

Space, Time and the Categories

Lectures on Metaphysics
1949-50

by

John Anderson

Challis Professor of Philosophy
University of Sydney 1927-1958

Introduction by D. M. Armstrong

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Introduction

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Foreword to the John Anderson Series

In 2006 a senior academic advisory committee was established at the University of Sydney to oversee the publication of a series of books which would present the intellectual achievement and development of John Anderson, Challis Professor of Philosophy 1927–1958. In 2006–08 the committee members are Emeritus Professor David Armstrong, Emeritus Professor Paul Crittenden, and Professor Stephen Gaukroger. The committee is convened by the John Anderson Senior Research Fellow undertaking research into and publication of the papers of Professor Anderson.

To some extent a proper appreciation of Anderson's work requires an experience of his lecture room. From the notes in the University Archives we may be able to provide something of this experience. Many of these lecture notes have been transcribed and are available at the John Anderson Archive along with Anderson's previously published writings, allowing researchers and students to access the chief resources and to follow the course of his thinking over many years.

The published series to be selected from this material aims to provide scholarly editions of the most complete and significant lectures now available and will include works devoted to Anderson's metaphysics, logic, ethics, politics and aesthetics. The series will help younger students and scholars to understand why John Anderson was the most important, the most controversial and the most influential philosopher ever to have worked in Australia.

Ongoing research into Professor Anderson's unpublished writings and the series of books drawn from this research has only been possible due to the generous bequest to the University of Sydney by his son, Alexander (Sandy) John Anderson (1923-1995).

Dr Creagh Cole
John Anderson Senior Research Fellow
University of Sydney 2007

Preface and Note on the Text

With the publication of the two-volume work *Space, Time and Deity* in 1920, Samuel Alexander (1859–1938) became for a time one of the most celebrated philosophers in Britain. His working life was spent almost entirely at the University of Manchester. He was, however, born in George Street, Sydney and educated in Melbourne before winning a scholarship as a young man to Balliol College, Oxford. Although he was never to return to Australia the story of his influence on Australian philosophy was to take a surprising turn.

In the Gifford lectures of 1917–18 in Glasgow he presented the main themes of *Space, Time and Deity* for the first time. One student who attended those lectures was the young Scottish philosopher, John Anderson, who was then completing his Masters thesis on the philosophy of William James (1917) at the University of Glasgow, and who was to have a powerful influence on the direction of Australian philosophy following his appointment to the University of Sydney in 1927.

Anderson was to revisit Alexander's work on Space-Time and the Categories in a series of lectures delivered in the 1940s. These lectures renewed interest in Alexander at Sydney and became the means by which Anderson would elaborate his own systematic realism. His students were in no doubt concerning Alexander's importance and direct influence on Anderson:

Alexander profoundly stirred Anderson's philosophical imagination; those who heard his lectures on Alexander felt that they were being led into the very heart of Anderson's philosophy.¹

He lectured directly on Alexander in 1941, 1944, 1947 and 1949. Among the students taking notes of these lectures in the final series 1949–50 was the young David Armstrong who in the 1960s would take up Anderson's position of Challis Professor of Philosophy at the University of Sydney. Professor Armstrong's major writings since the 1970s on universals and scientific realism, states of affairs and truthmakers have in turn inspired a new generation of philosophers in the questions of metaphysics.

Introduced by Professor Armstrong, this work brings together three of the major figures in the history of Australian philosophy. It

¹John Passmore, "John Anderson and Twentieth Century Philosophy", introduction to *Studies in Empirical Philosophy* Sydney: Angus and Robertson 1962, pp. xii-xiii.

presents a unique record of personal influence and inspiration over three generations and is a vitally important text in the history of the development of realist philosophy in Australian universities.

Acknowledgements

Many thanks to Eric Dowling for the high quality of his typescript lecture notes. Thanks are due most particularly to David Armstrong, not only for his own handwritten notes of the lectures and his personal recollections of Anderson, but also for his great enthusiasm for the project and his guiding hand and support throughout the editorial process. Thanks also to the University Archives for permission to reproduce primary materials from the Personal Papers of John Anderson.

