Michael Anthony Eardley Dummett

27 June 1925 – 27 December 2011

elected Fellow of the British Academy 1968 resigned 1984 re-elected Fellow of the British Academy 1995

by

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MICHAEL DUMMETT

Throughout the second half of the twentieth century, Michael Dummett was a powerful figure in British philosophy and in later years its most distinguished and authoritative practitioner, with tremendous international standing. His work spanned philosophy of mathematics, formal logic, philosophy of language, history of philosophy, and metaphysics. He also played an important role in combatting racism in Britain, and when he was knighted, in the 1999 New Year's Honours, it was 'for services to Philosophy and to Racial Justice'.

Biography

Early life and education

Michael Dummett was born at 56 York Terrace, London, his parents' home, on 27 June 1925, and died on 27 December 2011 at 54 Park Town, Oxford, the home where he and his wife Ann had lived since 1957 and brought up their children. He was the only child of his parents George Herbert Dummett (1880–1970), a silk merchant, who also later dealt in rayon, and Mabel Iris née Eardley-Wilmot (1893–1980), whose father, Sir Sainthill Eardley-Wilmot, had been Inspector-General of Indian Forests, and after whom Michael Dummett was given Eardley as his middle name. Dummett's father had two sons and a daughter by a previous marriage.

At the age of ten Dummett was sent as a boarder to a preparatory school, Sandroyd, in Cobham, Surrey. In September 1939, at the onset of the Second World War, he began his secondary education at Winchester College, having come top of the election roll for Scholars. After a compulsory year on the 'classics ladder', he opted for science, but was 'deeply disappointed' by it and switched to history.¹ In 1943 he obtained a history scholarship to Christ Church, Oxford, but—now eighteen and with the war still raging—went instead into the Royal Artillery, under which auspices he was sent on a six-month 'short course' at Edinburgh University. There he contacted the Catholic Chaplaincy and underwent instruction by the Chaplain, Father Ivo Thomas, and was received into the Roman Catholic Church on 10 February 1944. Dummett took the confirmation name Anthony, after St Anthony of Padua, and used it as a middle name thereafter, in addition to the middle name given to him by his parents. A child of irreligiously Anglican upbringing, and a declared atheist at fourteen, the deep religious faith of his conversion remained central throughout the rest of his life, though not always without struggle.²

¹M. A. E. Dummett, 'Intellectual autobiography', in R. L. Auxier and L. E. Hahn (eds.), *The Philosophy of Michael Dummett*, Library of Living Philosophers (Chicago, IL, 2007), p. 4. ²Ibid., pp. 5–6.

Dummett was then sent for six weeks of army basic training, after which he went on a six-month course at the ISSIS (Inter-Service Special Intelligence School) in Bedford to be taught to read and translate Japanese, and then to the Wireless Experimental Centre outside Delhi to translate intercepted Japanese messages. (The Wireless Experimental Centre was one of two overseas outposts of Station X in the signals analysis centre at Bletchley Park, and Dummett is recorded in the online Roll of Honour of Bletchley Park for this work.³) When the war with Japan ended, he was sent to Malaya as part of Field Security. He wrote that 'it must have been in Malaya that a passionate hatred of racism was first born in me. I learned of the means by which the British masters of pre-war colonial Malaya had maintained and acted out the myth of white racial superiority',⁴ though Michael Screech, who was on the Bedford course and at the Wireless Centre with Dummett, remembered him expressing anger about racism already at that time. Dummett was by then a heavy smoker, as he remained throughout his life, and Screech recalled that tapping the end of a cigarette many times before lighting it came to be called 'dummetting' by those around him.

Dummett was demobilised in 1947, with the rank of sergeant,⁵ and took up the scholarship he had been awarded at Christ Church, Oxford during the war. A letter from Harold Walker, Dummett's history master at Winchester (who had played a key role in enabling Dummett to make history his main subject,⁶ it being assumed in Winchester at that time that its most brilliant students, of whom Dummett was clearly one, should do either classics, or sciences and mathematics) to Nowell Myres, Winchester's main contact in Christ Church, on 21 July 1947, gives a snapshot of Dummett at a crossroads:

Michael Dummett, who is coming up to Ch. Ch. as a History Scholar in October, was staying with me this weekend. He is just back from Malaya where he has been a sergeant in the Intelligence, the Army having taught him Japanese. He asked my advice as between History & PPE, and I recommended him to do History [...] He is a very able boy—actually he's 22 now! – & was senior on the roll. But he's the last person in the world to do PPE. He has always needed steadying rather than stimulating,—he

³ https://bletchleypark.org.uk/roll-of-honour/2681 (accessed 6 September 2018).

⁴Dummett, 'Intellectual autobiography', p. 8.

⁵ 'Dummett, Sir Michael (Anthony Eardley)' entry in *Who's Who*, http://www.ukwhoswho.com/view/ 10.1093/ww/9780199540891.001.0001/ww-9780199540884-e-14263 (accessed 13 September 2018).

⁶Dummett refers to Harold Walker as 'an inspired teacher' (Dummett, 'Intellectual autobiography', p. 4); for an account of Harold Walker's impact on a pupil at Winchester who went on to a distinguished career as a historian, see the British Academy Biographical Memoir for Nicholas Brooks: B. Crawford, S. Keynes and J. Nelson, 'Nicholas Brooks', *Biographical Memoirs of Fellows of the British Academy*, 15 (London, 2016), pp. 23 and 28–9.

stimulates himself! Even at 15, before I rescued him from the Science Side, he was apt to be writing learned papers on Chinese Art to deliver to College societies, or articles against the Public Schools for Picture Post, to the neglect of his other work. Since then he has progressed from Scepticism through Medieval Mysticism to the Roman Church, where he may or may not remain.

Dummett opted for the Honour School of Philosophy, Politics, and Economics (PPE) in part because he felt that after four years in the army he had forgotten much of the history he had learned. He was 'soon captivated by philosophy'.⁷ His philosophy tutors were Michael Foster, Anthony Flew, J. O. Urmson and David Pears, who was appointed a research lecturer at Christ Church in 1948, and who later (in 1973) wrote of Dummett, 'I first met him when he was an undergraduate at Christ Church and was impressed by his penetration. In discussion he would quickly put the superficial issues on one side, and go directly to the fundamental ones.' Dummett was also sent for tutorials to Elizabeth Anscombe at Somerville, whose commitment to Wittgenstein greatly influenced Dummett at that time. For his Finals, in 1950, Dummett chose to do a paper established by J. L. Austin called 'The Origins of Modern Epistemology', available for the first time that year. Candidates were expected to study four texts from a list of seven, one of which was Frege's The Foundations of Arithmetic, translated from the German by Austin for this purpose. Instruction was provided by William Kneale and Friedrich Waismann in a class they gave on Frege's Grundlagen in Hilary Term 1950.8 Dummett later wrote of Frege's Die Grundlagen der Arithmetik, 'I thought, and still think, that it was the most brilliant piece of philosophical writing of its length ever penned.⁹ Dummett's ensuing work on Frege transformed understanding of this seminal figure's logic and philosophy.

Early career

After taking First Class Honours in PPE Finals in the summer of 1950, Dummett was appointed to a one-year Assistant Lectureship in Philosophy at the University of Birmingham. That October he sat the fellowship examination at All Souls College, Oxford, and was elected, with immediate effect, but nonetheless fulfilled his commitment to Birmingham, rushing back to Oxford during term to pernoctate as required by All Souls.

The first project Dummett set himself as a Prize Fellow at All Souls was to read all the published work of Frege, most of which at that time had been neither translated

⁷Dummett, 'Intellectual autobiography', p. 9.

⁸ Oxford University Gazette, 14 December 1949, 27.

⁹Dummett, 'Intellectual autobiography', p. 9.

nor republished. He also visited the Frege archive in Münster to study what survived of Frege's *Nachlass*. Despite his passion for Frege, Dummett began his philosophical career thinking of himself as a follower of Wittgenstein, arising from the impact of the arrival in Oxford during his last year as an undergraduate of typescripts of *The Blue and Brown Books* and of notes of Wittgenstein's classes on philosophy of mathematics, and from his philosophical contact and ensuing friendship with Elizabeth Anscombe. By 1960 he no longer considered himself a Wittgensteinian.¹⁰

On 31 December 1951, in his second year as a Prize Fellow, Dummett married Ann Chesney (1930–2012), who had taken Finals in History from Somerville College that summer. She was the daughter of the actor Arthur William Chesney. Fifty years later Dummett wrote of Ann, 'she has been my constant support and delight throughout my life'.¹¹ They had seven children, four sons and three daughters, of whom two, a son and daughter, died in infancy. To support his growing family, Dummett took on a great deal of undergraduate teaching for other colleges, 'since All Souls then paid its Fellows no marriage allowance, housing allowance, or children's allowance, and, unlike other colleges, had no houses to rent to Fellows on preferential terms'. Dummett 'once complained to John Sparrow, then Warden, that the College had houses for servants but not for Fellows: he replied that it was difficult to get servants'.¹²

Early in his All Souls Fellowship, Dummett had the idea of doing a second BA in Mathematics, but Humphrey Sumner, the then Warden, refused permission, on the grounds that it would disgrace the College if he failed to obtain a First, and he settled for some tutorials with John Hammersley, an applied mathematician in Oxford, later a fellow of Trinity College. Dummett was awarded a Harkness Fellowship to spend the academic year 1955–56 at the University of California, Berkeley, studying logic and mathematics. Ann and their two young children managed to join him there for seven months, on his very limited stipend. He learned a great deal from Leon Henkin, Raphael Robinson, John Myhill, Paul Halmos and others (but not Alfred Tarski, who was away that year). He also at that time came to know Donald Davidson, who was then teaching at Stanford, and they remained firm friends and philosophical interlocutors to the end of Davidson's life.

Mid-career and anti-racism

While in Berkeley Dummett became closely involved with the American civil rights movement. He noted later that 'at that time the United States was the most racist

¹⁰ M. A. E. Dummett, Truth and Other Enigmas (London, 1978), p. xii.

¹¹Dummett, 'Intellectual autobiography', p. 10.

¹²Ibid., p. 11.

country in the world after South Africa'.¹³ He and Ann joined the National Association for the Advancement of Colored People and attended a rally in San Francisco addressed by Dr Martin Luther King. Part of the duty of a Harkness Fellow was to travel in the United States, and after Ann and the children returned to England, Dummett devoted himself to visiting black Americans during that summer of 1956. He travelled to Montgomery, Alabama, where the boycott organised by Martin Luther King to force, by peaceful means, repeal of the law segregating blacks on the city's bus system was in progress. He there met Dr King, whom he admired greatly.

