

Twentieth-Century  
Literary Criticism

TCLC

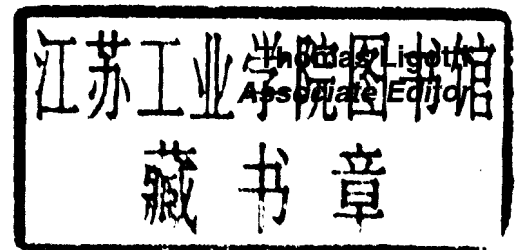
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# Twentieth-Century Literary Criticism

**Excerpts from Criticism of the  
Works of Novelists, Poets, Playwrights,  
Short Story Writers, and Other Creative Writers  
Who Lived between 1900 and 1960,  
from the First Published Critical  
Appraisals to Current Evaluations**

**Jennifer Gariepy**  
*Editor*



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# Twentieth-Century Literary Criticism

## Guide to Gale Literary Criticism Series

For criticism on	Consult these Gale series
Authors now living or who died after December 31, 1959	<i>CONTEMPORARY LITERARY CRITICISM (CLC)</i>
Authors who died between 1900 and 1959	<i>TWENTIETH-CENTURY LITERARY CRITICISM (TCLC)</i>
Authors who died between 1800 and 1899	<i>NINETEENTH-CENTURY LITERATURE CRITICISM (NCLC)</i>
Authors who died between 1400 and 1799	<i>LITERATURE CRITICISM FROM 1400 TO 1800 (LC)</i> <i>SHAKESPEAREAN CRITICISM (SC)</i>
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Major authors from the Renaissance to the present	<i>WORLD LITERATURE CRITICISM, 1500 TO THE PRESENT (WLC)</i>

# Preface

Since its inception more than fifteen years ago, *Twentieth-Century Literary Criticism* has been purchased and used by nearly 10,000 school, public, and college or university libraries. *TCLC* has covered more than 500 authors, representing 58 nationalities, and over 25,000 titles. No other reference source has surveyed the critical response to twentieth-century authors and literature as thoroughly as *TCLC*. In the words of one reviewer, "there is nothing comparable available." *TCLC* "is a gold mine of information—dates, pseudonyms, biographical information, and criticism from books and periodicals—which many libraries would have difficulty assembling on their own."

## Scope of the Series

*TCLC* is designed to serve as an introduction to authors who died between 1900 and 1960 and to the most significant interpretations of these author's works. The great poets, novelists, short story writers, playwrights, and philosophers of this period are frequently studied in high school and college literature courses. In organizing and excerpting the vast amount of critical material written on these authors, *TCLC* helps students develop valuable insight into literary history, promotes a better understanding of the texts, and sparks ideas for papers and assignments. Each entry in *TCLC* presents a comprehensive survey of an author's career or an individual work of literature and provides the user with a multiplicity of interpretations and assessments. Such variety allows students to pursue their own interests; furthermore, it fosters an awareness that literature is dynamic and responsive to many different opinions.

Every fourth volume of *TCLC* is devoted to literary topics. These topic entries widen the focus of the series from individual authors to such broader subjects as literary movements, prominent themes in twentieth-century literature, literary reaction to political and historical events, significant eras in literary history, prominent literary anniversaries, and the literatures of cultures that are often overlooked by English-speaking readers.

*TCLC* is designed as a companion series to Gale's *Contemporary Literary Criticism*, which reprints commentary on authors now living or who have died since 1960. Because of the different periods under consideration, there is no duplication of material between *CLC* and *TCLC*. For additional information about *CLC* and Gale's other criticism titles, users should consult the Guide to Gale Literary Criticism Series preceding the title page in this volume.

## Coverage

Each volume of *TCLC* is carefully compiled to present:

- criticism of authors, or literary topics, representing a variety of genres and nationalities
- both major and lesser-known writers and literary works of the period
- 6-12 authors or 3-6 topics per volume
- individual entries that survey critical response to each author's work or each topic in literary history, including early criticism to reflect initial reactions; later criticism to represent any rise or decline in reputation; and current retrospective analyses.

## Organization of This Book

An author entry consists of the following elements: author heading, biographical and critical introduction, list of principal works, excerpts of criticism (each preceded by an annotation and a bibliographic citation), and a bibliography of further reading.

- The **Author Heading** consists of the name under which the author most commonly wrote, followed by birth and death dates. If an author wrote consistently under a pseudonym, the pseudonym will be listed in the author heading and the real name given in parentheses on the first line of the biographical and critical introduction. Also located at the beginning of

the introduction to the author entry are any name variations under which an author wrote, including transliterated forms for authors whose languages use nonroman alphabets.