Note on the Text

There are at least two versions of student notes of the 1949-50 Alexander lectures. The text followed here represents the notes by R. E. Dowling and David Armstrong. These notes consist of 176 pages of typescript (June to October 1949) by Dowling, and 50 pages of close handwritten notes by Armstrong (April to August 1950).

The second set of student notes, recently discovered in the University Archives, are those by Sandy Anderson. They are missing lectures 37, 41 and 42. Although the Dowling-Armstrong notes are a clearer presentation of the lectures, Sandy Alexander's notes contain extensive annotations by John Anderson added at a later date later (perhaps later than 1954). These additional notes have been included in Appendix 1 following the main lectures.

Full transcriptions of all versions of the lecture notes are available at the John Anderson Archive.²

There are 45 lectures in this lecture set and the original division of the lectures into six sections has been followed in the presentation:

Introductory Lectures (1-5)

Interrelations of Space and Time (6-12)

Transition to the Categories (13-16)

Categories I (Logical/Qualitative) (16-28)

Categories II (Mathematical/Quantitative) (28-32)

Categories III (Physical) (33-45)

²The John Anderson Archive at <http://setis.library.usyd.edu.au/anderson/index.html>

As explained in Professor Armstrong's Introduction the text includes prefatory remarks by Anderson which were not part of the dictated lectures. Although these appear in the body of the text, they have been indented from the left to mark them off from the formally dictated lectures. Professor Armstrong reveals that these remarks were not part of the dictated lectures and so were more difficult to transcribe. This is very clear in Lecture 1 where Anderson's preliminary remarks seem quite extensive. We have chosen to use Anderson's own more discursive notes in place of the student notes in this case (pp. 1-3 below).

Other Lecture Series on Alexander

The available lecture series on Alexander's *Space, Time and Deity*, include those of 1941, 1944, 1947 and 1949. The lectures of 1941 and 1947 are very short. The 1941 lectures (8 lectures) are available at the John Anderson Archive, and were introduced by the preceding course on Hegel. The 1947 lectures are a typescript copy of 7 lectures in the University Archives, Anderson Papers Box 32 Item 35 (2nd July 1947 to 13th August 1947). The major lecture series then are from 1944 and 1949. The 1944 course consists of 46 lectures and is similar in structure to the later 1949 course. The 1944 lecture notes are in Anderson's handwriting in the Personal Archives of John Anderson, Series 3, Item 25, University of Sydney Archives. It was transcribed at the University of Sydney Library in 1999, edited by George Molnar and Mark Weblin, and published by Sydney University Press in 2004 under the title *Space-Time and the Proposition*.

Appendices

Appendix 1 presents additional notes written by John Anderson and inserted into Sandy Anderson's notes of the lectures.

Appendix 2 presents two letters from the University Archives which demonstrate Anderson's relationship to Alexander at the time of the Gifford Lectures.

Appendix 3 is the abstract for Samuel Alexander's Gifford Lectures of 1917 to 1918, which were to be the basis for the book *Space, Time and Deity* of 1920.

Appendix 4 presents Anderson's notes for the Lectures on Logic for 1948, a series referred to repeatedly in the 1949-50 lectures on Alexander. The University Archives holds two versions of this logic

series, one in Anderson's handwriting (P.A.J.A., Series 43, Box 102), the other consisting of student notes by Sandy Anderson and with annotations by Anderson himself (P.A.J.A., Series 5, Box 32). All of those annotations were incorporated into Anderson's handwritten notes which also include later addenda and references to articles published later than 1948. His handwritten notes then appear to be Anderson's final version of the lectures. This is the version included here as Appendix 4.

Abbreviations

Several abbreviations have been used in the footnotes for regular citations.

A.J.P.P. — *Australasian Journal of Psychology and Philosophy* (later *Australasian Journal of Philosophy*).

