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Author(s): Julie M. Johnson

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## JULIE M. JOHNSON

GEORGIA INSTITUTE OF TECHNOLOGY

## The Theory of Relativity in Modern Literature: An Overview and The Sound and the Fury

THREE-QUARTERS OF A CENTURY has elapsed since Albert Einstein published his Special Theory of Relativity in 1905, and the controversy over this once-startling theory has abated in the twenty-five years since his death in 1955. It is an appropriate time to look back: to seek out the mark of this "new physics" on modern literature; to consider the forms this influence has taken; and to ascertain the philosophical connotations of that influence. What was the significance of relativity theory for the writer? How did he use it? Why did he use it? The answers to these questions begin in the relationship between science and the arts; they take shape in a survey of relativity theory in modern literature; and they are illustrated in the particular case of Quentin Compson's section of *The Sound and the Fury*.

On the whole, except within the genre of science fiction, we tend to think of science and the arts as unrelated, perhaps even mutually antagonistic. However, as has been pointed out by many, the artist and the scientist are not unlike in their ultimate purpose, which is to order experience in such a way as to give it meaning. In a memorial address for Max Planck, the father of quantum theory, Einstein said,

Man tries to form a simplified and clear conception of the world in a manner somehow adequate to himself, and to conquer the world of reality by replacing it to a certain extent by this picture. The painter, the poet, the speculative philosopher, and the [scientist] do it, each of them in his own way. He places in this picture the center of gravity of his emotional life in order to find the tranquility and constancy which he cannot find within the narrow limits of turbulent personal experience.<sup>1</sup>

In light of this commonality of purpose, it is not surprising that scientific theories have appealed to the creative imagination of the literary artist, and the greatest scientists have intrigued the greatest humanists.

In addition, the major discoveries of science-the Copernican universe, for example, or evolution-have so often changed our understanding of Man and Nature that it is inevitable that they should not only impinge upon metaphysics and the behavioral sciences, but, in their philosophical and psychological implications, upon aesthetics as well. From Pythagoras to the present, scientists have introduced theories which have radically altered our view of ourselves, our universe, and the relationship between the two. Humanists have been forced to confront the realities revealed by these theories and somehow to deal with them. The history of thought in the physical sciences particularly is a history of what Clement Durrell has called "shocks administered to common sense."<sup>2</sup> Scientists seeking to construct an image of the universe which explains the way it behaves (rather than simply the way it appears) have repeatedly violated the image of reality which derives from our everyday, sensory experience. Because the world of the theoretical physicist is composed of things which most of us will never experience-black holes, curved space, the discontinuous motion of particles-the physicist's understanding of the universe has sorely tested our credulity even while it has fascinated us with its elusiveness. It is little wonder that it has captured the imagination of the artist.

The repercussions of relativity theory in philosophy and the arts have been great chiefly because of coincidence. If Einstein had not come along when he did, after Darwin and the nineteenth-century philosophers, and in the midst of Bergson, Freud, and the experimental aesthetics of the late nineteenth and early twentieth centuries, his theory of relativity might have remained obscurely lodged within the bosom of theoretical physics. And had he called his brainchild a Theory of Geodesics, which it is, rather than a Theory of Relativity, which, as that

<sup>&</sup>lt;sup>1</sup> Quoted by Archibald Henderson in "Albert Einstein," Contemporary Immortals (Freeport, New York: Books for Libraries Press, 1968 [1930]), pp. 22–23. Henderson discusses the kinship of artist and scientist on pages 20–21. In regard to this kinship, also see Herbert Muller, Science and Criticism (George Braziller, 1956), p. 94.

<sup>&</sup>lt;sup>2</sup> Clement Durrell, *Readable Relativity* (Harper Torchbooks, 1960), pp. 187–91. A good review of the history of thought in the physical sciences can be found in the first chapter of Durrell's book and in the second chapter of Moody Prior's *Science and the Humanities* (Northwestern University Press, 1962). The cataclysmic effect of the new universe of Copernicus, Keppler, Galileo, et al. on the Renaissance perception of God, man, and universe has been described by Marjorie Hope Nicolson in *The Breaking of the Circle* (Northwestern University Press, 1950).

phrase is popularly understood, it isn't, it might never have attracted the attention of the non-scientific community. Quantum mechanics, for example, has had no major influence on literature as a whole, even though the bizarre properties of atomic particles suggest a universe far more relativistic than Einstein's. In any case, the time was psychologically ripe for physics to confirm existing metaphysics, so the theory of relativity caught the popular imagination. It was inevitable that it would also capture the literary imagination, for the great gift of relativity theory to modern literature, and to the arts as such, has been to lend the imprimatur of "fact" to the wholesale relativism which had already seized the fancy.