- The **Biographical and Critical Introduction** outlines the author's life and career, as well as the critical issues surrounding his or her work. References to past volumes of *TCLC* are provided at the beginning of the introduction. Additional sources of information in other biographical and critical reference series published by Gale, including *Short Story Criticism*, *Children's Literature Review*, *Contemporary Authors*, *Dictionary of Literary Biography*, and *Something about the Author*, are listed in a box at the end of the entry.
- Some *TCLC* entries include **Portraits** of the author. Entries also may contain reproductions of materials pertinent to an author's career, including manuscript pages, title pages, dust jackets, letters, and drawings, as well as photographs of important people, places, and events in an author's life.
- The **List of Principal Works** is chronological by date of first book publication and identifies the genre of each work. In the case of foreign authors with both foreign-language publications and English translations, the title and date of the first English-language edition are given in brackets. Unless otherwise indicated, dramas are dated by first performance, not first publication.
- Critical excerpts are prefaced by **Annotations** providing the reader with information about both the critic and the criticism that follows. Included are the critic's reputation, individual approach to literary criticism, and particular expertise in an author's works. Also noted are the relative importance of a work of criticism, the scope of the excerpt, and the growth of critical controversy or changes in critical trends regarding an author. In some cases, these annotations cross-reference excerpts by critics who discuss each other's commentary.
- A complete **Bibliographic Citation** designed to facilitate location of the original essay or book precedes each piece of criticism.
- Criticism is arranged chronologically in each author entry to provide a perspective on changes in critical evaluation over the years. All titles of works by the author featured in the entry are printed in boldface type to enable the user to easily locate discussion of particular works. Also for purposes of easier identification, the critic's name and the publication date of the essay are given at the beginning of each piece of criticism. Unsigned criticism is preceded by the title of the journal in which it appeared. Some of the excerpts in *TCLC* also contain translated material. Unless otherwise noted, translations in brackets are by the editors; translations in parentheses or continuous with the text are by the critic. Publication information (such as footnotes or page and line references to specific editions of works) have been deleted at the editor's discretion to provide smoother reading of the text.
- An annotated list of **Further Reading** appearing at the end of each author entry suggests secondary sources on the author. In some cases it includes essays for which the editors could not obtain reprint rights.

## Cumulative Indexes

- Each volume of *TCLC* contains a cumulative **Author Index** listing all authors who have appeared in Gale's Literary Criticism Series, along with cross references to such biographical series as *Contemporary Authors* and *Dictionary of Literary Biography*. For readers' convenience, a complete list of Gale titles included appears on the first page of the author index. Useful for locating authors within the various series, this index is particularly valuable for those authors who are identified by a certain period but who, because of their death dates, are placed in another, or for those authors whose careers span two periods. For example, F. Scott Fitzgerald is found in *TCLC*, yet a writer often associated with him, Ernest Hemingway, is found in *CLC*.

- Each *TCLC* volume includes a cumulative **Nationality Index** which lists all authors who have appeared in *TCLC* volumes, arranged alphabetically under their respective nationalities, as well as Topics volume entries devoted to particular national literatures.
- Each new volume in Gale's Literary Criticism Series includes a cumulative **Topic Index**, which lists all literary topics treated in *NCLC*, *TCLC*, *LC 1400-1800*, and the *CLC* year-book.
- Each new volume of *TCLC*, with the exception of the Topics volumes, includes a **Title Index** listing the titles of all literary works discussed in the volume. In response to numerous suggestions from librarians, Gale has also produced a **Special Paperbound Edition** of the *TCLC* title index. This annual cumulation lists all titles discussed in the series since its inception and is issued with the first volume of *TCLC* published each year. Additional copies of the index are available on request. Librarians and patrons will welcome this separate index; it saves shelf space, is easy to use, and is recyclable upon receipt of the following year's cumulation. Titles discussed in the Topics volume entries are not included *TCLC* cumulative index.

## Citing Twentieth-Century Literary Criticism

When writing papers, students who quote directly from any volume in Gale's literary Criticism Series may use the following general forms to footnote reprinted criticism. The first example pertains to materials drawn from periodicals, the second to material reprinted from books.

<sup>1</sup>William H. Slavick, "Going to School to DuBose Heyward," *The Harlem Renaissance Re-examined*, (AMS Press, 1987); excerpted and reprinted in *Twentieth-Century Literary Criticism*, Vol. 59, ed. Jennifer Garipey (Detroit: Gale Research, 1995), pp. 94-105.

<sup>2</sup>George Orwell, "Reflections on Gandhi," *Partisan Review*, 6 (Winter 1949), pp. 85-92; excerpted and reprinted in *Twentieth-Century Literary Criticism*, Vol. 59, ed. Jennifer Garipey (Detroit: Gale Research, 1995), pp. 40-3.

## Suggestions Are Welcome

In response to suggestions, several features have been added to *TCLC* since the series began, including annotations to excerpted criticism, a cumulative index to authors in all Gale literary criticism series, entries devoted to criticism on a single work by a major author, more extensive illustrations, and a title index listing all literary works discussed in the series since its inception.

Readers who wish to suggest authors or topics to appear in future volumes, or who have other suggestions, are cordially invited to write the editors.



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# Samuel Alexander

1859-1938

Australian-born English philosopher and critic.

