



A-LEVEL

PHILOSOPHY

7172/2: Paper 2 – The metaphysics of God and the metaphysics of mind
Report on the Examination

7172
June 2019

Version: 1.0

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Introduction

What follows is a question by question commentary on the dominant trends in the performance of students on component 7172/2: The metaphysics of God and the metaphysics of mind. In the course of this commentary, reference is made to student responses, the question paper, the assessment objectives, the specification and associated readings, and the generic mark scheme. In compiling this report the observations of the lead examiner have been supplemented by the evidence provided by senior examiners and their team members. The only plausible generic point of comparison for this exam paper comes from the legacy specification (PHLS2).

Summary Findings and Recommendations

All questions served to discriminate well between students, with even low tariff questions giving a good indication of a student's performance across the exam paper, although this was especially true of questions 05, 09 and 10. The mean average rose to approximately 49.47% compared with the last year of PHLS2 (47.81%).

On average students scored 2.59 marks higher on the Metaphysics of God than on Metaphysics of Mind. There is also positive news on the Metaphysics of Mind, however. The trend in performance actually goes in the opposite direction when it comes to students accessing the top band on the (25 mark) essay questions, and there were new records set by students for attainment on both the 12 and 25 mark questions on Mind.

On the Metaphysics of God students need to be clearer about the essential features of cognitivist and non-cognitivist approaches to religious language, as this was the least well understood conceptual distinction on this section of the exam paper. The cognitivist and non-cognitivist divide is also important for the other A-level paper, within Moral Philosophy, so there are compelling reasons to address this for both, but without blurring philosophers' positions on ethical language with those on religious language, as they do not always translate.

There are fewer issues with redundancy on the 3, 5, and 12 mark questions, with students exercising greater discipline and showing greater precision in explaining concepts, arguments, claim, and issues. Students who type their responses are more likely to produce detrimental redundancy: excessive material which either contains errors or is just not sufficiently focused on the question.

Overall, there is quantitative and qualitative evidence of an improvement in the overall standard, judged against the outgoing A2 paper. This improvement is most evident in the skills necessary for AO1 on the 12 mark questions, and AO2 on the 25 mark questions (especially at the higher end of attainment). Given the weight of marks towards AO2 on questions 05 and 10, students should be encouraged to evaluate early and often: the evaluation and critical judgement of arguments was held in closer proximity to their exposition this year, which is where it should be. We had fewer essays producing pages of explanation and outline before evaluation commenced. Students are working harder to weigh their arguments, distinguishing stronger or more crucial arguments from weaker or less crucial ones.

However, for some students this is almost entirely rhetorical: they have clearly internalised the mark scheme language and use it frequently, but the significance of arguments is asserted without any clear rationalisation. These students (often in the 6-10 or lower 11-15 band) would be better advised to work on understanding an arsenal of arguments and counter arguments on the relevant topics which they can employ in support of their position, ensuring that the conclusion reflects the

preponderance of arguments and that the argument is coherent and consistent. Only then might it be to their advantage to start building in more nuanced distinctions between the relative merits of particular arguments.

Assessment Objectives:

AO1: Demonstrate knowledge and understanding of the core concepts and methods of philosophy, including through the use of philosophical analysis.

AO2: Analyse and evaluate philosophical argument to form reasoned judgements.

Section A: Metaphysics of God

Question 01: What is the difference between moral and natural evil? (3 marks)

This question assessed students' ability to distinguish between two forms of evil, moral and natural, testing AO1 only. We recorded a mean average for students of approximately 1.81, which compares well with low tariff questions on the legacy specification, and only two questions attracted better average scores on this exam paper. Less than 1% of students failed to score any credit.

At the top end of performance the requirements for this question were for students to *explain* (not exemplify) the different causes of the suffering/pain/harm that constitutes evil: eg 'moral evil is suffering brought about by the free actions of persons/agents, whereas natural evil is suffering brought about by natural events/processes but not the free actions of moral agent.' We did not ask for examples, but sometimes examples were developed in such a way that they helped students to meet the appropriate level of demand: eg 'the pain brought about by certain crimes such as murder...'; or 'unlike moral evil, no human being is responsible for earthquakes...'

The most frequently awarded mark was 2. Where students failed to gain a mark, it tended to be because they omitted the importance of human responsibility for moral evil, or their responses included tautological formations such as 'evil is evil.' At level 1, students often relied too much on examples without the requisite explanatory precision and philosophical substance.

Redundancy was not a major issue, although some students did succumb to the temptation to talk about the problem of evil, which did not help them answer the question. Contentious claims such as 'God is the cause of natural evil but not moral' form no part of a precise explanation of the distinction.

Question 02: Explain the difference between cognitivism and non-cognitivism about religious language (5 marks)

This question (also testing AO1) required a more developed demonstration of knowledge and understanding, this time applied to a distinction between two different approaches to the nature of religious language: cognitivism and non-cognitivism. Students achieved an approximate mean average of 2.48, which is the lowest proportion of available marks among any of the questions assessing AO1 only on the exam paper. But this figure is not extraordinary by historical standards, and more than 50% of students reached at least level 3. At the lowest end of performance, however, more than 10% of students failed to score any marks at all: the highest such figure on the paper this year. Nearly all students wrote in continuous prose, which suited this question.

