying one of the attitudes in conflict regarding a certain state of affairs. For instance, to go back to Russell's example, if I support the Democratic Party, and I hate its presidential candidate, I may change my view on either to make my attitudes cohere. That is to say that I can either stop supporting the Democratic Party or begin supporting its presidential candidate.

Moral contradictions proper can also concern a single person, but an important distinction must be made. Two main situations can materialize. The first one – quite frequent, actually – is when two desires are not *empirically* compossible. For example, I desire a new car and I also desire to help a friend in need, but I do not have enough money to afford both things. Here the two involved desires are compossible in theory (i.e. conceptually), but not in practice (i.e. empirically). The second situation occurs when two desires are not *conceptually* compossible. For instance, I desire to win the

[10] K. Blackwell, *The Spinozistic Ethics of Bertrand Russell*, loc. cit.

[11] This can be made by rejecting a previously expressed desire and so revising a certain set of desires.

lottery and I also desire not to win the lottery. The latter situation leads almost inevitably to unhappiness or despair – one might argue – for any course of action one chooses, there will always be a moral residue (i.e. one of two desires inevitably remains unsatisfied).

Second thesis: from an ethical point of view, a set of value judgments is better than another set (viz. generates a greater total of satisfaction of desire), if it encompasses a smaller number of moral ambivalences or moral contradictions (and, complementarily, a larger number of compossible desires).[12]

The examples offered by Russell concerning two or more different people are generally instances of genuine moral contradictions. When two people want to marry the same person, their desires are not compossible (to wit, they are incompatible) and the only way to solve the issue is to make one of them (or both) unhappy. This is so because it is not "empirically" possible for two people to marry the same person at the same time.[13] At a more general level, one easily faces "conceptual" moral contradictions, i.e. value judgments that have incompatible contents: e.g. country A desires to win the war against country B, and country B desires to win the war against country A. However, it is also possible to envisage moral ambivalences, i.e. different attitudes regarding the same state of affairs. This happens, for instance, when a country defends free trade within the international community, whereas another country hampers free trade.

As we have already seen, Russell affirms that the desires of those who feel benevolently to each other are compossible, but those who feel reciprocal malevolence have desires that are incompatible. If ethical preference is to be given to those sets of value judgments that can increase the level of general satisfaction, and more the compossible states of affairs the greater the general satisfaction, it follows that compossibility allows one to rank such sets on the basis of how many compossible states of affairs they are able to admit. So, after all, it is possible for emotivists to determine whether a certain set of moral judgments is better than another one.

However, there are at least two interrelated features of this strategy that can be seen as puzzling and deserve a brief analysis before we conclude.

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[12] A.C. Grayling, *Russell. A Very Short Introduction* (Oxford: Oxford University Press, 2002), 91-92.

[13] Actually, we should say "institutionally" possible, for there is nothing empirical that hampers the union of three or *n* people instead of two. It is rather cultural, moral or legal norms that refrain from admitting, as it were, "plural" marriages.

The first feature is that it may happen that a vast majority of people desires something which is incompatible with the desires of a minority, and that this hampers the satisfaction of the desires of the minority, often in a way that might seem unreasonable. Along these lines, Potter observes: "Suppose we have two men […] who desire to have a homosexual relationship. […] the majority of people in the world today probably disapprove of homosexuality, so we could say, with confidence, that it is incompossible with the desires of most people. Does this mean that a desire for a homosexual-free world is *good* – and that the desire of the two homosexuals is *bad*?"[14] Russell's approach would indeed seem to elicit the answer that forbidding homosexual relationships is *better* than allowing for them, for it makes a wider set of compossible desires satisfied (viz. the desires of those who oppose homosexuality). A possible answer here is that the mentioned conflict is between a desire that, when satisfied, forbids a harmless conduct of the minority, while the satisfaction of the desire of the minority does not hamper any conduct of the majority. So, overall, the homosexuality-permitting set would be better than the other.[15] This move, however, requires adopting a refined notion of "desire" – desires about harmless conduct, desires the satisfaction thereof does not hamper somebody else's conduct – and so to develop more fully the overall Russellian approach to rationality in ethics.

The second feature has to do with the circumstance that, as Russell admits, compossibility is not a notion by means of which one can prove the ultimate value on which the comparison between moral systems is carried out.[16] But this is a problem which can perhaps be mitigated in Russell's stance, I submit. As Russell himself affirms, when one considers a certain act a "right act", one implies that he or she feels an emotion of approval towards such an act, that his or her view can be held by all men, and that he or she should wish his or her view to be held by all men.[17] But views that can be held by all men and be actually satisfied are those that bear on compossible conducts. Accordingly, we have at least one conceptual argument not only to state that some moral systems are better than others because they allow for more compossible

[14] Potter, *Bertrand Russell's Ethics*, 114.

[15] Russell, *Human Society in Ethics and Politics*, 73, 96.

[16] This is perhaps why Russell uses the qualifying phrase "a certain validity" in articulating his views on compossibility.