## INTRODUCTION

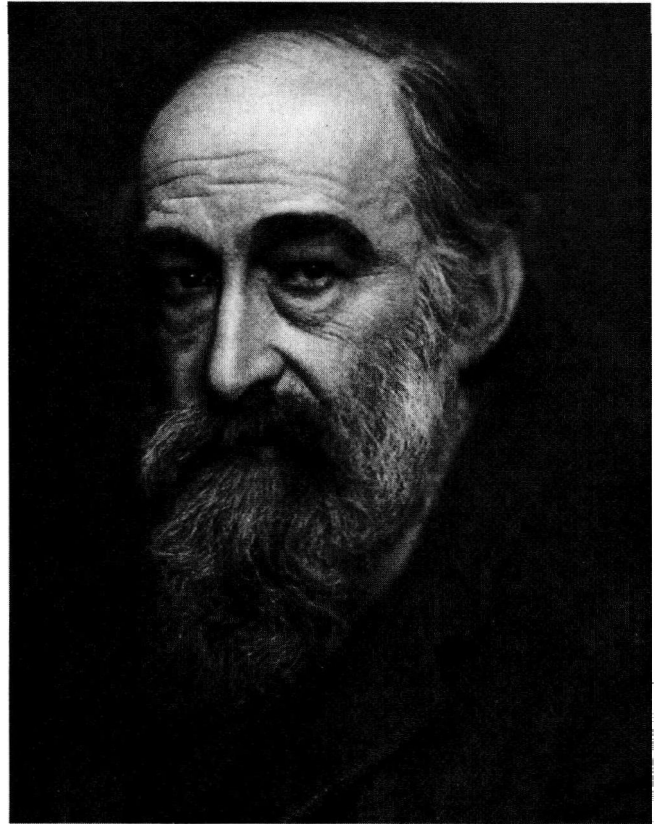
Alexander was among the foremost English realist philosophers of the early twentieth century. He is chiefly remembered for his *Space, Time and Deity* (1920), a systematic metaphysical inquiry into the nature of reality, consciousness, and God. Employing concepts of biology and psychology in addition to the methods of philosophical investigation, Alexander propounded his theory of "emergent evolution," the development of existence from primal space-time to successively higher levels, and posited the existence of God as an extension of the development of mind.

## Biographical Information

Alexander was born in Sydney, Australia, in 1859. His father was a saddler who died before Alexander's birth. His mother later moved the family to St. Kilda, a suburb of Melbourne, where in 1871 Alexander entered Wesley College. He attended the University of Melbourne for two years, and while he left Melbourne without completing a degree, he had enjoyed a distinguished academic career. Moving to England in 1877, Alexander was awarded a scholarship to Balliol College, Oxford. In 1882 he became the first Jewish fellow of either Oxford or Cambridge, when he received a fellowship from Lincoln College, Oxford. Alexander maintained his position in Oxford until 1893, when he became professor of philosophy at the University of Manchester. He remained in Manchester for more than thirty years, becoming highly admired by his students and well-known within the wider cultural life of the city. From 1908 until 1911 he was president of the Aristotelian Society, a position to which he returned in 1936-37. He was elected to the British Academy in 1913. During 1917 and 1918, at the invitation of the University of Glasgow, Alexander developed a series of lectures summarizing his philosophical system. Known as the Gifford Lectures, these works provided the basis of his masterwork, *Space, Time and Deity*, 1920, an extensive consideration of such metaphysical questions as the nature of the space-time continuum and the existence of God. Alexander retired from academic teaching in 1924 but continued to give public lectures and in his later years devoted his attentions to matters of literary criticism and aesthetics. In 1930 he was awarded the Order of Merit. He died in 1938.

## Major Works

Alexander's philosophical system is chiefly elaborated in his magnum opus, *Space, Time and Deity*, which repre-



sents the culmination of more than thirty years of academic research and teaching. In Alexander's view, metaphysical inquiry into the nature of reality and of such concepts as space, time, and value must utilize and reflect developments in the empirical sciences, including biology and psychology. In *Space, Time and Deity* Alexander maintained that neither space nor time can be comprehended without reference to the other and that all properties and values of nature arise out of the space-time continuum; in other words, out of motion.

Central to Alexander's philosophical system as outlined in *Space, Time and Deity* is the theory of "emergent evolution," a concept that dates from the works of the English philosopher and critic George Henry Lewes in the mid-1870s and which had been developed by Alexander's contemporary, the English zoologist and psychologist Conwy Lloyd Morgan. Rather than focusing on the sources of evolutionary development, emergent evolutionists concentrated on the process of evolution, in which the resulting advancement is greater than and is not reducible to the physical or chemical process through

which it has emerged. For Alexander, as space-time reaches successively higher levels of complexity new qualities emerge. The first to emerge are the primary qualities of matter, including size and shape. Such secondary qualities as color then follow. Applying the reasoning of emergent evolution, Alexander posited the existence of God as a "level of existence" that would be realized in the development from body to mind to deity—from physical to mental to supramental. However, because the way in which God would be distinguished from mind cannot be predicted, Alexander maintained that the nature of God is unknowable.

In *Space, Time and Deity* Alexander also sought to elucidate questions of human perception, and his concept of "compresence" embodies his explanation of the cognitive relation of mind to objects and actions and of minds to other minds. Alexander held that an object may be *before* a consciousness but is not *in* it; consciousness of an object is not the same as consciousness of one's consciousness of the object. For example, an object such as a chair may be apprehended by a consciousness, but the chair is not located within that consciousness; and, the contemplation of the chair is distinct from thinking about the act of contemplating the chair. Further, since the contemplation of an object is itself an action, in Alexander's view it cannot be "contemplated" but only subjectively experienced, or "enjoyed."

While *Space, Time and Deity* represents the highest achievement of Alexander's career, he had earlier published works of philosophy and criticism analyzing the writings of G. W. Hegel and John Locke, as well as essays on evolutionary theory, ethics, and political philosophy. During the 1920s and 1930s he turned to such subjects as the philosophy of Baruch Spinoza and the realm of aesthetics. A posthumous collection, *Philosophical and Literary Pieces*, was published in 1939.

