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Reflections of Science and Technology in American Drama From 1913 to 1941.

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REFLECTIONS OF SCIENCE AND TECHNOLOGY
IN AMERICAN DRAMA FROM 1913 TO 1941

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Theatre

by

Charles Keith Cockrell
B.S., Lamar University, 1974
M.S., Lamar University, 1980
May 1999
Dedication

Without the kindness, dedication, and superb editorial skills of Dr. Billy J. Harbin this study would not exist. For all of his encouragement, and possibly even more for his rigorous insistence on only the highest quality of work, this dissertation is dedicated to him.

I would also like to thank my wife Sallie for the exhilarating excitement she displayed at the completion of each phase of this study. In this, as in all things, she has improved my life.

Thanks must also go to Les Wade, Femi Euba, John Lowe, and Emily Batinski for their superb suggestions, and to my family for their support not only during this study but during my entire extended college career.
Preface

"And John Henry said to the Captain,  
Lord, a man ain't nothing but a man.  
But before I'll let a machine drive me down  
I'll die with my hammer in my hand  
Lord, Lord, I'll die with my hammer in my hand."  
-- "John Henry"  
-- American Folk Song

"Back in Ohio, where I come from,  
I done a lot of dreaming and I traveled some.  
But I never thought I'd see the day  
When I got to take a ride on the Santa Fe"  
-- "On the Atcheson, Topeka and  
the Santa Fe"  
-- Johnny Mercer and Harry Graham

Initial reaction to the concept of this study by theatrically knowledgeable individuals has divided itself into two clearly identifiable positions. Supporters of the first stance believe that no significant element of science and technology exists in the drama of the years covered by this study (1913-1941). Those taking the second position are aware that a few plays from the era exist that boast a technological orientation---often naming The Hairy Ape and The Adding Machine, occasionally adding the recently resuscitated Machinal---but assume that the science and technology is portrayed in an unfailingly negative manner. Both positions have much evidence to recommend them.

Support for the first position is self-evident. The plays in this dynamically-changing, technologically-oriented quarter century that actually take science and technology as their theme are surprisingly few. In these
twenty-five years that routinely saw some two hundred plays professionally produced in each theatrical season, only six significant plays take science and technology as their primary theme. Statistically speaking, that number---being less than one-tenth of a single percent of the plays produced---is so negligible as to be of little importance.

Furthermore, in support of the second position, the few well-known plays from the era which do explore the relationship of science and technology to humanity are overwhelmingly negative. The margin in fact is five to one. The three vehemently anti-technology plays mentioned in the first paragraph of this preface, The Hairy Ape, The Adding Machine, and Machinal, are joined by Robert Sherwood's Reunion in Vienna, which the author calls a play about "science hoist with its own petard" (There Shall be No Night xi), and Eugene O'Neill's Dynamo. The sixth, and only dissenting, play is Sidney Howard's Yellow Jack. This last play celebrates science, while the others castigate it with a fervor usually reserved for religious matters.

Such poverty of material combined with such unity of viewpoint would seem to indicate an infertile field for study. Nevertheless, while neither is completely false, these two positions alone do not tell all the story. Admittedly, the number of plays dedicated exclusively to science and technology in this time period are few; however, the plays that deal primarily with other themes
but include science and technology within their framework are many. The works of Eugene O'Neill, Maxwell Anderson, Clifford Odets, Lillian Hellman, Robert Sherwood, and Susan Glaspell are full of references to science and technology. Authors who would seem even more unlikely to treat science and technology because of their normally comedic bent---such as George Kelly, Philip Barry, S. N. Behrman, Thornton Wilder, and George S. Kaufman and his various collaborators---constantly refer to the science and technology of their time.

Nor is all of this reference negative. Some playwrights scorned science and technology and even sought to fight against them, while some dreamed of being part of the brave new world engendered by them. Overall, in these plays the disdain for the regimented, technological world is easily balanced by the admiration given to the very creators of that world, the scientists; the broken clock so often used as a metaphor for the failure of technology is no more often mentioned than the automobile, a symbol of beauty and of freedom because of the mobility it conferred upon its owners.