[DMA] — D. M. Armstrong (responsibility statement for footnotes in the Lectures on Alexander 1949-50).

[JA] — John Anderson (responsibility statement for footnotes in the Logic Lectures of 1948).

J.A.A. — The John Anderson Archive at the University of Sydney at <http://setis.library.usyd.edu.au/anderson/>

P.A.J.A. — Personal Archives of John Anderson, University of Sydney Archives

STD — Samuel Alexander, *Space, Time and Deity; being the Gifford Lectures 1916-1918*. London: Macmillan, 1920. Two volumes.

Studies — John Anderson, *Studies in Empirical Philosophy*, Sydney: Angus and Robertson, 1962.

Introduction

by *D. M. Armstrong*

These lectures contain the most developed statement that we have of John Anderson's account of the general nature of being, what we may call his ontology or metaphysics.¹ They were given to Sydney University Honours philosophy students in their 3rd and 4th years, the first part during 1949, the second part in 1950. I am happy to declare an interest by saying that I attended those lectures, and that they inspired me with a passionate interest in the great questions of metaphysics.

The lectures were, as was usual with Anderson, presented as a commentary on another author, in this case that of Samuel Alexander's two-volume work *Space Time and Deity* (1920). This book was based on lectures given at Glasgow University 1916 to 1918, and Anderson, as a young student philosopher, attended these lectures. The historian Brian Kennedy says in his biography of Anderson²:

During 1918 Professor Samuel Alexander, the Australian-born Jewish philosopher from Manchester, lived at the university for several months while he delivered the Gifford lectures. He frequently attended meetings of the [Philosophical] society and canvassed the realist arguments of 'Space, Time and Deity' in informal meetings with students and staff. The young man [Anderson] liked the affable and avuncular Alexander and had a number of discussions with him. . . (p.47).³

I have heard Anderson say that at that time he was looking for some figure on which to base his metaphysics on. He had considered but discarded Bertrand Russell. Alexander's empiricist scheme, a space-time world subject to categories, features that anything spatio-temporal exhibits, was just the sort of thing he was looking for.

This is not to say that Anderson was not very critical of the way that Alexander spelt out his argument. Some things, such as Alexander's 'emergent' Deity, he rejected without even discussing the view in these lectures. But as the reader will see, Alexander is continually criticized for all sorts of failure, in particular fallings away from 'realism' and 'empiricism' as well as numerous matters of detail. It has to be said, though, that Anderson was a fierce critic of any philosopher whom he discussed. There was just one who he seemed to admire, this was the

¹ Earlier lectures were given in 1944. These have been published as *Space-Time and the Proposition: The 1944 Lectures on Samuel Alexander's Space, Time and Deity*, by John Anderson. Edited and with an introduction by Mark Weblin. Sydney University Press, Sydney: 2004.

² *A Passion to Oppose: John Anderson, Philosopher*, Melbourne University Press, Melbourne: 1995.

³ See also the extract from an interesting letter from Anderson to his future wife, Janet Baillie, in February 22nd 1917, in Appendix 2 to this volume.

Presocratic philosopher Heraclitus. I think he saw Heraclitus as giving a dark, poetic adumbration of his own position. Heraclitus said, in one wonderful fragment that we have:

This world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living Fire, with measures of it kindling and measures going out.⁴ (R.P. 355.)⁵

This could serve as a brief but pregnant summing up of Anderson's own world-view, reading 'fire' as metaphor for the doctrine Anderson upheld that everything was always 'in flux' (another phrase from Heraclitus); and the 'measures' as what Anderson called 'the ways of working' of things, what others might call 'the laws of nature'.