### Critical Reception

Contemporary criticism of Alexander generally viewed his writings within the realist resurgence that flourished in American and English philosophy during the early twentieth century. Reviewers of *Space, Time and Deity* sought to explicate the extensive and systematic inquiry he presented and often praised particularly the comprehensiveness of his metaphysical system. However, within the decade such notable metaphysical works as M'Taggart's *The Nature of Existence* (1921) and Alfred North Whitehead's *Process and Reality* (1929) largely eclipsed Alexander's work, and his reputation subsided in the decades following his death. Some critics have suggested that his diminished status stems in part from the fact that he was connected with no movement or school and thus left no disciples engaged in the work of extending and refining his ideas. Yet Alexander has remained an attractive subject for numerous late-twentieth-century scholars, including Michael A. Weinstein, who summarized Alexander's appeal in 1984, writing, "The spirit of Alexander's philosophy is elegant passion,

something that is of vital importance for the sustenance of civilization. The elegance should not be taken to indicate indifference to public affairs . . . or retreatism . . . , but an understanding of philosophy's special role in describing experience comprehensively and reflectively, identifying its pervasive characters, relating them to one another, and judging them according to their importance."

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## PRINCIPAL WORKS

- Moral Order and Progress: An Analysis of Ethical Consideration* (philosophy) 1889  
*Locke* (philosophy) 1908  
*The Basis of Realism* (philosophy) 1914  
*Space, Time and Deity*. 2 vols. (philosophy) 1920  
*Spinoza and Time* (philosophy) 1921  
*Lessons from Spinoza* (philosophy) 1927  
*Spinoza: An Address* (philosophy) 1927  
*Beauty and Other Forms of Value* (philosophy) 1933  
*Philosophical and Literary Pieces* (philosophy and criticism) 1939
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## CRITICISM

Haldane (essay date 1920)

SOURCE: "Prof. Alexander's Gifford Lectures," in *Nature*, August 26, 1920, pp. 798-801.

[In the following essay, Haldane considers Alexander's *Space, Time and Deity* in the context of Albert Einstein's general theory of relativity.]

Prof. Alexander has written a book which requires more than cursory reading. It deserves careful study. For it embodies a thoroughly modern exposition of New Realism in full detail. Moreover, these two volumes are not merely the outcome of a sustained effort at accurate investigation. They are distinguished by their admirable tone and temper. The author is throughout anxious to understand and to represent faithfully the views of those with whom he is in controversy. His reading of what has been written by the great thinkers of other schools has been closer and more intelligent than that of most New Realists, and he displays no traces of arrogance. He has done all he could to appreciate the materials furnished, not merely by mathematical and physical science, but by biology and psychology; highly important fields for his inquiry.

These very merits of Prof. Alexander's method have, however, produced their drawbacks. They have driven him beyond the current conceptions of the New Realist type into others which are not always easy to reconcile

with them. In the second volume, particularly, where the author is chiefly concerned with such problems as those of the nature of the tertiary qualities of reality, of value, and of deity, the treatment leaves the impression that the subject-matter passes beyond the limits which alone are for the method legitimate. None the less, the effort made to be consistent is a notable one. But under this head I must refer the reader to the book, for the only aspect of the doctrine in it with which space allows me to concern myself is its cardinal principle as applied to physical knowledge.

To begin with, it is necessary to be clear as to what is peculiar to himself and his school in Prof. Alexander's teaching. It is not sufficiently realised that to-day the New Realists comprise a variety of groups divided by differences that are of far-reaching importance. These differences relate to the nature attributed to mind. For some of the most prominent of the American New Realists mind has no characteristic at all that distinguishes it from its objective content. Seeing means colours occurring; hearing means sounds occurring; thinking means thoughts occurring. Mind is itself just a casual selection out of the field of consciousness, and has no nature distinct from that field. When we speak of a mind, the grouping arises out of relations possessed by the objective elements themselves, relations which exist quite independently of our own action in perceiving. Minds are thus subordinate groups in a larger universe of being which includes them, and which would be unaltered if minds disappeared from it. Consciousness is thus merely a demonstrative appellation.

Now for Prof. Alexander, and, I think, for most of the English New Realists, mind has a reality independent of its object. With the latter, whatever it is, it is "compresent." The act of perceiving is one reality, the object perceived is another. Left to itself, the activity which we call mind reveals the object, with its relations (which may be universals) just as they exist independently of it. But the activity is a separate reality, which does not belong to the ordinary object world, but reveals itself in consciousness, in which it is said by Prof. Alexander to be "enjoyed." Here we have dualism, a dualism which he gets over by referring the origin of the activity of mind and the object with which it is compresent, alike, to a final reality which is the foundation of both, an ultimate space-time continuum. This, inasmuch as the flow of time enters into its very essence, is not static, but dynamic. The activity which we are conscious of (in the form, not of perception, which is of objects, but of self-enjoyment) is therefore in its turn dynamic, and its character is that of a conation.