In 1957 Dummett was elected to a further seven years as a Fellow of All Souls. He was also, in November 1957, offered appointment as Assistant Professor in the Philosophy Department at the University of California, Berkeley, for which he had not applied; the Department was keen to hire him having seen his exceptional qualities during his year at Berkeley as a Harkness Fellow. After considerable correspondence and agonising, Dummett accepted the offer, in April 1958, on the basis that he would start in September 1959, but in November 1958 he withdrew his acceptance, he and Ann having come to the conclusion that they should bring up their children in England rather than America: 'We neither of us wanted our children to grow up in an environment alien to us which we did not truly understand.'¹⁴

During Trinity Term 1958 (March–June) Dummett went on his own to the University College of Ghana in Legon as a Visiting Lecturer.¹⁵ In Legon he taught epistemology,¹⁶ and gave a seminar on the philosophy of time, one of his developing interests. He also worked on his ideas for topological models of modal logic during this period, which he had begun earlier with E. J. Lemmon, and which came close to the notion of a Kripke model, without quite reaching it. He became ill, however, and did not return to the topic: 'possibly, if I had, what are now called Kripke models might have been called Dummett–Lemmon models, though I doubt if we should have

¹³Ibid.

¹⁴Ibid., p. 16, provides a somewhat condensed account of this episode.

¹⁵The invitation to Legon was at the behest of William Abraham, a Ghanaian who had arrived in Oxford in Michaelmas Term 1957 as a BPhil. student directly after having taken his BA in Philosophy in Legon, and who came to know Dummett through attending his lectures and classes. When Dummett welcomed Abraham's suggestion that he visit Legon, the head of the department, Daniel Taylor, immediately arranged the invitation. When Abraham completed the BPhil. in 1959, Dummett encouraged him to sit the All Souls Prize Fellowship exam, and Abraham was elected, the first and so far only African Prize Fellow of All Souls. In correspondence to do with the writing of this memoir, Abraham noted that, 'One other thing for which I am grateful to Michael is that he pointed me at the Catholic Church. He regularly gave me *Blackfriars* to read. I was received into the Catholic Church in March 1967.'

¹⁶Letter from William Abraham 8 May 2018, based on enquiry to Kwasi Wirudu.

thought what to do about the quantifiers'.¹⁷ It was while in Ghana that Dummett sent his acceptance of the Berkeley offer, by cable and then aerogramme.

In 1950 P. F. Strawson published 'On referring', rejecting Russell's theory of descriptions (1905: cited by Frank Ramsey as 'that paradigm of philosophy'), on which reference failure renders a sentence false, in favour of a doctrine of presupposition, on which such sentences are neither true nor false.¹⁸ During the late 1950s Dummett began to explore the implications of those ideas for the notions of truth and logical validity, of which he gave the following account in the Preface to his 1978 collection of previously published papers *Truth and Other Enigmas*:

Interest in the doctrine of presupposition had led me to an interest in the concept of truth: and this, in turn, led me to an interest in the question how, if at all, it is possible to criticise or question fundamental logical laws that are generally accepted. These are interests that have remained preoccupations throughout my philosophical career. Their first fruit was a book called *The Law of Excluded Middle*, based on lectures that I had given in Oxford, that I submitted, I think in 1958, to the Oxford University Press and that was accepted by it on the advice of the late Professor Austin, one of the delegates of the Press. Austin was kind enough to recommend publication of the book [...] He had, however, reservations about my literary style, and required as a condition of publication, substantial stylistic emendation. At the time, of course, I found this galling, but could do nothing but agree; but, as I engaged in the laborious process of trying to comply, I became more and more dissatisfied with the content of the book, and never resubmitted it.¹⁹ In a sense I have been trying to rewrite the book ever since.²⁰

In his 'Intellectual autobiography', Dummett sharpens this earlier account by stating, 'I should be ashamed of it now if it had been published.'²¹ He there goes on to say, 'This led me to study intuitionistic logic and the intuitionist philosophy of mathematics, to which I felt strongly drawn.' Also at this time he had been writing his massive review article, which he published in 1959, of Wittgenstein's *Remarks on the Foundations of Mathematics*, published in 1956.²²

The confluence of these ideas came together in his paper 'Truth', published in 1959, a seminal work and his single most important paper.²³ It contained within it the

²⁰ Dummett, Truth and Other Enigmas, pp. xix-xx.

¹⁷Dummett, 'Intellectual autobiography', p. 16.

¹⁸ P. F. Strawson, 'On referring', Mind, 59 (1950), 329.

¹⁹No copy of this manuscript is known to have survived.

²¹ Dummett, 'Intellectual autobiography', p. 15.

²²M. A. E. Dummett, 'Wittgenstein's philosophy of mathematics', *Philosophical Review*, 68 (1959), 324–48.

²³ M. A. E. Dummett, 'Truth', *Proceedings of the Aristotelian Society*, n.s. 59 (1959), 141–62. The paper was presented at a meeting of the Aristotelian Society on 16 February 1959. William Abraham reports

seeds of a great deal of his later philosophy. It adumbrated the opposition between realism and anti-realism, as Dummett characterised these positions, in terms of bivalence and the law of excluded middle, and surveyed a variety of contexts, both mathematical and non-mathematical, in which this opposition arises. A connection between these considerations and Wittgenstein's dictum that meaning is use was sketched. It also contains a somewhat offhand rejection of Strawson's idea that reference failure results in truth value gaps ('It is thus prima facie senseless to say of any statement that in such-and-such a state of affairs it would be neither true nor false'²⁴). Late in the paper Dummett arrives at the idea that mathematical intuitionism is the paradigm for the anti-realism he there adumbrates: 'What I have done here is to transfer to ordinary statements what the intuitionists say about mathematical statements.'²⁵ This heady mixture of ideas took decades to explore, and led to new understanding of the nature of logic and meaning.

In 1962 Dummett applied for and was appointed to the Oxford University Readership in Philosophy of Mathematics, in succession to Hao Wang (who had succeeded Friedrich Waismann, the first incumbent of the post), which he held in conjunction with a Fellowship of All Souls. Between 1960 and 1966 he was regularly a visiting professor in the Philosophy Department at Stanford for the summer quarter (in part to earn money so that he could take his family on holiday). During one of those visiting appointments, in 1964, he gave a course of lectures as a preliminary version of a book he hoped to write surveying every variety of realism or denial of realism, the first of his attempts to rewrite the book that Oxford University Press had accepted for publication, subject to stylistic revision, in 1958, but when he returned to Oxford that summer he and Ann decided 'that the time had come for organised resistance to the swelling racism in England',²⁶ and he put this project on hold, along with a book on Frege he had been planning.

For the next four years, Dummett devoted every moment he could spare to the fight against racism, while fulfilling his heavy teaching commitments. He and Ann were deeply engaged both in organisational activity to combat racism as a trend in British government and society, and in work on behalf of individuals threatened by racist policies and attitudes. This latter included intervening to stop persons of colour from being deported back to the country from which they were fleeing as they

that at Dummett's invitation, he and Gillian Romney, another BPhil. student, attended this meeting, at which A. J. Ayer presided (presumably deputising for Karl Popper, who was President of the Aristotelian Society in that year). Attendance at this meeting was sparse, and there was little comprehension of the paper.

²⁴Ibid., p. 150.

²⁵Ibid., p. 160.

²⁶Dummett, 'Intellectual autobiography', p. 19.

attempted to enter the UK. A telephone call at any hour of the day or night would alert Dummett to such a case, and transform him from philosopher to activist, telephoning the Chief Immigration Officer to obtain a stay of immediate deportation, then dashing to the airport to argue the case, often successfully. Dummett's organisational work against racism included a role in founding the Oxford Committee for Racial Integration, participation in the turbulent and ultimately self-destructive Campaign Against Racial Discrimination, and playing a key role in founding the Joint Council for the Welfare of Immigrants (JCWI), which continues to do important work to the present day. He chaired its inaugural meeting at the Dominion Theatre in Southall in September 1967, and maintained his association with it to end of his life. Its website contains an obituary of Dummett by Habib Rahman, its then Chief Executive, who remembered Dummett as 'an extremely compassionate person and a fierce opponent of racism in our society', and declared, 'He will be sorely missed and fondly remembered by us for his uncompromising struggle for equal rights for migrants and refugees in Britain.'27 Ann is also memorialised by an obituary on the JCWI website. Dummett later described this time as 'the most exhausting period of my life'.²⁸ One could say that he had anti-racism in his genes, from the fact (discovered, to his great delight, by his daughter Suzie) that Sir John Eardley Eardley-Wilmot, grandfather of his mother's father, had campaigned for the abolition of slavery, and is among those depicted in the painting by Benjamin Robert Haydon, hanging in the National Portrait Gallery, of the Anti-Slavery Society convention of 1840.

During this period, while on holiday in France with his family, Dummett came across, by chance, a pack of Tarot cards *avec règles du jeu* in a shop, which he bought for entertainment during the holiday, and the game was enjoyed in the family. Back in England, he 'came across an Austrian pack, also with rules: the game was very different, although plainly related. I wanted to discover how the game was played in other countries, and wrote to card-game experts to ask, but none of them could tell me. I then embarked on my own enquiries.'²⁹ Thus began a passionate side interest in Tarot, in the cards themselves, and in the games played with them: 'It may seem odd that I could pursue a new interest in the midst of involvement in the struggle against racism. It was a solace. It provided difficult intellectual problems whose solution, unlike those of philosophical ones, had no serious import: it relieved the anxiety that always accompanied thinking about the racial situation or the problems of individuals entangled in it.'³⁰

²⁷ https://www.jcwi.org.uk/2012/01/06/sir-michael-dummett (accessed 6 September 2018).

²⁸ Dummett, 'Intellectual autobiography', p. 21.

²⁹Ibid., p. 23.

³⁰Ibid.

While maximally committed to anti-racism in this time, Dummett fulfilled all his obligations as a teacher, in which he was inspiring, and also played an important role in establishing mathematical logic within Oxford University. This resulted in the creation in 1965 of a University Lectureship in Mathematical Logic associated with a Fellowship at All Souls, to which John Crossley was appointed. Dummett then, together with Crossley, did a great deal of the work in creating a new Oxford undergraduate degree in Mathematics and Philosophy, which the Kneale Report in 1966 had called upon the University to establish (along with a joint school of Physics and Philosophy). Dummett gave the lead to colleagues on the committee that was set up by the Faculty Board of Literae Humaniores, of which Philosophy was then a Sub-Faculty, and the Mathematics Faculty Board, to design the new course: 'As bridge subjects we included in the curriculum the philosophy of mathematics and a very large component of mathematical logic, including an optional paper on intuitionism.³¹ The teaching of the bridge subjects fell largely to Dummett and Crossley, when the joint school got underway, and they found themselves having to give twice the number of tutorials and lectures required by their conditions of appointment, a situation which continued with Crossley's successor, Robin Gandy, who came to Oxford in 1969 as Reader in Mathematical Logic This situation was finally somewhat alleviated with the establishment, in 1971, of a Professorship in Mathematical Logic, to which Dana Scott was appointed. The professorship and readership in mathematical logic had been established within the Philosophy Sub-Faculty, but in 2000 were transferred to the Mathematical Institute, where they now constitute the core of a world renowned group in model theory. A significant number of the best graduates in philosophy from Oxford have come from the honour school of Mathematics and Philosophy since its founding.