When relativity theory is viewed objectively it can be seen to be, in fact, a theory of absolutes: Einstein asserted the means whereby an observation can be verified for any inertial (that is, space-time) system and measurements validated from within any such system.<sup>3</sup> Whereas the theory affirms that relativity need not hold dominion over perception, a postulate to the theory appears to make relativity king, for it claims that, because each observer exists within his own unique spacetime continuum, one observer's perception cannot arbitrarily be designated as "true." Because the postulate confirmed the increasing relativism in philosophy, psychology, and the arts, it caught the popular imagination and was taken for the theory itself. The arts are influenced by science through its philosophical implications, not its mathematical proofs. Sometimes the implications fit the facts, sometimes not; but the influence is nonetheless real. In this case, the metaphysical implication of Einsteinian theory-that "everything is relative"-contradicted the absolute space and time which is a given of Newtonian mechanics and so appeared to support philosophical Idealism. There were even those who claimed that it supported solipsism.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> These works, in addition to Durrell's, offer a good introduction to relativity theory for the layman: Albert Einstein, *Relativity Theory: The Special and General Theory*, trans. Robert W. Lawson, 15th ed. (Crown Publishing Co., 1952 [1916]). Einstein was remarkably gifted at making difficult concepts intelligible to the layman. James R. Newman, "Einstein's Great Idea," in Richard Thruelson and John Kobler, eds. Adventures of the Mind (Alfred Knopf, 1960). This article, which originally appeared in *The Saturday Evening Post*, is a particularly readable introduction. Bertrand Russell, in Felix Pirani, ed., *The ABC of Relativity*, rev. ed. (London: George Allen and Unwin, 1958 [1925]).

<sup>&</sup>lt;sup>4</sup> Charles Bragdon, for example, leapt from physics to solipsism in one sentence: "These new concepts of space and time bid fair to produce a revolution in philosophical thought considerably greater than that caused by the displacement of the earth from the center of the universe by Copernicus. . . . Are we on the point of discovering that the only reality is thought-consciousness?" ("New Concepts of Time and Space," *Dial*, LXVIII [January 1920], pp. 187–91.)

Einstein, who himself was very sensitive to the relationship between scientist and non-scientist, argued that, "'the popularization of science is of the greatest importance, but it must originate from a good source. In trying to simplify things, we must not distort them.'" Quoted by Hilaire Cuny in Albert Einstein: The Man and His Theories, trans. Mervyn Savill (London: Camelot Press, 1961), p. 154.

The reaction to relativity theory and its implications received substantial and diverse coverage in the press. Alfred North Whitehead explained the theory for the readers of *The Times* (London), and the *New York Times* warned its readers that "the new physics comes perilously close to proving what most of us cannot believe."<sup>5</sup> In the years after the publication of the General Theory in 1915, periodicals including *Scientific American, Forum, The Literary Digest,* and even *Popular Mechanics* published articles on relativity theory. It was repeatedly "proved," "disproved," applauded, and condemned. It would have been impossible for any intellectually oriented person not to think that he had some understanding of the theory, even if it were a wrong one, which it often was.

The extent to which relativity theory and its distortions have influenced modern literature is not easily definable. Confronted with a mathematical construct which has been transmuted into a metaphysical theory and blended with parallel philosophical and psychological ideas, it is often difficult to separate one thread from another and trace it directly back to its origins. However, in general, individual writers reacted to relativity theory as did the world at large: they welcomed or opposed or ignored it. Those writers who chose to confront it usually did so in one of two ways: they used their work to comment upon it, or they used it as a rationale for their art; or, like E. E. Cummings, they simply accepted as a given what Cummings, in "pity this busy monster manunkind," called the "curving wherewhen" of the new universe.

