

# ORIGINAL ARTICLE OPEN ACCESS

# **Macdonald Before Quine on Truth by Convention**

Oliver Thomas Spinney

Department of Philosophy, University College London

Correspondence: Oliver Thomas Spinney (o.spinney@ucl.ac.uk)

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### **ABSTRACT**

I show that Margaret Macdonald anticipated Quine's well-known criticisms of logical conventionalism in her unpublished 1934 PhD thesis, but that she later developed her criticisms in a direction distinct from that of Quine under the influence of Wittgenstein. Macdonald rejected as senseless the suggestion that statements of logical truth admit of justification, through an examination of the use to which such statements are put in ordinary speech.

### 1 | Introduction

Margaret Macdonald (1903-1956) was a prolific philosopher in the analytic tradition whose work has only very recently been subject to serious examination by historians of philosophy.<sup>1</sup> Macdonald published numerous articles in such journals as Analysis, which she edited from the end of the second world war until her premature death, Philosophical Review, Philosophy, and the Proceedings of the Aristotelian Society. She studied with Susan Stebbing for her PhD and with Wittgenstein during a subsequent research fellowship at Cambridge, and though her philosophical interests were continuous with those of her teachers she would also make significant contributions in later years to Aesthetics. The chief aim of this article is a novel assessment of Macdonald's criticisms of conventionalism with respect to logical truths as they appear in her unpublished 1934 PhD thesis<sup>2</sup> and in a short 1940 article titled 'Necessary Propositions'. I show that Macdonald anticipated some of the well-known criticisms made of conventionalism by Quine, but that she subsequently developed her views in a direction distinct from that of Quine under the influence of Wittgenstein.

In section 2 I first outline Quine's critical treatment of conventionalism before describing the positive conception of logic and its epistemic status which he would later advance. The unique status of logic which the conventionalist seeks to establish is, Quine famously argued, an illusion; logical truths differ in epistemic surety from non-logical truths in degree but not in kind.

This material will aid in an assessment of the extent to which Macdonald anticipated the critical views of Quine, and for a contrast between their positive approaches.

In Section 3, I begin by sketching the historical context within which Macdonald's PhD thesis was written. I offer a comparison of Macdonald's and Quine's negative arguments against conventionalism, and I examine the contrasting approaches to logic which they adopt in the light of those arguments. Where Quine would go on to advance his positive approach in 'Two Dogmas of Empiricism', Macdonald, I show, offers her mature view in 'Necessary Propositions'. In the years intervening between her PhD thesis and 'Necessary Propositions' Macdonald would study with Wittgenstein at Cambridge and adopt a methodological approach according to which examination of our use of expressions in ordinary contexts promises to deliver a route towards dissolving philosophical problems in which the misuse of those expressions plays a central role. Macdonald rejects, in 1940, application of the word 'justify' to logical truths as senseless and with it the conventionalist attempt to justify logical truths through appeal to facts concerning word usage.

### 2 | Quine

In this section, I first describe the distinctions Quine draws between different ways in which the notion of convention is relevant

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to considerations of truth, and I identify the specific construal of logic as true by convention which Quine seeks to criticise. This construal, I show, is the subject also of Macdonald's discussions. I then set out Quine's view of the motivations for holding to the relevant construal, before outlining his objections and, briefly, his subsequent positive proposal. I should note here that since there is already a rich extant secondary literature concerning Quine, I do not in what follows enter at length into interpretive controversies over his works. As my chief focus is here on the work of Macdonald, my discussion of Quine should be viewed as preparing the ground for a subsequent treatment of her views in later sections.

In his 'Truth by Convention', Quine (1936)<sup>4</sup> introduces several distinctions aimed at clarifying the target of his criticisms. There are cases of 'conventional' truth which it is not Quine's aim to undermine, namely statements of definition. We might, as a matter of convention, give a definition of the symbol 'e' as an 'arbitrary shorthand for some complex expression, e.g., "thousand meters" (1936: 71). What is conventionally decided in setting up this definition is that the longer phrase 'thousand metres' is capable always of substitution for 'e'. Given our definition, the true statement 'item A is a thousand metres in height' is capable of being 'transformed' (1936: 81) into 'item A is e in height'. Conventional definition here serves to license the rewriting of sentences into more convenient forms, but the truth of our original statement 'item A is a thousand metres in height' is independent of the relevant definition. Quine examines in detail the proposal that statements of mathematics may figure as definientia for statements of logic. An important difference though between cases of logico-mathematical definition and that just considered for the symbol 'e' is that statements of mathematics already possess a 'traditional usage' (1936: 72), while 'e' does not.5 These facts of traditional usage must be respected, Ouine says, in our setting up of definitions in this context, so that we may not simply hew statements of arithmetic from that usage and declare them substitutable for statements of logic. It is precisely the fact that traditional usage does impose these constraints which gives the possibility of defining logical statements in mathematical terms its philosophical interest. Such a project will not though, if executable, involve construing statements of logic as owing their truth to the conventions codified in our definitions. The truth of such statements is presupposed in the giving of mathematical abbreviations and is not explained by them.

The conception of logic as true by convention which is Quine's target of criticism involves a separate notion of convention from that so far employed:

But if we are to construe logic also as true by convention, we must rest logic ultimately upon some manner of convention other than definition: for [...] definitions are available only for transforming truths, not for founding them. [...] Such a second form of convention has long been recognised in the use of postulates.

(Quine 1936: 81)

Postulation here involves determining—deciding—for every sentence in which some symbol may occur, what the

truth-value of the sentence is. In determining those truth-values the meaning of the symbol will thereby have been determined. Logically true statements will be those which include only logical words essentially, and their truth will be a matter of fiat. Quine says,

Since all contexts of our new word are meaningless to begin with, neither true nor false, we are free to run through the list of such contexts and pick out as true such ones as we like; those selected become true by fiat, by linguistic convention.

(Quine 1936: 83)

Imagining that we take the symbol '~' and carry out the procedure described, the result is either that our conventional determination accords with the ordinary usage for 'not', or the determination does not so accord. If it does not accord, and the complaint is made that our determination constitutes a faulty translation, then 'we always have the same answer, "You use the word differently"' (Quine 1936: 83).<sup>7</sup> If it does accord, then the determination is none the less conventional for that reason. Clearly the envisaged procedure is not as it stands capable of being carried out, for the number of sentences in which a given expression may occur are infinitely many, while our capacities for determination are finite. Principles of substitution may, Quine suggests, bridge the gap, though I return to this issue below.

Later, in his 'Carnap and Logical Truth' (1960),8 Quine offers the further distinction between legislative and discursive postulation. 9 Legislative postulation is in Quine's view plausibly a central component of set theory, where 'deliberate choices' (1960: 110) are made and the logical consequences of those choices accepted as true. The introduction of claims concerning sets which conform, e.g. to the strictures of ZF counts as legislative in the relevant sense. Postulation need not always take the legislative form though, for it often involves ordering claims rather than 'fixing' (1960: 111) their truth. Discursive postulation involves the construal of certain claims as relatively more fundamental than others, such that those most fundamental figure as axioms from which others may be deduced. Discursive postulation does not institute truth by fiat, but only arranges truths already accepted according to the requirements of the theorist; and what is a matter of convention here is just the arrangement decided upon. Only legislative postulation 'affords truth by convention unalloyed' (1960: 112), for at the moment of institution the justification for thinking a legislative postulate true may involve appeal only to the act of institution itself. Note here, what Quine insists upon, that it is the act of legislation which is properly considered conventional, and not the statement itself, for a statement first endowed with truth in an act of convention may later be asserted on grounds which make no reference to the decisions of human beings.<sup>10</sup>

The view Quine goes on to criticise cannot be that according to which statements of logic have been endowed with their truth in an act of legislative postulation, for as he notes, 'Relatively few persons, before the time of Carnap, had ever seen any convention that engendered truths of elementary logic' (1960: 108)<sup>11</sup>; if construed as concerning the occurrence of historical acts, the relevant view

is obviously false. Rather, what is under dispute is the contention that the status of logical truths is *as that* of legislative postulates. Wittgenstein draws the following relevant comparison, as recorded in Macdonald's lecture notes:

Suppose we call "2+2=4" the expression of a convention. This is misleading, though the equation might originally have been the result of one. The situation with respect to it is comparable to the situation supposed in Social Contract theory. We know that there was no actual contract, but it is as if such a contract had been made. Similarly for 2+2=4: it is as if a convention had been made.