The most effective responses drew the distinction between ‘cognitivism and non-cognitivism’ in terms of whether their representatives hold that religious claims are ‘truth-apt (or fact asserting)’. Cognitivists hold that religious statements make propositional claims about the nature of reality (eg that ‘God exists’ or ‘our souls are immortal’), which (at least in principle) can be known to be ‘true or false’. By contrast, non-cognitivists hold that religious claims are ‘not truth-apt’ or ‘fact asserting’, and ‘cannot be demonstrated to be true or false’, but have some other function, such as the expression of ‘faith’, an ‘attitude’ to the world, or a ‘commitment to a particular way of life’. These responses were also clear that it is *not* ‘religious language’ as some abstract discourse that is at issue here, but the ‘claims’, ‘propositions’, ‘statements’ etc which contain religious concepts.

Still at the higher end of performance (level 4), students failed to gain a mark where they occasionally deployed examples which blurred the distinction between the two positions, such as ‘non-cognitivism’ and the ‘attitudes and beliefs they hold which do not seek to describe reality’, when ‘beliefs’ are of course typically understood as a cognitive state. But the rest of these responses were sufficiently clear and correct on the ‘truth-apt’ dimension not to penalise further. Some students did not refer to *religious* language at all, but discussed the distinction in the abstract, but they still understood the substantive logic of the distinction sufficiently well to be awarded level 3.

By far the major cause of students failing to gain marks here was the muddled intrusion of the ‘meaningful/meaningless’ status of religious language. The extent to which this occurred and the prominence given to incorrect material on this issue often determined a student’s mark. The likelihood of misremembering some prior learning on one of these issues which then feeds into the other is entirely understandable: students very often encounter these concepts for the first time within the context of that whole (early/mid) twentieth-century debate on religious language and meaning. But this cast an unhelpful shadow over the students’ ability to answer this particular question. Perhaps the most frequent error among more effective responses was to claim that ‘cognitivism understands language to be truth-apt and therefore meaningful, whereas non-cognitivism does not understand religious language to be truth-apt and is therefore meaningless’. In cases such as this, the substance of the distinction is there (at the level of ‘truth-apt’ or ‘not truth-apt’) but it is compromised by the mistaken generalisations about meaning.

Students at the lower end of attainment (levels 1 and 2) usually only defined one of the two positions, usually cognitivism, or they introduced a specific cognitivist or non-cognitivist and accurately linked their *particular* position as a cognitivist or non-cognitivist with their *particular* take on the meaningful/meaningless debate. The divide on the cognitivist/non-cognitivist approach to religious language cuts across the divide on the meaningful/meaningless debate: cognitivists (eg Hick, Mitchell, Swinburne) and non-cognitivists (eg Hare, Brathwaite, Wittgenstein) have all affirmed the meaningfulness of linguistic religious expression, but they do so on different grounds. Ayer was often utilised by students as exemplary of the view that ‘cognitivists’ regard religious language as ‘meaningless’ (which is true of Ayre but it is not a general truth).

Some students had clearly learned the distinction between ‘cognitivism and non-cognitivism’ while studying moral philosophy, because a surprising number of them actually answered this question by referring to ‘ethical’ rather than ‘religious language’. And this may be more significant than an unconscious slip in terminology. Ayer was sometimes used as exemplary of a ‘non-cognitivist’ approach to religious language ‘because he did not think it succeeded in making verifiable truth claims and was therefore meaningless’. This response combines aspects of Ayre’s positions on two different discourses. Unlike in moral philosophy, where Ayre actually provides a non-cognitive account of the status of ethical language (ie emotivism), thereby securing its meaningful status, he did not offer a ‘positive’ (alternative/not at face value

non-cognitive) account of religious language: he tested religious claims against cognitive epistemological criteria, found them wanting as students for verification (like other metaphysical claims they were ‘nonsense’), and preferred their elimination from philosophy. So if students learned Ayre’s position on moral language that does not mean that they have, by default, learned it on religious language.

Given that the cognitive/non-cognitive distinction occurs in different areas of philosophy (and other subjects, too), it is probably worth learning it in the abstract first rather than via what particular philosophers have thought about particular discourses.

Question 03: Outline the paradox of the stone. (5 marks)

This item required students to demonstrate their understanding of a famous philosophical criticism of one of God’s classical attitudes (omnipotence): the paradox of the stone (testing AO1 only.) This question was the most effectively answered on the whole paper: we recorded an approximate mean average of 3.89, and around 31% of students were awarded top marks (level 5).

Most students posed the paradox in the form of a question: eg ‘Can God create a stone so heavy that even God cannot move it?’ Although there were other successful approaches that simply presented the reader with two scenarios: 1 Either an omnipotent being can create...or 2) an omnipotent being cannot create...’, and then developed the logic of the paradox from there. The top scoring responses (levels 4-5) tended to characterise the paradox as an attempt to demonstrate the ‘incoherence of omnipotence’; others developed the logical implications of the argument further, claiming that it functions as a demonstration that ‘God (as classically conceived) cannot exist’, although this wasn’t necessary for students to get full marks. These students were careful to outline both sides of the paradoxical scenario: 1) the logical implications of an omnipotent God being able to create an unmoveable stone (unmoveable even for God); and 2) the logical implications of an omnipotent God being able to move all stones (including the heaviest God is capable of creating). Some of the most able students also noted that neither scenario, on its own, constitutes a logical contradiction, and that one of the classic philosophical understandings of omnipotence is ‘the ability to do anything that does not entail a logical contradiction’. This added the ‘precision’ and ‘fullness’. Some students achieving top marks answered in a ‘step by step’ style of argument, others wrote in continuous prose.