With the exception of anachronistic plays (those set in other, older times), not a single work by a significant author was discovered which did not mention science and technology in some fashion; and the attitudes toward technology in these plays, rather than being uniform, ran the gamut from sheer disdain to near worship.
The following study attempts first to prove that far from being a barren prospect, a rich and fertile collection of technological references exists in the dramatic literature of the era from 1913 to 1941. Second, that literature, far from being unified in condemnation of science and technology, reflects a veritable rainbow of responses, both positive and negative. The study documents hitherto ignored dramatic references to science and technology, and by discerning themes and attitudes made important either by repetition or through intensity of feeling, draws conclusions from this vast, amorphous, and previously unstudied field of data, hopefully adding to our knowledge and understanding of this exciting era in American drama.
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ABSTRACT

The growth of science and technology exploded in the first half of the twentieth century. At the same time America was developing for the first time a dramatic literature that was worthy of international respect. Beginning in 1913, when the young Eugene O'Neill wrote his first plays, this study traces the appearances of science and technology in the drama from that year until the start of World War II.

Special attention has been given to the clock, the car, electronic communications, scientists, dehumanization in the machine age, technology as religion, and film. The drama of the era reveals a previously unnoted fascination with the elements of technology, and abounds with both positive and negative reactions.

Included in the study are the complete works of Eugene O'Neill through 1941, the Pulitzer Prize-winning plays of the era, and selected plays by Maxwell Anderson, Philip Barry, S. N. Behrman, Marc Connelly, Susan Glaspell, Paul Green, Lillian Hellman, Sidney Howard, George S. Kaufman, George Kelly, John Howard Lawson, Clifford Odets, Elmer Rice, Sophie Treadwell, Robert Sherwood, and Thornton Wilder among others.
Chapter 1:
INTRODUCTION

It is well to observe the force and virtue and consequence of discoveries.
---Francis Bacon (1521-1626)

On a clear, cold night near the beginning of this century, humanity's most awesome technological creation carved its majestic way through the near-frozen waters of the North Atlantic. This massive vessel, a veritable skyscraper laid on end, carried over three thousand people, all in confident safety, many in sybaritic luxury. The mighty engines that drove the ship forward throbbed with power, for conditions that caused other ships to slow, or even stop and poke cautiously ahead, could be ignored in this, the largest, the most impressive, the most powerful vessel ever built, the unsinkable Titanic.

The mania for the Titanic that currently sweeps the nation in the wake of the unbelievably successful movie is nothing new. Even while being built the mighty vessel exerted a strange fascination over the minds of the public. Once the unthinkable happened and the unsinkable sank, it was thrust immediately into the realm of legend. Thousands of newspaper and magazine articles were written, sermons were preached, dining room, ballroom, and barroom conversations buzzed incessantly; all seemed spellbound by the loss of the giant ship. On April 14, 1912, when the Titanic hit that fateful iceberg and a giant slab of ice tore through the steel bulkheads of the ship as if they
were so much tissue paper, the tragedy also ripped asunder
the overweening pride and confidence of scientists,
engineers, and technicians everywhere. Hours later, when
the huge hulk finally broke up and slipped beneath the
waves, it took not only John Jacob Astor and fifteen
hundred other poor souls to the bottom of the ocean, it
also sank an entire nation's faith in technological
invincibility. Americans would never again be completely
comfortable with the promises of the technological elite.

Thus, at the very time that America was finally
developing a significant drama—Eugene O'Neill would write
his first play in the following year—the nation also
suffered its first wide-spread scientific trauma. In many
ways, politically, technologically, theatrically, America's
childhood was over.

Beginning in 1913 with the first works of the
fledgling Eugene O'Neill, this study attempts to trace
through the next quarter century, up to the beginning of
the Second World War, attitudes toward science and
technology in the drama of the era. For the purposes of
this study the differences between science and technology,
generally recognized to be the difference between pure
research and practical application, are not emphasized.
Rather the two are treated as a gestalt, a whole, since the
purest research quickly finds practical application and the
most devout practitioner of practical technology must rely
on knowledge discovered by scientists.