One of the most outspoken critics of relativity theory was Wyndham Lewis. Although Lewis understood that relativity theory actually asserted absolutes, he could not forgive Einstein for inadvertently fostering a popular misconception. Lewis' *Time and Western Man* attacked relativity theory as ''insidious'' because it causes men to accept a ''highly-complex *disintegrated* world of private 'times' and specific amputated 'spaces.'''<sup>6</sup> Lewis also wrote a satirical novel, *The Childermass* (1928), which serves as a comment upon relativity theory. In the novel, characters representing James Joyce and Gertrude Stein wander through a world in flux, a world conceived, he felt, by Einstein and Henri Bergson, who, ironically, made strange bedfellows.

<sup>&</sup>lt;sup>5</sup> Whitehead's explanation, which appeared in a two-part article in 1920, has been reprinted in a collection of his scientific essays, *The Interpretation of Science* (Bobbs-Merrill, 1960). "The Mystic Universe" appeared on the editorial page of the *New York Times* on January 28, 1928. It is quoted in L. Pearce Williams, ed., *Relativity Theory: Its Origins and Impact on Modern Thought* (John Wiley & Sons, 1968), pp. 129f.

<sup>&</sup>lt;sup>6</sup> Wyndham Lewis, Time and Western Man (Harcourt, Brace 1928), pp. viii, 417.

Another writer who used his art to comment on relativity theory was Archibald MacLeish. His poem, entitled simply "Einstein," is a blend of triumph and despair. Einstein, avatar of modern science, "conceives the universe./Atomic." However, he cannot see through the "flux" to penetrate the "secret" of the universe; he perceives only the swirling dust of a dissolving world which, MacLeish concludes, ". . . seems to keep/Something inviolate. A living something." MacLeish's triumphant comment is that "something inviolate" does exist, but his despair emanates from a conviction that modern man, like his figure of Einstein, looks at the universe and sees only dissolution.

James Joyce and Robert Frost also used relativity theory in their art. Joyce satirized it in the penultimate chapter of *Ulysses*. In a parody of the scientific method, Molly and Bloom, lying in bed, are described by a **catechism of questions** and answers. Various sciences are incorporated **into the catechism**, one of which is relativity:

In what state of rest or motion?

At rest relatively to themselves and to each other. In motion being each and both carried westward, forward and rereward respectively, by the proper perpetual motion of the earth through everchanging tracks of never-changing space.<sup>7</sup>

Joyce is demonstrating an understanding of the relativity of different inertial systems, but he is also expressing amusement at using such theories to describe human experience. Similarly, throughout his poetry Robert Frost treated what he called "scientism" with an amused disdain because he perceived it to be absurdly irrelevant to life.<sup>8</sup> "Scientism" definitely included relativity theory, for in *A Masque of Reason* God says to Job, "... You got your age reversed/When time was found to be a space dimension/That could, like any space, be turned around in." The Diety then concludes, chidingly, "... novelty has doubtless an attraction." For Joyce and Frost, the theory of relativity was but one scientific notion, to be treated with no more nor less humorous disdain than any other scientific theory. It was not the revolutionary idea which Lewis and MacLeish attacked, and which Durrell and Sartre would embrace.

Jean-Paul Sartre and Lawrence Durrell have used relativity theory as a rationale for multiple point-of-view as a structural device in the novel.

<sup>&</sup>lt;sup>7</sup> James Joyce, *Ulysses* (Random House, 1934 [1922]), p. 721. William Y. Tindall refers to this in *Forces in British Literature* (Freeport, New York: Books for Libraries Press, 1947), p. 181f.

<sup>\*</sup> Hyatt Waggoner discusses Frost's disdain for science in *The Heel of Elohim: Science and Values in Modern American Poetry* (University of Oklahoma Press, 1950), pp. 144–46.

Theories of narrative structure have been widely debated since Henry James made the debate fashionable, and the use of multiple points-ofview as a narrative device predates Einstein's theory. However, the revelation that in the so-called real world no observation can be considered more valid than another provided additional support for abandoning the omniscient author on the ground that he is no more reliable than his characters.<sup>9</sup> Sartre speaks to this in his essay on François Mauriac's novel, *La fin de la nuit*, which he criticized harshly on the basis that Mauriac, in employing an omniscient author, destroys his work on the "sin of pride":