[17] *Ibid.*, 77. Russell adds another feature: one must also have "an emotion of either impartiality or benevolence or both, which makes [one] unwilling to value the good of one man more than an equal good enjoyed by another".

desires, but also to affirm that there is a rational criterion to prefer the view that, as Russell puts it, "happiness is better than unhappiness" (viz. that a certain ultimate criterion is better than another one), for such a view can be actually satisfied regarding the totality of all mankind, whereas the opposite is not true. Of course, one can rebut that this is all too circular. However, it is much more promising, I submit, than assuming that things are intrinsically good or bad without any rational proof.

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Russell and Schlick on Work and Play

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The concepts of work, labour, leisure, and play have been widely debated by the social sciences. By contrast, most canonical figures in the history of analytic philosophy have written very little, if anything, on the topic. One of the few exceptional discussions of the concept of labour and its history can be found in Bertrand Russell's popular work from the 1930s, and more specifically his well-known essay 'In Praise of Idleness'.[1] In the essay, Russell attempts a spirited defence of a specific, qualified proposal for eventual reform: the universal limitation of the working day to four hours. Looming in the background of this proposal is a bolder thesis, namely the view that social progress involves the eventual minimisation (if not the complete elimination) of labour in the sphere of human activity. It is this bolder view that, as I shall show in what follows, Russell at least partly shares with another philosopher whose work shaped the history of analytic philosophy, Moritz Schlick. While Russell's work on the future of leisure and labour was written for a popular audience and widely read, Schlick's early writings on work and play have not received adequate scholarly attention. Aside from some differences in their scope and details, there are some striking parallels between Russell's and Schlick's overall views on the future of work and play.

Russell's more pragmatic proposal for a four-hour working day is based on a specific economic argument that is informed by his sketch of the history of labour. Historically, in Russell's view, a certain high amount of labour had been necessary for the survival of humanity. In his account, this need was met within a threefold division between those who undertake the labour itself, those whose work it is to ensure others undertake the labour, and a landed aristocracy which is altogether exempt from labour. While this seems roughly like an account of a feudal society, Russell generalises this account to cover every socio-economic formation from antiquity to his contemporary world. Within this socially and economically unjust, as Russell sees it, distribution of labour, the landed aristocracy has indulged in leisure time that was granted it by the

[1] Bertrand Russell, 'In Praise of Idleness', in *In Praise of Idleness: And Other Essays*, pp. 9-29 (London: George Allen & Unwin, 1935). As Russell notes (p. 9), the essay was written in 1932.

toil of others. This made the aristocracy 'oppressive, limited its sympathies, and caused it to invent theories by which to justify its privileges'.[2] One of these inventions, according to Russell, was the work ethic, which he also refers to as 'the morality of the Slave State'.[3] Employing this ideology (though Russell does not use such a Marxian term), the landed aristocracy had pursued its own interests by indoctrinating others into upholding work as inherently virtuous. Yet, as Russell points out, the theories on which such a work ethic was founded were produced by those who had the leisure time to do so and were nothing other than ways of holding on to this leisure time at the expense of those who believed them.

Russell even admits to having been indoctrinated in the Victorian work ethic, and to having struggled to overcome it. I must note here that his effort to overcome the Victorian work ethic involves regurgitating colonial prejudices in his references to 'Mediterranean sunshine idleness'.[4] In Russell's view, the lazy Mediterraneans rightly rejected the work ethic, and it is only the Northern Europeans that need a 'great public propaganda'[5] campaign to overcome it. Such xenophobic, and demonstrably false, views have had disastrous economic effects in recent years. If Russell could see past his prejudice, he would have understood that the implementation of his proposal for overcoming the work ethic would require a global effort.

Russell claims that, in the past, the social and economic injustice brought about by the division of labour described above may have been warranted, insofar as it had been necessary for the survival of humanity. In the broad economic history outlined by Russell, he believes that up to the early twentieth century, there may have been no viable alternatives to injustice, given the long labour hours needed for producing basic necessities like food. During the First World War, according to Russell, for the first time in history, a viable alternative was shown to be possible. This was accomplished through the use of 'modern technique'.[6] Wartime economies made it possible to sustain the lives of numerous people who, due to participating in the war effort, 'were withdrawn from productive occupations',[7] i.e., did not labour for the production of basic necessities. This, Russell argues, shows that it is possible, due to the rise of

[2] Ibid., p. 26.
[3] Ibid., p. 16.
[4] Ibid., p. 9.
[5] Ibid.
[6] Ibid., p. 15.
[7] Ibid.

modern technology, to drastically reduce labour time without ensuing famines or other loss of goods necessary for survival. Indeed, according to Russell, what had taken place during wartime

> showed conclusively that, by the scientific organization of production, it is possible to keep modern populations in fair comfort on a small part of the working capacity of the modern world. If, at the end of the war, the scientific organization […] had been preserved, and the hours of work had been cut down to four, all would have been well. Instead of that the old chaos was restored, those whose work was demanded were made to work long hours, and the rest were left to starve as unemployed.[8]

Without considering alternative modes of explanation, Russell naïvely attributes the post-war restoration of chaos described above to the entrenched ideological faith in the work ethic. His strategy in defence of his proposed four-hour day is, thus, to shake this belief by countering variants of the view that work is somehow either virtuous in itself, productive of beneficial outcomes, or that its absence brings about vice. I will not here labour to rehearse the details of Russell's specific objections to either of these theses. I will instead simply sketch, very briefly, Russell's defence of the benefits of leisure.