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The early years of this century are an exciting time in American history. The First World War brought America onto the stage of world politics as a virile young giant, a giant that immediately gave a fair imitation of a turtle pulling back in its head. Harlow Shapley measured the Milky Way, Robert Goddard began designing rockets, alcohol was prohibited. The twenties roared in, with flappers and bathtub gin, and crashed out as the stock market tumbled over the cliffs of financial reality. The Hindenburg crashed in flames, Lindbergh flew the Atlantic, Byrd flew to the pole. The thirties brought the Depression, the Dust Bowl, Okies, and a million "cures" for America's ills, from Keynesian economics to communism and back again. Technocracy, the absolute domination of technology, became a common topic of discussion. The Empire State building was built in New York, the Boulder (later to be Hoover) Dam was so big it was built in both Nevada and Arizona, Einstein and company found refuge in the United States from the rabid nationalism sweeping Europe. The era began with the greatest war in the history of humanity and ended with a conflagration that made the first one seem pale by comparison.

And America came of age technologically. The era may have begun with the technological trauma of the Titanic, but it ended with the mass production of goods such as had never been seen in all of history. Flight, the eternal dream of the ancients, became such a commonplace that
commercial carriers flew not just anywhere in America, but anywhere in the world. The automobile, once only a curiosity of the extremely wealthy, became the birthright of virtually every American.

Not all the technological excitement of the period was good. The war that began the era and the one looming on the horizon as it ended were both fueled by technological advances in the art of killing that created horrors undreamed of even a generation before. And while material goods were available in quantities that made economists struggle to reinvent their art, repetitive mechanical drudgery, once the province of only a few unlucky clerks, became as much the birthright of the American worker as the car which that work allowed him to buy.

That technology could have a negative aspect was not a new thought. Certainly, doubt about the unlimited good promised by "progress" and "technology" existed long before the disastrous wreck of the Titanic or the mind-numbing toil experienced by workers on Henry Ford's assembly lines. Dickens' bitter descriptions of the horrors of industrialization were bestsellers half a century earlier, and Blake's "dark Satanic mills" had been apostrophized fifty years earlier than that. But those were in other forms of literature. In such American drama as had existed during those times science and technology were exalted. Dion Boucicault, an Irish import but clearly America's most successful playwright of the nineteenth century, made a
habit of incorporating the latest technological advances into his plays. The greatest symbol of technology in the nineteenth century, the railroad, might have been an object of regret in Thoreau's *Walden* (1854) but in that century of steam it took center stage in play after play, and late in the century was often joined there by its technological sibling, the telegraph.

While the technophobia caused by the loss of the *Titanic* may have influenced the coming generation of playwrights---of O'Neill's first six plays, three concerned shipwrecks, and disasters caused by a misplaced faith in technology would surface again and again in his work---it certainly caused no mass revulsion aimed at science and technology. The prophets of technological utopias continued to press their claims long after the mammoth liner lay broken on the ocean floor. The technocracy ballyhooed in the thirties was as often advocated as derided. Indeed, the idea of "progress" as a synonym for "good" would thrive throughout those years, and despite various ups and downs, has certainly not died out of the American character to date. However, the technological breakdown that was the *Titanic* disaster---especially reinforced as it was only years later in the first World War with the most horrifyingly object lessons in just how dangerous technology could be---nurtured a healthy skepticism in the intellectuals of the nation, including the American playwright.
And the playwright became suddenly important amongst those intellectuals. For as electrifying a time as it was politically and technologically, even more excitement flourished in the theater. These were the years when American theater suddenly matured. Comparatively, all the plays that came before were the awkward steps of a toddler or the oh-so-careful imitation of its elders that characterizes the young child. Now American theater began to stride out on its own. In the era between the wars America's dramatic art and practice underwent revolutionary changes. Hundreds upon hundreds of little theaters, America's answer to the art theaters of Europe, were organized, ambitious theater projects like the Group Theatre, the Theatre Guild, and the Federal Theatre Project blossomed, while the commercial theater churned out plays in numbers to stagger the modern imagination. Equally exhilarating was the playwriting of the era. Eugene O'Neill, the first American playwright to give the nation's drama an international stature, soon was followed by such impressive talents as Maxwell Anderson, Clifford Odets, Lillian Hellman, Robert Sherwood, Sidney Howard, Susan Glaspell, George Kelly, Thornton Wilder, George S. Kaufman, Marc Connelly, Philip Barry, S. N. Behrman, Elmer Rice, and other promising young playwrights.