Like most of our writers, he has tried to ignore the fact that the theory of relativity applies in full to the universe of fiction, that there is no more place for a privileged observer in a real novel than in the work of Einstein, and it is no more possible to conduct an experiment in a fictional system in order to determine whether the system is in motion or at rest than there is in a physical system. M. Mauriac has put himself first. He has chosen divine omniscience and omnipotence. But novels are written *by* men and *for* men. In the eyes of God, Who cuts through appearances and goes beyond them, there is no novel, no art, for art thrives on appearances. God is not an artist. Neither is M. Mauriac.<sup>10</sup>

Sartre adapted this view in *La nausée*, which has a first-person narrative structure. The difficulties involved in fixing some events in the spacetime of this novel are a consequence of our inability to perceive events from within Roquentin's system. Ostensibly a posthumously-published diary, its embellishment with dates, footnotes, and editor's notes argues verisimilitude—that absolute time and space Newton postulated in his *Principia*. However, in an existential novel, as in Einstein's postulate, no absolutes inhere.

Lawrence Durrell's debt to Einstein is indisputable: his Alexandria Quartet is a monument to space-time. Durrell wrote a prefatory note to the second volume of the quartet, Balthazar, in which he explained the structure of the quartet in terms of Einstein's theory:

Modern literature offers us no Unities, so I have turned to science and am trying to complete a four-decker novel whose form is based on the relativity proposition. Three sides of space and one of time constitute the soup mix recipe of a continuum. The four novels follow this pattern.

<sup>&</sup>lt;sup>9</sup> Sharon Spencer maintains that a novel which employs "three or more narrative points of view of the same characters and situation . . . evokes a complex, multifaceted open structure that approximates the spatial and temporal dynamics of Einsteinian physics" (*Space, Time and Structure in the Modern Novel* [The Swallow Press, 1971], p. 81).

<sup>&</sup>lt;sup>10</sup> Jean-Paul Sartre, "François Mauriac and Freedom," in his *Literary and Philosophical Essays*, trans. Annette Michelson (Criterion Books, 1955), p. 23.

The first three parts, however, are to be deployed spatially... and are not linked in a serial form. They interlap, interweave, in a purely spatial relation. Time is stayed. The fourth part alone will represent time and be a true sequel.

The subject-object relation is so important to relativity that I have tried to turn the novel through both subjective and objective modes. The third part, *Mountolive*, is a straight naturalistic novel in which the narrator of *Justine* and *Balthazar* [Darley] becomes an object, i.e. a character.

This is not Proustian or Joycean method—for they illustrate Bergsonian "Duration" in my opinion, not "Space-Time."

The novels of the quartet contradict each other at points because of Durrell's use of different narrators, each with his own biases (and his own lies), and each with somewhat different material. Because of these narrative complications, facts must be pieced together with a careful eye to their source.

Moreover, Durrell does not use relativity theory for a structural device alone. He also incorporates the thematic implications of a relativistic perspective. Darley quotes Pursewarden as saying, "'We live . . . lives based upon selected fictions. Our view of reality is conditioned by our position in space and time—not by our personalities as we like to think. Thus every interpretation of reality is based upon a unique position. Two paces east or west and the whole picture is changed.'"<sup>11</sup> The four novels are full of views from two paces east or west of other views, and the thematic lesson is the impossibility of ever living a life of nonfiction.

The Alexandria Quartet exhibits inconsistencies between relativity theory and its structural imitation. For instance, why did Durrell rely so heavily on Darley as a narrator in three of the novels, thereby creating a disproportionate perspective? But be that as it may, the Einsteinian influence is obvious, regardless of what Durrell may or may not have done with it, and regardless of whether he properly understood the theory.

Some influences of relativity theory are less blatant but nonetheless real. For example, Jerry Bryant puts together a rather good case that Joseph Heller's first novel, *Catch-22*, is a "parody of the epistemology of relativity." Bryant argues that an observer, to understand the system, must be outside of it, for "catch-22," like the measuring devices in relativity theory, is an elusive ruler which "shrinks or expands, speeds up or slows down, to cover the situation, obscuring its own relativity."<sup>12</sup> That is, "catch-22" varies with the perspective of the observer: for

<sup>&</sup>lt;sup>11</sup> Lawrence Durrell, Balthazar, vol. 2 of The Alexandria Quartet (E. P. Dutton, 1961), pp. 14f.

<sup>&</sup>lt;sup>12</sup> Jerry H. Bryant, The Open Decision: The Contemporary American Novel and Its Intellectual Background (The Free Press, 1970), p. 157.