(Wittgenstein 1979: 157)

Given that no historical act of legislative postulation has occurred with respect to logical truths, what is meant by saying that they are true by convention is that the grounds or justification we may cite for asserting them may include reference only to the possibility of their having been legislatively postulated, and not to any fact which obtains independently of that possibility. Where, according to one construal of social contract theory, 12 the justification for political authority derives from the possibility of our having entered into a contract which, on reflection, we *would* enter into, the justification for our asserting logical truths derives from the possibility of their having being legislatively postulated in ways in which we *could* have proceeded given the choice. The question here then is one of justification, rather than origin.

The criticisms raised by Quine against the view just described are issued in the broader service of undermining its application in drawing a distinction between analytic and synthetic statements. Quine motivates that view through appeal to familiar considerations such as the perceived certainty of logical and mathematical truths as compared with 'empirical' ones, as well as an examination of issues related to the notion of translation. Quine asks us to imagine that we have translated the words 'ka' and 'bu' of some hitherto unknown language as 'and' and 'not', respectively, and that we consequently translate 'q ka bu q' as 'q and not q'. Quine points out though that where assessments of accuracy are concerned, it 'counts overwhelmingly' (1960: 102) against any translation that it involves ascribing to the relevant speakers belief in the truth of 'q and not q'. We cannot, Quine argues, make sense of the supposition that the members of a given community are 'pre-logical'13 in their assertions, for the supposition is itself sufficient reason to reject the translation upon which it is based: 'pre-logicality is a trait injected by bad translators' (1960: 102). It is on the grounds of this observation that Quine says, 'further plausibility accrues to the linguistic doctrine of logical truth when we reflect on the question of alternative logics' (1960: 101), and later 'That logic is thus tied to translation does, on the face of it, conspicuously favour the linguistic theory of logical truth' (1986: 96). What underpins the thought that logic's connection with translation lends support to the conventionalist approach is the claim that facts about meaning have the status of legislative postulates in the justificatory (but not genetic) sense outlined above. Since we can only entertain symbols as meaning what we understand by 'and' and 'not' in contexts which preserve the truth of ' $\sim$  (  $\sim p \& p$ )' the suspicion is that truth here is *wholly* a matter of meaning; if facts about meanings have the status of legislative postulates, so also then do logical truths. These considerations notwithstanding, Quine rejects the view which they allegedly support, for reasons which I shall now outline.

In 'Truth by Convention' Quine writes,

In the adoption of the very conventions [...] whereby logic itself is set up, however, a difficulty remains to be faced. Each of these conventions is general, announcing the truth of every one of an infinity of statements conforming to a certain description; derivation of the truth of any specific statement from the general convention thus requires a logical inference, and this involves us in an infinite regress.

(1936:96)

Recall, above, that the possible sentences in which some piece of logical vocabulary may occur are infinitely many, and that consequently the act of legislative postulation cannot proceed on a case-by-case basis. We may then introduce general conventions such as,

For all *x* and for all *y*, if *x* and *y* are true then the result of substituting '*p*' for *x* and '*q*' for *y* in 'if *p* then *q*' is true.

Then, if we assume that two items ' $\alpha$ ', ' $\beta$ ', are true, and that we have substituted them for 'p' and 'q' respectively in 'if p then q', we may infer, on the basis of our general convention, that 'if  $\alpha$  then  $\beta$ ' is true. The formulation of our general convention here though is aimed at contributing to a determination of what the phrase 'if … then …' means, <sup>14</sup> but the use of that convention requires a prior grasp of modus ponens in order to derive the target conclusion. Quine characterises the argument in terms of a regress, for the project of legislative postulation must, if we are to have convention 'all the way down' so to speak, be applied to the rule of inference used in deriving our target conclusion. But the same issue will obviously re-emerge, ad infinitum. Quine later summarises the argument:

Briefly the point is that the logical truths, being infinite in number, must be given by general conventions rather than singly; and logic is needed then to begin with, in the meta theory, in order to apply the general conventions to individual cases.

(1960:108)

We might accept the argument here while remaining puzzled over the observations cited above in support of conventionalism. What shall we make now of the distinctive certainty attached to truths of logic as compared with empirical claims, or the close relationship between meaning and logical truth exhibited in our inability to accept translations of the kind described above? In response to the second point here Quine says that our reaction to translations ascribing, e.g. rejection of the law of non-contradiction to speakers is equally well

accounted for by appeal to the obviousness of that law as it is by a conventionalist thesis. 15 For Quine's response to the first point, we must advert to the position of 'Two Dogmas of Empiricism' which, since it is extremely well known and has elsewhere been treated at length, I will discuss relatively briefly here. <sup>16</sup> There Quine describes the system of our present beliefs as so structured that some elements of the system are logically interconnected with very many others, while others are less deeply entangled, and where the revision of any given belief potentially occasions also the revision of those with which it is interconnected. In light of some 'recalcitrant experience' (1951: 40) which demands a revision, our 'natural tendency' (1951: 41) is to revise in such a way as to disrupt the total system as little as possible, and so our inclination is to jettison those beliefs least entangled with others in pursuit of harmony between system and experience.

Quine suggests that the perceived certainty of logical and mathematical truths is not explained by their possession of a characteristic named 'analyticity', explicable in conventionalist terms and not possessed by 'empirical' claims comparatively less certain. Rather, *all* statements are 'empirical' insofar as any statement may in principle be revised in the light of recalcitrant evidence, but logical truths are those so deeply entangled with others in our system of beliefs that we are loathe to revise them except in extraordinary circumstances<sup>17</sup>:

If revisions are seldom proposed that cut so deep as to touch logic, there is a clear enough reason for that: the maxim of minimum mutilation. The maxim suffices to explain the air of necessity that attaches to logical and mathematical truth.

(1986: 100)

It is just this depth of entanglement which distinguishes logical truths from others, where depth here is conceived of by Quine as a matter of degree. The justification for holding fast to belief in the law of non-contradiction is no different in kind from the justification for assenting to established scientific laws. The 'maxim of minimal mutilation' figures as one among many criteria governing theory choice throughout the system.<sup>18</sup>

To close this section, I offer some remarks about the historical context within which Quine's contributions have been situated by others. This will aid in an assessment of the extent to which Macdonald's works anticipate those of Quine and to which they demand therefore the attention of historians and philosophers. Gary Ebbs summarises the 'standard view' 19:

Authors of encyclopaedia entries and survey articles and books have over the years converged on a concise standard story of W. V. Quine's debate with Rudolf Carnap about the relationship between linguistic convention and logical truth. The story, which has been told and retold in countless journal articles in philosophy of language, logic, and mathematics, is that Quine won the debate mainly, if not only, because he completely discredited the

idea that logic, or any other part of science, is true by convention.