Students at level 3 captured the substantive content of the paradox, but it was often compressed into a couple of sentences, with the logic not fully developed on both sides of the paradoxical challenge. Some students also couldn’t resist producing redundant evaluation, responding to the paradox.

Only around 8% of students scored below level 3, and this was often because of a combination of not outlining the logic of the paradox fully, while also trying to tie in God’s other attributes (usually ‘omniscience’). It is (in principle) possible to take ‘omniscience’ and ‘omnipotence’ together in this context, given that some philosophers have taken ‘omnipotence’ to include or imply ‘omniscience’ (where knowledge is conceived as a ‘power’). But this is not what students were doing here: they tried to turn the paradox into a contradiction *between* two (or more) of God’s attributes rather than an internal incoherence in God’s supposedly unlimited power. Less than 1% of students failed to score any marks on the question.

Question 04: Outline Descartes' ontological argument and explain Kant's objection to it. (12 marks)

This question required a more expansive demonstration of philosophical knowledge, understanding and analysis (AO1), with students required to outline one of the ontological arguments on the specification (Descartes's) and explain Kant's objection to it.

The approximate mean average of 6.55 is high by historic standards for this question type, and a record number of students accessed the top band of marks (10-12). Even among the latter, however, students rarely addressed both parts of the question with the same levels of knowledge and skill. More often than not, students who missed out on the very top mark did so because of a lack of precision on Descartes's argument, whereas their explanation (and illustration) of Kant's objection was outstanding, with detailed explanation and precise use of relevant philosophical language. The most able students gave answers that were more balanced, with a clear outline of Descartes's deductive, a priori argument for the (necessary) existence of God: moving from his 'idea of God as a supremely perfect being' (sometimes this was connected to his doctrine of 'innateness' or 'clear and distinct ideas'); to the necessity of a 'supremely perfect being possessing all perfections'; the affirmation of 'existence as a perfection'; and the conclusion that a supremely perfect being must exist. Some students went on to explain that Descartes could no more think of God as 'non-existent' than he could think of a 'triangle without three angles that add up to 180°'. In terms of the response, students invariably applied Kant's 'existence is not a *real* predicate' objection (which is covered on the specification): that is to say, it may be a 'logical predicate' but it is not a predicate which has any existential/ontological implications (*Critique of Pure Reason*, A 592/B620). Students frequently used Kant's own example of the idea of '100 Thalers': they listed various 'predicates' which do enrich our concept of the subject of predication (eg 'size', 'weight', 'colour') and contrasted this with 'existence', which adds nothing to the *idea* of the Thalers, the actual existence of which is an independent matter to be determined by the empirical facts. The students then achieved 'full integration' by applying the same logic to Descartes's ontological argument: they identified an 'illegitimate attempt to treat existence as real predicate (like omnipotence or omniscience)', demolishing a specific premise in a deductive proof and thereby refuting the argument.

Although the second part of the question was framed in the singular ('objection'), Kant does raise other objections to ontological arguments (or, at least, his objection is multi-layered), and students were credited with knowledge and understanding of those. For example, some went on to discuss an argument of Kant's to the effect that that even if 'God exists were an analytic truth, this would tell us nothing about the actual existence of God' (only about the concept), which like other ontological/existential claims could only be 'demonstrated a posteriori'. For Kant, necessary properties of ideas (eg the three angles of a triangle) are part of conceptual 'necessities of judgment/reason', and they only hold if/where triangles do actually exist: three angles are not absolutely necessary in and of themselves, but 'under the condition that a triangle exists, three angles also exist (in it) necessarily' (*Critique* 592/B620). The most we can say is that 'if God were to exist then God would exist necessarily', but if we 'cancel the subject along with the predicate' then there is no difficulty with 'separating the idea of God from the existence of God'.

Students who accessed the 7-9 band tended to be similarly balanced between the two parts of the question, but with less detail on Kant, and less integration with the precise details of Descartes's argument. Some students reversed the formal demands of the questions offering not just an *outline* but an extensive *explanatory* commentary and background on Descartes, but they were all too brief on Kant ('outlining' rather than 'explaining' in any detail): noting, for example, that 'existence is not a predicate, meaning it does not add any new information about a concept and so cannot be one of God's perfections'. At the lower end this band, students who were less accomplished on

Descartes's ontological argument tended to present it (at least in part) in the language of his critics rather than on his own terms (from Meditation 5): eg 'For Descartes, God exists is true by definition', or 'Descartes regards God's existence as an analytic truth'.

Students accessing the 4-6 band sometimes blurred Descartes's argument with Anselm's. How damaging this was depended on the extent to which the key premises in the argument were held in common with Descartes and then critiqued on Kantian terms, and sometimes they were.

Fewer than 20% of students failed to progress out of the bottom scoring band (1-3). Those that fell into this category, however, often confused Descartes ontological argument with his trademark (cosmological) argument, some explicitly rooting their discussion in 'Meditation 3'; consequentially, they were awarded marks for fragments of relevant material. Some also included Gaunilo's objection to Anselm in their treatment of Kant, which did not receive any marks unless there was some clear cross-over material relevant to Descartes's ontological argument and Kant's objection.