This dynamic new playwrighting did not immediately lead to a conscious rethinking of the theater's position concerning technology. Technology might have been
reshaping the world around these playwrights, but it did not immediately reshape their drama. Between 1913 and 1941 only a scant handful of significant plays can actually be described as taking science and technology as their subject: Dynamo (1928) and The Hairy Ape (1922) by Eugene O'Neill, The Adding Machine (1923) by Elmer Rice, Machinal (1928) by Sophie Treadwell, Yellow Jack (1933) by Sidney Howard in collaboration with Paul de Kruif, and Reunion in Vienna (1931) by Robert Sherwood. This is a small representation from a theater that produced over seven thousand plays in those years. Herbert L. Sussman in Victorians and the Machine (1968) says, "With very few exceptions, during the Victorian period the machine appears in the minor works of major poets or the major works of minor poets" (2). If one substitutes the phrase "American" for "Victorian," and "playwright" for "poet," the sentence remains equally true. The only play in the list that could be argued to be the most significant work of a significant playwright is Elmer Rice's The Adding Machine.

Playwrights seldom confine themselves to the presumed major theme of their plays, however, often adding other motifs to provide what W. S. Gilbert called "corroborative detail, intended to give artistic verisimilitude to an otherwise bald and unconvincing narrative" (Quotations 227). So, while the machine is the subject of only one O'Neill play, Dynamo, and the plight of the human in the machine age the subject of only one other of his plays, The
Hairy Ape, O'Neill's work in general abounds in technological references. In his very first play, A Wife for a Life (1913), O'Neill sets a stage as far removed from the machine world as is possible to imagine. At a smouldering campfire at the "edge of the Arizona desert," an old prospector in clothes "all patched and showing evidence of long wear and tear" waits for a friend. The friend, "Old Pete," enters, also in rough garb and "covered with dust." And the first thing Old Pete does is hand the waiting prospector a telegram. Not only has science and technology encroached on the forsaken wasteland of the two desert rats, but it has also invaded O'Neill's play in an immediate and revealing manner. Even that near the beginning of the twentieth century and that far from the centers of society, it was no longer possible for a person to be beyond the reach of modern communications, and, in a play with no other technological theme, O'Neill's work faithfully reflected that. The three volume edition of O'Neill's Complete Plays, if marked with slips of paper at each technological reference, would bulge with those markings like a literary hedgehog.

The same may be said for the works of every other member of the dramatic luminati of the era listed above. The plays of Maxwell Anderson, Clifford Odets, Lillian Hellman, Sidney Howard, Robert Sherwood and their contemporaries are filled with references to the science and technology of the day.
Obviously, with over seven thousand produced plays during the period, it is not possible to consider all of them for this study. Since one of the firmly held tenets of this study is that references to science and technology existed in not just the small, marginal, technologically-oriented theater, but manifested itself frequently and substantially within the mainstream drama of the day. Thus, while lesser playwrights exploring these facets of the modern age are not ignored, the bulk of attention is given to those playwrights who had achieved some measure of critical and public recognition, enabling their works to reach wide American audiences through publication and/or performance. Given this guideline, most of the decisions were easy. The works of Eugene O'Neill, Maxwell Anderson, Clifford Odets, and Lillian Hellman immediately recommended themselves. The plays which won Pulitzer Prizes were also clear-cut choices. Beyond that, the choices become more subjective, with the plays chosen by reputation, subject matter, and popularity. No two authors would choose the same plays to embody this era, but I have carefully chosen a representative sampling. Besides the four authors above, plays written between 1913 and 1941 by the following dramatists are included in this study: Zoe Akins, Philip Barry, S. N. Behrman, Marc Connelly, E. E. Cummings, Owen Davis, Paul de Kruif, Edna Ferber, Zona Gale, Susan Glaspell, Paul Green, Moss Hart, Hatcher Hughes, John Howard Lawson, Dorothy and DuBose Heyward, Sidney Howard,