Yossarian it is the ultimate, indefinable absurdity; for Colonels Cathcart and Korn it is the essence of an ordered world; for Milo Minderbinder it is a way around the very system it represents; and so forth. Whether there is a direct influence of relativity theory is debatable. That it thematically incorporates one aspect of relativity theory—the relativism of measurements in different inertial systems—is evident.

This overview of some modern writers whose work has incorporated relativity theory or been influenced by it indicates that writers have used Einstein's theory as a source of content and as a rationale for form. Those who have actively embraced relativity theory in their work have believed it to validate the subjective nature of all reality. Those who have denied it have perceived it, on the other hand, as a threat to the materialistic view of the universe as objective reality. It would be simplistic and invalid to attribute all the symptoms of cultural relativism to one physicist, though Kenneth Clark attempts to do so when he maintains, at the end of Civilisation, that "the incomprehensibility of our new cosmos seems to me, ultimately, to be the reason for the chaos of modern art."<sup>13</sup> It is far more realistic to see the scientific, philosophical, psychological and aesthetic relativism of the century as whole cloth. However, because Einstein's theory of relativity has been understood to validate with the hallowed stamp of science the wholesale relativism to which this century has given birth, it has influenced our understanding of the nature of man; and because this understanding is the very wellspring of our aesthetics, the theory has, inevitably, influenced modern literature.

William Faulkner's work evidences no fascination with science as such, and would seem to provide an unlikely vehicle for Einstein's theory of relativity. However, because he was a well-read man of eclectic interests, Faulkner's work reflects a broad exposure to Modernist influences, from philosophy and the arts to the behavioral sciences. It is to be expected that such a literate man would have some knowledge of Einstein's work. It is also possible that Faulkner, a thorough-going Bergsonian, read Henri Bergson's *Duration and Simultaneity* (1922), which was a passionate if misguided attack on what Bergson understood to be a denial of the mental concepts of simultaneity and duration by relativity theory. (Einstein quietly dismissed the attack by responding that time

<sup>&</sup>lt;sup>13</sup> Kenneth Clark, Civilisation (Harper and Row, 1969), p. 345.

for the physicist and psychological time are two different things.)<sup>14</sup> Although there is no specific external evidence that Faulkner was familiar with relativity theory, it is known that in later years he stood in awe of the theoretical physicist. They met in Princeton in the fall of 1953, and Joseph Blotner records that they carried on—or at least Einstein carried on—an awkward conversation; and when Einstein died two years later, Faulkner wired Saxe Commins, his agent at Random House, "'Albert Einstein was one of the wisest of men and one of the gentlest of men. Who can replace him in either, let alone in both.'"<sup>15</sup> It is my conviction that, in Quentin Compson's section of *The Sound and the Fury*, Faulkner has created an oblique monument to the physicist he so admired.

Faulkner's novel, like the works of other twentieth-century writers, has been influenced by the metaphysical implications of two common distortions of relativity theory. The first distortion results from taking the famous postulate for the theory itself-a distortion which has been shared by the yea-sayers and nay-sayers alike. This postulate, which affirms the relativism of all perception, has had an indisputable influence on theories of narrative structure in the novel, as several critics have pointed out, and provides a different approach to the structure of The Sound and the Fury.<sup>16</sup> The second distortion of relativity theory results from the tendency of verbal man to reify concepts-to make "things" out of entities which the physicist defines in his own peculiar way, such as "mass," "energy," "particle"-and then to embody the concepts imagistically. The resulting metaphors-for example, at the speed of light time stops, mass becomes energy, length contracts to zero-imply a relativism and idealism in the so-called real world which appears to support the tendency to relativism and idealism in modern psychology, philosophy, and the arts.<sup>17</sup>

<sup>17</sup> The distortions which derive from the tendency of western language to reify concepts are discussed by P. W.

<sup>&</sup>lt;sup>14</sup> Henri Bergson, Duration and Simultaneity, trans. Leon Jacobson (Bobbs-Merrill, 1965 [1922]). Einstein's response is recorded in Bergson and the Evolution of Physics, ed. and trans. by P. A. Y. Gunter (University of Tennessee Press, 1969), pp. 128–33.

<sup>&</sup>lt;sup>15</sup> Joseph Blotner, Faulkner (Random House, 1974), II, pp. 1476, 1535.