Question 05: How successful is the design argument for the existence of God (25 marks)

This was the first of two questions on the paper designed to test AO1 and AO2. The question invited a discussion of one of the classic arguments for the existence of God on the specification: the design argument. The mean average (approximately 11.28) indicates that this was the most challenging question on the Metaphysics of God section, although around 21% of students accessed the top two levels (16–25), with the most able students awarded maximum marks.

Students in the top two scoring bands sometimes took a self-consciously narrow approach, restricting their discussion to an assessment of the success of the arguments of just one philosopher: Paley was one such example. These responses required deep knowledge and understanding of Paley and his critics, such that they produced a sustained critical discussion, with detailed argument and counter argument, in defence of their position (usually that his arguments were not successful, but stronger than many give them credit for). Such responses were rare, however, as they require a broader and nuanced understanding of a particular philosopher's arguments, and the issues arising from their work. It was more typical for students to discuss several varieties of argument, usually from analogy (eg with reference to Aquinas, Hume, and Paley), from spatial regularity (with reference to Hume, Paley, and Darwin), and from temporal regularity (with reference to Swinburne and Hume). Some of the most effective essays argued that Swinburne's was the most successful: either in showing the likely existence of God, or as the most credible among a set of design arguments, none of which are ultimately successful in demonstrating the existence of the God of classical theism.

What marked the aforementioned essays out as successful, in formal terms, was the sustained testing of arguments against objections before moving on with the discussion, and the very most successful students did this right until the very end of their essays, without leaving a single argument unexamined. In terms of substantive content, these students were clearly able to distinguish the arguments of Hume and Paley, sometimes showing how Paley was actually able to offer responses to some of Hume's famous objections against design arguments (eg his criticisms of arguments from analogy and of arguing from a single case). This was a strength in terms of knowing the history of the subject (Hume was obviously not responding to Paley), but more significantly it allowed students to get more philosophical and analytical mileage from a philosopher (Paley) who, more often than not, is just presented as someone who Hume comprehensively anticipated and refuted. These high scoring responses explained *why* Darwin's theory of evolution by natural selection is more successful than design when accounting for *spatial* regularity, rather than just asserting it on scientific authority. Another distinguishing feature of these answers was

the ability of students to explain (and not just assert) the rationale behind Swinburne's appeal to a 'personal explanation' for the laws of the universe, and why exactly he thinks that 'scientific explanations' cannot achieve this. Objections to Swinburne were occasionally drawn from the multi-verse hypothesis, and answered by with a well-informed appeal to Ockham's razor. Some of these students also showed their awareness of the porous border between Swinburne's design and cosmological arguments (and to some extent Hume's), but they kept their discussion trained on the former without getting side-tracked with other theistic proofs.

The most frequently accessed range of marks was the 11-15 band. Relatively few students, at this level, stated explicitly what a 'successful' argument for God's existence would constitute, but those that did were usually clear that they understood it in terms of 'proof' (and many more took this view implicitly). Students are of course free to set the bar high in terms of what counts as 'successful', but this sometimes meant ignoring the self-consciously inductive and probabilistic nature of many modern design arguments, and the fact that they rarely aim to 'prove the existence of the God of Abraham, Isaac and Jacob.' At the lower end of this band, students tended to just assume rather than explain what they understood by 'God', despite this often proving to be crucial to their conclusion.

Structurally, these responses typically follow a similar basic pattern to the higher scoring essays, but their understanding of the different types of argument was not as sharp. Students at this level often produced detailed versions of the argument from analogy and spatial order, while dissimilarity, spatial disorder, and the problem of evil were frequently offered as criticisms (often with reference to Hume and Swinburne). The more effective response in this band often did a good job of showing how the design argument could overcome the arguments against analogy through an 'inference to the best explanation' (for parts organised for a purpose, eg the solar system or the human eye). Evolution by natural selection and arguments from blind chance over infinite time (Hume's version of the 'Epicurean thesis') were often used to challenge the notion 'design is necessarily the best explanation for spatial order'. Darwin's theory was often clearly explained, and frequently well illustrated with reference to the evolution of dark coloured moths during the industrial revolution. This material was effective in showing why dark coloured months prospered and reproduced in those conditions, but few students were effective in using this material to demonstrate why design is not a better explanation for 'complex for parts organised for a purpose'.

Where these students discussed Swinburne's arguments, they often outlined his arguments formally and more or less correctly, but the philosophical reasoning behind the premises was not clear, and evaluation almost invariably turned to the fact that Swinburne 'may demonstrate a designer, but not God' (some referred back to earlier arguments of Hume's that design is often carried out in teams, that designers do not typically outlive their designs, or to the problem of evil). Replies from Swinburne were rarely considered.

At the lower end of this scoring range, students often drew conclusions whereby evolution by natural selection *and* the Epicurean hypothesis together as part of a cumulative case against design arguments in general, without any obvious awareness that the two might be in intention, and despite the fact that they had already acknowledged that Swinburne's argument is compatible with evolution by natural selection and poses questions that evolution cannot answer. Some students in this band defended a Kantian argument, supplemented by arguments from Hume, that the best that any of these design arguments can achieve is to show the likelihood of some 'worldly architect'. Few went on to explain how this would fall short of theological conceptions of God creating *ex-nihilo*. The latter would have given some context for students' dissatisfaction with the achievements of design arguments.