(2011:193)

The orthodox historical view, which Ebbs goes on to challenge, ascribes to Quine a decisive victory in 1936 over Carnap with respect to conventionalism, where the dawning of a post-positivist period in philosophy may be owed, at least in significant part, to the victory ascribed. Ebbs argues both that Carnap did not hold to the position criticised by Quine, and that Quine was aware of this fact; rather, Quine's criticisms were aimed at a view to which he himself was initially attracted, though found on reflection inadequate. Sean Morris (2017) has in turn argued that Quine in 1936 had the views of C. I. Lewis in mind; and this point will be relevant below. Whoever the real target though, it is indisputable that Quine's arguments have been viewed as successfully defeating *a* conventionalist approach as defined above. Paul Benaceraff may for instance be taken to exemplify a widespread attitude where he says, <sup>20</sup>

Quine, in his classic paper on the subject, has dealt clearly, convincingly, and decisively with the view that the truths of *logic* are to be accounted for as the products of convention [...].

(Benacerraf 1973: 676, emphasis original)

More recently, Jared Warren has said that 'The earliest major criticism of logical conventionalism is also the most historically influential. It comes from Quine' (*Warren* forthcoming.), and that Quine's argument is 'one of the most lauded critical pieces in contemporary philosophy' (Warren 2020: 181).<sup>21</sup> Given the enormous influence of Quine on subsequent developments then, it will constitute a significant discovery to show that similar considerations to those he articulates were formulated at an earlier stage by a figure now absent from discussions of conventionalism and of its historic decline.

# 3 | Macdonald

# 3.1 | 'The Logical Characteristics of Expression'

Macdonald's PhD thesis, 'The Logical Characteristics of Expression', was completed in 1934 at University College London under the supervision of Susan Stebbing. Macdonald's principal concern there is with an examination of those conditions required for the possibility of linguistic meaning. To this end she offers an extended critical treatment of both logical positivism and pragmatism, and it is from this treatment that her objections to conventionalism emerge. I note here that my aim in what follows is not an assessment of the accuracy with which Macdonald interprets those she discusses, but rather an understanding of her philosophical objections to those figures, whether faithfully portrayed or not.

Macdonald attributes to the logical positivists, and to Carnap in particular, commitment to a 'pre-established harmony' obtaining between speakers' minds in virtue their grasping a common structure, <sup>22</sup> where appeal to this common structure is aimed

at circumventing the solipsism which threatens an empiricist–phenomenalist language. The notion of structure here is given a more complete explanation, according to Macdonald, by C. I. Lewis; though Lewis, as Macdonald notes, had a development of C. S. Peirce's views in mind and not those of the positivists. She quotes from *Mind and the World Order* in support of a continuity of concern between Carnap and Lewis:

The world of experience is not given in experience: It is constructed by thought from the data of sense. This reality which everybody knows reflects the structure of human intelligence as much as it does the nature of the independently given sensory content. It is a whole in which mind and what is given to mind meet and are interwoven.

(Lewis 1929: 29-30).

The common 'structure of human intelligence' is determined, according to Lewis, by shared categories or concepts which we contribute to experience.<sup>23</sup> Macdonald emphasises Lewis's characterisation of a priori truths concerning the categories as legislative<sup>24</sup>:

The necessity of the a priori is its character as legislative act. It represents a constraint imposed by the mind, not a constraint imposed upon mind by something else.

(Lewis 1929: 197)

In support of his contention, mentioned at the close of Section 1, that Quine's chief target was Lewis, Morris (2017: 371) identifies the continuity in terminology with respect to 'legislate' and its cognates appearing both in *Mind and the World Order* and 'Carnap on Logical Truth'. If Morris is correct in this contention, then Macdonald's anticipation of Quine is striking not only in the similarity of argument they employ and which I shall shortly outline, but also in their having the same target in mind.

Macdonald notes also Lewis's conception of a priori truth as instituted by *fiat*:

The a priori has its origin in an act of the mind. It has in some respects the character of a fiat and is like deliberate choice. The a priori is the peculiar possession of the mind because it bears the stamp of the mind's creation and the criterion of creativity is not inevitability but its very opposite, the absence of impulsion and the presence of conceivable alternatives.

(Lewis 1929: 213)

Macdonald draws a distinction between Lewis and the 'traditional rationalists' (1934: 169) who held that a defining feature of necessary truths is the inconceivability of their being false. Lewis, by contrast, advances the view that a priori (and necessary) truths are conceivably false, and in fact that a corollary of their being legislatively instituted is precisely that they are deliberately chosen in light of available alternatives. <sup>25</sup> The law of

excluded middle, for example, 'represents only our penchant for simplicity' (1929: 247), in Lewis's view, and is capable of being sensibly denied.<sup>26</sup> Lewis's commitment to the conceivability of alternative a priori truths to those we do in fact accept has its source, Macdonald argues, in his appreciation of developments in geometry and logic<sup>27</sup>:

But in his conception of 'alternatives' Prof. Lewis has obviously been influenced by the discovery of 'alternative' geometries and 'alternative' logics or what should rather be called 'alternative logical systems'.

(Macdonald 1934: 170)

Lewis includes amongst those claims true by convention and admitting of conceivable alternatives principles of logic, according to Macdonald:

[Lewis] goes on to say that the Law of Excluded Middle represents only our penchant for simplicity; our decision to make a dual classification of all things instead of a tripartite which we might have chosen [...].

(Macdonald 1934: 171)

But whether true or not of any a priori statements this claim cannot, in Macdonald's view, be applied to logic without exception. She writes,

[Lewis] nowhere, I think, suggests that the Principle of Contradiction should have alternatives and the supposition seems obviously absurd. [...] Nor does this appear to follow merely from a decision about the use of words for the principle must itself govern such decisions if they are to be consistent with themselves. It would seem then as though the principles of logic or at least the principle of non-contradiction or self-consistency must be on a different level even from other necessary and a priori propositions and that it cannot have alternatives.

(Macdonald 1934: 171-172)

Here, Macdonald expressly rejects conventionalism as applied to certain fundamental principles of logic on the grounds that the decisions conceived of as instituting truths of logic must themselves be governed by the truths in question in order that they be executed consistently. In deciding, e.g. that the statement 'For all p, not both p and not-p' is true, we must antecedently be governed by our present interpretation of the target claim or else the truth of that claim will not be sufficient to rule out also its being counted as false. We cannot, according to Macdonald, therefore freely adopt the principle of non-contradiction, as it were, ex nihilo, and so its acceptance cannot be viewed as an act of legislation. While Macdonald does not frame her argument here as involving an infinite regress, her emphasis on the requirement that logical principles be operative in advance of any legislative decision clearly anticipates the concerns of Quine, who in summary of his argument writes

In a word, the difficulty is that if logic is to proceed mediately from conventions, logic is needed for inferring logic from the conventions.

(Quine 1936: 97)

Macdonald's anticipation of Quine should then be clear. Her denial that the adoption of non-Euclidean geometry constitutes a useful analogy for understanding logical truth anticipates also remarks of Kripke<sup>28</sup>:

The point is that logic, even if one tries to throw intuitions to the wind, cannot be just like geometry because one cannot adopt the logical laws as hypotheses and draw the consequences. You need logic in order to draw these consequences.