In 1968 Dummett was elected a Fellow of the British Academy.³² He had at that stage adumbrated a philosophical programme in eight published papers, which he would then pursue over the next forty-three years. This election came at the end of a period of four years in which he had given up writing philosophy altogether in order to devote himself to the fight against racism. Years later he wrote, 'I thought at the time that I had wrecked my career, as did Ann, but I was content that the sacrifice was

³¹Ibid., p.17.

³²At forty-three Dummett was the second youngest in the cohort of twenty-one new Fellows elected in that year, whose average age was fifty-six, but Timothy Smiley, writing in 1995, noted, in regard to the election of William Kneale in 1950 at the age of forty-four, that 'to its credit the philosophy section of the Academy recruits new members a decade younger than their opposite numbers in other subjects' (T. J. Smiley, 'William Calvert Kneale, 1906–1990', *Proceedings of the British Academy*, 87 (1995), p. 386). In recent years the ages at which philosophers have been elected to the Academy have tended to be as in other subjects.

worth it, the enemy being so evil. Some years later I discovered that I had not after all wrecked my career.'³³ Election to the British Academy indeed signalled that he had been able to devote himself to anti-racism for the preceding four years while remaining a potent force in the development of philosophy.

In 1984 he resigned his Fellowship of the British Academy in protest at the Academy's failure, as he saw it, to stand up to the Thatcher government's attack on British universities by its cuts to spending for higher education and research, as he explained in a letter published in *The Guardian* on 19 June 1984, under the headline 'When an academy leaves academics in the lurch.' He declared that

The universities have very few friends among politicians, journalists, or any other external group. Their champions ought to be the academies that exist to foster research in academic disciplines which—especially in the arts—is very largely carried out in the universities. Of these, the British Academy covers all academic disciplines other than the sciences; in the face of the Government's unprecedented attack upon the universities, it has been its evident duty to defend their cause. [...] It has made no adequate attempt to fulfil this duty.

Dummett absolved the Fellows of the Academy of responsibility for this situation, and laid blame on those running the Academy: 'The Fellows as a body have little say in what the Academy does, since it is run in a thoroughly undemocratic fashion.'³⁴ Dummett's public letter had been preceded by a letter of resignation on 2 January 1984, from which he had been temporarily dissuaded, in which he had given as his reason 'the utterly undemocratic nature of the institution', and citing in particular the Blunt affair from four years earlier. (Dummett considered that the then President had gone against the wishes of the Fellows, as expressed in a vote in the 1980 AGM, on a motion put by Dummett, not to ask Anthony Blunt to resign his Fellowship of the Academy in the aftermath of having been identified as a Soviet agent.³⁵) Dummett was also disaffected towards the Academy at that time by its refusal to support his research interests in Tarot cards and games. In 1995 Dummett accepted re-election to the British Academy as a Senior Fellow, perhaps in part persuaded, and at any rate not put off, by Timothy Smiley's argument that this would give him the possibility of resigning again over another issue, should one arise.

³³Dummett, 'Intellectual autobiography', p. 19.

³⁴Ibid.

³⁵ For another view of this affair see the section by P. W. H. Brown in D. A. Russell and F. S. Halliwell, 'Kenneth James Dover 1920–2010', *Biographical Memoirs of Fellows of the British Academy*, 11 (London, 2012), pp. 169–71.

Later career

The period in which Dummett gave the fight against racism highest priority among all his commitments came to an end in 1968. As he explained

by 1968, Britain had become irretrievably identified by the black people living here as a racist society The alienation of racial minorities is now so great that a white ally in the struggle can, except in special circumstances, play only the most minor ancillary part. It was only at the stage at which ... I felt that I no longer had any very significant contribution to make, that I thought myself justified in returning to writing about more abstract matters of much less importance to anyone's happiness or future.

Dummett offered this account of his return to writing philosophy in the Preface to his first book, *Frege: Philosophy of Language*,³⁶ published in 1973, to great critical acclaim. Dummett went on to publish eight further books in philosophy and three volumes of essays In the same year as he published his first book, his wife Ann published *A Portrait of English Racism*,³⁷ about which Dummett later said, 'I would rather have written that book than any of the many I have written.'³⁸

In 1974 Dummett applied for and was elected to a Senior Research Fellowship at All Souls, and resigned as Reader in the Philosophy of Mathematics, in order to have more time for research and to be free to work more broadly than specifically in the philosophy of mathematics. In this period he had embarked on a series of major philosophical papers pursuing lines of research adumbrated in 'Truth', beginning in 1973 with his British Academy lecture 'The justification of deduction', and continuing with 'The philosophical basis of intuitionistic logic' (given as a lecture in 1973, published in 1975), 'What is a theory of meaning?' (lecture in 1974, published in 1975), 'What is a theory of meaning? (III)', and his William James Lectures at Harvard, 'The logical basis of metaphysics' (given in 1976, published in an expanded and revised form as a book in 1991).³⁹

In 1977 Dummett published *Elements of Intuitionism*,⁴⁰ a remarkable accomplishment mathematically, philosophically, and pedagogically. He there established that

³⁶ M. A. E. Dummett, Frege: Philosophy of Language (London, 1973), pp. x-xi.

³⁷A. Dummett, A Portrait of English Racism (Harmondsworth, 1973).

³⁸ Dummett, 'Intellectual autobiography', p. 24.

³⁹ M. A. E. Dummett, 'The justification of deduction', *Proceedings of the British Academy*, 59 (1974), 201–32; M. A. E. Dummett, 'The philosophical basis of intuitionistic logic', in H. E. Rose and J. C. Shepherdson (eds.), *Logic Colloquium '73: Proceedings of the Logic Colloquium Bristol, July 1973* (Amsterdam, 1975), pp. 5–40; M. A. E. Dummett, 'What is a theory of meaning', in S. Guttenplan (ed.), *Mind and Language* (Oxford, 1975), pp. 97–138; M. A. E. Dummett, 'What is a theory of meaning (II)', in G. Evans and J. McDowell (eds.), *Truth and Meaning: Essays in Semantics* (Oxford, 1975), pp. 67–137; and M. A. E. Dummett, *The Logical Basis of Metaphysics* (Cambridge, MA, 1991).

⁴⁰M. A. E. Dummett, *Elements of Intuitionism* (Oxford, 1977), (2nd edn, Oxford, 2000).

intuitionist mathematics and logic can indeed be cast in the form of Dummettian anti-realism, as foreshadowed in 'Truth'—a completely different basis from the psychologism by which Brouwer had argued for intuitionist mathematics.

In 1979 Dummett was elected to the Wykeham Professorship of Logic, and moved from All Souls, which had been his academic home for twenty-nine years, to New College, with which the Wykeham chair is associated. The question in that election was not whether Dummett would be offered the job but whether he would accept, which entailed giving up his Research Fellowship at All Souls, with its very limited formal demands, which he had held for five years and which could have continued for thirteen years more, until retirement. His taking up the chair was a selfless act of loyalty to Oxford Philosophy. Almost immediately he was called upon to supervise substantially more than fifteen graduate students at a time. This was in part because professors had a statutory obligation to do a lot of graduate supervision, but mostly because his publications were now setting the agenda for important philosophical developments, and graduates flocked to Oxford to study with him.

In 1982 Dummett was awarded a Humboldt-Stiftung Research Prize which he used for four months at the University of Münster, working on Frege. He spent the academic year 1988–89 in Stanford as a Fellow of the Center for Advanced Study in the Behavioral Sciences, during which he finished two major books begun earlier, *Frege: Philosophy of Mathematics* and *The Logical Basis of Metaphysics* (both published in 1991).⁴¹ In 1989 Dummett took the Oxford degree of DLitt (a higher doctorate awarded on the basis of publications).⁴²

Final years

Michael Dummett retired from Oxford in 1992, at the compulsory age of sixty-seven. He gave many lectures in retirement, including the Gifford Lectures at St Andrews University in 1997, which he published as *Thought and Reality* in 2006.⁴³ His aim in those lectures and the ensuing book was 'to describe the conception of the world—of reality—that would be proper to one who accepted the version of anti-realism that has been associated with me, namely a generalisation to all language of the intuition-ist understanding of mathematical language, which I have never for long more than provisionally accepted. It turned out very Berkeleian, with a strong asymmetry between past and future, something to which I am temperamentally averse.'⁴⁴ In 2002

⁴¹M. A. E. Dummett, *Frege: Philosophy of Mathematics* (London, 1991); Dummett, *The Logical Basis of Metaphysics*.

⁴² 'Dummett, Sir Michael (Anthony Eardley)', Who's Who.

⁴³M. A. E. Dummett, *Thought and Reality* (Oxford, 2006).

⁴⁴Dummett, 'Intellectual autobiography', p. 31.

he gave the John Dewey Lectures at Columbia University, published in 2004 as *Truth* and the Past,⁴⁵ in which he continued the struggle with which he had been engaged ever since his paper 'Truth' between the pull toward a global anti-realism and a countervailing pull toward a realist view on statements about the past, as he had explored in 'The reality of the past', in 1969, where his final sentence had been, 'Of course, like everyone else, I feel a strong undertow towards the realist view: but then, there are certain errors of thought to which the human mind seems naturally prone.'⁴⁶ He now attempted again to find a tenable antirealism for statements about the past. His assessment of his earlier attempt in 1969 was that 'the conclusion that I reached was the most disappointing possible. Antirealism about the past was not incoherent; but it was not believable, either. I have been perplexed by this matter ever since.'⁴⁷

Dummett's final philosophical project was to write replies to the twenty-seven essays on his work in the *Library of Living Philosophers* volume on *The Philosophy of Michael Dummett* (which he described as 'sometimes like an experience we are all denied, writing thank-you letters for favourable obituaries'),⁴⁸ and to write his 'Intellectual autobiography' for that volume, which he wrote mostly in 2000. His replies get to the heart of the various matters under discussion and constitute an invaluable resource for understanding his thinking. The volume appeared in the summer of 2007; Dummett said then that he no longer felt able to do any new philosophy, though he continued to attend the philosophy of mathematics seminar in Oxford until the spring of 2010. He died on 27 December 2011, at the age of eighty-six, four days before what would have been his and Ann's 60th wedding anniversary. He was buried in Wolvercote Cemetery on 17 January 2012 after a Requiem Mass at St Aloysius Church. Ann died six weeks after Michael, on 7 February 2012, and they were commemorated together in a memorial service in New College Chapel on 2 June 2012.

Honours

Among honours not already mentioned, Dummett received five honorary degrees (University of Nijmegen 1983; University of Caen 1993; University of Aberdeen 1993; University of Stirling 2002; University of Athens 2004). He was elected Honorary Foreign Member of the American Academy of Arts and Sciences in 1985, and member of the Academia Europaea in 1990. He received the Lakatos Prize in

⁴⁵M. A. E. Dummett, Truth and the Past (New York, 2004).

⁴⁶ M. A. E. Dummett 'The reality of the past', *Proceedings of the Aristotelian Society*, n.s. 69 (1968–1969), 258.