For students operating in the 6–10 range, there was limited understanding of the distinctive characteristics of each argument, and there were sometimes tangential discussions of ontological and cosmological arguments (albeit they were not the main focus). Students would often restrict themselves to Hume and Paley, but the arguments of the latter often looked like a rehash of those of the former, albeit with a concrete analogy this time: the watch. These responses were less likely to allude to features of the watch, or concrete examples from the natural world, that show what is meant by ‘parts organised for a purpose’.

Hume, who featured in most essays, is typically taught as a religious sceptic, and understandably so, but this poses problems for students when it comes to them discussing the theistically ‘affirmative’ arguments in his *Dialogues Concerning Natural Religion*. Some students would introduce Hume’s argument from analogy as ‘a deliberately weak argument in an attempt to show that they fail.’ Given the emphasis on the generic mark scheme on presenting arguments ‘in their strongest forms’, this immediately raises the question why the argument is worthy of critical attention and whether there are better ones that are being ignored. It would be better for students to approach Hume in essay questions on design as someone who presented noteworthy arguments on both sides, and then just use him in an ad hoc way. Where Aquinas’s argument from analogy was used (‘the arrow and the archer’), there was a tendency to say that Aquinas was arguing that *everything* in the universe has a purpose and required God to be the source of it. The argument is of course that everything that shows evidence of some ‘end’ or ‘goal’ towards which it is directed requires ‘intelligence’ to guide it. More generally on the latter, ‘teleological’ was a term that often featured in essays, but it was not always clear that students understood what it means.

Finally, the problem of evil featured implicitly in a lot of these responses in the 6-10 band, with students asking (relevant) critical questions such as: ‘How could God have designed a world with so much violence and natural disaster?’ But these responses rarely unpacked what they understand by the concept of ‘God’, nor did they always refer to the divine attributes that make this a problem.

At the bottom end of the attainment scale, around 12% of students failed to progress beyond the 1-5 band. This was sometimes because they simply did not produce enough material to constitute an essay in the form of argument in answer to the question; on other occasions, the discussion of design was drowned out by other theistic arguments (usually the cosmological); sometimes Paley’s watch analogy was discussed, but the point of it was completely missed: eg with God invoked as the ‘designer of the watch’, or arguments were advanced by students ‘for the purposes of the stone as well as the watch’.

Given the relative accessibility of design arguments, and the freedom to range over many different versions, examiners singled this question as the one which surprised them most in terms of the quality of the responses produced. Against this, however, at the upper end of the performance scale, the philosophical and writing skills that students are demonstrating are as good as they have been. The weight given to different arguments is clear and well-reasoned at that level; the evaluation is robust and sustained.

Section B: Metaphysics of Mind

Question B6: Define qualia (3 marks).

This question (testing AO1 only) assessed the ability of students to explain a concept in the Metaphysics of Mind: qualia. The mean average of 1.96 is high by historical standards, and this proved to be the most accessible question on this section of the exam.

It was pleasing that so many students managed to reach level 3 in explaining this technical term in the discipline. Some students had clearly learned the term as defined in the specification: 'Intrinsic (and non-intentional) phenomenal properties that are introspectively accessible', though there were many variations in phrasing. Some students included 'non-representational' and 'ineffable' among the defining features (there are many definitions in the professional philosophical literature, and we allowed students to reflect that range in their responses).

Students who accessed level 2 (the majority) only tended to get the 'intrinsic' or 'non-intentional part'; others defined qualia as the 'what it is like experience', but lacked precision in the use of relevant philosophical language and fell short of a full explanation.

At level 1, students produced relevant material, but their definitions did not sufficiently distinguish qualia from other mental states: eg responses focusing on 'subjectivity' or 'experience' with examples such as 'the taste of an apple.'

Over four times as many students failed to receive credit for this question compared with 01, but this was still only around 5%. Where students attempted the question but did not score marks, they would sometimes confuse qualia with intentional mental states: eg 'it is a mental state *about* something'.

Question 07: Outline how the 'knowledge/Mary argument' can be applied to functional facts. (5 marks)

This question (testing AO1 only) required students to show their knowledge and understanding of how one can apply an argument that was originally advanced by Jackson (for property dualism) to functional facts. The mean average of approximately 3.01 is historically high for 5 mark questions on Mind, and around 15% of students scored maximum marks. This proved to be the second most accessible question on this section of the paper. Some of the most effective responses laid their argument out in a formal, step by step, format; other outstanding examples wrote in standard, continuous sentences.

Some of the most able students simply outlined the original argument with 'functional facts' and 'functionalism' inserted at appropriate points in the argument to gain the full 5 marks. But most students tended to approach the question in two phases: 1) the original knowledge/Mary argument, and 2) its application to functional facts.

Students could get to level 3 by showing that they understood the substance of the original knowledge/Mary argument: that there are scenarios where someone could know all the physical facts about some phenomena (eg colour vision), and yet learn something new when experiencing something associated with that phenomena for the first time (eg 'what it is like' to see the 'redness of a rose'), thereby showing that physical facts do not exhaust knowledge of colour perception, and therefore physicalism cannot be true. Although there were alternative (and generally less successful) thought experiments (eg someone 'learning everything about

bicycles from books, and then discovering ‘what it is like’ to ride one), most students told some version of the original story of Mary: the scientist who had never seen colour because she was confined to a monochrome room, but had nevertheless become an expert in the neurophysiology of colour vision. The non-physical facts were typically associated with ‘qualia’, which students sometimes defined as the ‘intrinsic and non-physical properties of mental states.’ Students who stayed at level 3 either failed to apply the argument to functional facts, or else they cast Mary at some points as knowing ‘*all the facts before*’ she left the monochrome room, when they needed to be consistent in their representation of the (supposed) limits of her knowledge, which was restricted to the ‘physical’ or ‘functional facts’.