In Russell's view, regardless of the fact that the existence of their class relied on social injustice, the aristocrats are to be seen as exemplary of what can be achieved by a group of people that has been granted the gift of leisure time. Russell attributes to this leisure 'nearly the whole of what we call civilization',[9] including the arts, sciences, philosophy, and 'even the liberation of the oppressed'.[10] In Russell's view, such achievements will be proliferated by universalising leisure time through the minimisation of labour time. Minimising labour time will prevent exhaustion, thus maximising the value of leisure.[11] In this Russellian utopia, everyone will be free to indulge their scientific curiosity or need for artistic expression,[12] and 'at least 1 percent'[13] will produce something of value during their leisure time.

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[8] Ibid., p. 16.
[9] Ibid., p. 26.
[10] Ibid.
[11] Ibid., p. 28.
[12] Ibid., pp. 27-28.
[13] Ibid., p. 28.

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The many significant parallels between Russell's and Schlick's philosophical positions have long ago been acknowledged in the secondary literature.[14] Nevertheless, scholarship has ignored the striking similarities between their accounts of work and leisure, as well as their visions of societies freed from work. In part, this is due to the fact that, in both Russell's and Schlick's case, the relevant works in which these views are developed were ill-received by their academic colleagues, who were much more interested in either philosopher's technical work, and far less in their musings on social or cultural topics. Academic philosophers have tended to see Russell's popular writings as a sign of decline from his exceptional early work. L. Susan Stebbing, for example, referring to a meeting with Russell in 1935 in her private correspondence, notes that

> It seemed like the Russell of old, whom I admired so much. He has so much that's fine and sensitive [...] in him. I think his recent books (e.g., 'In Praise of Idleness') are so cheap; & he can be so good.[15]

A similar attitude has been directed to the central early work in which Schlick first developed his account of work and play, namely his 1909 book *Lebensweisheit*.[16] Schlick had been previously trained as a physicist, and the 1909 book may seem like a novice's entry into philosophical writing. It covers a perplexingly broad domain of topics, from neurophysiology, biology, and drive-psychology, to ethics and the nature of love. It is not only the breadth of its topics, but also Schlick's literary language that has

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[14] See e.g. Herbert Feigl, "Russell and Schlick: A Remarkable Agreement on a Monistic Solution of the Mind-Body Problem," *Erkenntnis*, 9 (1975): pp. 11-34.

[15] Quoted in Siobhan Chapman, *Susan Stebbing and the Language of Common Sense* (Hampshire: Palgrave, 2013), p. 65.

[16] Moritz Schlick, *Lebensweisheit: Versuch einer Glückseligkeitslehre und Fragen der Ethik*, edited by Mathias Iven (Vienna: Springer, 2006). I explore in further detail Schlick's early work, and its notion of play, in Andreas Vrahimis, "The Vienna Circle's Reception of Nietzsche", *Journal for the History of Analytical Philosophy*, 8 (9) (2020): 1-29; "Philosophy (and Wissenschaft) without Politics? Schlick on Nietzsche, German Idealism, and Militarism." In *The Socio-Ethical Dimension of Knowledge: The Mission of Logical Empiricism*, edited by Christian Damböck & Adam Tamas Tuboly (Basel: Springer, forthcoming); furthermore, I explore the early Schlick's critical response to Russell in Andreas Vrahimis, *Bergsonism and the History of Analytic Philosophy* (Cham: Palgrave, forthcoming).

contributed towards discouraging philosophers from taking the book seriously. Nonetheless, as recent scholarship has pointed out, the book develops themes that will continue to play a role in subsequent work, including his many contributions to debates within the Vienna Circle.[17] Schlick's conception of work and play lies at the heart of the book.

Russell's attack against the work ethic was, as we have seen in the above, primarily prescriptive. His main purpose had been to recommend a particular, in the main pragmatic, attitude towards the limitation of working hours. While sharing Russell's broadly critical attitude towards valuing work, Schlick's approach to the topic is founded on a descriptive biological account of the emergence of play. In other words, rather than begin, as Russell does, from an evaluation of the merits and demerits of labour and leisure in the history of feudalism and capitalism, Schlick's descriptive account looks back to the origin of the distinction between work and play in the longer history of the evolution of the human animal.