⁴⁷Dummett, *Truth and the Past*, p. 45.

⁴⁸Dummett, in Auxier and Hahn, *The Philosophy of Michael Dummett*, p. 819.

1994, for his book *Frege: Philosophy of Mathematics*, the Rolf Schock Prize for Logic and Philosophy in 1995, and the Lauener Prize for Analytical Philosophy in 2010. In 2017 Christ Church named its lecture theatre in his honour, thereby bringing the name of Michael Dummett into everyday use in the place where his long and illustrious career in Oxford had begun.

Dummett's character

In 'Truth' Dummett considers the sentence 'Jones was brave or he was not', said of a man who never faced danger in his lifetime, and concludes that 'anyone with a sufficient degree of sophistication' will reject the claim that, on the basis of Jones' character, one or other of these statements is true. Whichever it would be 'must be true in virtue of the sort of fact we have been taught to regard as justifying us in asserting it', not something 'of which we can have no direct knowledge'.⁴⁹ Dummett's life was filled with visible manifestations of bravery, combined with great independence of spirit.

Dummett's conversion to Catholicism in the face of disapproval from parents and teachers clearly showed bravery and independence. Doubtless this was so also when he proclaimed his anti-racist views in Malaya among the British colonials there after the war, and Robert Pring-Mill, who served with Dummett in Malaya, recalled him there as displaying 'beatific disregard of danger'.⁵⁰ His courage and independence of mind is also shown in the fact that he established himself as a major figure in Oxford philosophy without the support of and indeed in antipathy to its leading figures in his philosophical youth, Gilbert Ryle and John Austin. ('I never greatly cared for Ryle; he tried to make us narrower and narrower, scorning not only Heidegger, whom he had once reviewed respectfully, but Carnap as well',⁵¹ and referring to the fact that he began his philosophical career thinking of himself as a follower of Wittgenstein, 'it helped to inoculate me against the influence of Austin; although he was himself unquestionably a clever man, I always thought that the effect of his work on others was largely harmful, and therefore regretted the nearly absolute domination that for a time he exercised over Oxford philosophy'.⁵²) Dummett put himself on the line in the fight against racism, bravely facing great hostility from racists as illustrated in his account of being arrested, charged and tried, with the possibility, averted by acquittal, of being sent to prison, for picketing a hairdresser's in Oxford which refused to serve

⁴⁹ Dummett, 'Truth', 158–9.

⁵⁰ Kenneth Wachter (pers. comm.).

⁵¹M. A. E. Dummett, 'Reply to Brian McGuinness', in Auxier and Hahn, *The Philosophy of Michael Dummett*, p. 52.

⁵²Dummett, Truth and Other Enigmas, p. xii.

Asian or Caribbean people;⁵³ see also *The Times* 8 October 1968, for a photo of Dummett confronted by a steward when protesting during the meeting of the 'Society for Individual Freedom'. Michael and Ann received death threats during this time, in response to which, on the advice of the police, sheets of bullet-proof clear plastic were put over the windows at the back of their house. None of these dangers deflected Dummett from his pursuit of anti-racism.

Moral outrage at flagrant injustice or culpable irresponsibility or cruelty could rouse him to fury, seldom manifested, but volcanic in its occurrence, like Vesuvius, which has long periods of quiet followed by an almighty explosion, rather than Etna, which is in a state of more or less continuous eruption, as Timothy Smiley noted. (Dummett's resignation from the Academy may be seen as one of those Vesuvian eruptions.) Far more characteristic of Dummett than his fury was his kindness and compassion, and great generosity. His brilliance as a philosopher was matched by brilliance as a teacher, and the generosity of his commitment to anti-racism was matched by generosity towards his students and colleagues, with his time and his ideas, and his engagement with their ideas. When he died, he was warmly remembered in an unprecedented collective expression of gratitude, affection, and admiration by twenty-six members of the philosophy profession, many of them his former students (including the two authors of this memoir) in the Opinion Pages of the New York Times on 4 January 2012.⁵⁴ At the centre of Dummett's life was his family, and many affectionate memories of his students and friends are of being generously welcomed by Michael and Ann into their family home. Dummett's jovial good humour and infectious laugh, combined with the depth and humanity of his conversation, enriched the lives of those around him.

Philosophical work

Reflecting on the nature of the progress in philosophy, Dummett suggests that 'the path toward the goal of philosophy—any path that we may take—is a meandering one that twists and turns upon itself. At a given stage, the only way to proceed any further along this path may be to go quite a long way in a direction opposite to that in which the goal lies; to go in that direction may be the only way to improve our chance of eventually reaching the goal.'⁵⁵ Dummett was true to this precept in being unusually

⁵³Dummett, 'Intellectual autobiography', p. 20.

⁵⁴https://opinionator.blogs.nytimes.com/2012/01/04/remembering-michael-dummett/ (accessed 13 September 2018).

⁵⁵ M. A. E. Dummett, *The Nature and Future of Philosophy* (New York, 2010), p. 149 (first published in Italian translation, 2001).

unconcerned with whether interlocutors agreed with him about the ultimate answers to philosophical questions. Those answers, he thought, were no more than highly fallible predictions about where the path might eventually lead. What mattered was using one's machete to clear away the tendrils of confusion that obscure any philosophical issue and then taking some further steps down the path. The assessment of Dummett's philosophical work which follows has been written in the same spirit. We have not been afraid to say which trails seem to us to lead to dead ends. Only by doing so will philosophers be encouraged to concentrate their efforts at the points where further progress is likely.

Early papers

Dummett began to publish in 1954 and over the next ten years published thirteen full-length papers (six of them in *The Philosophical Review*) alongside four substantial reviews. Between 1965 and 1973, by contrast, he published only a short encyclopaedia article on Frege and the paper 'The reality of the past', which was read to the Aristotelian Society in 1969. Accordingly, the articles which appeared between 1954 and 1964 constitute a distinctive part of his oeuvre, one on which his early international reputation rested.

In style, these papers are typical of their time and differ from Dummett's later publications. They are short and largely free of footnotes: readers were trusted to know the literature which an author might have in mind. The writing is precise but terse; the reader is also expected to fill in some vital argumentative steps.⁵⁶ There is throughout a strong sense of a powerful, fresh, and logically ingenious mind addressing itself to a wide range of philosophical topics.

The philosophy of time was an early and enduring preoccupation: along with the possibility of retro-causation, Dummett defended McTaggart's notorious argument that time was unreal. Traditional metaphysical concerns also loom large: a critical notice and two essays reflect an intense early engagement with Nelson Goodman's *The Structure of Appearance*.⁵⁷ Although he admired the book's technical adroitness, Dummett had little sympathy with Goodman's neo-Carnapian project of constructing the world from qualia. One of the essays on Goodman, 'Nominalism', also shows the importance that Frege's Context Principle ('Only in the context of a sentence does a word have meaning'⁵⁸) had already come to assume for Dummett. Dummett understands the Principle to imply that 'if a word functions as a proper name, then it *is* a

⁵⁶Dummett may on occasion have expected too much. The Appendix, below, draws on personal communication with him to explicate an argument that is merely sketched in his 1964 paper, M. A. E. Dummett, 'Bringing about the past', *The Philosophical Review*, 73 (1964), 338–59.

⁵⁷ N. Goodman, *The Structure of Appearance* (Cambridge, MA, 1951).

⁵⁸ M. A. E. Dummett, 'Nominalism', *The Philosophical Review*, 65 (1956), 491.

proper name'.⁵⁹ He takes this to exclude the sort of nominalism espoused by Goodman and (at one stage) by Quine, which allows that the numeral '28' functions as a proper name, and that the statement '28 is a perfect number' is true, but nonetheless there is no such thing as the number 28.

The early papers also include two contributions to formal logic. 'A propositional calculus with denumerable matrix⁶⁰ explores a logic, *LC*, in which the schema $(A \rightarrow B) \lor (B \rightarrow A)$ is added to the axioms of the intuitionistic propositional calculus. The main result is that *LC* (now called Gödel-Dummett logic⁶¹) is complete with respect to any infinite lattice with zero and unit elements whose constitutive partial ordering is linear. 'Modal logics between S4 and S5' (1959), written in collaboration with E. J. Lemmon,⁶² showed that the modal system S4.2, got by adding the axiom schema $\Diamond \Box A \rightarrow \Box \Diamond A$ to the familiar system S4, has five distinct affirmative modalities (i.e., $\Box A$, $\Diamond \Box A$, $\Box \Diamond A$, A, $\Diamond A$). It also introduced the fruitful notion of an 'order closure algebra', which Dummett later renamed a '*QO*-space'. *QO*-spaces are close relations of the 'frames' which Saul Kripke used in giving his celebrated semantic theories for modal and intuitionistic logics.

In this period, Dummett also began to make his mark in the philosophy of mathematics. His 1959 assessment of Wittgenstein's contribution to that field brought to the fore Wittgenstein's discussions of following a rule. Dummett, however, became dissatisfied with his understanding of Wittgenstein and wrote, towards the end of his life, 'I should like to come to terms with Wittgenstein: I am sure I have not yet.'⁶³ In 'The philosophical significance of Gödel's theorem', he developed the difficult but suggestive concept of indefinite extensibility (see below p. 221).⁶⁴

'Truth' and the anti-realist programme

Important as many of these pieces were, they are overshadowed by 'Truth'. This paper is Dummett's first published attempt to address the questions about meaning, logic and realism that were to dominate his philosophical thinking to the end of his life. Some of its suggestions did not bear fruit in Dummett's later writings; he did not

⁵⁹ Ibid., p. 494.

⁶⁰ M. A. E. Dummett, 'A propositional calculus with denumerable matrix', *The Journal of Symbolic Logic*, 24 (1959), 97–106.

⁶¹ R. Dyckhoff, 'A deterministic terminating sequent calculus for Gödel-Dummett logic', *Logic Journal of the IGPL*, 7 (1999), 319–26.

⁶²M. A. E. Dummett and E. J. Lemmon, 'Modal logics between S4 and S5', *Mathematical Logic Quarterly*, 5 (1959), 14–24.

⁶³Dummett, 'Reply to Brian McGuinness', p. 54.

⁶⁴ M. A. E. Dummett, 'The philosophical significance of Gödel's theorem', Ratio 5 (1963), 140–55.

pursue, for example, the falsificationist theory of meaning adumbrated at pages 149–50 (see also remark (5) in the Postscript to 'Truth' that Dummett wrote in 1972, and the second paragraph of Dummett's 'Reply to Ian Rumfitt'65). The paper culminates in the first published statements of two theses to which Dummett remained strongly attracted throughout the rest of his life, even though he was well aware of the problems which confront them. First, the meaning or sense of a statement should not, in general, be given by specifying the conditions under which it is true; rather, it should be given by saying 'when it may be asserted in terms of the conditions under which its constituents may be asserted'.66 This claim-which Dummett later labelled 'justificationism'-was the basis of a strong form of 'anti-realism' whereby 'the concept of truth-values determined by reality independently of us should be abandoned. The notion of a statement's being true should be replaced by that of its being shown to be true.^{'67} The second thesis was that adopting this anti-realist position, whereby truth is 'dethroned' from its central place in the theory of meaning, would in turn require dethroning certain principles of classical logic-notably the Law of Excluded Middle-from their status as logical laws.