The most effective responses did of course go on to apply the argument to ‘functional facts’, usually noting at the outset that functionalism defines the mind in terms of ‘functional facts’ or ‘causal in-puts and out-puts’. They then developed the knowledge/Mary argument in such a way that someone might learn about all the ‘functional facts’ or ‘facts about causal in-puts and out-puts’ concerning colour perception, and yet when they experienced ‘the colour red’ for the first time, they learn a new fact: ‘what it is like’ to see red. This would be a new (phenomenal) and ‘non-functional fact’, which would demonstrate that functionalism is false: a successful functionalist account of the mind would exhaust all facts concerning the mind, and this it fails to do.

Students failed to gain a mark due to imprecision when their adoption of the argument continued to present functionalism as (yet another) physicalist theory. The new specification clearly sets functionalism aside as an independent theory of mind, which cannot simply be subsumed under physicalism (although most functionalists have tended to be physicalists). Some students missed out the concluding point that this argument could be applied to show that functionalism is false, not just that it ‘raises questions about the existence of non-functional facts’.

Students who only managed to access level 2 may have identified the original argument as an ‘anti-physicalist’ or ‘pro-property dualist position’, and have told the story of Mary up until she ‘learns something new’, but the logical implications were just not drawn out, nor was there an attempt to apply the argument to functionalism.

Some students almost completely misunderstood the nature/purpose of the argument, and thought that we were looking for an outline of how functionalism might *respond* to the knowledge/Mary argument: eg ‘in so far as Mary knew all the functional facts, then she really did know all about colour after all, and this “qualia” that people refer to is actually just acquaintance or ability knowledge’.

Only around 3% of students failed to gain any credit for this question

Question 08: Explain Ryle’s claim that substance dualism makes a ‘category mistake’ (5 marks)

This question required students to explain a claim by a philosopher who features more prominently on the reformed specification: Ryle, and his claim that substance dualism makes a ‘category mistake’. The mean average of approximately 2.51 suggests the question was more challenging for students than question 07, but it was still answered well by historical standards, with almost half of students reaching at least level 3.

Just as students typically approached the previous questions through some version of the original ‘knowledge/Mary’ thought experience, students often sought to articulate Ryle’s claim

through one of the analogies that he used in *The Concept of Mind*: a visitor to the universities of ‘Oxford or Cambridge’, or someone ‘watching a cricket match’ for the first time. The problem in this case was that too few students were able to make the appropriate logical links between the scenario they described and a category mistake (either category mistakes ‘in general’ or in the case of substance dualism specifically); nor were all that many who were able and willing to place the claim within the context of Ryle’s own alternative approach to understanding the mind: behaviourism. This helps to account for the fact that half of the students did not get any further than level 2.

Surprisingly few students cut to the chase, in terms of a general definition, and said that ‘a category mistake is the error of placing one concept into a logical category to which it does not belong.’ For students who did, this laid the foundations for showing that, for example, the concept of ‘team spirit’ does not belong in the same logical category as ‘batting, bowling, or fielding’; it is, rather, the process of batters, bowlers, and fielders ‘working effectively together in support of a common purpose’. This was then applied to ‘substance dualism’ by noting that the dualist makes the category mistake of treating the mind as another thing’, like the brain or the heart, which carries out the ‘thinking’ (very occasionally, students referred to the ‘para-mechanical hypothesis’ underlying this error). Rather, when conceptualising the mind we should realise that what we call ‘the mind’ is just the array of ‘behaviours or behavioural dispositions’ which constitute the objectively verifiable evidence of minded beings.

Some students dropped a level by associating Ryle with some form of mind-brain identity theory, whereby ‘the mind just is the workings of the different parts of the brain, like the university is the existence and operation of colleges, libraries, and lecture theatres’. This was even evident in students who were otherwise exemplary on the ‘category error’ in substance dualism, and because that was the focus on the question, students were not penalised too heavily.

At the bottom end of attainment, students did not get beyond a brief definition of dualism and/or a point about Ryle being a materialist / behaviourist. Around 8% of students did not score any marks at all on this question. From the very the highest scoring responses to the very lowest, students wrote in standard continuous prose.

Question 09: Explain the philosophical zombies argument and the response that what is conceivable may not be metaphysically possible. (12 marks)

This question required an extended demonstration of philosophical knowledge, understanding and analysis (AO1), focused on 1) an important modern thought experiment originally devised to critique mind-brain identity theories: the philosophical zombies (p-zombies) argument; and 2) a specific response to it: that what is conceivable may not be metaphysically possible. The mean average of approximately 6.07 is above that for the paper as a whole, and is above average for previous 12 mark questions. It was pleasing to see students respond so well to a challenging question, with subtle technicalities: about 11% of students accessed the top band of marks (10-12), which is a record for the philosophy of mind.