(Kripke 2024: 20)

It is not my aim to argue that the historical influence of Quine as identified, e.g. by Benaceraff and Warren must now be reappraised; it remains a fact that Quine's critical treatment of conventionalism has had the effect described above. And since Macdonald's first expression of the relevant objection has never been published neither am I arguing that she has been overlooked by those who, having credited Quine with originating the objection outlined, have subsequently rejected conventionalist explanations of logical truth along similar lines.<sup>29</sup> Rather, it is hoped that an appreciation of Macdonald's novelty in this context will contribute to the broader investigations into her works now being undertaken by historians of philosophy. It is further evidence of Macdonald's insight and originality that she developed the relevant criticism of conventionalism prior to Quine, and this evidence ought to figure in our continuing assessment of her place in the history of philosophy.

While Macdonald is sympathetic to Lewis's "debunking" of the a priori and its aura of Platonic and other traditional mystification' (1934: 177), she is, as we have seen, ultimately dissatisfied with his positive conception of logical truth. Macdonald argues, moreover, that Lewis's conception of legislative acts as 'social achievements' (1934: 176) rooted in shared 'biological needs' (1934: 177) which determine the categories of thought and speech is intolerably idealist. She says, of Lewis's view, that

[T]he whole position is very close to that of Kant. We do not agree because we have a common world but we have a common world because we agree. [...] But it seems to me that Lewis succeeds only by giving a peculiar metaphysical status to biological needs and ending in a strange sort of idealism which makes it difficult to account for knowledge.

(Macdonald 1934: 176-177)

What Lewis offers us, and what Carnap in Macdonald's view does not,<sup>30</sup> is a reason to believe in an objective basis for communication, to wit the shared biology, attitudes, and interests from which our legislation emerges. But the basis for objectivity here is, in Macdonald's view, undermined by its dependence upon the constitution of human beings. Macdonald suggests

that both Lewis and the logical positivists have denied that the content of experience may serve to underpin the objectivity of communication due to their conception of experience as wholly private, and that legislative categories and shared structure, respectively, have therefore been made to do duty in securing the requisite objectivity. In response Macdonald makes a distinction between the act of experience, which is indeed inaccessible to others, and the content experienced, which in her view need not be.31 Having made that distinction Macdonald argues that the objective basis for communication is the existence of an empirically observable and mind-independent reality to which we may refer in speech. Macdonald does not though in 1934 offer a full explanation of necessary truth with which to replace that given by Lewis, and while her position involves 'the taking of some metaphysical standpoint' (Macdonald 1934: 6) concerning the world to which we refer, Macdonald is hesitant to draw out these implications in detail:

The only alternative seems to be that we can be acquainted with common properties, which include qualities, instances of which we can indicate, in the last resort, as the basis of our reference to the common world about which we communicate. But the nature and status of universals is a metaphysical question whose further discussion lies beyond the scope of this essay.

(Macdonald 1934: 203)

Macdonald accepts here a metaphysical basis for the philosophy of language though she does not offer a comprehensive explanation of necessity in these terms. We shall see, in the next section, the way in which Macdonald subsequently addresses this issue while manifestly rejecting a metaphysics of necessary truth.

# 3.2 | 'Necessary Propositions'

Having completed her PhD Macdonald began in 1934 a fellowship at Cambridge lasting until 1937. During her attendance at Wittgenstein's lectures there she took notes later edited and published alongside those of Alice Ambrose,<sup>32</sup> and though Macdonald was not selected by Wittgenstein to attend the dictation sessions from which *The Blue and Brown Books* emerged<sup>33</sup> she was able to obtain copies of these which she retained for the rest of her life.<sup>34</sup> A remark of Macdonald's from 1938 exhibits the influence of Wittgenstein on her approach to philosophy:

[I]t is suggested that philosophical problems can be solved by understanding how language is ordinarily used, how certain uses of it have provoked these problems and how it has been misused in many alleged solutions.

(Macdonald 1938: 312)

This remark occurs in an article titled 'The Philosopher's Use of Analogy', in which Macdonald identifies philosophical problems with instances of confusion rooted in the employment of

inappropriate analogies.<sup>35</sup> The comparison of traditional philosophy with (inapt) analogy here echoes Wittgenstein who, in *The Big Typescript*, says,

If I correct a philosophical mistake and say that this is the way it has always been conceived, but this is not the way it is, I always point to an analogy//I must always point to ... .//that was followed, and show that this analogy is incorrect. // ... . I must always point to an analogy according to which one had been thinking, but which one did not recognize as an analogy.//

(2005: 302e)

Macdonald's influences during and prior to this period undoubtedly include a range of figures such as Peirce, Stebbing, and Ramsey.<sup>36</sup> Macdonald's characterisation of the source and remedy for philosophical problems in 1938 though is certainly reminiscent of that articulated by Wittgenstein. In what follows I shall emphasise Wittgenstein's influence upon Macdonald, though my emphasis should not be interpreted as excluding the possibility that alternative sources of inspiration figured in Macdonald's philosophical development.

Macdonald's (1940) article 'Necessary Propositions', published in Analysis, was prompted by an article in Mind of the same year by Norman Malcolm titled 'Are Necessary Propositions Really Verbal?'. There Malcolm defends an approach to necessary statements according to which our *justification* for saying, e.g. 'if S is an eye doctor, then S is an oculist' involves exclusive appeal to facts about word usage; but this does not imply, what Malcolm denies, that statements<sup>37</sup> of the relevant kind express facts about word usage, for facts about word usage are patently contingent. Moreover, the use to which necessary sentences are put in speech is not, in Malcolm's view, that of factual description but instead they may be employed in the completion of certain tasks such as calculating and inferring. What the characterisation of necessary statements as verbal misleadingly encourages, Malcolm says, is the contradictory conclusion that they express contingent truths. What the characterisation correctly indicates, though, is that the source of justification for asserting necessary statements consists exclusively of facts concerning word usage. Consequently, Malcolm describes as 'an illuminating statement' (1940: 200, emphasis original) the claim that necessary sentences are 'verbal', for it contributes to our no longer conceiving of them as describing facts of a peculiar (viz. Platonic) kind, and as justifiable on metaphysical grounds discoverable by a peculiar faculty of mind. Malcolm claims also that, while false, the construal of necessary statements as expressing rules for the use of words has 'great merit' (Malcolm 1940: 203), for here again the comparison serves to steer us away from the conception of these items as descriptive and towards an understanding in which their role as aids to the performance of certain tasks is made central.

Macdonald's article is aimed at the view expressed by Malcolm just described, for it is, she says, both prevalent and unhelpful. While Malcolm's view discourages us from construing necessary statements as either descriptive of metaphysical facts or discoverable by means of peculiar mental faculties, 'It seems doubtful [...] whether these remarks are more illuminating than those they oppose' (Macdonald 1940: 47). Macdonald offers several lines of criticism, some of which clearly echo the views we have seen her advance in 1934:

[A]lthough deductive processes enter into any intelligent playing of a game, the rules of no such game enter into the processes of deduction. Without processes of reasoning based on logical principles there could be no conclusions drawn even from conventions. Necessary propositions and rules of games, therefore, seem on such a very different level that comparison between them is almost unprofitable.