I am not sure that the Americans, notwithstanding their boldness, are not here on safer ground. They project everything, thought, feeling, and tertiary qualities, such as goodness and beauty, into what they call a non-mental world. Prof. Alexander is more cautious. With him the native hue of resolution is, at times at least, as he progresses in his enterprise, sicklied o'er with the pale

cast of thought. He seems to feel that he must retain something for a mental world. Starting with space and time as having no reality apart from one another, but as mere abstractions from aspects or attributes of the foundational reality, which is space-time or motion, the "stuff of which all existents are composed," he has to account for our actual experience. His foundationally existent activity breaks itself up into the complexes of which we are aware, and which possess, as belonging to their nature, certain fundamental and all-pervasive features which we recognise as categories. There result also qualities which appear in our experience. These form

a hierarchy, the quality of each level of existence being identical with a certain complexity or collocation of elements on the next lower level. The quality performs to its equivalent lower existence the office which mind performs to its neural basis. Mind and body do but exemplify, therefore, a relation which holds universally. Accordingly, time is the mind of space, and any quality the mind of its body; or, to speak more accurately, mind and any other quality are the different distinctive complexities of time which exist as qualities. As existents within space-time, minds enter into relations of a perfectly general character with other things and with one another. These account for the familiar features of mental life; knowing freedom, values, and the like. In the hierarchy of qualities the next higher quality to the highest attained is deity. God is the whole universe engaged in process towards the emergence of this new quality, and religion is the sentiment in us that we are drawn towards him, and caught in the movement of the world towards a higher level of existence.

I have given the general result of his inquiry as summed up in the author's own words, those used by him in concluding his final chapter. But it would be unfair to suggest that the nature of this result can be appreciated from any isolated quotation. The whole book must be read. It is admirable alike in thoroughness of method and in command of material. Still, it is obvious that the entire edifice depends for its stability on its foundation, and that the author's conception of the ultimately real as being space-time, a continuum of point-instants or pure events entirely independent of mind, is the crucial point in his reasoning. If he is right, it must be in terms of this existent that all else must be capable of expression, and it cannot itself be expressed in terms of anything beyond itself. Of course, Prof. Alexander does not dispute that when we speak of space and time as of this character we are going beyond what we learn through sense, or intuitively, and are employing constructions of reflection. He is quite entitled to do this if a non-mental world can include universals, as he insists, in common with all New Realists. Our simplest experience is, as he says, "full of our ideas." The question is whether they belong to mind or to what is not mind. We shall see presently to what path this conclusion conducts.

At this stage we have to put before us the author's analysis of the relation of space to time, an analysis that seems



to me altogether admirable. Space taken in abstraction from time has no distinction of parts. Time in so far as it is purely temporal is a mere now. To find a continuum we must find distinguishable elements. Without space there would be no connection in time. Without time there would be no points to connect. There is therefore no instant of time apart from a position in space, and no point of space except in an instant of time. The point occurs at an instant, and the instant occupies a point. The ultimate stuff of the universe is thus of the character of point-instants or pure events, and it is so that we get our continuum. The correspondence is, however, not a one-to-one, but a many-one, correspondence. For one point may occur at more than one instant, and one instant may, analogously, occupy several points.

Prof. Alexander thinks that he is here in full accord with Minkowski's well-known conception of an absolute world of four dimensions, of which ordinary geometry omits the fourth, the time element. When he wrote his book Einstein's doctrine of relativity was only fully known in its first form, the "special" theory, and Prof. Alexander believes that his view of the character of the space-time continuum has left him free to accept the so-called principle of relativity in this form. For it suggests really no more than the unification of the observations of two sets of observers who may be observing an absolute world in space-time, by means of formulas of transformation in which the observations of observers with one system of co-ordinates can be rendered in terms of the co-ordinates of observers with a different system. It may be, he says, that the formulas are not really independent, inasmuch as they are ultimately numerical, and numbers may be wholly dependent on an absolute space and time system. Thus it would be an absolutely identical set of relations which was observed from the two systems of reference, moving rectilinearly with a relative velocity which remained uniform.

But can this be accepted in the fresh light cast by the general theory of relativity, of which the special theory is now shown by Einstein to be a mere special case? Here metaphysicians have to look over a fence into ground at present mainly occupied by the mathematician. But not exclusively so occupied. The ground is in truth a borderland where mathematics and epistemology trench on each other, and the fence is not of barbed wire. We are, indeed, compelled to try to do the best we can with unfamiliar topics if we would get at the truth about the nature of reality. The relativity doctrine now extends to accelerating motion. It has also, apparently, been demonstrated that a principle of equivalence obtains according to which any changes which an observer takes to be due to what he supposes to be attraction within a gravitational field would be perceived by him in precisely the same way if the observer's system of reference were moving with the acceleration which was characteristic of the gravitation at the observer's point of observation. The combination of these principles gives us relativity of measurement in actual experience without restriction. The gravitational principle is, in addition, here based, not

on a supposed elementary law of gravitational *force*, whatever that means, which would leave us in metaphysical perplexities about action at a distance, but on elementary laws of the *motion* of bodies relatively to each other in a so-called gravitational field. There is no decision either for or against Euclidean geometry as a possible special case. But there is a decision that space, as a physical thing with unvarying geometrical properties, is to be banished, just for the same sort of reasons as the æther was banished before it. Only observable things are to be recognised as real in the new system of modern physicists.

It is therefore asserted by Einstein that, all motions and accelerations being relative to the system of reference of the observer, neither space nor time has physically independent objectivity. They are not measurable in themselves. They mean only the framework in which the minds of the observers arrange physical events, according to the conditions under which observation takes place. We may choose such frameworks as we please, but in point of fact we naturally choose so that the application of our method is the one that appears best adapted to the character of what we observe. The standard used will give their physical significances to our "geodetic lines." The apparent order in space and time has no independent existence. It manifests itself only in the events that present themselves as so ordered.