Following on an old tradition, which he presumably encountered in the Scottish universities, Anderson's lectures were dictated, using either his own notes for the lecture, or perhaps sometimes texts of earlier dictations. No guidance was given on punctuation, paragraphing, etc. except the tone in his own voice, something that should be borne in mind in the transcriptions of lectures that follow. The 1949 lectures are based on a typescript made by Dr. R. E. Dowling (Eric Dowling) who was another member of the class, and the 1950 lectures are based on my own hand-written notes, which were re-written shortly after each lecture. Discussion was not much encouraged, it was best if one had a query or difficulty to approach him at the end of the lecture, though even that was not much done. What he wanted you to do was to master the material he had presented.

He did present some material informally at ordinary talking speed, often at the beginning of a lecture, perhaps some mention of the lesson of the previous lecture, but sometimes some illuminating extras. Some of us tried to take notes of this material also, but could do little better than a telegraphic rendering of what was said. In the present text of the lectures, these notes are marked by being indented on the left with the print size reduced.

We may now consider some of Anderson's philosophical pre-suppositions in these lectures, in particular ones that his students understood well enough, but which are likely to not be understood by present readers. But let us begin with Alexander's plan of attack.

⁴ John Burnet, *Early Greek Philosophy*, 4th ed. 1930, p.134, Fragment 20. Among historians of philosophy, Anderson picked out only one of them to admire: the Scotsman John Burnet.

⁵ R. P. is: *Historia Philosophiae Graecae*, H. Ritter et L. Preller Editio octava, quam curavit Eduardus Wellmann. Gotha, 1898.

What drew Anderson to Alexander's work in the first place? He was greatly impressed by Alexander's central idea, which we may now consider. Alexander started from Kant. In Kant's metaphysics, space and time are argued to be mere forms of intuition under which we must experience the world, and categories such as causality and substance are mere forms of understanding under which we must understand the world. Things-in-themselves, what is objectively there, are not given to us, Kant argued, and so we could know nothing about them. With these doctrines Kant had moved significantly towards a philosophical Idealism. But Alexander suggested, and Anderson enthusiastically seconded the idea, that a Realist revolt be staged against Kantian Idealism. Space and Time are not forms of intuition, but are forms of being. Reality, that is, everything, is spatio-temporal. The categories are not forms of understanding but are categories of being, categories under which all being, which is spatio-temporal being, must fall.⁶ Alexander's book, and Anderson's lectures both work this idea out, though with a great deal of difference in the detail.

We should now consider some of Anderson's philosophical pre-suppositions in these lectures, in particular ones that his students understood well enough, but which are likely to not be understood by present readers.

With regard to space and time Anderson took up a position that I think would be very difficult to take up today. He took space, with its three dimensions, and time with its one dimension, to be fundamental, to be ontological bed-rock. He took space-time to be infinite, and to be continuous in the precise mathematical sense—governed by the 'real number' system. He also thought that its geometry was Euclidean, thus putting himself utterly at odds with modern cosmology. We are familiar now with the idea that space and time, or rather space-time, is a subject for empirical investigation and that its true nature is still to seek. Einstein's theory of General Relativity, contemporary quantum physics, and such further developments such as 'string theory', make this clear. What picture of ultimate physical reality they leave us with is very far from clear, but there is no going back to the old Newtonian account of space and time.

The American philosopher Wilfrid Sellars drew a famous distinction between the 'manifest image' of the world, the world as revealed to

⁶ I record here that my BA. Honours thesis, which I should not care to re-read, was called "A Realist Reconstruction of Kant's Transcendental Analytic".

ordinary perception, and the ‘scientific image’ that fundamental physics and cosmology strives to present us with. He argued that the manifest image can hardly be maintained and must largely yield to the scientific image.⁷ It can fairly be said, I think, that Anderson takes the manifest image of space and time to be the ontological reality, and that this position is now very difficult to defend.

In the case of the categories Anderson is on what I judge to be more interesting ground. The categories of being dive so deep, that though quantum physics and other physics may have interesting things to say to philosophers—for instance, whether causation is in fact deterministic or not—the major issues involved are not susceptible of being resolved at the level of experimental science, yet seem to be real issues. Science may be able to cast light on whether causation is irreducibly statistical or not, but how can it decide what causation is in itself? Is it just a universal or statistical regularity? Or is it something deeper in the nature of things? What of the properties, numbers and quantities in which physical science inevitably traffics? Are they just concepts in our minds, or do they point us to features of physical objects that our concepts merely reflect? Alexander and Anderson give realist answers to such questions; and, furthermore, Anderson’s answers are more sharply edged than Alexander’s, and well repay examination.