<sup>&</sup>lt;sup>16</sup> Critics, in addition to those already cited, who have discussed relativity theory in relationship to modern literature include: Anaïs Nin, *The Novel of the Future* (New York: n.p., 1968), pp. 29, 193; Frederick J. Hoffman, *The Twenties: American Writing in the Postwar Decade*, 2nd ed. (The Free Press, 1965), p. 324f; Martin Dyck, "Relativity in Physics and Fiction," in Siegfried Mews, ed., *Studies in German Literature of the Nineteenth and Twentieth Centuries* (University of North Carolina Press, 1970); Lawrence Durrell, *A Key to Modern British Poetry* (University of Oklahoma Press, 1952), p. 23; Rod W. Horton and Herbert W. Edwards, eds., *Backgrounds of American Literary Thought*, 2nd ed. (Appleton-Century-Croft, 1967), pp. 439–49; Charles I. Glicksberg, *Modern Literary Perspectives* (Southern Methodist University Press, 1970), and *The Self in Modern Literature* (Pennsylvania State University Press, 1963); and F. E. L. Priestley, "'Those Scattered Rays Convergent': Science and Imagination in English Literature," in Harcourt Brown, ed., *Science and the Creative Spirit* (University of Toronto Press, 1958).

For The Sound and the Fury, Faulkner may have borrowed both the postulate and the metaphorical "paradox of the clocks." The postulate inheres in the narrative structure, and the paradox of the clocks provides one explanation for Ouentin's obsessive streetcar hopping. Because both the multiple point of view and the trolley rides can be explained without recourse to relativity theory, what in the text itself justifies this approach? The justification can be found in Quentin's references to the laws and properties of the physical universe. Before boarding the first streetcar, he purchases the two six-pound weights he will later use to drown himself. Using the formula for the displacement of water which he learned in freshman physics, he has previously determined that ten pounds would be sufficient, but the ten-pound weight is too bulky to carry. Quentin muses, after his purchase, that this calculation was, "the only opportunity I seemed to have for the application of Harvard."<sup>18</sup> Later, seeing Gerald Bland rowing down the Charles with his mother following alongside in her car, he imagines mother and son "just moving side by side across Massachusetts on parallel courses like a couple of planets" (112). Quentin would have taken this physics course during the 1909–1910 academic year, his only year at Harvard. The Special Theory of Relativity had been published four years previously. It is therefore logical that his physics class would have been exposed to the highly proclaimed new theory of the budding genius, Albert Einstein. Because Einstein frequently used a train in his explanations of relativity theory to non-scientists, it would be tempting also to argue that Quentin's streetcars are a conscious derivative of that ubiquitous train.<sup>19</sup> Certainly the subsequent repetition of that example by Einstein's popularizers makes it very likely that Faulkner would have been familiar with it. However, because the train was used by Einstein to illustrate the effect of different inertial systems on the perception of an event, and the streetcars were used by Faulkner in the paradox of the clocks, it would be irresponsible to insist on a direct relationship between the two, though such a relationship is possible.

<sup>19</sup> In his exposition of relativity theory for laymen, *Relativity: The Special and the General Theory,* Einstein frequently used a moving train to illustrate another inertial system.

Bridgeman in "Quo Vadis," in Gerald Horton, ed., Science and the Modern Mind (Beacon Press, 1958), p. 86. Also see Philipp Frank's essay, "Contemporary Science and the Contemporary World View" on pages 58 and 61.

Einstein often has been held up as "proof" of the validity of Idealism. Wildon Carr, for example, asserted that relativity theory was "the death-knell of materialism" ("Metaphysics and Materialism," Nature [October 20, 1921], pp. 247f). Joseph Campbell has argued that Einstein's use of the term "observers" made this association inevitable, for non-scientists do not distinguish the purely physical function of observation from the mental function of interpretation (Creative Mythology, vol. 4 of The Masks of God [Viking Press, 1968], p. 31).

<sup>&</sup>lt;sup>18</sup> William Faulkner, *The Sound and the Fury* (Random House, 1946 [1929]), pp. 105, 111. Subsequent references to the novel will be noted in the text.