But the revolution in conception does not stop here. As so-called "gravitational fields" are everywhere present, the old special theory of relativity is nowhere an accurate account of phenomena. The velocity of light, for instance, cannot really be constant under all conditions. It is the things we observe in space and time that give to these their definite structure, and the relations in them of the things depend on the system of observation. To get at the fundamental law of the change which takes place in the space-time continuum we must look for the principle which governs the motion of a point in it as of the form of a differential law for the motion of such a point, not merely in a straight line in the Euclidean sense, but in a geodetic line which will be relative to any possible form of motion and acceleration in a gravitational field. If we can reach such a differential law under the aspect of an equation sufficiently elastic in its variables, we shall be able to fit into it mathematical expressions based on actual observation which give the "gravitational potentials" required for the application of the law. The form of the differential equation which expresses the law must therefore be such as to be applicable whatever may be the four co-ordinates of reference of the observer of motion in any conceivable gravitational field. The principle of equivalence necessitates this, and we get as the result a science of motion depending on the relativity of every kind of motion. All that is required is that the co-ordinates which are the variables in the equation of motion of a point-mass moving uniformly and rectilinearly should be so expressed as to be capable of transformation into the co-ordinates, whatever their shape, of any system of reference which moves in any path and has any accel-

ated motion whatsoever. This appears to have been done completely. The *result* is intelligible to the epistemologist who can even do no more than look across the boundary fence. The mathematical details and scaffolding he may be wholly unable to appreciate. But not the less does he feel compelled to take off his hat reverently before the shades of Gauss and Riemann, and before those who have been able to wield the mighty sword with which these great thinkers cut the knots that held physicists back from the unrestricted calculus of to-day, purified as it now is from the old assumptions.

Now the importance of this thorough-going application of the principle of the relativity of the character of the point-event continuum to the observer is obvious. It means relativity in significance for intelligence. As Prof. Eddington has recently remarked in a notable article in *Mind*, the intervention of mind in the laws of Nature is more far-reaching than is usually supposed by physicists. He develops this conclusion in a fashion which is impressive. Freundlich and Schick in their recent books insist on the same thesis.

But what does the word "mind" mean when used thus? Not a substance in space-time, as Prof. Alexander would have it. To start with, such an assumption would involve either the rejection of the modern doctrine of relativity as the school of Einstein has put it forward as dependent on interpretation, or something tending towards solipsism. Nor can mind mean substance in another aspect, that in which Berkeley and the Mentalists have sought to display it. Few competent students of the history of thought look on philosophy as shut up to such a view, the view which New Realism seeks to bind into the "egocentric predicament."

There is another interpretation of the meaning of mind in which it signifies neither any of these things nor yet an Absolute Mind apart from that of man, but just our own experience interpreted as being in every stage relative in its presentation, and not so merely in the relation of measurement. For Einstein's doctrine seems to be only a fragment of a yet larger and even more striking view of reality. Relativity is surely not to be confined to judgments based on the co-ordinates we employ in measurement. It may equally arise in other instances from the uncritical applications of conceptions concerned with quality as much as with quantity. From such a point of view reality, including human experience, is what it is only because we are ever unconsciously, under the influence of practical ends to be attained, limiting our systems of reference, interpreted in even a wider sense than that of Einstein. These may be limiting ends imposed on us by the mere fact that we are human beings with a particular position in Nature. The relativity of knowledge will thus assume the form of relativity of the real to general points of view, and will result in a principle of degrees extending through all knowledge and reality alike, which fall short of ideal completion. It is an old principle, as old as Greek thought. If it is true, it solves many problems and gets rid of the distinction between mental and non-men-

tal, between idealism and realism, between mind and its object. For it accepts the "that," and confines the legitimate problem to the "what." It also gets rid of the perplexing idea of an Absolute Mind as something to be conceived as apart from us while working in us.

The idea and the method, recurring as they do in ancient and modern philosophy, are worth study by those who feel the stimulus of the new atmosphere which Einstein has provided. They may find a convenient analogue to the special principle of relativity in Kant's "Critique of Pure Reason," with its investigation of the general conditions which are required in order to render any individual experience possible. If they seek for an analogue to Einstein's general principle, they may look either in the "Metaphysics" of Aristotle or in the "Logic" of Hegel. The greatest thinkers have presented resembling conclusions in varying language.

This path is one that is not easy to tread. It is as hard to enter on as is that of the metaphysician who has to try to understand the meaning for philosophy of the absolute differential equations which Einstein employs. Prof. Alexander, however, knows the direction, if he does not now look that way. And it may be that the difficulties with which the new principle of general physical relativity seems to threaten New Realism, with its non-mental and static reality, may lead him, with his openness of mind, to consider once again whether he should not wend his steps afresh towards the wicket-gate for a further pilgrimage. But whatever the direction in which he is looking, his new book is full of stimulating material, even as it stands.

Charles Hartshorne (essay date 1937)

SOURCE: "Mead and Alexander on Time," in *Beyond Humanism*, Willett, Clark & Company, 1937, pp. 242-52.

[In the following essay, Hartshorne explicates and identifies weaknesses in Alexander's arguments in *Space, Time and Diety*.]