Careful consideration must be given to prevent knowledge that came into existence long after the era from influencing the reading of the plays of the actual time. For instance, Marxist philosophers, especially Jacques Ellul but not limited to him, have, since World War II, made a connection between capitalism and the machine age, damning them both equally. Transferring that stance backwards to communist and communist-leaning playwrights of the era would be misleading; they made no such connection. Their utopia, the Soviet Union, was embracing technology as rapidly as possible in a series of five-year plans. To those on the left, it was not science and technology but their control by capitalists that was to be deplored. This position was clearly argued by Clifford Odets, the most successful of the left-wing playwrights, in Waiting for Lefty (1935). In it a young lab assistant is asked to spy on his scientific mentor and to report to the businessman who paid for the research so it could be used for chemical warfare. The lab assistant is clearly presented as admirable; and, since a person of such admirable character is devoted to him, the scientist must also be presumed to be admirable. It is the businessman—the capitalist, not the technologist—who is the villain, and who receives a
salutary sock on the nose. John Howard Lawson, the other most successful socialist dramatist of the era, is equally praising of technology (in this case of coal and the power it represents) while damning fervently the capitalists who controlled the coal.

Modern sensibilities of either a positive or negative nature should therefore not be allowed to color the reading of the material. This study will attempt to respond only to what actually existed in the drama itself, and not be drawn into controversies engendered by the invention of the atomic bomb or by the creation of the computer and the modern information age, controversies that long antedate the years involved.

The problem is to find, categorize, and comment on American plays written during the period from 1913 to 1941 that refer to science and technology. The study is, in many ways, a response to the criticism that American writers of the era somehow shirked their duty to respond to the new inventions reshaping their lives. This criticism, either implicit or explicit, has been widespread in modern writings on literature and technology. Perhaps it is most clearly stated by Joseph W. Slade in "American Writers and American Inventions: Cybernetic Discontinuity in Pre-World II Literature."

The misfortune was not so much that the writer had a special obligation to deal with the complexities of technology, though he did. Nor was it so much that his failure to devise adequate metaphors was a failure of humanism, though it was. What was unfortunate,
however, was that the writer missed his chance to provide literary guidance in a critical period of American culture (31).

Passing over the controversy concerning whether writers have a duty to "provide literary guidance," one is still left with the question of the validity of the underlying assumption. Did writers of the era, in this case playwrights, fail to respond adequately to technology? The only way to answer that question is to list and catalogue references to science and technology, and then evaluate those responses through criticism and analysis. This study will attempt to trace the theme of response to the science and technology shaping the era through those incredibly exciting years for American theater.

The review of the literature in this field in Chapter 2 will reveal that very few books or articles have addressed the subject of my study. The scarcity of contributory studies with topics similar to mine argues for one of two states of affairs. One, either the study is so unimportant that no one has bothered about it; or two, the field has been neglected. The latter is my contention.

In the past twenty years there has been a veritable explosion of books dealing with technology and its effect on society, including many that deal with literature. The time seems right for a study that deals with the way drama has dealt with technology. As will become obvious in the next chapter, dramatists have responded to technology since the very inception of theater. Nevertheless, that response
increased geometrically in the years covered by this study. Obviously, almost any era would be ripe for this purpose, since none has been systematically studied, but the one chosen has several unique advantages to recommend it. While humanity has always been a tool-using animal, technology in previous ages has not been the dominant factor of life that it has become in this century. Robert Nisbet, author of a brilliant essay on the "Impact of Technology on Ethical Decision-Making," phrases it this way, "... in no other age in history has technology held the central and determining role that it does in our own" (Technological Threat 40). However, while the theme admittedly gains even greater momentum after World War II, it seems appropriate to begin this study at the beginning of the century, before the theme was forever changed during World War II by the introduction of a technological device capable of rendering all humanity extinct in an instant.