The divergences between their prescriptive and descriptive approaches are further reflected in the difference between Russell's and Schlick's definitions of 'work'. Russell's definition of 'work' is deployed in his account of the threefold division of labour outlined above. According to Russell, work is divided into two types, either that of 'altering the position of matter at or near the earth's surface relatively to other such matter',[18] or of ordering others to do so. Russell is clearly careful here not to introduce any normative element into his definition of 'work'. By contrast to Russell's apparent restriction of his definition of work to the domain of physics, Schlick upholds an explicitly evolutionary biological definition of 'work'. In various places, Schlick defines 'work' as any activity undertaken not for its own sake, but rather for the sake of some other end. Already in his 1909 *Lebensweisheit*, Schlick would connect this conception of work to evolutionary theory, insofar as his definition of work ties it to what is ultimately undertaken for the goal of the survival of the individual or the species. Thus, though both Russell's and Schlick's definitions might initially seem equally broad, Russell's discussion of work is more strictly tied to the common-sense notion of the concept. Schlick, by contrast, comes to see a broader range of activities as pertaining to work. In his discussion of aesthetics, for example, he conceives of all sensation as a type

[17] See e.g. Thomas Mormann, "Zwischen Weisheit und Wissenschaft: Schlicks weites philosophisches Spektrum." *Grazer Philosophische Studien,* 80 (2010): pp. 263–85.
[18] Russell, 'In Praise of Idleness', p. 12.

of work, insofar as it is a type of action whose purpose is to guide an animal, whether human or not, through its surroundings. Equally, any activity that is geared towards a particular practical end must, in Schlick's account, be considered as work.

Interestingly, though the teleological dimension of work and play does not enter directly into Russell's definition of work, he concurs with Schlick that the activity of 'moving matter about […] is emphatically not one of the ends of human life'.[19] In his view, work is clearly not undertaken for its own sake, but for the attainment of something else, such as survival. The work ethic has so deeply infiltrated modern approaches to work that many have forgotten this:

> There was formerly a capacity for light-heartedness and play which has been to some extent inhibited by the cult of efficiency. The modern man thinks that everything ought to be done for the sake of something else, and never for its own sake.[20]

Russell goes on to examine a variety of cases in which something is praised as virtuous because it is undertaken for the sake of some other end (such as that of earning money, or of preparing oneself for further work).[21] Conversely, Russell notes, activities enjoyed for their own sake are condemned for violating the work ethic. He argues that this leads to the following absurd outcome: the work that goes into making a product is applauded, while the consumption of the same product is frowned upon.

In Schlick's account, almost all activity by all living beings, including human animals, counts as work, insofar as it is undertaken for the sake of some other goal – ultimately for the sake of surviving. Once coupled with his broad acceptance of evolutionary biology, Schlick's definition of work as any activity undertaken for the sake of some other end gives rise to the following question: how is it possible, within an evolutionary framework, for any activity to be undertaken for its own sake? To answer this question, Schlick gives a detailed account of the evolutionary origins of play in human animals.[22] According to Schlick, play is made possible only as a result of a certain amount of work. Work cumulatively secures the adaptation of human animals

[19] Ibid., 23.
[20] Ibid., p. 24.
[21] Ibid., pp. 24-25.
[22] Schlick, *Lebensweisheit*, 143-155.

to their environment. Once a certain level of adaptation is accomplished, all drives guiding action can become temporarily satiated, during which time humans can cease working. In a state where all drives are temporarily satiated, activity that had previously been undertaken as work can now be undertaken, and even enjoyed, for its own sake. A sensation can now be attended to not as a guide to action, but as a pleasing thing in itself.[23] In Schlick's account, such a playful approach is presupposed not only by aesthetic appreciation, but also by the kind of dispassionate search for truth that he understands science as essentially involved in. This is a central view maintained throughout Schlick's career, e.g. when he talks, in the midst of the Vienna Circle's Protocol-Sentence debate, of the joy that comes from affirming the truth of a scientific prediction.[24] While all living things engage in some form of work, and some can even engage in certain forms of play, the human animal's higher ability to play can allow it to engage in an ongoing search for truth unavailable to other living things.

The broader scope of Schlick's descriptive account of the emergence of play leads him to some quite bold predictions concerning the future of humanity. In Schlick's utopian vision, the evolutionary development of the human animal will eventually lead to the replacement of all work by play. As Schlick sees it, this will come about through a progressive adaptation of humans to their environment. In his environmental vision, Schlick calls for a future harmonisation of culture with nature.[25] Play is exemplary of this harmonisation: it is the transformation of the toil which nature imposes onto human civilisations in the guise of work, into a joyful activity undertaken for its own sake. This transformation of course presupposes work, which is necessary for the adaptation of the human animal to its environment prerequisite for play. Once an adequate amount of work has been put into this adaptation, Schlick claims, then a stage can be reached at which all work will be redundant. What this means is that, at this

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[23] This underlies the account of aesthetics developed both in Schlick's *Lebensweisheit* and in Moritz Schlick, "The fundamental problem of aesthetics seen in an evolutionary light." In *Moritz Schlick: Philosophical Papers: Volume One (1909-1922)*, edited by Henk L. Mulder and Barbara van de Velde-Schlick (Dordrecht: Reidel, 1979) pp. 1–24.