In the mid-1970s Dummett set out substantive arguments for these theses. The argument for anti-realism was presented in his two essays entitled 'What is a theory of meaning?', the first of which came out in 1975 with the second appearing the following year. He began to elaborate his case against classical logic—and his argument that intuitionistic logic is the strongest system that can be philosophically justified—in two lectures which were delivered in 1973 and published 1975: 'The philosophical basis of intuitionistic logic' and 'The justification of deduction'. Both the main theses of 'Truth' were also defended in the William James Lectures which Dummett gave at Harvard in early 1976, and published in considerably revised form as *The Logical Basis of Metaphysics* in 1991.

Dummett's main argument for justificationism was that it is the only theory of meaning that makes possible a non-circular account of what it is to understand a statement. The salient contrast is with the more familiar truth-conditional theory, whereby a statement's content is constituted by the conditions under which it is true. According to Dummett, a theory of meaning is of interest only if it is a theory of our knowledge of meaning: as he often put it, 'a theory of meaning is a theory of understanding'.⁶⁸ On this conception, the key thesis of the truth-conditional theory is the

⁶⁵ Dummett, *Truth and Other Enigmas*, p. 22; M. A. E. Dummett, 'Reply to Ian Rumfitt', in Auxier and Hahn, *The Philosophy of Michael Dummett*, p. 694.

⁶⁶Dummett, 'Truth', 161.

⁶⁷ Dummett, 'Intellectual autobiography', p. 18.

⁶⁸ Dummett, 'What is a theory of meaning?', p. 99; this is reprinted in M. A. E. Dummett, *The Seas of Language* (Oxford, 1993), pp. 1–33 at p.3.

claim that understanding a statement is a matter of knowing under what conditions it is true. In general, however, this knowledge will be implicit, and Dummett held that an ascription of implicit knowledge to a speaker is vacuous unless it amounts to attributing to him a disposition, the possession of which may be fully manifest in his behaviour. However, knowledge of the conditions under which a statement is true cannot always be cashed out as a fully manifest disposition. At least, this is so if our conception of truth is the usual realist one, whereby a statement may be true in circumstances where no one can recognise that it is true. For, Dummett supposed, the only plausible candidate to be a disposition, possession of which amounts to knowing a statement's truth conditions, is the disposition to assent to it in circumstances where one recognises that it is true. And if a statement may be true in circumstances where no one can recognise that it is true, then a speaker's implicit knowledge that a statement is true in, and only in, certain conditions will not be fully manifest in his disposition to assent to it in the circumstances in which it may be recognised as true. By contrast, Dummett claimed, knowledge of the conditions in which we have grounds for asserting the statement may be fully manifest in a speaker's behaviour: such knowledge will be manifest in the speaker's disposition to assert the statement when he has such grounds, and to refrain from asserting it when he does not.

Critics challenged this argument at a number of points. In the eyes of many, the main premiss—that a speaker's knowledge of meaning must be fully manifest in his behaviour—was more a philosopher's prejudice about how language ought to work rather than anything that can be applied in analysing actual linguistic practice, though in 'Truth' Dummett says of his doctrine that 'we no longer explain the sense of a statement by stipulating its truth-value in terms of the truth-values of its constituents, but by stipulating when it may be asserted in terms of the conditions under which its constituents may be asserted. The justification for this change is that this is how we in fact learn to use these statements.'⁶⁹ Another worry is that this requirement of full manifestability is so strong that even a justificationist cannot meet it. We will consider briefly Dummett's attempts to allay the first doubt by constructing justificationist semantic theories for reasonably large fragments of a natural language.

As the quotation from 'Truth' in the previous paragraph already shows, Dummett differed from the verificationists of the Vienna Circle in taking seriously the compositionality of linguistic content. Like most empirical linguists, he held that the content of a complex statement is determined by the contents of its parts. Accordingly, he had to show (at least in outline) how a compositional justificationist semantic theory would go. His model here was the semantic theory for the language of intuitionistic mathematics that had been proposed by Arend Heyting. As Dummett explains this theory,

⁶⁹ Dummett, 'Truth', 161.

the meaning of each [logical] constant is to be given by specifying, for any sentence in which that constant is the main operator, what is to count as a proof of that sentence, it being assumed that we already know what is to count as a proof of any of the constituents. The explanation of each constant must be faithful to the principle that, for any construction that is presented to us, we shall always be able to recognize effectively whether or not it is a proof of any given statement. For simplicity of exposition, we shall assume that we are dealing with arithmetical statements...

The logical constants fall into two groups. First are \land , \lor and \exists . A proof of $A \land B$ is anything that is a proof of A and of B. A proof of $A \lor B$ is anything that is a proof either of A or of B. A proof of $\exists x A(x)$ is anything that is a proof, for some n, of the statement $A(\bar{n})$.

The second group is composed of \forall, \rightarrow , and \neg . A proof of $\forall xA(x)$ is a construction of which we can recognize that, when applied to any number *n*, it yields a proof of $A(\bar{n})$. Such a proof is therefore an *operation* that carries natural numbers into proofs. A proof of $A \rightarrow B$ is a construction of which we can recognize that, applied to any proof of *A*, it yields a proof of *B*. Such a proof is therefore an operation carrying proofs into proofs...A proof of $\neg A$ is usually characterized as a construction of which we can recognize that, applied to any proof of *A*, it will yield a proof of a contradiction.⁷⁰

This semantic theory explains why certain classical logical laws are not logically valid for the intuitionist. A statement will count as intuitionistically valid if the semantic principles guarantee it to be provable no matter which atomic statements are provable. So a statement in the form $\lceil A \lor \neg A \rceil$ will be valid only if either A or its negation is provable. Since it cannot be assumed of an arbitrary statement that either it or its negation is provable, Excluded Middle is not an intuitionistic logical law.

Heyting's semantics, though, needs to be generalised before it can be applied to a natural language, few of whose statements admit of anything that can properly be called a 'proof'. Since a mathematical proof justifies its conclusion, Dummett opted for a generalisation in which the semantic axiom for 'or' is as follows (and similarly for the other connectives):

(J) A justification of $\lceil A \text{ or } B \rceil$ is anything that is a justification either of A or of B.

As Dummett acknowledged, (*J*) is untenable if it is understood to concern an individual's justification for his assertions, at a particular time: 'I may be entitled to assert $^{\Gamma}A$ or B^{η} because I was reliably so informed by someone in a position to know, but if he did not choose to tell me which alternative held good, *I* could not [assert either disjunct].'⁷¹ For this reason, he understood (*J*) as concerning the existence of justifications, not a

⁷⁰ Dummett, *Elements of Intuitionism*, p. 12 (2nd edn., p. 8).

⁷¹Dummett, *The Logical Basis of Metaphysics*, p. 266.

given thinker's apprehension of them. All the same, if a justification is to exist, he required that a suitably placed thinker *could have* apprehended it, even if none in fact did.⁷²

Even when understood in this way, however, another of Dummett's own examples points to a whole range of cases where (J) remains problematic. 'Hardy may simply not have been able to hear whether Nelson said, "Kismet, Hardy" or "Kiss me, Hardy", though he heard him say one or the other: once we have the concept of disjunction, our perceptions themselves may assume an irremediably disjunctive form'.⁷³ On its face, this is a counterexample to (J). If Hardy heard Nelson say one thing or the other, then there was-indeed, he had-very strong justification for asserting the disjunction. But in the circumstances of the Battle of Trafalgar, there may have been no justification that any observer could have apprehended for asserting either disjunct. Hardy was as well placed to hear Nelson's last words as anyone could have been, but all he could hear was that Nelson said either one thing or the other. Dummett's last point is the crucial one: our perceptions may themselves assume an irremediably disjunctive form. Since they may do so, the only way to protect (J) from this sort of counterexample is to deny that perceptions can constitute justifications for disjunctive assertions. But in that case (J) forces so radical a departure from our ordinary understanding that the notion it characterises is unrecognisable as our notion of disjunction.

In *The Logical Basis of Metaphysics*, Dummett tried to get around this problem by following Dag Prawitz in distinguishing between a statement's *canonical* or *direct* grounds and those which are merely indirect: it is only the statement's direct grounds which give its content. Dummett postulated that a speaker has direct grounds for asserting $^{\Gamma}A$ or B^{Γ} when, and only when, he has either direct grounds for asserting A or direct grounds for asserting B. The direct grounds for other complex statements follow this pattern: they embody the standard introduction rule for the statement's principal connective.

This move creates a problem about the validity of deductive proofs. Many proofs (or apparent proofs) of complex statements do not terminate with an application of the introduction rule for the conclusion's principal connective. Given that a statement's content is given by its canonical grounds, it seems that such proofs (or apparent proofs) will be unfaithful to the contents of their conclusions. Dummett maintained that they may be faithful so long as they show how to transform any direct grounds for all the premisses into a direct ground for the conclusion. Indeed, he took this condition to be the criterion for an argument to be deductively valid. In this way, truth

⁷² Ibid., p. 268.
⁷³ Ibid., p. 267.

was 'dethroned' not only from its central place in the theory of meaning, but also from its traditional place in the explanation of validity.

Dummett illustrated this anti-realist conception of validity by using Euler's famous solution to the problem about the bridges of Königsberg. Euler's proof is valid in that it 'show[s] us, of someone observed to cross every bridge at Königsberg, that he crossed at least one bridge twice, *by the criteria we already possessed for crossing a bridge twice*'.⁷⁴ 'When an expression, including a logical constant, is introduced into the language, the rules for its use should determine its meaning, but its introduction should not be allowed to affect the meanings of sentences already in the language.'⁷⁵ By mastering logical rules, we acquire new indirect grounds for making assertions, even of atomic statements. However, the conditions in which atomic statements may be directly asserted, and hence their meanings, are not disturbed.

This account of validity generates serious problems of its own. Euler's proof is said to show, of someone observed to cross every bridge at Königsberg, that he crossed at least one bridge twice, by the criteria we already possessed for crossing a bridge twice. But that cannot mean that those criteria were actually applied to verify that the promenader crossed a bridge twice. Perhaps they were—perhaps an observer stationed on the Dombrücke, for example, saw the promenader cross that bridge twice—but the proof would not be invalidated if the pre-existing criteria were not actually applied. The most that can be claimed is that the proof's validity consists in the truth of a counterfactual claim: had an observer been stationed on each bridge, with instructions to tick a box if, and only if, the promenader was observed crossing it twice, at least one observer would have ticked his box.

This analysis, however, is susceptible to objections parallel to those which face putative counterfactual analyses of other notions. There are possible worlds in which all the inhabitants of Königsberg are afflicted by Königsberg ennui, a neurological condition which ensures that anyone trying to observe whether a promenader has crossed a given bridge twice falls into a catatonic state before any second crossing. In such a world, it will not be true to say that at least one of the observers would have ticked his box, had the promenader crossed every bridge at least once. Even in such a world, though, Euler's deduction is valid.