In this question there was no formal distinction in what students were being asked to deliver in the two parts of the question: they were asked to *explain both* the p-zombies argument and the response. Examiners had different impressions of which part of the question was addressed most effectively by the majority of students.

Students usually characterised the p-zombies argument as one formulated by Chalmers ‘against physicalism and in favour of property dualism’. This was often followed by a step by step account of the argument and further explanatory remarks at the end. Nearly all students knew that p-zombies are supposed to be ‘conceivable’, but few *explained* why; most students understood that the conceivability of such creatures posed problems for physicalism and its ability to account of qualia, but few *explained why*. Some of the most effective responses explained that p-zombies were conceivable because there was ‘no logical contradiction’ in the idea of ‘physically and behaviourally identical’ creatures to human beings which nevertheless ‘lack the phenomenal properties of consciousness’: it is not like trying to conceptualise four sided triangles, so there is a ‘possible world’ where p-zombies exist. They then went on to note that if physicalism were true, then this should not be possible, since ‘in all possible worlds phenomenal properties would be identical to (or supervene on) physical properties’. The fact that p-zombies are conceivable opens up a metaphysical gap between physical and phenomenal properties, refuting physicalism.

Students who accessed the top band of marks (10-12 marks), understood the response, in general terms, to be arguing that the p-zombies argument moves (Illegitimately) from conceivability to metaphysical possibility, where the latter is taken to be revealing of the way things actuality are (ie ‘that phenomenal properties are irreducible to the physical’). Some of the most able students explained that the claim for ‘metaphysical possibility’ assumes the ‘falseness of physicalism’. The reason that the p-zombies argument does not get as far as this ‘metaphysical possibility’, they argued, is because ‘metaphysical possibility’ is not exhausted by what one can ‘conceive’, ‘imagine’, or ‘picture’ without some ‘logical contradiction’. Such logical matters are settled by a priori reflection on the relevant concepts. Metaphysical possibility, however, is ‘defined by the nature of things’, not the concepts used to describe them, and the nature of things in the world are discovered a posteriori.

The most effective example they used was ‘water is H₂O’, a truth which is not entailed by reflection on the concepts involved, but a truth that was discovered empirically, and is (according to philosophers such as Kripke) a necessary identity claim: the nature (chemical composition) of water is H₂O in all possible worlds, irrespective of the mind’s ability to conceive of applying a different chemical formula to water. These students then brought their explanation back round to the matter at hand to achieve the necessary ‘integration’: if physicalism *is* true (just as water *is* H₂O) then it will *not* be metaphysically possible for p-zombies to exist; ‘it will be in the very nature of physically identical creatures (identical to human beings) to have the same kind of phenomenal properties that human beings have’, and so the mind’s powers to conceive of p-zombies does not entail their existence, and physicalism is not refuted by the thought experiment. Other generally successful answers tried to use examples from the truths of geometry (eg ‘people who are ignorant of Pythagoras’s theorem’), though these were less compelling than empirically discovered necessities, given the empirical nature of physicalist theories of mind.

Students who accessed the 7-9 band often gave precise and detailed explanations of the p-zombie argument, but they were very brief on the response, often posing a counter example to the legitimacy of moving from conceivability to metaphysical possibility---such as conceiving of ‘jumping from the earth to the moon’, but recognising that this is ‘not metaphysically possible’. But there was insufficient philosophical detail in their explanations. Others explained the response in greater detail on the response, but omitted important details about the *physical identity* of p-zombies with human beings in their original account of the argument, where their focus was on the behavioural imitation of human beings by p-zombies (though this was also relevant).

Students in the 4-6 band would sometimes describe a p-zombie extremely well and place them in context within the content of debates in philosophy of mind concerning dualism and physicalism, but the actual details of the argument for its specific conclusion were omitted. The understanding of these students was implicit, however, because they actually explained the response in a way that

targeted the appropriate premises in the p-zombie argument. Some of the supposed counter examples to the principle that ‘conceivability entails metaphysically’, such as ‘unicorns’, were not very effective: given the many horned creatures that do exist, it is not self-evident why such creatures should be ‘metaphysically impossible’. This kind of example tended to feature in responses which conflated the limits of ‘metaphysical possibility’ with what is true of the *actual* (as in this) world, and therefore did not take into account *possible* worlds.

Students in the bottom band of marks (1-3), of which there were around 24%, often only made a few remarks about what a p-zombie was; others jumped straight to the response but completely misrepresented it as an argument that p-zombies are not even conceivable.

Question 10: Is eliminative materialism convincing? (25 marks)

This question tested both AO1 and AO2, taking as its subject matter one of the modern theoretical stances featured on the specification: eliminative materialism. Statistically, it was the hardest question to score marks on across the paper: it had a mean average of approximately 9.90. On the surface this looks like the continuation of a downward trend which started on the legacy specification, but these figures alone do not tell the full story. More students than ever before reached at least the 16-20 band, and more than ever were awarded maximum marks. One of the main reasons that the mean average is as low as it is, is because over a quarter of students did not progress beyond 5 marks (with around 8% scoring zero).