[24] Moritz Schlick, "The Foundation of Knowledge, translated by David Rynin." In Ayer, A. J., *Logical Positivism* (Glencoe, Ill.: The Free Press, 1959), pp. 209–27. See Christian Bonnet, "Schlick et l'origine pratique de la connaissance." In *Wissenschaft und Praxis. Zur Wissenschaftsphilosophie in Frankreich und Österreich in der ersten Hälfte des 20. Jahrhunderts*, edited by Christian Bonnet and Elisabeth Nemeth (Dordrecht: Springer, 2016), pp. 43–53.

[25] Schlick continues to uphold such views in his final unfinished work from the 1930s; Moritz Schlick, *Natur und Kultur* (Vienna & Stuttgart: Humboldt, 1952).

stage, *all* activity will be undertaken not in order to attain some other end, but for its own sake. His example in the domain of aesthetics is that of the transformation of sensation. As long as humans continue to work in order to adapt to their environment, their sensations will be mere guides to action. But once this is no longer necessary, all sensations will be eventually come to be enjoyed for their own sake. In Schlick's utopian future, every sight or sound will give the kind of pleasure that is currently only glimpsed in works of artistic genius. This is, of course, a prediction concerning a distant future (assuming that the human species has worked to ensure its survival for such a length of time). Schlick presents his environmentalist vision as being at odds with the development of modern technology, which in his view forges further divisions between nature and culture. Thus, while Schlick predicts a utopian evolutionary future for humanity, he also warns against moving towards the contrary direction.

Russell's bold proposal to limit working hours appears to be quite reserved when contrasted with Schlick's bold vision of the transformation of all work into play. This difference is partly reflected in their ways of applying their accounts of work to their specific views of academic work. Russell sees universities as a way of systematically pursuing what had initially arose as a by-product of leisure time, i.e. the pursuit of knowledge for its own sake. Apart from various other disadvantages of this systematic pursuit of knowledge, such as its potential stifling of originality, the basic problem which Russell sees as faced by universities is a split between academic life and the world outside it. While the world at large is more and more engaged in work, academics are engaged in paradigmatically 'unutilitarian pursuits'.[26] In Russell's view, academics thus

> tend to be unaware of the preoccupations and problems of ordinary men and women; moreover their ways of expressing themselves are usually such as to rob their opinions of the influence that they ought to have upon the general public.[27]

This outlook may provide some of the reasoning behind Russell's work as a public intellectual, which can be seen as at least in part his way of attempting to breach this gap. Yet one academic's outreach programme would be completely inadequate in a

[26] Russell, 'In Praise of Idleness', p. 27.
[27] Ibid.

world increasingly too busy to deal with 'unutilitarian pursuits'. Russell's proposed solution to this is the four-hour day, which will give everyone leisure to engage in such pursuits for no gain.

What Russell did not foresee in the 1930s was that the tension between the 'unutilitarian' world of universities and the utilitarian pursuits of the world outside academia could be resolved by the transformation of the academic vocation into something more closely resembling work. Given that his conception of work is modelled on manual labour, Russell seems to think of the academic pursuit of knowledge as, by default, a kind of leisurely pursuit, almost a hobby. Schlick's account of work is better equipped to handle this issue. On the basis of his definition, Schlick could clearly see that academia can and does involve work, though he questions whether it should. In his view, insofar as the activities of academics are undertaken for the sake of some other end, such as academic advancement, money, or power, they are to count as work. In Schlick's account, however, the genuine pursuit of scientific knowledge must be a form of play, i.e., an activity undertaken for its own sake. Science, in Schlick's account, is the search for truth, undertaken for its own sake, regardless of the various practical benefits it may also bring about.

In the above I have claimed that, despite their various differences, Russell's and Schlick's accounts of work call for future societies in which work is reduced and play and leisure are highly valued. Though both Russell's and Schlick's accounts of work come from a time very different from the present, they both serve as reminders of the evitability of the work ethic. They call us to think of the destructive effect such an ideology may have on the environment, as Schlick warns, and also, as both Schlick and Russell insist, on the development of human culture.

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Bertrand Russell on Automation: How Necessary are Human Beings?

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In 1951 Bertrand Russell asked whether or not human beings are truly required, or even desirable, for the many tasks that they then performed. Political scientist Thomas Rid, of Johns Hopkins University, has recently publicised in his recent history of cybernetics and on social media[1] a little-known essay by Russell in *Everybody's Weekly* that bears the provocative title: "Are Human Beings Necessary?"[2]

Rid, in Chapter Three of his book, draws our attention to Russell's article in the context of a discussion of mid-twentieth century thinking on automation. He situates the article in the context of a discussion of Norbert Weiner's seminal work on cybernetics, especially his 1950 book, *The Human Use of Human Beings*. Russell's short but fascinating article, although not a detailed book review, is in part stimulated by his reading of Weiner's book.

Russell, in his 1951 article, makes several powerful and potentially disturbing points and predictions, linked to his anti-totalitarianism during the early Cold War. He foresees an ominous choice before humanity possibly within a few short years, and certainly by the end of the 20th century. Russell thinks that if we do not, as a species, become clearer and more determined on the proper ends of human life, then our automation may become the prime instrument of own unspeakable oppression.