(Macdonald 1940: 50)

The comparison of necessary statements with rules of games here is evidently viewed by Macdonald as constituting a form of conventionalism, according to which the relevant truths are instituted by persons and the grounds of their truth explicable solely in terms of their being so instituted. Macdonald argues that our institution of conventions could not be fruitful in the absence of logical principles upon which our reasoning is based. The relevant logical principles<sup>38</sup> are therefore prior in order of explanation to any rules which may be adopted by means of convention, and so the principles in question may not be identified with conventionally adopted rules. In the absence of any broader context, it might be natural to view Macdonald's objection here as rehearsing that articulated by Quine in 1936 and which had been by 1940 receiving increased attention.<sup>39</sup> Given what has been said in the preceding sub-section, though, this reading of Macdonald must be rejected. Instead, we should view this passage as echoing the argument Macdonald gives against Lewis in 1934. There we saw Macdonald emphasise the requirement that principles of logic be operative in advance of any attempt to instate them through convention. In 1940, Macdonald again identifies the priority of logic over convention and to the same effect. In light of this continuity, we ought to conclude that Macdonald levels against Malcolm similar criticisms as she had in mind against Lewis, rather than that an intervening influence of Quine is responsible for her employment of the argument in question to a novel target. None of this though rules out the possibility that Macdonald had come into contact with Quine's work. In fact, as Misak and Kremer show in their (Misak and Kremer forthcoming: note to letter 28), Macdonald was in attendance at the symposium on truth by convention in which Ayer refers to Quine's (1936). It remains however an uncharitable interpretation which awards to Quine credit for Macdonald's 1940 position, for as we have seen, her first expression of the relevant anti-conventionalist argument is given some years prior to his own.40

Further criticisms of Malcolm given in 'Necessary Propositions' but not anticipated in Macdonald's thesis focus on the conception of necessary statements as admitting of justification, and it is here that the influence of Wittgenstein on Macdonald is felt most strongly:

And suppose it were asked, 'And why do you accept the Principle of Contradiction?'. Why is it logically necessary? I should say there is no answer to this question. There is no *reason* for the necessity of the ultimate principles of deduction as they are the reason for the necessity of the conclusions drawn in accordance with them. Nor does it follow that their necessity is *irrational*. What is irrational is to ask for a reason and give an inappropriate one where none is required. And that is what philosophers from Plato to the Positivists have done. [...] The principles of logic, one might say, are their own justification, which is to say that they need none.

(Macdonald 1940: 48-49, emphasis original)

Macdonald here identifies the role played by necessary statements as that of *reasons* for conclusions reached by deductive means. To ask after reasons for thinking logical principles themselves true is, Macdonald says, 'irrational', for they do not stand in need of justification. In *The Big Typescript*, Wittgenstein makes several remarks in which the role of justification is examined and its limits indicated:

It is one thing to justify a thought on the basis of other thoughts – something else to justify thinking. It is this, I believe, that makes our investigation purely descriptive.

(180e)

I can justify  $5^2$  by means of  $x^2$  if in so doing I contrast  $x^2$  with  $x^3$ , or another sign in the system. The difficulty is obviously not to try to justify what admits of no justification. If one asks: "Why do you write  $5^2$ ?" and I answer "It says I'm to square", then that is a justification – and a *complete* one – . To demand a justification in the sense in which this isn't one is senseless.

(219e)

The phenomenon of justification. I justify the result  $3^2$  by  $x^2$ . That's what all justifications look like. In a certain sense this doesn't get us any further. But of course it can't get us *further*, i.e. to a metalogical realm.

(220e)

There are contexts in which it is meaningful to ask after, and to provide, a justification, and there are contexts in which the notion of justification has no sensible application. When calculating we might for instance ask how someone reached a certain result and may if shown their working accept it as justifying their answer. If upon being shown that working however we take issue with some particular step, e.g. that expressed by 'divide both numerator and denominator by the same number' and ask after the justification for *its* being employed, our correspondent is likely to draw a blank, and rightly so. The word 'justify' does not have a use in the relevant context beyond that of asking for, and offering in return, steps of the kind just given. This is a *descriptive* claim about the meaning of the word 'justify'; this word just does not have a use outside of those contexts in which it is clear *what* is being asked for and

where transactions are completed by means of its employment in ways with which we are all familiar.

Insofar as she holds that the principles of logic which we employ in the justification of inferences do not themselves admit of justification, Macdonald's view here is clearly in agreement with that expressed by Wittgenstein, for whom the steps of calculation are not capable of justification, but figure rather as means of justification themselves. Macdonald concludes:

And logical necessity needs no explanation. To describe the nature of necessary propositions is to describe how they function in the different processes of reasoning. And to do that one must know how to reason. [...] [T] heir necessary character is revealed in their use. But they are not necessary *because* they are used in this way. For to ask *why* they are necessary is senseless.

(Macdonald 1940: 50-51, emphasis original)

This passage demonstrates Macdonald's concern with attending to the use of necessary statements in order to dispel the impression that they stand in need of explanation. Moreover, dispelling that impression involves, in Macdonald's view, our coming to see that the demand for explanation here is itself senseless. What is unhelpful in Malcolm's position according to Macdonald is the attempt to give a justification for thinking necessary statements true, for an attempt of that kind betrays a misunderstanding of the use to which those statements are put in the practice of reasoning; it is a fact of our practice that we do not expect further justification for the use of logical principles, and to use the word 'justify' in a way for which we have no provision is senseless. Wittgenstein's The Big Typescript was completed in 1933,41 and so it is plausible to suppose that Macdonald encountered the ideas expressed above during her 3 years at Cambridge from 1934 to 1937.<sup>42</sup> To be clear, I am not arguing that Macdonald's employment of ideas resembling those of Wittgenstein as expressed in the quoted passages constitutes a wholly faithful interpretation of Wittgenstein's general outlook<sup>43</sup>; the question of accuracy cannot be settled here and is not in any case my primary focus. My claim is, rather, that a coherent picture emerges of Macdonald's being critical of conventionalism in her earliest writings and maintaining this critical view in later years, while also introducing into her thinking a recognisably Wittgensteinian approach aimed at dissolving the problem of justification for necessary truth.

Macdonald's position though faces a clear objection, for there are results of metatheory such as Gödel's theorems, the Löwenheim-Skolem theorem, compactness, and so on, which we accept as logically true though stood before that acceptance in need of justification, and moreover received the requisite justification by means of logical proof. It cannot then be constitutive of logical truth that justification is ruled out as senseless; and so, Macdonald's approach, according to this objection, involves a characterisation of (logical) necessity which does not apply in many instances. This objection though involves a failure to appreciate the dialectical position from which Macdonald argues. Nowhere does Macdonald suggest that her aim is to provide an alternative definition of logical truth with which to supplant that given by the

conventionalist. This orientation is consistent with remarks of Wittgenstein's from *The Blue Book* and to which we can be sure she had access:

The idea that in order to get clear about the meaning of a general term one had to find the common element in all its applications has shackled philosophical investigation; for it has not only led to no result, but also made the philosopher dismiss as irrelevant the concrete cases, which alone could have helped him to understand the usage of the general term.