The theater's purpose, Shakespeare tells us, "is to hold, as 'twere, the mirror up to nature; ... to show ... the very age and body of the time his form and pressure." (Hamlet 137) If this is so, then any time we pick up a play we have, in a very real sense, a looking glass that reflects back through time and shows us the society that formed it, at least as perceived by the playwright. A historian studying Elizabethan times wouldn't dream of ignoring Shakespeare, and a scholar essaying a history of the labor unions in America surely
would not disregard Odets' *Waiting for Lefty*. Any student wishing to discover how technology and science were perceived in the United States between the World Wars may profitably examine the drama of the era.

The study of a new-born child, while no doubt fascinating to the parents, yields little in the way of clues to the nature of the adult that child will become. Likewise, the first few years, when the child's goal is merely imitation of its elders and while it is completely under the constraint of their precepts, tells us little about the eventual mature individual. However, those teenage years, those years when the not-quite child, not-quite-adult strikes out and experiments, those are the exciting years, the revealing years, the years when inclination and character can first be discerned, often more clearly than will ever be possible again. Those are the years to study if one would understand the adult. In America, in a unique concatenation of events, those exciting years occurred for drama and technology at the same time, in the first half of this century. It would be astonishing if the two had left no mark upon each other.
Chapter 2:
REVIEW OF LITERATURE

"Thy godlike crime was to be kind;
To render with thy precepts less
The sum of human wretchedness,
And strengthen man with his own mind."

--Lord Byron (1788-1824)

Prometheus

The muscular giant body, slick with the sweat of pain, writhing within the bond of its chains while an eagle eternally rips into its tender abdomen, is an image that has fascinated poets and playwrights since the very origin of Western civilization. This godlike Titan's agony echoes again and again throughout literature, not only because of its inherent drama, but, also, because of the nature of the Titan's crime--raising humanity from its brutish state to one that rivaled the gods.

"With this gift man was more than a match for all the animals," Bulfinch tells us (13), speaking of what Shakespeare had earlier called the "true Promethean fire" (Love's Labour's Lost IV:ii:350). "It enabled him to make weapons wherewith to subdue them," Bulfinch continues, "tools to cultivate the earth; to warm his dwelling . . . ." Literary references to Prometheus abound throughout history; besides the examples already quoted, Aeschylus, Aristophanes, Goethe, Schiller, Maxwell Anderson, and both Shelleys leap to mind as authors either portraying or commenting on him.

Prometheus, or the idea of Prometheus, so dominates the origins of science and technology that it seems natural
that we begin this study with him in both the metaphorical and literal sense. Metaphorically, there would be no study without science and technology, and science and technology, according to the myth, was the gift of the Titan. The control of fire is beyond doubt the progenitor of modern science and technology. In the more literal sense, Prometheus's theft still inaugurates the theme even for those contemptuous of myth, because in the fifth century Theater of Dionysus in the city-state of Athens in the country of Greece, one of the first topics the newly invented theater dramatized was the tale of the tragic Titan, eternally punished for the temerity of his technological gift to humanity.

More than two millennia later, at the end of the twentieth-century, science and technology is still a topic for drama, witness several recent plays, Tom Stoppard's Arcadia (1993), Stephen Poliakoff's Blinded by the Sun (1996), and Timberlake Wertenbaker's The Break of Day (1995). In fact, at present more interest in science and technology exists in general, and specifically as it is reflected in literature, than at any other time in history. Nevertheless, compared to the allure of themes such as religion, sexuality, or war, this fascination can only be called modest, and has seldom included drama. Only one full-length study has been published with its sole topic being science and technology as it is reflected in drama, though some dramatic pieces are mentioned within books.
dedicated to literature, and a few papers have covered portions of the topic. Even this modest interest, however, has not extended to the drama of any era other than the present.