This oppression may be worse, he thinks, than the totalitarianism of his day. It would consist of an automated machine technology being used to wage another world war, and then to subjugate and control human beings to an extent beyond the wildest dreams of totalitarian dictators. The machines, programmed by technocrats in the service of state masters, would reinforce and control society to the strictest degree. His chilling prophesy of a possible future is all the more dismal, Russell thinks, due to the lack of any capacity of machines for human bonds and emotions, and for the arts and

[1] Rid (2016), p. 85; Rid (2018).
[2] Russell (1951a).

sciences. This version of the world's future would be buttressed by state propaganda and a technocratic ethos. In short, a mechanical totalitarianism of our own making.

However, Russell is not entirely without hope. He thinks that a far brighter future linked to automation may well await us, should we have the wisdom to implement it. This brighter future would be characterised by a society with much more leisure time due to machines liberating us from drudgery. We would then be free to pursue friendship and the arts in a world in which we would all be aristocrats ruling over mindless mechanical slaves. In a striking foreshadowing of the guaranteed minimum income proposal, he suggests that we might all work one hour a day, with almost all of our income consisting of a division of the fruits of automation's labour. Russell sees this as a distinct possibility, but only after at least half a century of class warfare. Mitigated optimism, indeed.

Russell's long and illustrious career was in full throttle in 1951. Then in his late seventies, he had won the Nobel Prize for Literature the previous year, and he was active on a number of political fronts, including the anti-Communist Congress for Cultural Freedom. Russell was deeply concerned about the place of science and technology in society during this period, and in particular, about the prospect and value of a future technocracy. One of his works on social philosophy, *New Hopes for a Changing World*, also came out in 1951. In it, the value of wisely-applied science and technology was justly affirmed.

A book perhaps more germane to our theme was published the following year, *The Impact of Science on Society*, and it was based upon his lectures at Columbia and Oxford on the same themes. In it, Russell distinguished between what might be termed good and bad forms of technocracy, or "a scientific society," in his terms. This distinction is in keeping with his *Everbody's Weekly* article of the preceding year. The former promised to harness science and technology for human development and freedom, and the latter threatened to end all human development and freedom in the interest of the totalitarian state, understandably a major preoccupation of his. He preferred some form of global democracy, to be determined, but it was to have fierce power on what he saw as existential questions, such as overpopulation. Russell wrote:

> My conclusion is that a scientific society can be stable given certain conditions. The first of this is a single government of the whole world, possessing a monopoly of armed force, and therefore able to enforce peace.

> The second of these is a general diffusion of prosperity, so that there is no occasion for envy of one part of the world for another. The third condition (which supposes the second fulfilled) is a low birth rate everywhere, so that the population of the world becomes stationary, or nearly so. The fourth condition is the provision for individual initiative, both in work and play, and the greatest diffusion of power compatible with maintaining the necessary political and economic framework.[3]

Deeply concerned by the prospects of nuclear war and concerned to develop strategies for avoiding the consequent destruction of civilization by lethal technology, Russell advocated what might be termed a limited technocratic model for the alleviation of global problems. This may well have been at odds with his stated commitment to democracy. In the end, he believed that humanity could go either way: towards greater happiness through rational planning for good ends, or into the abyss of totalitarianism.[4]

It is clear that by 1951, Russell was ambivalent about automation. He thought that if we could just change the way we see work and technology, then we could be happier with more freedom to pursue our own interests, given an increase in our leisure time. This is in keeping with his strong sense of the need for balancing individual freedom with social good.

Whether the cause be conscription during the First World War, anti-totalitarianism during the Cold War, or—towards the end of his exceptionally long and active life—America's prosecution of the Vietnam War, Russell sought to combine his belief in the power of civic action with a sense of the common good of humanity.

It should be noted that there are some earlier indications of what Russell would come to say in his 1951 *Everybody's Weekly* article. In his 1938 book *Power: A New Social Analysis*, Russell is clear in his warnings to humanity concerning the scope and dangers of rampant technological power:

> Mechanical power, I am convinced, tends to generate a new mentality, which makes it more important than in any former age to find ways of controlling

[3] Russell (1985), p. 102.

[4] I have recently attempted to develop the philosophical implications of technocracy in Litwack (2018a) and Litwack (2018b).

> governments. Democracy may have become more difficult, owing to technical developments, but it has become more important. The man who has vast mechanical power at his command is likely, if uncontrolled, to feel himself a god.[5]

Still earlier—in 1932—Russell published an only slightly ironic article, far better known than his 1951 piece: "In Praise of Idleness." Here, he lamented the fact that what he saw as a distinctly modern culture of hard work was based on a combination of the interests of aristocrats who did not work and the gullibility of working-class people who were indoctrinated into believing that productivity that profited others makes the world go round. Russell held at times radically left-wing views. However, he didn't subscribe to the widespread view, especially promoted by communists, that workers were morally better as a class than capitalists primarily because of their industrial labour. He already thought, in 1932, that the real and desirable revolution for the working class, and ultimately for all classes, lay with more efficient means of production and automation. Russell didn't use the word "automation," which was yet to be coined,[6] but it is clear that this process was very much on his mind in 1951.