Other doubts about the form of anti-realism proposed in *The Logical Basis of Metaphysics* arise when we reflect on the role which the distinction between direct and indirect grounds needs to play in it. The notion of directness needs to be sufficiently generous that no ground for asserting a formula obtains unless a direct ground for asserting it could have obtained. Yet the direct grounds for asserting a complex

⁷⁴Ibid., p. 219, emphasis in the original.

⁷⁵ Ibid., p. 220.

formula are constrained to be those given by the introduction rule for the formula's main connective. Combining these points, we deduce that no ground for asserting a complex formula can obtain unless the assertion of that formula could have been justified by applying the introduction rule for its main connective. This thesis is what Dummett calls his *Fundamental Assumption* and it opens the way to a new assault on classical logic, one which does not require accepting Heyting's semantic clauses for the connectives and quantifiers. The Assumption combines with the account of deductive validity to yield the requirement that the introduction and elimination rules for a given connective must be 'in harmony'. Dummett contended that, while the intuitionistic rules for negation possess this virtue, the classical rules do not.

The basic problem with this line of attack on classical logic is that the Fundamental Assumption is highly doubtful. Dummett concluded his own discussion of it by saying that 'our examination of the fundamental assumption has left it very shaky'.⁷⁶ While it may be tenable for the case of conjunction, it is indeed implausible for all the other sentential connectives, and particularly for the key case of negation. According to the Assumption, we shall not be entitled to assert a negated statement unless we could have justified it by applying the introduction rule for 'not'. That rule licenses the assertion of Not A¹ when a contradiction has been derived from our premisses along with the hypothesis A. In many circumstances where we take ourselves to be entitled to assert [Not A], though, it is hard to see what the appropriate premisses might be. Suppose you look out of the window and see that it is not raining. You are surely entitled to assert 'It's not raining', but in many circumstances your observation delivers no premisses that would enable you to justify your assertion by applying the rule of 'not'-introduction. In looking out of the window, you might see that it is sunny, but being sunny is compatible with rain. The only specification of the content of your experience that is guaranteed to be incompatible with 'It is raining' is 'It is not raining', but while you can indeed see that it is not raining, the belief that it is not raining serves as a *premiss* in your reasoning. It is not a conclusion which has been reached by applying the rule of 'not'-introduction.

For the reasons set out, Heyting's semantic theory does not seem to generalise so as to yield a plausible account of the meanings of empirical statements. It does not follow at all, however, that justificationism is doomed; there are justificationist semantic theories which do not take Heyting's semantics as their model.

Whether any such theory is really viable, and whether it can sustain classical logic, remain important open questions in the philosophy of language. One class of statements which present a particular challenge to the coherence of global anti-realism are those about the past. Dummett early recognised the problem they pose. In his

⁷⁶Ibid., p. 277.

important paper 'The reality of the past', he wrote: 'I think that without doubt the thorniest problem for one who wishes to transfer something resembling the intuitionist account of the meanings of mathematical statements to the whole of discourse is what account he can give of the meanings of tensed statements.⁷⁷ The problem arises from the apparent 'existence of the truth-value link',⁷⁸ that what is true at a certain time remains true, regardless of whether or not the evidence that showed it to be true at that time is later irretrievably lost. 'No matter what manoeuvres he attempts, the anti-realist will be unable to avoid inconsistency in recognising the existence of the truth-value link if he formulates his contention as being that a past-tense statement, made at any given time, is true at that time only if there is at that time a situation justifying the assertion of the statement.⁷⁹ How uncertain he felt about the position he was attempting to maintain comes out poignantly in the last line of the paper: 'Of course, like everyone else, I feel a strong undertow towards the realist view: but, then, there are certain errors of thought to which the human mind seems naturally prone.'80 Dummett returned to this problem time and again, and never reached a settled view on how to solve it. He adumbrated incompatible solutions in his final two books, Truth and the Past and Thought and Reality. These two books started life as invited lecture series: Thought and Reality began as the Gifford Lectures at St Andrews, in 1996; Truth and the Past began as the Dewey Lectures at Columbia, given in 2002. (One further book by Dummett appeared in his lifetime, The Nature and Future of *Philosophy*, published in 2010, but he had already written it by 2001, when it was published in Italian translation.)

Dummett was perfectly clear that his proposed solutions to this problem in these two sets of lectures, and their subsequent publications (in the reverse order from their delivery) were incompatible, as he spells out in the Preface to *Thought and Reality*:

In the Gifford Lectures, a proposition is reckoned to be true just in case *we* [Dummett's emphasis], as we are or were, are or were in a position to establish it to hold good; my present standpoint, as stated in the Dewey Lectures, is that it is true just in case *anyone suitably placed in time and space* would be or have been [the use of the subjunctive here is hugely significant] in such a position. The difference has an evidently far-reaching effect; far more propositions will be rendered true under the Dewey than under the Gifford conception.⁸¹

80 Ibid., p. 258.

⁷⁷ Dummett, 'The reality of the post', 250–1.

⁷⁸Ibid., p. 245.

⁷⁹Ibid., p. 251.

⁸¹ Dummett, *Thought and Reality*, pp. vii–viii.

Dummett was adamant that such divergences of views in the corpus of a single philosopher are in the nature of doing philosophy, as he makes clear in the Preface to *Truth and the Past*:

The position I have adopted in this book is greatly at variance with those I expressed in my not yet published Gifford Lectures of a few years ago. In those, I did not embrace antirealism about the past: but I did maintain that the body of true statements is cumulative. I have not published these lectures, which it is the normal practice to do, because I was troubled that this view was in error. Now that I am publishing a book expressing a different view, I think I will probably publish the Gifford Lectures as I gave them. I do not think that anyone should interpret everything that a philosopher writes as if it were just one chapter in a book he is writing throughout his life. On the contrary, for me every article and essay is a separate attempt to arrive at the truth, to be judged on its own.⁸²

Important books

While the project of combining anti-realism with logical revisionism was Dummett's most distinctive and original contribution to philosophy, he also did significant work in other areas.

Chief among these is Frege scholarship. The first book Dummett published was Frege: Philosophy of Language, which appeared in 1973. It offered the earliest systematic presentation of Frege's doctrines outside the philosophy of mathematics and was widely hailed as a masterpiece. Its interpretation of Frege has been challenged. In particular, some scholars have denied that Frege was, centrally, a philosopher of language or even that he had a philosophy of language. Dummett's account certainly downplays the extent to which Frege was motivated by epistemological concerns-in particular, by the desire to get clear about what ultimately justifies our acceptance of the basic principles of arithmetic and geometry. The value of the book, though, does not depend on its offering a fully convincing interpretation of Frege's writings. It lies, rather, in Dummett's having created an intellectual framework in which certain key Fregean theses have a secure and comprehensible place, and which enabled him to compare them fruitfully with central contentions in the philosophy of language of the middle fifty years of the twentieth century. Thus the book contains illuminating discussions of, inter alia: Kripke's theory of names as rigid designators; Russell's and Strawson's accounts of definite descriptions; the nature of the difference between particulars and universals; Quine's analysis of belief ascription, of ontological commitment, and attack on the analytic/synthetic distinction; Wittgenstein's remarks on

⁸²Dummett, Truth and the Past, p. x.

names, truth, and the speech act of assertion; Prior's analysis of tenses; Moore's account of 'exists'; the nature of abstract objects and the temptations of nominalism; Poincaré's strictures on impredicative definition; and Geach's theory of relative identity. In places, the discussion is prescient. For example, the 'new relativism' that has come to the fore in the past twenty years is both anticipated and criticised.⁸³ As Dummett realised, shorter and more clearly articulated chapters would have made the book more accessible (a lesson he took to heart in later books), although the provision of a proper index in the second edition (where the first had only a 'Brief Subject Index' and an 'Index of Names') helps. Despite these flaws, the book remains a stimulating source of ideas forty-five years on.

Dummett's second book, Elements of Intuitionism, appeared in 1977 (with a second edition in 2000). It includes a pedagogically useful chapter expounding intuitionistic arithmetic and analysis, but the focus is on intuitionistic logic, and the two central chapters, on the formalisation of the logic and on its semantics, interweave formal exposition and philosophical discussion in a most satisfying way. In addition to the originality and clarity of his exposition of intuitionist mathematics and logic in that book, Dummett also established intuitionistically the completeness of negationfree intuitionist logic, a best possible result in light of the result by Gödel and Kreisel that the completeness of Heyting's predicate calculus intuitionistically implies Markov's Principle, which is not intuitionistically valid. This result was obtained independently around the same time, by Harvey Friedman, by different means.⁸⁴ In the semantic analysis of intuitionistic logic, Dummett makes effective use of his and Lemmon's notion of a QO-space (see p. 209 above) to illuminate the relationship between Heyting's semantic theory and that of E. W. Beth. Dummett remarks in the Preface to the second edition that he has simplified the treatment of valuation systems, which leads to a more perspicuous and elegant presentation of the semantic theory. By contrast, some significant changes of mind on philosophical points are not noted. In particular, the two versions of section 7.2 give very different answers to the vexed question of in what way the intuitionist's account of 'valid proof' must be compositional.

Students of Dummett's philosophy have sometimes been puzzled by his reverence both for Frege, a fervent realist, and for Brouwer, a passionate anti-realist. Comparison of these two books goes a long way to resolve the apparent cognitive dissonance. Brouwer's exposition of intuitionism exemplifies the psychologism which Frege had fiercely attacked. One of Dummett's achievements in *Elements of Intuitionism* was to recast intuitionist mathematics and logic on a completely anti-psychologistic basis. As

⁸³Dummett, Frege: Philosophy of Language, pp. 396–400.

⁸⁴Dummett, *Elements of Intuitionism*, 1st edn. p. 288, 2nd edn. p. 201.

for realism, Dummett remarked that what attracted him to Frege was not his realism, 'for which, I thought, he never really argued, but which he simply took for granted, but the clarity of his thought: much of his thinking was perfectly compatible with a constructive view of mathematics'.⁸⁵ Further,

Reflecting on my rationale for intuitionistic mathematics as an exemplification of Wittgenstein's dictum about meaning as use, it struck me that the metaphysical conceptions accompanying both Platonist and constructive conceptions of mathematics were not the foundations of those conceptions: they were merely pictures illustrating them. One could not argue from the metaphysical pictures, because there was no independent ground for accepting one or the other. The core of the different conceptions lay in the divergent views of what the meanings of mathematical statements must consist in: to adopt one or the other view was to make one or the other picture natural.⁸⁶

Dummett described his third philosophical book as one he never intended to write. The Interpretation of Frege's Philosophy appeared alongside the second edition of Frege: Philosophy of Language in 1981;87 it was written to defend the view of Frege advanced in the earlier book against rival conceptions. It evinces a much closer interest than its predecessor in the textual niceties of Frege's writings and, especially, in the context of late nineteenth-century German philosophy. Dummett was there concerned, for example, to downplay the suggestion that Hermann Lotze (a figure who had gone unmentioned in Frege: Philosophy of Language) had much influenced Frege.⁸⁸ However, the book also contains material of wider philosophical interest. Dummett continues his debate with Kripke over the semantics of proper names, and two chapters pursue a fruitful discussion with Geach. In his critical notice of Frege: Philosophy of Language,⁸⁹ Geach had objected to the central role Dummett had ascribed to a distinction between simple and complex predicates; on Geach's view, the very distinction, and the related distinction between a statement's 'analysis' and its various 'decompositions', were 'radically unFregean'. In Chapters 15 and 16 of The Interpretation of Frege's Philosophy, Dummett convincingly argued that these distinctions, whilst not drawn explicitly, are needed to make best sense of the passages where Frege writes of the 'parts' of thoughts. He also contended forcefully that some such distinction is needed to relate our understanding of statements to their logical powers.