One difficulty that Anderson canvasses early in the lectures, but hardly resolves, is the question forced on him by the demand of his logic that his terms (and we shall see shortly how realistically he takes terms) should have real, existing, opposites. If A is term, then there must be non-A’s. Applied to the categories this raises a problem, because the categories are, by definition, properties or whatever we decide to call them, that everything must have, must fall under.

Anderson never embraced the new formal logic created by Bertrand Russell and A. N. Whitehead along with others. He was perhaps the last of the ‘Aristotelian’ logicians. He drafted a logic book⁸ but it was never published. But there here exists in his handwriting an exposition of the central themes in his system of logic, marked as being lectures given in 1948. We think that they could be a useful companion to the Alexander lectures, and have reproduced them in Appendix 4.

⁷ Wilfrid Sellars, “Philosophy and the Scientific Image of Man”, *Frontiers of Science and Philosophy*, edited by R.G. Colodny, 1962, reprinted as Ch. 1 in *Science, Perception and Reality*, Routledge & Kegan Paul, London: 1963.

⁸ Manuscript and typescript copies of this book are in the Sydney University Archives, P.A.J.A. Series 2 (1914-1926).

But for those who do not wish to study the Logic lectures, or would like some preliminary guidance, I will call attention here to some of the main themes in his thinking on logic. He accepted the traditional doctrine of the subject/ predicate proposition, with its four Aristotelian forms:

All A's are B (the A proposition, in symbols AaB)

No A's are B (the E proposition, AeB)

Some A's are B (the I proposition, AiB)

Some A's are not B (the O proposition, AoB)

These terms are all supposed to have real opposites. There must be non-As and non-Bs, thus raising the problem about the categories, which by definition have no opposites. One can see also that there may be problems about propositions that assert that a certain relation holds between two or more things, the propositions that contemporary logic symbolizes as e.g. $R(a,b)$. How are such propositions to be rendered in one of the four forms? Anderson is aware of this problem and discusses that problem for his position in the lectures (See lecture 19, section 2, lecture 21, paragraph 3, see also lectures 22 and 24.) He suggests that relational properties (to be distinguished from relations) can be used, i.e., that 'having R to b' can be taken to be a term.

Notice that the singular propositions 'This A is a B' and 'This A is not B' are not included among the fundamental forms. This also created some difficulty for Anderson. He tried to deal with it by treating e.g. 'Socrates is sitting' as a sort of I proposition, because Socrates is sometimes sitting and sometimes not sitting.

Anderson again follows the old logic in recognizing the copula, the 'are' in the four forms, or the 'is' in singular propositions ('Socrates is wise'). It is clearly not the 'are' or 'is' of identity, unlike 'The Morning star is the Evening star' which is an identity statement. Rather, it links particulars or a particular with their properties. Here it may be said of the old logic that it brings up-front what the new Russellian logic ignores. Or rather, the new logic hands over the problem to metaphysics, and contemporary metaphysicians well understand the pressure to postulate some 'fundamental tie' holding between an object and its properties, though not all of these metaphysicians actually accept such ties. Anderson, however, gives the copula ontological significance, indeed identifies it with one of his categories, that of Existence. Furthermore, he also accepts a negative copula, needed, as

he sees it, by the E and the O propositions, though I am not aware of any identification that he makes of this second copula with one of his categories.

Another important point to be noted in Anderson's logic is the doctrine of the 'convertibility of terms'. The term that in one proposition appears in the subject place can elsewhere appear in the predicate place. The argument for this is that, for example, in the syllogism 'All As are Bs, All Bs are Cs, therefore All As are Cs', the 'middle term' B must be identical in the two premises for the argument to be valid. The late George Molnar pointed out to me that this made the distinction between subject and predicate, particular and universal, a functional one for Anderson.