He writes, in "In Praise of Idleness":

> Leisure is essential to civilization, and in former times, leisure for the few was only made possible by the labours of the many. But their labours were valuable, not because work is good, but because leisure is good. And with modern technique it would be possible to distribute leisure justly without injury to civilization. Modern technique has made it possible to diminish enormously the amount of labour required to secure the necessaries for everyone.[7]

In other, words, work to live—don't live to work. Also, make use of organized industrial science and technology in order to do this, and people will tend to be happier. This is best seen as a prophetic call for the intelligent and well-intentioned

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[5] Russell (2004), p. 20.

[6] It was likely coined by the American automotive engineer D.S. Harder shortly after the Second World War, according to Mikell P. Groover in the *Encyclopedia Britannica*. See Groover (2020).

[7] Russell (2015), p. 65.

application of automation on as broad a scale as could be imagined—across all industry.

Russell thought that some of the things that he valued most, such as art and philosophy, could only flourish with a reduction in labour. Give people more time, and they will likely try to better themselves. Maybe. That very probably won't *always* be the case. Given the broad range of value systems, interests, and personality types among us, there is likely to be some real variation in this matter. How you spend your free time says much about what you value. However, if we could get more people to value cultural, and it should be added, ethical pursuits like community and charitable work, then the freeing up of more regular time for leisure is likely to be on balance a good thing. We can only hope that this is well on its way, as our era becomes increasingly automated. This is among the most pressing of debates, given the exponential growth of automation in recent years. Russell's philosophy of work and automation is best seen as a foreshadowing of things to come. In that regard, it would be of interest to take a brief look at some examples of contemporary thought on automation.

The predictions concerning automation's scale are nothing short of striking. Some key prognostications: Andy Haldane, Chief Economist of the Bank of England, predicted in 2015 that close to half of all jobs in the UK alone would be at risk in the near future due to automation, and a 2017 McKinsey & Company report estimated that at least half of global jobs could be at least partially automated, with sixty percent of them being at least one third automated by 2030.[8] Whether full automation or partial automation due to cobots and task division, the change will further what Klaus Schwab has termed "the Fourth Industrial Revolution," in which the process of integrating high technology into human life will reach new and broader limits.

How shiny an Emerald City are we headed towards? Automation pessimists like Nicolas Carr and Matthew Crawford warn us that what automation takes, humanity loses. They are conspicuously more pessimistic than Russell was.

More particularly, both of these analysts are concerned that we are now, piece by piece, becoming less autonomous, less capable, and more remote from the value of fashioning things than ever before. Nicolas Carr (2015) tells the moving story of Canadian Inuit hunters who have lost their ancient and remarkable tracking skills due to their recent reliance on GPS technology. Where once the people found their path,

[8] Elliott (2015), McKinsey (2017).

now satellite technology does so for them. In this case, a practice which had been an important part of their way of life for centuries was lost among the younger generation within a few short years, courtesy of automated direction-seeking technology. Creative destruction through cutting age convenience, or tragic cultural loss? The jury is out. In any case, it is hard to imagine Russell missing the dilemma here.

Matthew Crawford knows political philosophy, and he knows car and motorcycle mechanics too—a rare combination. In his book published in 2020, he presents a subtle set of arguments against an uncritical embrace of automation, focussing on the loss of autonomy and the potential technocratic effects of many current automation technologies. Companies and their boards design automated systems with instrumental efficiency and profit maximization in mind. The same narrow quest for efficient instrumental control may well be present in decisions by government experts, thereby increasing tendencies towards technocracy. As such, the technocrats--or executives--may well see highly competent—or "spirited"—individuals with the autonomy and drive to lead as a monkey wrench in the system, no technical pun intended. Crawford writes:

> A spirited readiness to take charge may well be maladaptive. To a committee designing an automated system, such a disposition in the operator—a confident human *individual*—may appear as a bug in the system. So there is a kind of character formation of the operator that needs to be accomplished, a reorientation that emphasizes the limits of his own capacities.[9]

Conversely, automation optimists like John Danaher and Jerry Kaplan have argued recently that an automated future may well be a better future. Danaher holds that this is because automation will allow us to rethink, and even potentially eliminate, work in a transvaluation of our identities and meaningful activities in ways that will increase self-fulfilment and give us freedom from the continual need to secure a livelihood. In his 2019 *Automation and Utopia: Human Flourishing in a World Without Work*, Danaher asks bold questions about whether we should define ourselves by work at all, and ends with an endorsement of a VR future, or "Virtual Utopia." Philosophers before Russell as diverse as Plato, Aristotle, Adam Smith and Hannah Arendt have all,

[9] Crawford (2020), p. 125.

in different ways, affirmed the centrality of work to both personal and social identity. Maybe it's time for a reset, Danaher suggests. If so, future historians—whether humans or AIs—may well come to see today's world as being at the dawn of a new and freer era, one characterized by a liberation by machine intelligence from the need to work at all.