The postulate to relativity theory which asserts that the perception of an observer in one inertial system may not be considered to be more valid than the perception of an observer in a different inertial system is. as we have seen, a mathematician's version of the philosophical and psychological relativism which underlies multiple point-of-view in fiction. Whether Faulkner consciously or unconsciously justified his use of this narrative structure on the basis of relativity theory is moot. It is nonetheless interesting to examine the structure of The Sound and the Fury in light of the postulate. Of the three character-narrators of the novel, Quentin is the only one who is in a different space-time system. Benjy and Jason are both in Jefferson, and both narrate their sections during Easter weekend, 1928. Quentin, on the other hand, is at Harvard, and his narrative is set in 1910. He is very close in time to the subject of his obsessive memories-Caddy's fall from grace and her marriage of expediency—yet he is more distanced in space from the scene of those events. Though Benjy and Jason are not geographically distanced, they are distanced in time by eighteen years. Beniv, locked in his idiocy, is unable to separate time, and is therefore in a peculiar state of temporal dislocation. Jason's narrative, however, reflects the difference time can make upon observation: the Caddy-event in his narrative is but part of the whole chronology of the family deterioration, whereas it is Ouentin's primary focus. For Quentin, like the disoriented Benjy, the Caddyevent is present, not past. Quentin's spatial dislocation affects his perspective by aggravating his sense of alienation and of loss. From his position in the North, he sees the South, Yoknapatawpha County, and his family from within another inertial system; and as we learn in Absalom, Absalom!, he is torn between love and hate.

The most tantalizing influence of Einstein's theory on the novel may be Faulkner's use of the paradox of the clocks. The paradox of the clocks is that time slows down as speed increases, so that at the speed of light time stops. This law, which explains the transformation of timeintervals between different inertial systems, does not necessarily have tidy practical applications in all cases. However, in the heyday of the relativity debate which raged during the years prior to the publication of *The Sound and the Fury* in 1929, it was generally believed that if you could travel by rocket around the universe at the speed of light you would return to earth no older than when you left, no matter how long you were gone. I believe that in his series of aimless streetcar rides Quentin is hoping the paradox of the clocks is true, and he is trying to move fast enough to slow time, if not to stop it.

It is generally agreed that on this, his last day on earth, Quentin is

paradoxically trying to escape the moment in time in which he has planned, through suicide, to escape time forever.<sup>20</sup> He spends his last day wandering through Cambridge and its environs hoping to elude time, or at least to delude it. Before leaving his room, Quentin had first tried to obliterate time by breaking his watch, but he had succeeded only in breaking the crystal and removing the hands; the watch had continued to tick suggestively. Shortly after leaving his room, he stopped in a jewelry store to ask whether "'any of those watches in the window are right'" (103), and to inquire about getting his own watch repaired. Ambivalent, he then refused to let the jeweler tell him which watch was correct, and he refused to leave his to be fixed. Leaving the jewlery store, Quentin crossed the street to the hardware store and bought the weights.

With the instruments of his death in hand, he begins his odyssey: "A street car came. I got on. I didn't see the placard on the front" (105). Not knowing or caring where the car is going, he sits down in the only vacant seat, next to a black man. This combination of circumstances reminds him of the train trip he had taken home at Christmas-time, and his realization at that time of how much he had missed Roskus and Dilsey (106). In motion, his time frame changes: thinking of Dilsey reminds him of Benjy and then of Caddy. In his reverie he is aware that the car "stopped, started, stopped again," and there are now different riders on the car. When the streetcar stops again, he gets off and walks down to the river, where he sees mother and son moving on parallel courses like planets.

Quentin next takes three trolley rides in rapid succession. Again, the destination is irrelevant to him. It is almost noon, and Quentin is anxious to board a car, any car, before noon. He gets on the first trolley that comes, aware that he can "feel noon," wishing he couldn't (128f). He keeps riding through the lunch hour, and every time the car stops he can hear the watch ticking in his pocket, marking the relentless passage of undefined time (128). The hour of the crucifixion safely passed, he gets off that car and returns to town by another one: "Then it was past. I got off and stood in my shadow and after a while a car came along and I got on and went back to the interurban station" (129). But once back at the interurban station, he immediately boards another car and returns to the country. During this ride his time frame alters again, and he relives the

<sup>&</sup>lt;sup>20</sup> The concept of time in Quentin's section is thoroughly analyzed by Perrin Lowrey in "Concepts of Time in *The Sound and the Fury,*" reprinted in Michael Cowan, ed., *Twentieth Century Interpretations of* The Sound and the Fury (Prentice-Hall, 1968), pp. 53–62.

scene with Herbert and Caddy before the wedding. When the car stops, he gets off (138).