We will start by looking at answers in the 6-10 band, which was the most frequently accessed level. These responses answered the question in the form of an argument, usually indicating from the outset that they were arguing *against* eliminative materialism. These students understood the ‘materialist’ dimensions of the theory, and its relationship with ‘neuro-science’; they also knew that materialists (such as ‘the Churchlands’) thought that ‘folk psychology should be rejected’. The problem with many of these responses surfaced in AO2, when eliminative materialism was recast as a ‘reductionist’ position, sometimes blurred with identity theory, which impacted the quality of the evaluation where questions of the ‘plausibility of this reduction’ were to the fore. Others grasped the *eliminative* dimension, but they had a very narrow view of the target of this research project, focusing on ‘qualia’ and the question of whether or not someone ‘feeling pain’ when, for example, they ‘stepped on a nail’ would be ‘a good predictor’ of their subsequent behaviour. These students would have benefited from a better understanding of the arguments found in Paul Churchland’s ‘Eliminative Materialism and the Propositional Attitudes’, even just brief extracts.

Some of the more effective responses in this band explained the conceptual issues with greater evidence of understanding, but in their evaluation they relied a lot on examples from scientific history which might support eliminative materialism (by analogy), which would have been fine itself, but they misrepresented now discredited scientific theories (eg the ‘caloric’ hypothesis) as previous instances of ‘folk psychology’, so these examples were served up as if they constituted *precedents within psychology* as opposed to analogies from the history of other sciences which suggest that the project of eliminative materialism is not as radical as it may seem. Some responses in the 6-10 band only substantially addressed the ‘materialism’ dimension, but they nevertheless did so with relevant arguments about the progress of physicalism as assumed in many modern scientific research programmes, and then they critiqued it with ‘non-physicalist’ arguments from various forms of dualism. They also managed to bring the discussion back round to eliminative materialism and argued, for example, that the ‘confidence in future scientific advances’ to demonstrate the truth of eliminative materialism was ‘unfounded’ or in some cases eminently ‘reasonable’.

Students who did not progress beyond the 1-5 band sometimes just did not produce sufficient material to constitute a response in the form of an argument in defence of their answer to the question. Others were not short on material, but it wasn't sufficiently relevant. For some students in the 1-5 band, no sooner had they identified eliminative materialism as a 'physicalist position', than they proceeded to outline and evaluate the specifics of 'behaviourism', 'mind-brain identity theories', and physicalist 'versions of functionalism'. These students simply did not know anything about eliminative materialism, or they lacked the skills and discipline to draw on the little they did know to discuss the one part of the theory they grasped in as focused a way as possible.

Students in the 11-15 band typically showed detailed knowledge and understanding of eliminative materialism and of their critical target 'folk-psychology'. There was some attempt at weighting, and although this was not always well reasoned, it was clear why at least some arguments were assigned the significance that they were. The following were all used to argue against eliminative materialism: the 'predicative' and 'explanatory power' of folk psychology; the 'practical difficulty' of exchanging deeply rooted folk psychological concepts for a hypothetical scientific understanding; the 'intuitive certainty' of mental phenomena accessed introspectively; and the 'self-refuting' character of eliminative materialism. The latter was often presented as particularly damaging, seemingly because it is an error of logic rather than a yet to be settled empirical question. Historical analogies from intellectual and cultural history were utilised well in defence of the prospects of eliminative materialism: 'caloric', 'phlogiston', and 'witchcraft' were discussed as once influential ideas we have eliminated from our discourse as knowledge has advanced. There were some more successful attempts to critically compare eliminative materialism with rival theories of mind, rather than just juxtapose them as alternatives.

What tended to distinguish the responses described above from those in the 16-20 band, and of course those in 21-25 band, was the extent to which students were able to formulate responses to objections against eliminative materialism (regardless of their final conclusion). Some of the most effective responses took a nuanced approach to the subject matter, and argued that 'elimination' is *not* an 'all or nothing' project, but rather for the purposes of scientific enquiry one can recognise that there are good reasons to think that a future science of the mind will dispense with many of the 'common sense mental states', propositional attitudes and qualia, which we currently use. The presumed power of 'intuition' was repudiated as unscientific; the predictive and explanatory power of folk psychology was acknowledged, but it was argued that there were still significant gaps in our understanding of mental functions from 'intelligence', to 'sleep', and 'mental illness', which only a mature brain science will be able to illuminate. The 'self-refuting' objection was met with the charge that the critic was 'begging the question', by assuming the reality of the phenomena that the eliminative materialist rejects.

Some of the most able critics of eliminative materialism argued convincingly against the analogies from scientific history, arguing that the 'similarities are not sufficient' to make the analogies persuasive. Students discussed 'cognitive behavioural therapy', which works on 'folk psychological' concepts such as 'beliefs and desires', as an empirical science which has achieved considerable success in understanding and treating mental illness. Other students employed sophisticated 'circularity arguments', imagining scenarios in the future whereby whenever we try to eliminate and replace our concepts of mind, we are constantly engaged in a process of translating the new concepts we were urged to use by neuroscience back into ones that actually make sense to human beings in order to show just how 'successfully' the new language of mind was (including eliminative materialists). This kind of argument often had Wittgensteinian overtones, and there were references to Peter Hacker: these responses distinguished between the 'scientific picture' of a human being from the picture of human beings as 'persons'. Each picture, they argued, had its own integrity, and one should not intrude on the other. Students reaching the top band, and

especially those awarded maximum marks, evaluated every point or argument raised, and their conclusion was robustly defended against a range of objections.

Use of statistics

Statistics used in this report may be taken from incomplete processing data. However, this data still gives a true account on how students have performed for each question.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.