Kaplan holds that automation will expand our opportunities for economic growth and that steps can be taken to shield us from what John Maynard Keynes called "technological unemployment" as far back as 1930. The author of *Humans Need not Apply: A Guide to Wealth and Work in the Age of Artificial Intelligence* (2015), has come up with some novel ideas for working with the current and growing phenomenal wave of capital generation in order to distribute a greater share of wealth more equitably. In his view, automation and artificial intelligence, which have over the past half century created major disparities between capital and labour, can also help to generate a bigger piece of the pie for the ninety-nine percent by the use of mechanisms such as generous government loans for strategic investment, corporate incentives, and more control by citizen investors over their own government pensions. Make technology work for us, and then we can decide how much of it we want to use on a daily basis.

How would Russell have seen these contemporary discussions of automation? In keeping with his general conception of work in the books and essays discussed, it is likely that he would have held that the jury is still out. The key question for Russell may well have been: will automation advance human freedom by liberating us from drudgery and soul-destroying tasks, or will it lead to humanity's domination by a technocratic elite armed with machines of great power?

Thomas Rid has done well to bring our attention to what is truly a clever and visionary short article written by Russell in a popular British magazine. When added to Russell's considerably more famous works dealing with social philosophy, the general picture that we get is of a major thinker who not only foresaw, but who endorsed greater automation and efficient management techniques, given the right conditions. Just as today's automation scholars are wrestling with the full implications of an increasingly mechanized world, so too did Russell think—and to a moderate degree, worry—about the future of our relationship with technology. Especially technologies that could fuel a tyrannical form of technocracy.

We can and should ask ourselves what we, in the 21st century, can learn from 20th century philosophy, including Russell's social thought. That includes the timely and

important topic of automation. It is impossible to understand our technological world without a sense of where it came from. Automation has been accelerating over the course of the last few centuries, and it shows every likelihood of expanding dramatically over the next few decades. Increasingly, it will be the motor of industrial civilization. As such, it is of great interest to incorporate the thoughts of past thinkers like Russell into the ongoing debates around it. We have much to learn from them, and we can only hope that future generations will learn equally from us. They may well, if Russell was right, have more leisure time with which to do it.

Works Cited

Carr, Nicolas. (2016) *The Glass Cage: Who Needs Humans Anyway?* New York: Vintage.

Crawford, Matthew. (2020) *Why We Drive: On Freedom, Risk and Taking Back Control*. New York: Vintage.

Danaher, John. (2019) *Automation and Utopia*. Cambridge, Massachusetts: Harvard University Press.

Elliot, Larry. (2015) "Robots Threaten 15m UK jobs, says Bank of England's Chief Economist." *The Guardian*, Thursday, 12 November 2015. URL: https://www.theguardian.com/business/2015/nov/12/robots-threaten-low-paid-jobs-says-bank-of-england-chief-economist

Groover, Mikell. (2020) "Automation." *Encyclopedia Britannica*. Published on 22 October. https://www.britannica.com/technology/automation

Kaplan, Jerry. (2015) *Humans Need not Apply: A Guide to Wealth and Work in Age of Artificial Intelligence*. New Haven: Yale University Press.

McKinsey & Company. (2017) "A Future that Works: Automation, Employment, and Productivity." Published online at: https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works_Full-report.ashx

Litwack, Eric B. (2018a) "Wittgensteinian Humanism, Democracy, and Technocracy." *Techné*: *Research in Philosophy and Technology*, first published online on 8 December at: https://doi.org/10.5840/techne2018111486

-----. (2018b) "Technocracy." *The Routledge Encyclopedia of Modernism*, first published online on 24 April at: Article DOI: 10.4324/0123456789-REM1837-1

Rid, Thomas. (2018) Twitter Post. May 15, 4:23 PM. This contains a scan of Russell's *Everybody's Weekly* article: https://twitter.com/RidT/status/996410710346231808

-----. (2016) *Rise of the Machines: A Cybernetic History*. New York and London: W.W. Norton & Company.

Russell, Bertrand. (1985) *The Impact of Science on Society*. Abingdon and New York: Routledge Classics; first published 1952.

-----. (2004) *Power: A New Social Analysis*. Abingdon and New York: Routledge Classics; first published in 1938.

-----. (2015) *In Praise of Idleness and Other Essays*. Philadelphia: R.P. Pryne. The title essay was originally written in 1932.

-----. (1951a) "Are Human Beings Necessary?" *Everybody's Weekly*, 15 September, p. 13.

-----. (1951 b) *New Hopes for a Changing World.* London: Allen &Unwin.

Schwab, Klaus. (2018) *Shaping the Future of the Fourth Industrial Revolution: A Guide to Building a Better World*. London: Penguin Books.

Weiner, Norbert. (1950) *The Human Use of Human Beings*. First edition. London: Eyre and Spottiswoode.

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