George Herbert Mead was a great philosopher and certainly a humanist. Until his *Philosophy of the Act* has been published it will be too soon to pass judgment on his philosophy. But there are some aspects of his system which seem fairly well defined by his extant writings, and these aspects suggest the following criticisms. In his *Philosophy of the Present* Mead declares that each age creates its own past—not its own image of the past, for Mead seems to deny the validity of this distinction. The past *is* the best image we can construct on the basis of present experience in its past-pointing characteristics. The question then arises of how the past which we infer in this manner differs from the future which we may also infer. What is the direction of pastness? To this question Mead's writings seem to give only a cloudy answer. And in any case, it seems contradictory to assert that our efforts to know the past create the past we wish to know.

In Mead's own discussion we can feel the unwished-for but really inescapable naïve meaning of past as the "irrevocable," the settled and done for, contrasted with the future, the unsettled, which can be more and more settled in this way or in that as it comes closer and closer to the present. Mead admits that an absolutely fixed past is possible only theistically, but he considers only the old type of theism according to which the future is fixed also, and he rightly objects that in that case past and future lose their distinctness and time is explained away, not explained. But then is this not also the result if we make both past and future unsettled? The point is to distinguish them, and both old theism and Mead's humanism seem, though in opposite ways, to confuse them together. Is it not striking that Mead's paradoxical view was expressly adopted under the conviction that the only alternative was the medieval or Roycean absolute (which Mead mistakenly supposed was also Whitehead's doctrine)?

In theory of value Mead was a great thinker. But his view of the social nature of mind is dangerously unprotected against the conclusion that society is the only real locus of value. His sympathetic critic, Professor T. V. Smith, has warned against this danger.<sup>1</sup>

In any case, Mead's social psychology is compatible with organic sympathy, since the "mind" which, according to him, is generated by relations to other human organisms is mind as reflective consciousness, as understanding of "significant symbols," not mind as merely feeling and striving, and the embracing of these factors in a unity of awareness with its element of meaning as awareness "of" an environment. Or did Mead really think that *all* sense of meaning, including that involved in simple memory and desire and emotional attitudes, is due to "taking the role of the other" in the fashion which is achieved only by man? (That all life whatsoever is "social" in a broad sense Mead fully grants.)

Again, in *Movements of Thought in the Nineteenth Century*, Mead says that a physical object really is, in the perspective of the beholding organism, what it looks to be—colored, etc.<sup>2</sup> But the question between psychism and its critics concerns what the object is when *not* in the perspective of human perception, e.g., before animals existed on earth, or today when we are all asleep. Mead says the world is the totality of perspectives.<sup>3</sup> Then we must ask, What is the perspective that belongs individually to a molecule as a man's perceptions belong to the man? Does the molecule's perspective possess quality, and if so how can it lack feeling or sensation? Does it possess the past as real in the present, and then how can it lack memory? Is it subject to order, and then how can it lack some germ of purpose, i.e., of present pattern binding upon the future? Only if the *Philosophy of the Act* illuminates these questions will Mead's philosophy present a significant alternative to psychic naturalism.

Perhaps the most important of all recent efforts to interpret the world without resort to the cosmic psychic variables is that of S. Alexander in *Space, Time, and Deity*.

Alexander's view is that the only cosmic principle is space-time or, as he expresses it, pure motion. If one asks, Motion of what? Alexander replies, in effect at least, that there need be nothing to move except bits of motion themselves. In other words change of position can take place even though there is nothing at any position except change of position. This frank assertion of a paradox seems to me more honest intellectually than Santayana's pretense to possess in the term "matter" a key to what it is that has locus and that changes.

Out of pure motion "emerge" certain special properties ("local variables" in our terminology) such as quality, life, mind. But there are no cosmic variables, except bare space-time or motion, by which these local variables may be described.

In cosmic terms this system differs from older materialisms in three ways. First, space is held to be essentially temporal. Second, "matter" is given up as a cosmic principle except in so far as it means simply what is spatio-temporal. (This of course is the only positive meaning it ever did have.) Third, really new, unpredictable qualities perpetually appear in the universe. (The quality now emerging is deity, nascent divinity.) Because of these differences Alexander greatly objects to being called a materialist. When this charge is brought, he points out with great earnestness that he has described time as "the mind of space." But if asked what this means, and whether or not, by virtue of time, space thinks or feels, he replies that his metaphor must not be taken too seriously. The psychist cannot but suspect that Alexander has an intuition of the cosmic range of memory and expectation as essential to time, but has not clarified this intuition.

So far as I know, Alexander's is the only carefully elaborated, honest attempt (unless we should except Nicolai Hartmann's) to work out a non-psychic metaphysics which the twentieth century has so far witnessed. By virtue of his thoroughness and honesty the following difficulties appear plainly enough. First, pure structure is made independent of qualities. For space-time is nothing definite except a changing pattern of relations. "Relations of what?" remains unanswered. Second, the fact that space-time does in fact produce qualities is not explained. Third, there is in the system no ground of order in change.

It is also interesting that Alexander, writing a third of a century after Boutroux and Peirce had exploded the pretensions of determinism, tried to combine the absoluteness of law in physics with the absolute unpredictability of emergent properties.<sup>4</sup> Both absolutes are groundless obstacles to any understanding of time. It is also interesting that Alexander's quasi-materialism was not deliberately chosen as an alternative to a temporalistic panpsychism, but as an alternative to absolute idealism and ordinary materialism.