But the most unusual feature of Anderson's view of logic must now be introduced if much that he says in these lectures is to be understood. For him, logic is at the same time the science of the most general features of reality, and a true proposition is something in the world, there is no distance between the true proposition and reality. The world is propositional. (Notice also that in view of the negative forms E and O Anderson is committed to negativity in the world.)

This view does immediately raise the question 'What about false propositions, then?' and this was a problem that regularly exercised the minds of Anderson's students, and which we discussed among ourselves. But it can be pointed out that Russell had in his important lectures published in 1918 as *The Philosophy of Logical Atomism*⁹ argued for a view of the world that it was constituted by what he called 'facts' (others have said 'states of affairs') which had a distinctly proposition-like structure, though the structure, such as it was, was given by his new, non-Aristotelian, logic. Anderson can be thought of as doing much the same thing, but retaining an Aristotelian logic. It is interesting to notice that Russell in his lectures accepted and argued for negative facts as ontological realities, which constitutes a further parallel to Anderson's E and O propositions.

A further problem that arises for Anderson is to determine just what categories should be recognized, and how they should be ordered. We find him arguing both these points with Alexander. Anderson says that it is the proposition itself that answers this problem. If we consult its subject-predicate structure then, he thinks, with the subject indicating the place and time of something, and the predicate indicating what

⁹ Russell's *Logical Atomism*, ed. David Pears, London, Fontana Collins, 1972.

sort of thing it is, we can get a systematic answer to these questions. Interestingly, Anderson was here following Kant’s lead, but this time without a lead from Alexander. Kant had what Norman Kemp Smith, who made the classical English translation of Kant’s *Critique of Pure Reason* called Kant’s ‘metaphysical deduction of the categories’ (see the index to his translation), where Kant uses logical considerations to ‘deduce’ his list of categories. (See pp.106—119 in the Kemp Smith translation.)

It may whet the appetite of those philosophers who have metaphysical interests to give an immediate pre-view of his scheme of categories.

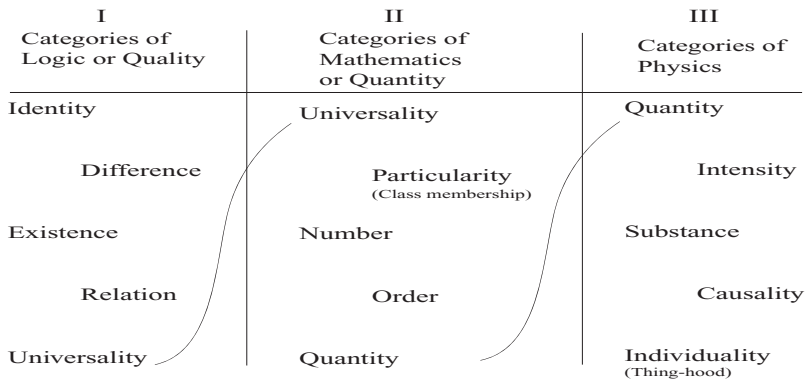


Figure 1.

His set of categories of 13 categories (1 more than Kant’s 12) is laid out in an almost Hegel-like ‘succession’ organized in three groups, with the categories of Universality and Quantity acting as ‘link categories’ in the two transitions between groups. ‘Monadic’ and ‘dyadic’ categories succeed to each other, so that Difference, Relation, Particularity, Order, Intensity and Causality are dyadic, the others monadic. Individuality, Anderson noted, brings us circling back to Identity again, though with a richer, more enhanced, notion of Identity.

With this scheme, John Anderson joins a very distinguished line of philosophers who have presented us with a set of categories. We have first Plato (the doctrine of Highest Kinds in his dialogue *The Sophist*), then Aristotle, Kant, Hegel, and Samuel Alexander.