⁸⁵Dummett, 'Intellectual autobiography', p. 15.

⁸⁷M. A. E. Dummett, The Interpretation of Frege's Philosophy (London, 1981).

⁸⁸ An irony that amused Dummett was that he had provided the earliest solid evidence that Frege had so much as read Lotze. His 'Frege's Kernsätze zur Logik' (*Inquiry*, 24 (1981), 439–48) shows that the eponymous fragment in Frege's *Nachlass* is a commentary on parts of Lotze's *Logik*.

⁸⁹ P. T. Geach 'Critical notice of M. Dummett Frege Philosophy of Language', Mind, 85 (1976), 436–49.

⁸⁶Ibid., p. 17.

These chapters show how close attention to what is implicit in a great philosopher's writings can yield insights into the first-order questions he or she was addressing.

Dummett's heavy workload as Wykeham Professor of Logic meant that he published comparatively little during the 1980s. In 1991, however, with a sabbatical at Stanford behind him and retirement imminent, he brought out two new books. As well as The Logical Basis of Metaphysics (discussed above), that year saw the appearance (after a twenty-year gestation) of Frege: Philosophy of Mathematics. Dummett had originally envisaged this work as one which would compare Frege's theories with the leading twentieth-century approaches to the subject, somewhat as Frege: Philosophy of Language had done. He found, however, that Frege's conception of the philosophy of mathematics, which recognised formalism and subjective idealism as the only alternatives to his preferred Platonism, made comparisons with later writers strained and unfruitful. In particular, Frege's view of the field left no room for the sort of intersubjective anti-realism about mathematics that Dummett himself propounded. For this reason, the book that eventually emerged took a very different form. The body of it is a close commentary on Frege's Die Grundlagen der Arithmetik and on the sections of his *Grundgesetze* where Frege extends his logicist programme to real analysis. Because it is partly a commentary, Frege: Philosophy of Mathematics is the most straightforwardly organised and accessible of Dummett's philosophical books; however, it goes well beyond commentary in tackling problems unsolved by Frege.

The book also entered into controversies. In 1983, Dummett's former student Crispin Wright had published a monograph, *Frege's Conception of Numbers as Objects*,⁹⁰ which aimed to revive Frege's logicist project, at least for the arithmetic of the natural numbers, by eschewing the fatal Basic Law V in favour of the abstraction principle specifically concerning cardinal numbers that he had formulated in *Die Grundlagen*. That principle, now called Hume's Principle,⁹¹ says that the cardinal number of *Fs* is identical with the cardinal number of *Gs* if and only if there is a one-one correlation between the *Fs* and the *Gs*. This 'neo-Fregean' programme, as it came to be known, owed much to *Frege: Philosophy of Language*. In particular, it drew heavily on Chapter 4 of that book, where Dummett had set out inferential tests for an expression to qualify as a singular term. That debt, though, did not stop Dummett from being sharply critical of the project in *Frege: Philosophy of Mathematics*. Given the formal parallels between Hume's Principle, which is formally consistent, and Basic

⁹⁰C. Wright, Frege's Conception of Numbers as Objects (Aberdeen, 1983).

⁹¹Miscalled, by Dummett's lights: he argued that what Hume had in mind was no abstraction principle, but simply the thesis that two collections of objects are equinumerous if and only there is a one-one correlation between the members of the first collection and those of the second. See the Appendix to M. A. E. Dummett, 'Neo-Fregeans: in bad company?', in M. Schirn (ed.), *The Philosophy of Mathematics Today* (Oxford, 1998), pp. 369–87.

Law V, which is inconsistent in the context of Frege's impredicative second-order logic, the neo-Fregeans were, Dummett thought, too sanguine in assigning to the former principle a foundational epistemological role. He also criticised them for downplaying the importance of the distinction between those singular terms (such as personal proper names), understanding of which is sustained by acquaintance with the bearer, and those (such as numerals) for which such acquaintance is impossible.

Other noteworthy papers

In the period in which Dummett was writing his major books, he also published a number of substantial papers, of which the following three are particularly significant. 'Wang's paradox' (written and presented in 1970, but not published until 1975) anticipates the supervaluationist treatment of vagueness that was to get such attention later in the 1970s. It also identifies some basic flaws in the treatment.⁹²

'Is logic empirical?' (1976) analyses Hilary Putnam's famous argument that the paradoxes of quantum mechanics call for revisions to the classical logical law of distribution.⁹³ Dummett's answer to his titular question is that empirical information could, in principle, bear on logic, but it will do so only via a philosophical account of what logical consequence is. Putnam, Dummett argued, had not justified his preferred account.

'What is mathematics about?' (1993) sketches an anti-realist answer to its titular question.⁹⁴ According to Dummett, numbers, sets, and the like are not denizens of a Platonic realm which exists wholly independently of human thinking. Rather, they exist only insofar as thinkers are able to characterise the domains which they compose and share those characterisations with other thinkers. In this third essay, Dummett made extensive use of the notion of indefinite extensiblity he had introduced in 'The philosophical significance of Gödel's theorem' (see above). On his view, some of these fundamental mathematical domains—certainly that of sets—are 'indefinitely extensible'. While this notion has antecedents in the writings of Russell, Poincaré, and Zermelo, it was Dummett's distinctive contribution to contend that quantification over indefinitely extensible domains would not conform to classical logic but would obey only the weaker laws of intuitionistic logic. This 'local' argument for using intuitionistic logic within, for example, set theory is independent of the more general argument against classical logic discussed above. Work by Solomon Feferman and others

⁹²M. A. E. Dummett, 'Wang's paradox', Synthese, 30 (1975), 301-24.

⁹³ M. A. E. Dummett, 'Is logic empirical?', in H. D. Lewis (ed.), *Contemporary British Philosophy 4th Series* (London, 1976), pp. 45–68.

⁹⁴M. A. E. Dummett, 'What is mathematics about?', in A. George (ed.), *Mathematics and Mind* (Oxford, 1994), pp. 11–26.

on semi-constructive set theory revived interest in this latter argument, which may have a better chance of sustaining its conclusion than the general anti-realist argument.

Dummett's Catholicism and his philosophy

Dummett published twenty articles arising from his deep commitment to Roman Catholicism, of which his most notable contribution to Catholicism and Catholic theology is 'A remarkable consensus', published in *New Blackfriars* in 1987. In this paper, directed against what Thomas Sheehan, Professor of Philosophy at Loyola University in Chicago, had called 'a liberal consensus',⁹⁵ Dummett declared that 'the divergence that now obtains between what the Catholic Church purports to believe and what large or important sections of [it] in fact believe ought, in my view, to be tolerated no longer'.⁹⁶ This paper generated responses, some virulent, as Dummett experienced them, from five leading Catholic theologians in subsequent issues of *New Blackfriars*, and the debate has continued to be discussed in *New Blackfriars* and in other Catholic University of Lublin.⁹⁷ It also continued at a conference on Philosophical Theology and Biblical Exegesis held at the University of Notre Dame in March 1990 in which Dummett was invited to give a lecture published as the lead paper in its proceedings as 'The impact of scriptural studies on the content of Catholic belief'.⁹⁸

For most of Dummett's philosophical career his philosophy and his Catholic faith, both of which he pursued passionately, did not appear in the same publications. However, in the *Library of Living Philosophers* volume on *The Philosophy of Michael Dummett*, they are brought together in 'Dummett: philosophy and religion' by Andrew Beards (who at the time of writing was Director of the BA in Philosophy and the Catholic Tradition at Maryvale Institute in Birmingham), which surveys Dummett's writings on Catholicism and Catholic theology and brings them into relation with aspects of his philosophy.⁹⁹ Dummett's 'Reply to Andrew Beards', appreciative and mostly in agreement, articulates connections between the two. Particularly striking is a direct connection between the basis of Dummett's anti-realism/justificationism and the necessity to believe in God: 'It makes no sense to speak of a world, or the world,

⁹⁵ M. A. E. Dummett, 'A remarkable consensus', New Blackfriars, 68 (1987), 428.

⁹⁶Ibid., p. 431.

⁹⁷ Volume 65 (4), 2017.

⁹⁸ M. A. E. Dummett, 'The impact of scriptural studies on the content of Catholic belief', in E. Stump and T. P. Flint (eds.), *Hermes and Athena: Biblical Exegesis and Philosophical Theology* (Notre Dame, IN, 1993), pp. 3–22.

⁹⁹A. Beards, 'Dummett: philosophy and religion', in Auxier and Hahn, *The Philosophy of Michael Dummett*, pp. 863–88.

independently of how it is apprehended. [...] How things are in themselves consists in the way that God apprehends them. That is the only way in which we can make sense of our conviction that there is such a thing as the world as it is in itself, which we apprehend in certain ways and other beings apprehend in other ways.¹⁰⁰ Dummett also invoked this theism in one of his Gifford Lectures, published as Chapter 8, 'God and the World', in *Thought and Reality*.

Dummett also articulated an understanding of the Catholic doctrine of transubstantiation in which he sought to reconcile 'the fact that no *physical* change occurs at the consecration of the bread and wine'¹⁰¹ in the Eucharist with the doctrine that after consecration the bread and wine *are* the Body and Blood of Christ, by invoking the notion that after consecration, God *deems* the bread and wine to be the Body and Blood of Christ. Dummett offers an analogy with the adoption of a child: 'When adoptive parents deem an adopted child to be their son, there remains a sense in which he is not their son namely the biological sense', yet 'the parents may legitimately say "He is truly our son."¹⁰²

Dummett published strong criticisms of the moral teachings of the Catholic Church regarding contraception, which he considered to be gravely mistaken, saying that 'the condemnation of any use of the pill with contraceptive intent by married people is ethically bizarre: an act not wrong in itself is held to be wrong if done for a motive not in itself wrong, indeed often laudable'.¹⁰³ He also considered that 'the widely publicized condemnation of the use of condoms in countries where there is a great risk of AIDS is morally objectionable'.¹⁰⁴

Fergus Kerr concludes his In Memoriam notice for Michael Dummett in *New Blackfriars* with the words, 'Few have ever combined unwavering loyalty to the Church with such relentless interrogation.'¹⁰⁵

Dummett's place in philosophy

Michael Dummett was one of the most important analytic philosophers of the second half of the twentieth century, among a group that included W. V. Quine, Donald

¹⁰⁰M. A. E. Dummett, 'Reply to Andrew Beards', in Auxier and Hahn, *The Philosophy of Michael Dummett*, p. 892.