(Wittgenstein 1958: 21-22)

Recall that in her PhD thesis Macdonald explicitly aimed to undermine the view that members of a certain subset of a priori claims are true by convention, but she allows for the possibility that there are other such claims of which the conventionalist characterisation may well be true. Those statements to which Macdonald in her thesis applies the anti-conventionalist argument are those statements our acceptance of which is constitutive of an ability to exercise reason as such. It is worth pausing here to observe a development in Macdonald's views between 1934 and 1940. In 1934, Macdonald conceives of only a very narrow subset of logical truths, and possibly only the principle of non-contradiction, as incapable of either a conventionalist treatment or of alternatives. In 1940 though Macdonald describes a broader range of claims as incapable of sensible denial; statements concerning the relations between colours feature as prominent examples: 'But no-one I think has succeeded in giving a convincing account of a situation in which orange might be called lighter than lemon and darker than crimson or in which something might be both red and green all over' (Macdonald 1940: 50). 44 Insofar as Macdonald in 1940 rejects the application of conventionalist thinking to claims beyond the principle of non-contradiction, we may conclude that her opposition to conventionalism is more expansive in her later thinking than in her doctoral work. Macdonald's expanding her conception of those necessary truths to which conventionalist forms of justification do not apply does not though imply that she later conceives of necessary truths as constituting a set of items all of which possess some shared characteristic (e.g. unjustifiability, or incapability of denial).<sup>45</sup> Insofar as it is false that the statements to which her argument applies are true by convention, the attempt to draw a sharp boundary between necessary and other statements by means of conventionalism fails. But Macdonald does not aim to re-draw that boundary through an alternative definition of logical or necessary truth in which a common feature of all such statements is revealed. Like Quine, Macdonald should be viewed as casting doubt on the possibility of our drawing a sharp distinction between two mutually exclusive though jointly exhaustive categories of statement. Unlike Quine, though, Macdonald does not supplant a dualist division of categories with a monistic empiricism. Macdonald's objection to monism here is shown in a remark from 1937:

I suggest that we should accept the fact that "know" is used in a great many different ways in English. Some

of them are shown by correct answers to the question "How do you know that p?" [...] What we should not do, I think, is to look for a property common to all these circumstances which tempts us in fact to try to translate all the usages in terms of one or other of them [...]. This would be true of philosophers who say that all knowledge must be deductive or must be direct and intuitive.

(Macdonald 1937: 35)

Later, in a separate context, 46 she writes,

The philosopher's temptation is to simplify. But, as Wittgenstein once said, "It can never be our task to reduce anything to anything else." That may be the business of scientists; the philosopher's task is pure description.

There are, perhaps, family likenesses among *all* our utterances; some more, some less: even the notion of a "type" may be vague. Nevertheless, we do seem to start with relatively isolable groups which cause philosophical puzzlement. The treatment of this by philosophical analysis is not, however, the reduction of the complex to a set of simple elements, I suggest, but the disentangling of the complex by a variety of different comparisons, without identification.

(1950: 200, emphasis original)<sup>47</sup>

Macdonald does not attempt to define the notion of necessity through appeal to a distinction between the method of justification operative in that context and that which applies to other kinds of statement, for as we have seen, justification does not in her view sensibly apply to such statements as those expressing, e.g. the law of non-contradiction. Neither does Macdonald subsume justification under a single category. In 1937, she had emphasised the variety of uses to which we put the word 'know', while in 1940, she concentrates on the distinctive features of a subset of necessary statements in logic. In 1950, Macdonald explicitly claims that the attempt at categorisation obscures many differences between uses of language, and she holds that the variety of those uses is not amenable to simplification by the philosopher. Macdonald's outlook then, while rooted in a critical approach to conventionalism shared with Quine, is distinct from his view in ways which exhibit a clear Wittgensteinian influence.

The presence in Macdonald's PhD thesis of arguments against logical conventionalism which anticipate those of Quine, and which were employed again later in her career to similar effect is a discovery which in my view lends strong support to the assessment of Macdonald as a figure of great philosophical interest worthy of further study. In this discussion I have demonstrated just to what extent she does in fact anticipate the critical treatment of conventionalism given by Quine, and to what extent her view subsequently diverges from his under the influence of Wittgenstein. Macdonald, I have shown, developed criticisms of conventionalism which she later supplemented with

Wittgensteinian ideas such that she came to the view the problem of justification for some necessary statements as spurious. Macdonald's and Quine's treatments of logical truth then differ radically, for where Quine had conceived of logical truths as justifiable on grounds applicable also to hypotheses in the 'empirical' sciences, Macdonald rejected as senseless the attempt to justify logical truths of the kind described above.

Macdonald's anticipation of an important criticism of conventionalism given also by Quine has not been noticed simply because it has not been widely available. But her subsequent treatment of necessity has been available and has not attracted extended engagement. It is now being appreciated just how serious have been the effects of both institutional and personal sexist attitudes in obstructing women working in the analytic tradition from receiving engagement with their works. In erole played by women in the twentieth century and the value of their contributions has only recently been emphasised by historians. In have aimed, in the above, to support this direction in the history of philosophy through my bringing to the attention of contemporary readers an aspect of Macdonald's philosophical thought hitherto unacknowledged.

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## **Endnotes**

- <sup>1</sup> See Chapman (2024), Kremer (2022), Misak (2024), Spinney (2023, Forthcoming-a, Forthcoming-b), Vlasits (2022), West (2024), and Whiting (2022) for recent work on Macdonald.
- <sup>2</sup> This thesis is housed at the University College London library.
- <sup>3</sup> Some of which I refer to below.
- <sup>4</sup> In what follows page numbers for 'Truth by Convention' (1936) and 'Carnap on Logical Truth' (1960) refer to the reprinted versions in Quine's (1966) *The Ways of Paradox*.
- <sup>5</sup> Ignoring here its use in physics and, as an anonymous referee points out, in mathematics as standing for Euler's number.
- <sup>6</sup> 'What this means is that any other words, though they may occur in a logical truth [...] can be varied at will without engendering falsity' (Ouine 1960:103).
- <sup>7</sup> 'If we make a mark in the margin opposite an expression "---", and another opposite "~---", we sin only against the established usage of "~" as a denial sign' (Quine 1936:90).
- 8 Though first published in 1960, this article was written in 1954; see Quine (1966:100).
- <sup>9</sup> As well a distinction between legislative and discursive *definition*, which I shelve for present purposes.
- 10 'Set theory, currently so caught up in legislative postulation, may some day gain a norm even a strain of obviousness, perhaps and lose all trace of the conventions in its history.' (Quine 1960:113).
- <sup>11</sup> And, 'if it is meant that it is a general practice to adopt such conventions explicitly for those fields but not for others, the first part of the characterization is false' (Quine 1936:95).

- What I offer here is only a crude simplification of Social Contract theory aimed at fleshing out Wittgenstein's comparison.
- $^{13}$  The contrary position is attributed by Quine (1960:102) to Lévy-Bruhl.
- 14 Though supplementation is required in order to capture the accepted meaning of 'if ... then ...' as it is employed in, e.g., elementary logic.
- <sup>15</sup> And this is not to say, in Quine's view, that either view accounts for the relevant phenomenon in a satisfactory way. Quine does not suggest that the notion of obviousness has explanatory value, but only that in this respect it is equal to that of convention, for both leave 'explanation unbegun' (1960:106). For more on the role of obviousness in Quine's philosophy of logic, see MacBride (2024:380–381).
- <sup>16</sup> I leave out numerous details here in the interests of space.
- <sup>17</sup> Quine's commitment to the revisability (in principle) of logical truths has been criticised by Kripke (2024) as vulnerable to the very argument Quine gives against conventionalism, described above. There is not space here to address this charge, though see Birman (2024), Boghossian and Wright (2024), and Devitt and Roberts (2024) for further discussion.
- <sup>18</sup> See Hjortland (2017: 788-789).
- Ebbs (2011: 194, no. 1) cites Baldwin (2006: 77), Boghossian (1996: 363–366), Burge (1986: 699–700), Harman (1996: 392–396), Romanos (1983: 62), and Soames (2003: 264–270) as proponents of the standard view.
- <sup>20</sup> See Warren (2017).
- 21 It should be noted that Warren advances in the works cited above a rehabilitation of conventionalism which in his view is not vulnerable to Quine's objections, though an assessment of Warren here lies beyond the scope of this article.
- <sup>22</sup> See, e.g., Carnap (1928: §66). MacBride (2021) offers an extended treatment of structure in Carnap, and convincingly argues that the related notion of *foundedness* figured as an influence on David Lewis's metaphysics of natural properties.
- <sup>23</sup> Macdonald plausibly anticipates neo-Kantian interpretations of Carnap from the 1980s and 90s where she conceives of Carnap's and Lewis's approaches as broadly continuous. See Coffa (1985, 1991: 223–239), Friedman (1987, 1999), and Richardson (1998).
- 24 As is characteristic for the period, neither Lewis nor Macdonald distinguishes between necessary and a priori truth. I follow their lead in the discussion below.
- <sup>25</sup> He says, 'That we elicit some formula as a principle means that we take it as forbidding something or denying something which in some sense has significance. That which is utterly incapable of any alternative is utterly devoid of meaning' (Lewis 1929: 197).
- <sup>26</sup> Lewis follows this with the claim that 'Further laws of logic are of like significance' (1929: 247). My thanks to an anonymous referee for urging greater clarity with respect to the 'alternatives' Lewis has in mind.
- 27 Macdonald's distinction between alternative 'logics' and 'alternative logical systems' is here obscure but very plausibly traceable to the distinction Stebbing makes in her (1933a), and which Macdonald lists in her bibliography (1934: -2-). Two anonymous referees rightly ask for further details of this distinction. Stebbing (1933a: 194–196) distinguishes between a *deductive system* conceived of as a body of propositions and the postulates from which they are derived, and the reasoning employed in carrying out those derivations and which constitutes our *logic*. While the former vary widely, as shown in, e.g., the development of 'alternative geometries' (Stebbing 1933a: 194), the latter is invariant throughout its distinct applications, according to Stebbing (1933a: 196).
- <sup>28</sup> Though published in 2024 these remarks are based on a lecture given in 1974.