Alexander's point that space is inconceivable apart from time is an improvement over older materialisms, yet a

weakness. For it is easier to overlook the emptiness of the concept of non-psychic reality in a static than in a dynamic context. That psychic reality is essentially dynamic is obvious, since thinking, feeling, striving, loving, hating, are all acts and since novelty and surprise are aesthetically valuable, and the very thought of their total absence is unbearable if we really strive to imagine it. But the blank notion of lifeless, insentient existence suggests no activity, for it suggests nothing definite, except, as Alexander says, the bare stuff of motion itself, and then it throws no light on what it is that moves. Becoming is a richer notion than being, and hence it reveals even more clearly the poverty of "matter" or of "non-psychic reality." If there is becoming, *something* must become which is not just a bit of becoming. Alexander's error is the universal one of all dualisms and materialisms, that of trying to explain the concrete by the abstract, "the fallacy of misplaced concreteness."

Alexander gives a very interesting argument for his rejection of quality as a cosmic variable.<sup>5</sup> He says that there is no "plan," or principle of variability, in quality similar to the plan of "humanity" as varied in Caucasian, Mongolian, and other races. He even doubts that there is any plan to color, and is confident that there is none uniting red and hard and sweet—all the sense qualities. Strangely, he says nothing about the continuity of colors, and of course nothing about the possibility that discontinuities among the different senses are due to the fact that human sense-feelings are not all possible feelings, but a restricted realization of these possibilities, even by comparison with other existent animals. Hence Alexander's conclusion that "quality" is only a collective name for red, sour, hard, etc., is hastily arrived at. Nor can it be justified, since no observation can prove the impossibility of qualities intermediate between red and sweet, or sweet and warm, or in general any discontinuity of this type. And the only plan of variability any universal can have is dimensionality, a continuous spread of values (admitting various discontinuous spreads as special cases).

Starting, as Alexander does, from motion as an ultimate, one cannot interpret quality and qualitative change. But if we start from the notion of qualitative changes as socially interlocked, sympathetically interacting with one another, motion becomes readily explicable.<sup>6</sup> For motion is change of relative position and position is determined by the principle: "My neighbor is he with whom I intimately interact" (Peirce). Hence motion is simply the changes in the degrees of interaction among qualitative changes. Furthermore, it is explicable why there should be such changes in interaction. For, given a certain feeling-quality in *A*, then the degree to which this quality is compatible with intimate relationship to a given quality in *B* is determined. To take an example on the human plane: If I am melancholy in such a settled way that it conflicts with my mood to be vividly aware of a cheerful neighbor, I shall tend to keep at a certain distance from cheerful persons and to seek out intimate relations with persons in a melancholy mood. But if I pass from this state to one

of feeling cheerless in a restless, painful way that makes me wish to be "cheered up," I shall seek out the society of happy people. The aesthetic unity of contrasting feelings which is necessary if feeling is not to be indefinitely destroyed by boredom or intolerable discord thus implies that changes in feeling-quality should be accompanied by changes in degree of relationship to other feeling-qualities, that is, by motion. And it matters not how simple the feelings may be, how subhuman or superhuman, for this law of unity in contrast is perfectly general and implies no higher degree of complexity than an electron may enjoy. Thus there is no riddle in the fact that our human feelings may produce motions in the human brain and muscles, for the parts of these organs sympathize with our changing feelings to such a degree as to involve sharp changes in their internal qualities, and from this their motion follows necessarily. The reverse process is equally explicable. Motion in the brain particles necessarily involves changes in their qualities, hence, by sympathy, qualitative changes in us. It also involves shifts in our relative intimacy with different parts of the brain (shifts of attention), so that one can truly say that consciousness moves.

It is easy to see why it is that science deals with motion as the causative factor rather than with qualitative change. All motion involves qualitative changes, but these are usually inaccessible to us by ordinary practical or scientific means. Only with animals a great deal like ourselves can we rather easily infer something about the feelings involved in their "behavior." With inorganic bodies, which do not as wholes feel, since the feelings of their parts are not pooled into a single aesthetic pattern, we find it much easier to infer analogy to ourselves in terms of mere behavior than in terms of feeling-quality. And the behavioristic analogy serves our purposes. Why does it do so? How can we know the shapes of things whose feelings we do not know? How can we separate what in our sensations is due to motion in the environment from what is due to qualitative change? It seems almost a sufficient explanation to say that the aesthetic unity of the world is such that when we take the motions by themselves, we find them characterized by a very definite quantitative pattern. Doubtless the complete aesthetic pattern involves qualities also. But these qualities evidently change in such a way as to involve motions (changes in the relations between qualitative changes) which, considered in abstraction from the qualitative side, yield fairly definite patterns of their own, somewhat as the pattern of a poem is relatively independent of the meanings of its words. Thus the final proof of the atomic theory of matter was the proof that if there is a definite law of heat, heat must be a mode of motion, whatever else it may be. In other words, our sensations can be predicted if we suppose changes in them to be correlated with motional changes in the environment and in ourselves and if we suppose these changes to follow certain patterns. Not that it does not matter what qualities there may be in the environment, but that it does not matter to us whether or not we *know* these qualities. For we do know this about them, that they are such as to be compat-