¹⁰¹ Ibid., p. 896

¹⁰²Ibid., pp. 896–7; see also M. A. E. Dummett, 'The intelligibility of Eucharistic doctrine', in W. J. Abraham and S. W. Holzer (eds.), *The Rationality of Religious Belief: Essays in Honour of Basil Mitchell* (Oxford, 1987), pp. 231–61.

¹⁰³ Ibid., p. 898.

¹⁰⁴ Ibid.

¹⁰⁵ F. Kerr, 'Michael Dummett In Memoriam', New Blackfriars, 93 (2012), 262.

Davidson, P. F. Strawson, Hilary Putnam and Saul Kripke. His espousal of a form of verificationism, distinct in crucial ways from the earlier verificationism of Carnap and the Vienna Circle in the 1920s and first half of the 1930s, and from Quine's later form of empiricist verificationism on the other, started from the question 'In what does grasp of meaning in language consist?'. Few philosophers today espouse Dummett's anti-realist, or justificationist, answer to this question, but his recognition of the central role of that question was and remains enormously influential. The British Academy characterised Dummett's importance in its citation for his re-election to the Academy, as a Senior Fellow, in 1995 as follows:

Michael Dummett was Wykeham Professor of Logic in the University of Oxford until 1992. He was then without question the most distinguished and authoritative philosopher occupying an academic post in this country, and his productivity is undiminished since his retirement. His great series of books on Frege, his own independent contribution to the philosophy of language and to the philosophy of mathematics, his work in logic and in metaphysics and, finally, his observations on the nature of philosophy itself, constitute a body of theory unsurpassed in quality by the work of any of his contemporaries in the English-speaking world. The work is distinguished throughout by its originality, by its profundity and range, and by an unusually high level of intellectual unity. Its importance is universally acknowledged in the philosophical world, and its influence has been, and will be, great.

Dummett published his philosophical ideas in eight books and nearly a hundred articles, including one book and three articles in mathematical logic. His philosophical publications have given rise to a vast literature of responses, including the critical essays in that ultimate accolade—a volume in the *Library of Living Philosophers* devoted to *The Philosophy of Michael Dummett*.

Other interests

Anti-racism and support for immigrants

As has been described, Dummett, with his wife Ann, played an important role in combatting racism in Britain. As well as his work as an activist, he wrote or co-wrote five pamphlets and an article on this topic, and a book, *On Immigration and Refugees*.¹⁰⁶ Dummett's *Library of Living Philosophers* volume contains an article on 'Work against racism' by Ann Dummett, and on 'Immigrants and refugees: individualism and the moral status of strangers' by Kwame Anthony Appiah.¹⁰⁷

¹⁰⁶ M. A. E. Dummett, On Immigration and Refugees (London, 2001).

¹⁰⁷A. Dummett, 'Work against racism', in Auxier and Hahn, The Philosophy of Michael Dummett,

Voting systems

He had a strong interest in voting systems and published significant work on this topic, both theoretical and practical, in the form of two books and three articles, including an influential joint paper with Robin Farquharson, 'Stability in voting'.¹⁰⁸ He advocated the Borda count, and was able to put his views into practice when as Sub-Warden of All Souls (1974–76), he presided over the election of a new Warden (in which Patrick Neill was elected). After re-election to the British Academy, in 1995, he proposed a system of voting for the Philosophy Section to elect new members that allowed for weighting of negative as well as positive preferences, which was tried out in one election, alongside the existing system, but not adopted after objections that it was unrealistic to expect voters to have a preference, for each pair of candidates, between electing both and electing neither. Dummett's Library of Living Philosophers volume contains an article on 'Michael Dummett on social choice and voting' by Maurice Salles, who concludes, 'It is very difficult to convey the richness of the contribution of Michael Dummett to social choice and voting theory and to the practical voting procedures. [...] In French "hobby" is violon d'Ingres. I do not know whether Ingres, surely a great painter, was a good violinist. However, I am sure that Michael Dummett is a great social choice theorist.'109

Tarot cards and their uses

He pursued a passionate side interest in the games played with tarot cards, and in the cards themselves, about which he published six books and nearly forty articles. His researches are credited with establishing that the tarot cards are not relics of Ancient Egypt (as some like to believe), but originated in fourteenth-century Italy and fifteenth-century France. He also co-authored two books on the vogue for using Tarot cards for fortune-telling, *A Wicked Pack of Cards: Origins of the Occult Tarot* with Ronald Decker and Thierry Depaulis, and *A History of the Occult Tarot 1870-1970* with Ronald Decker.¹¹⁰ Dummett's *Library of Living Philosophers* volume contains an article by Thierry Depaulis, 'The first golden age of the Tarot in France'.¹¹¹

pp. 845–55; K. A. Appiah, 'Immigrants and refugees: individualism and the moral status of strangers', in Auxier and Hahn, *The Philosophy of Michael Dummett*, pp. 825–40.

¹⁰⁸ M. A. E. Dummett and R. Farquharson, 'Stability in voting', *Econometrica*, 29, 33-43.

¹⁰⁹M. Salles, 'Michael Dummett on social choice and voting', in Auxier and Hahn, *The Philosophy of Michael Dummett*, p. 815.

 ¹¹⁰ R. Decker, T. Depaulis and M. A. E. Dummett, *A Wicked Pack of Cards: the Origins of the Occult Tarot* (London, 1996); R. Decker and M. A. E. Dummett, *A History of the Occult Tarot* (London, 2013).
 ¹¹¹ T. Depaulis, 'The first golden age of the Tarot in France', in Auxier and Hahn, *The Philosophy of Michael Dummett*, pp. 901–12.

Yet further interests

Dummett was among the first to join the British Committee for the Reunification of the Parthenon Marbles, when it was established in 1983. He published two articles on the morality, or rather immorality, of nuclear deterrence, in 1984 and 1986.¹¹² In 1993 he published a practical book on English grammar and style, motivated by his experience of being a Finals examiner at Oxford shortly before his retirement.¹¹³ He loved the Blues, a love ignited by hearing Bessie Smith's recording of 'Thinking Blues' in a record shop during his first trip to the United States, in 1955–6, and was proud to have heard Billie Holiday sing in a small bar on the South Side of Chicago in 1956.¹¹⁴ (He listed 'listening to the blues', along with 'investigating the history of card games', in his *Who's Who* entry under Recreations.)

Appendix

As remarked above, Dummett (especially in his early papers) expected his readers to fill in the details of his deductions. We take this opportunity to put on record the intended completion of one well-known early argument, attested to in discussion with Ian Rumfitt around 1992.

Dummett's 1964 paper 'Bringing about the past' includes an extended comparison between two arguments.¹¹⁵ The first is addressed to a parent who hears on the radio that a ship on which his son was sailing has sunk, and who prays that he was among the passengers rescued by another boat: 'Either your son has drowned or he has not. If he has drowned, then your prayer will not (cannot) be answered. If he has not drowned, your prayer is superfluous. So in either case your prayer is pointless.' The second is the apparently parallel argument for fatalism: 'Either you are going to be killed by a bomb or you are not going to be. If you are, then any precautions you take will be ineffective. If you are not, all precautions you take are superfluous. Therefore it is pointless to take precautions.' In the article, Dummett contends that both arguments are fallacious. In the case of the second argument, Dummett allows that the fatalist may infer from 'You will be killed' to '(Even) if you do not take precautions, you will be killed' and from 'You will not be killed' to '(Even) if you do not take precautions,

¹¹⁴Dummett, 'Intellectual autobiography', p. 13.

¹¹²M. A. E. Dummett, 'Nuclear warfare', in N. Blake and K. Pole (eds.), *Objections to Nuclear Defence* (London, 1984), pp. 28–40; M. A. E. Dummett, 'The morality of deterrence', *Canadian Journal of Philosophy* supplementary vol. 12 (1986), 111–27.

¹¹³M. A. E. Dummett, Grammar & Style for Examination Candidates and Others (London, 1993).

¹¹⁵Dummett, 'Bringing about the past'.

you will not be killed'. However, he deems it 'clear' that, on any use of '(even) if' on which this inference is valid, it is impermissible to pass from this last conditional to the fatalist's conclusion that 'Your taking precautions will not be effective in preventing your death.'¹¹⁶

Many readers have found this claim far from clear. Dummett understands 'Your precautions will be effective' as tantamount to the conjunction of two conditionals: 'If you take precautions, you will not be killed' and 'If you do not take precautions, you will be killed'. Using the letters 'P' and 'K' to symbolise 'You will take precautions' and 'You will be killed', his claim is that where ' \rightarrow ' is any conditional operator which validates the schema

$$(*) \qquad A \vdash B \to A,$$

the conditionals $\neg P \rightarrow \neg K$, $P \rightarrow \neg K$, and $\neg P \rightarrow K$ form a consistent triad.

There is, in fact, a strong argument for this claim. One instance of (*) is $\neg K \vdash P \rightarrow \neg K$; another is $\neg K \vdash \neg P \rightarrow \neg K$. Thus, if we had $\neg P \rightarrow \neg K, P \rightarrow \neg K$, $\neg P \rightarrow K \vdash$, we should also have $\neg K, \neg P \rightarrow K \vdash$, whence $\neg P \rightarrow K \vdash K$. Since (*) also yields $K \vdash \neg P \rightarrow K$, the hypothesis that $\neg P \rightarrow \neg K, P \rightarrow \neg K$, and $\neg P \rightarrow K$ are inconsistent generates the absurd result that $\neg P \rightarrow K$ is logically equivalent to its consequent. (As stated, the argument assumes that negation behaves classically. If it behaves intuitionistically, we reach the equally absurd conclusion that $\neg P \rightarrow K$ is equivalent to the double negation of its consequent.) Hence, on any use of '(even) if' which validates (*), the inference from '(Even) if you do not take precautions, you will not be killed' to 'Your precautions will not be effective' is fallacious, as indeed is the corresponding inference from '(Even) if you do not pray, your son will have been rescued' to 'Your prayer makes no difference'. Although he does not spell this out in the published article, Dummett confirmed that he had precisely this argument in mind.

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¹¹⁶Dummett, Truth and Other Enigmas, p. 341.

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¹¹⁷D. Isaacson, 'Dummett, Sir Michael Anthony Eardley (1925-2011)', Oxford Dictionary of National Biography, https://doi.org/10.1093/ref:odnb/104464 (accessed 7 September 2018).
 ¹¹⁸D. Isaacson, 'Michael Anthony Eardley Dummett: a biographical sketch', in M. Frauchiger (ed.), Truth, Meaning, Justification and Reality: Themes from Dummett (Berlin, 2017), pp. 1–12.