- <sup>29</sup> An anonymous referee points out that the mere fact of Macdonald's thesis's being unpublished does not in itself show that she has not been overlooked, for the unpublished works of other figures (e.g. Wittgenstein) have attracted extended scholarly attention.
- 30 'The logical positivists must explain [a common world] in terms of coincidence in the "structure" of our experiences. What is communicated is always structure. But they give no reason for supposing that the structure of our experiences is similar while its content is not. It is apparently a dogma which we must accept [...]' (Macdonald 1934: 175).
- 31 Macdonald (1934: 201).
- <sup>32</sup> Wittgenstein (1979).
- 33 This can be gathered from Ambrose's list of attendees, recorded in a letter to C. L. Stevenson; see Wittgenstein (2008: 219).
- <sup>34</sup> Later bequeathed to Gilbert Ryle, as shown in her will, housed in the Royal Holloway, University of London archives (reference: BC AR/321/2/5). See Kremer (2022), and Misak (2024) for discussions of the relationship between Macdonald and Ryle.
- <sup>35</sup> See Spinney (Spinney Forthcoming-a) for details.
- <sup>36</sup> For an interpretation which emphasises the influence of Stebbing, see Vlasits (2022). For a discussion of the relationship between Macdonald and Peirce's and Ramsey's views see Misak (2024). See Spinney (Forthcoming-a) for an extended treatment of Wittgenstein's influence on Macdonald's philosophical development.
- <sup>37</sup> Both Malcolm and Macdonald move very freely between 'proposition', 'sentence', 'statement', and 'truth'. In what follows I will use 'sentence' and 'statement' for the objects under discussion. This will avoid ascribing to either figure metaphysical views concerning propositions which they may not have held.
- <sup>38</sup> Two sentences prior Macdonald mentions the 'law of non-contradiction' (1940: 50).
- <sup>39</sup> See, e.g., Ayer (1936), Lowe (1936), and Rosser (1936: 42).
- <sup>40</sup> My thanks to an anonymous referee for inquiring as to the possibility of Macdonald's being familiar with Quine. My thanks also to Misak and Kremer for their generously sharing with me an early draft of their forthcoming book, in which an answer to this question is found.
- 41 Though subject to further revisions until 1937; see Wittgenstein (2005: viie).
- <sup>42</sup> It is worth noting that Wittgenstein was absent from Cambridge during the final year of Macdonald's fellowship, for he had in August 1936 left for Norway; see Wittgenstein (2008: 253).
- <sup>43</sup> The status of conventionalism in Wittgenstein remains an intensely contested issue. For classic treatments see Dummett (1959), in contrast with Stroud (1965), and Lear (1982).
- <sup>44</sup> A concern with colour exclusion here signals the influence of Wittgenstein, for whom such issues were, as is well-known, of continual interest.
- 45 The observation of a change in Macdonald's thinking here was stimulated by the comments of an anonymous referee, to whom I am thankful. The referee asks also if Macdonald conceived of all logical truths as derivable from the principle of non-contradiction. The referee indicates that there may be no decisive answer to this question. There is though some evidence that Macdonald did take this view; she writes, 'But suppose my enquirer is a philosopher and goes on "And why do you accept the Principle of the Syllogism as necessarily true?". I might try to deduce this principle from more primitive logical principles and perhaps "ultimately" from the Principle of Contradiction' (1940: 48). This does not imply that in Macdonald's 1940 view all necessary statements incapable of conventionalist treatment are derivable from

- the principle of non-contradiction though, for as noted above she includes among her examples those concerning colour relationships.
- 46 Her interest in 1950 is principally in moral language, but the remarks quoted are plausibly intended by Macdonald to have a general application.
- <sup>47</sup> An anonymous referee suggests that here Macdonald includes among the conceptions of philosophical analysis to which she is opposed that described by Stebbing (1932, 1933b) as 'directional' or 'metaphysical'. The relevant kind of analysis is characterised by Stebbing as the process in which complex facts are resolved by successive steps into basic ones. While a thorough treatment of Stebbing's views on analysis requires more space than can be used here, it is clearly plausible to suppose, in light of the close relationship between Macdonald and Stebbing, that Macdonald's 1950 statement is made with the views of Stebbing in mind.
- <sup>48</sup> I can find one example of a published work discussing Macdonald's 1940 article, a short and dismissive two-paragraph review piece by Daniel J. Bronstein (1940). Macdonald's article is not listed in a bibliography compiled by Roland Hall (1966) of entries dealing either with the analytic-synthetic distinction or with the issue of necessity.
- <sup>49</sup> This is not merely an historical observation.
- <sup>50</sup> See Connell and Janssen-Lauret (2022) for an extended discussion.

#### References

Ayer, A. J. 1936. "Truth by Convention." Analysis 4, no. 2/3: 17-32.

Baldwin, T. 2006. "Philosophy of Language in the Twentieth Century." In *The Oxford Handbook of Philosophy of Language*, edited by E. Lepore and B. Smith, 60–99. OUP.

Benacerraf, P. 1973. "Mathematical Truth." *Journal of Philosophy* 70, no. 19: 661–679.

Birman, R. 2024. "The Adoption Problem and the Epistemology of Logic." *Mind* 133, no. 529: 37–60.

Boghossian, P. 1996. "Analyticity Reconsidered." Noûs 30: 360-391.

Boghossian, P., and C. Wright. 2024. "Kripke, Quine, the 'Adoption Problem' and the Empirical Conception of Logic." *Mind* 133, no. 529: 86–116.

Bronstein, D. J. 1940. "Review of: Margaret Macdonald. Necessary Propositions." *Journal of Symbolic Logic* 5, no. 4: 158.

Burge, T. 1986. "Intellectual Norms and Foundations of Mind." *Journal of Philosophy* 83: 697–720.

Carnap, R. 1928. *Der Logische Aufbau der Welt*. Weltkreis Translated into English as *The Logical Structure of the World* by R. A. George. (Berkeley, California: University of California Press), 1967.