Quentin's next ride is in the back seat of Mrs. Bland's rented car after his friends have extricated him from a bogus charge of kidnapping the little Italian girl who had taken up with him on his wanderings through the countryside. Riding in Mrs. Bland's car, Quentin returns in memory to the argument with Caddy when he had tried to get her to say that she hated Dalton Ames. In motion, again Quentin steps out of time, leaving the present on a conscious level until the conclusion of his fight with Gerald Bland, who has served the raging and disoriented Quentin as a surrogate Dalton Ames (181–206).

His eye blackened, Quentin leaves his friends and takes another trolley back into town. It is twilight, "that quality of light as if time really had stopped for a while" (209f). Again, when the car stops he gets off and boards another. On that ride he crosses the river, returning to Harvard, and the crossing projects him mentally into space: "We crossed the river. The bridge, that is, arching slow and high into space between silence and nothingness . . ." (212). But this trolley, like those before it, does not cross the bridge at the speed of light, and it does not continue to move through space without interruption. Therefore, when he returns to his room to confront inescapable and unconquerable time he once again hears the watch ticking in his pocket.

Certainly these seven rides have their Bergsonian aspect in that the trolleys and the automobile, like the river, participate in the flux, and in that motion past and present become one in Quentin's mind. However, like the physics course, Quentin's preoccupation with light rays strongly suggests the influence of Einstein as well as Bergson. Light rays are important in relativity theory because Einstein determined that the speed of light in a vacuum provides the only absolute measuring rod in relativistic inertial systems. The speed of light, beyond which acceleration is not possible according to relativity theory, is also, as we have seen, the speed at which time stops according to the paradox of the clocks. In The Sound and the Fury and in Absalom, Absalom! Ouentin conceptualizes light rays as the embodiment of all time, as in a Bergsonian present. He remembers his father telling him, "down the long and lonely light-rays you might see Jesus walking" (94), and Quentin imagines all history compressed into one moment in those rays: Jesus; and St. Francis, who never had a sister but called Death Sister (97); and George Washington, who never told a lie (99).<sup>21</sup> Quentin seems to

<sup>&</sup>lt;sup>21</sup> The metaphor of all time embodied in light rays is also used in *Absalom, Absalom*! (Random House, The Modern Library, 1936), p. 261.

believe that if he could only move as swiftly as that light he could stop time, and so be able to conquer it; and if he could conquer time he might see Jesus; and seeing, he might believe; and believing, he might be saved.

Although Faulkner never publicly acknowledged a debt to Einstein, he undoubtedly was familiar with at least the metaphysical implications of relativity theory because it was widely popularized and debated in the years before the novel was published. It is inescapable that physics is one of Quentin's frames of reference in the novel: the references to the formula for the displacement of water, the motion of the planets, the emptiness and silence of space, and the "long and lonely light-rays" are not simply coincidence. Given this fact, and the fact that all of Faulkner's work displays a knowledge of and interest in the major movements and ideas of his time, it is reasonable to conclude that in the second section of *The Sound and the Fury* Faulkner used the paradox of the clocks from Einstein's theory of relativity as one metaphor for Quentin's obsessed effort to escape time.

Over the centruries, revolutionary scientific theories have suggested new images of the universe and of man. Ptolemaic imagery has given way to Copernican; Darwin, Freud, and Jung have modified our metaphors; Einstein has suggested a symbol for the subjective nature of all human understanding. In the case of relativity theory, the scientific confirmation of a relativistic universe and, by metaphysical extension, of the subjective relativism of all reality, has been received differently by writers, depending upon their own philosophical and psychological mind set. Some, like Sartre and Durrell, have embraced it openly because of its apparent validation of Idealism, using it as a rationale for narrative structure and as a source of content. Others, like Wyndham Lewis and Archibald MacLeish, have attacked it as a negation of objective reality. Still others have chosen simply to ignore it or, like Frost and Joyce, to dismiss it as metaphysically irrelevant. Finally, the influence of relativity theory on some writers, like Faulkner, has been overlooked because of its subtle integration with parallel philosophical and psychological ideas. Although the theory has been variously employed, its importance for the writer has been to provide yet one more window through which he can view the world and man, and one more metaphor for the nature of reality.