Chapman, S. 2024. "Alice Ambrose and Margaret MacDonald: Two Women Who Challenged Bertrand Russell on Ordinary Language." In *Bertrand Russell, Feminism, and Women Philosophers in His Circle*, edited by L. D. C. Elklind and A. M. Klein, 161–190. Palgrave Macmillan.

Coffa, J. A. 1985. "Idealism and the *Aufbau*." In *The Heritage of Logical Positivism*, edited by N. Rescher, 133–155. University Press of America.

Coffa, J. A. 1991. In *The Semantic Tradition From Kant to Carnap: To the Vienna Station*, edited by L. Wessels. CUP Press.

Connell, S., and F. Janssen-Lauret. 2022. "Lost Voices: On Counteracting Exclusion of Women From Histories of Contemporary Philosophy." *British Journal for the History of Philosophy* 30: 199–210.

Devitt, M., and J. R. Roberts. 2024. "Changing Our Logic: A Quinean Perspective." *Mind* 133, no. 529: 61–85.

Dummett, M. 1959. "Wittgenstein's Philosophy of Mathematics." *Philosophical Review* 68, no. 3: 324–348.

Ebbs, G. 2011. "Carnap and Quine on Truth by Convention." *Mind* 120, no. 478: 193–237.

Friedman, M. 1987. "Carnap's Aufbau Reconsidered." Noûs 21: 521-545.

Friedman, M. 1999. Reconsidering Logical Positivism. CUP.

Harman, G. 1996. "Analyticity Regained?" Noûs 30: 392-400.

Hjortland, O. T. 2017. "Theories of Truth and the Maxim of Minimal Mutilation." *Synthese* 199: 787–818.

Kremer, M. 2022. "Margaret Macdonald and Gilbert Ryle: A Philosophical Friendship." *British Journal for the History of Philosophy* 30: 288–311.

Kripke, S. 2024. "The Question of Logic." Mind 133, no. 529: 1-36.

Lear, J. 1982. "Leaving the World Alone." *Journal of Philosophy* 79, no. 7: 382–403.

Lewis, C. I. 1929. Mind and the World Order: Outline of a Theory of Knowledge. Charles Scribners.

Lowe, V. 1936. "Review: A Tribute to Whitehead." *Philosophy of Science* 3, no. 3: 366–370.

MacBride, F. 2021. "Rudolf Carnap and David Lewis on Metaphysics." *Journal for the History of Analytical Philosophy* 9, no. 1: 1–31.

MacBride, F. 2024. "Against Second-Order Logic: Quine and Beyond." In *Higher Order Metaphysics*, edited by P. Fritz and N. Jones, 378–401. OUP.

Macdonald, M. 1934. 'The Logical Characteristics of Expression'. Thesis, Bedford College, University of London. University College London Special Collections.

Macdonald, M. 1937. "Induction and Hypothesis." *Proceedings of the Aristotelian Society, Supplementary Volumes* 16: 20–35.

Macdonald, M. 1938. "The Philosopher's Use of Analogy." *Proceedings of the Aristotelian Society, New Series* 38: 291–312.

Macdonald, M. 1940. "Necessary Propositions." Analysis 7, no. 2: 45-51.

Macdonald, M. 1950. Ethics and the Ceremonial Use of Language. Vol. 1950, 211–229. Blackbuck.

Malcolm, N. 1940. "Are Necessary Propositions Really Verbal?" *Mind* 49, no. 193: 189–203.

Misak, C. 2024. "Ryle's Debt to Pragmatism and Margaret Macdonald." *Journal for the History of Philosophy* 62, no. 4: 639–656.

Misak, C., and M. Kremer. forthcoming. Margaret Macdonald and Analytic Philosophy in the 1930s: Unpublished Letters With Biographical and Interpretive Essays. OUP.

Morris, S. 2017. "Quine Against Lewis (and Carnap) on Truth by Convention." *Pacific Philosophical Quarterly* 99: 366–391.

Quine, W. V. 1936. "Truth by Convention." In *The Ways of Paradox*, edited by W. V. Quine, 70–99. Harvard University Press.

Quine, W. V. 1951. "Two Dogmas of Empiricism." *Philosophical Review* 60, no. 1: 20–43.

Quine, W. V. 1960. "Carnap on Logical Truth." In *The Ways of Paradox*, edited by W. V. Quine, 100–125. Harvard University Press.

Quine, W. V. 1966. The Ways of Paradox. Random House.

Quine, W. V. 1986. *Philosophy of Logic*. 2nd ed. Prentice Hall  $1^{\rm st}$  Edition Published 1970.

Richardson, A. W. 1998. Carnap's Construction of the World: The Aufbau and the Emergence of Logical Empiricism. CUP.

Romanos, G. 1983. Quine and Analytic Philosophy. MIT Press.

Rosser, B. 1936. "Truth by Convention by W. V. Quine." *Journal of Symbolic Logic* 1, no. 1: 42.

Soames, S. 2003. Philosophical Analysis in the Twentieth Century, Volume 1: The Dawn of Analysis. Princeton University Press.

Spinney, O. T. 2023. "Margaret Macdonald on the Argument From Dreaming." *Philosophical Quarterly* 74, no. 3: 962–977.

Spinney, O. T. Forthcoming-a. "Margaret Macdonald, Philosopher of Language." *Mind*.

Spinney, O. T. Forthcoming-b. "Helen Knight and Margaret Macdonald on the Meaning of 'Good'." *British Journal for the History of Philosophy*.

Stebbing, S. 1932. "The Method of Analysis in Metaphysics." *Proceedings of the Aristotelian Society* 33: 65–94.

Stebbing, S. 1933a. "The "A Priori"." Proceedings of the Aristotelian Society, Supplementary Volumes 12: 178–197.

Stebbing, S. 1933b. "Logical Positivism and Analysis." *Proceedings of the British Academy* 19: 53–87.

Stroud, B. 1965. "Wittgenstein and Logical Necessity." *Philosophical Review* 74, no. 4: 504–518.

Vlasits, J. 2022. "Margaret Macdonald's Scientific Common-Sense Philosophy." *British Journal for the History of Philosophy* 30: 267–287.

Warren, J. 2017. "Revisiting Quine on Truth by Convention." *Journal of Philosophical Logic* 46: 119–139.

Warren, J. 2020. Shadows of Syntax: Revitalizing Logical and Mathematical Conventionalism. OUP.

Warren, J. forthcoming. "Logical Conventionalism." In *Oxford Handbook of Philosophy of Logic*, edited by F. Ferrari, E. Brendel, M. Carrara, O. Hjortland, G. Sagi, G. Sher, and F. Steinberger. OUP.

West, P. 2024. "Philosophy is not a Science: Margaret Macdonald on the Nature of Philosophical Theories." *HOPOS: Journal of the International Society for the History of Philosophy of Science* 14, no. 2: 527–553.

Whiting, D. 2022. "Margaret Macdonald on the Definition of Art." *British Journal for the History of Philosophy* 30: 1074–1095.

Wittgenstein, L. 1958. The Blue and Brown Books. Blackwell.

Wittgenstein, L. 1979. In *Wittgenstein's Lectures, Cambridge 1932–1935*, edited by A. Ambrose. Blackwell.

Wittgenstein, L. 2005. In *The Big Typescript TS 213*, edited by C. G. Luckhardt and M. E. Aue . Wiley-Blackwell.and trans.

Wittgenstein, L. 2008. In Wittgenstein in Cambridge: Letters and Documents 1911–1951, edited by B. McGuinness. Blackwell.