Admittedly, science and technology have not been dominant themes in any theatrical era. Drama reflects the time in which it was created, and therefore it would be fruitless to search for a play totally devoted to science and technology—in the sense of, say, Eugene O'Neill's *The Hairy Ape* (1922) or Elmer Rice's *The Adding Machine* (1923)—prior to the general interest generated in those topics by the incredible changes wrought in human life by the industrial revolution. However, humanity has used tools since its very inception. Indeed, as Arnold Gehlen noted, anthropologists often use the presence or absence of tools to help decide whether remains are still our evolutionary ancestral animals or the first proto-humans (2). This tool use, so obviously different from the behavior of the animal kingdom around them, fascinated early human civilizations, and, as noted above, in the first great Western civilization, almost as soon as there was a stage, the discussion of technology spilled over onto it. The first play dealing with science and technology was *Prometheus Bound* (unknown date, prior to 468 BCE) by Aeschylus (525-456 BCE). Written in the very infancy of drama and considered worthy of preservation over unimaginable spans of time and through the barbaric rape and destruction of
the remnants of Greek culture, this play about Prometheus's celestial theft of fire remains alive to the stage.

To the typical denizen of twentieth-century America the gift of fire is all we associate with Prometheus, and even in Greek times it was certainly considered the most significant. But for the Prometheus described in Aeschylus's play, fire is just the beginning of what he has contributed to humanity. Lest it be thought that Prometheus Bound is simply another Greek retelling of a legend and not a play dealing with technology at all, it must be noted that the Prometheus of Aeschylus bears little resemblance to the Prometheus of Hesiod. In Hesiod, Prometheus is a minor character who stole fire from the Gods, gave it to humanity, and was promptly punished for it. In Hesiod's universe Gods held all the power and anyone who defied them was, quite properly, punished. In the Aeschylean play Zeus is a tyrant, and Prometheus makes it clear in his first speech what he is being punished for.

For the power, the glory I gave to human beings I'm bound in irons. I tracked down fire, where it springs from, and stole it. I hid the spark in a fennel stalk, and brought it to human beings. Now it shines forth: a teacher showing all mankind the way to all the arts there are. That's my crime. That's why I'm hammered in chains under the open sky (34).

Two things stand out in this speech. First, while fire is mentioned, that is not how Prometheus initially describes his gift to humans. His gift is "power;" it is "glory." Second, Prometheus understands the implication of
his gift in a technological sense: "Now it shines forth: a
teacher showing all mankind the way to all the arts there
are."

Later in the play, to make his point even more
clearly, Prometheus points out the miserable state humanity
was in before he gave them his gifts.

I tell this not against humankind, but only to
show how loving my gifts were . . . Men and women
looking saw nothing, they listened and did not
hear, but like shapes in a dream dragging out
their long lives bewildered they made hodgepodge
of everything, they knew nothing of making brick-
knitted houses the sun warms, nor how to work in
wood. They swarmed like bitty ants in dugouts in
sunless caves (50).

Hardly a single technological facet of the era exists
that the Titan does not mention as springing directly from
his gifts. Prometheus is definitely presented as a martyr
suffering for his altruism, his love for the human race,
and as one who improved the lot of humanity through his
gift.

For the next two thousand years, plays concerning
Prometheus are almost the only drama that could be
considered to be technologically oriented. And those did
not follow in the nobly tragic and heroic footsteps carved
out by Aeschylus, although even Aeschylus didn't always
treat Prometheus with great respect. T. R. Wutrich tells
us that prior to Prometheus Bound Aeschylus wrote a satyr
play, a remarkably unheroic form, Prometheus Pyrkaeus
(unknown date, possibly 472 BCE). However, it was
Aristophanes who first gave a comic cast to Prometheus. In
Aristophanes, Prometheus comes bringing not fire but words, and carries an umbrella to keep Zeus from noticing him. Apparently this comic version of Prometheus was also popular with the Romans, but the only surviving Roman play directly to concern Prometheus, Accius' *Prometheus*, survives only in fragmentary form (Wutrich 55).

The end of the Roman era coincided, of course, with the Church's complete proscription of theater. Even when drama began to return, in the form of Mystery plays, technology was noticeably and understandably absent.

However, as soon as the Church no longer dominated the stage, science and technology returned to the theater when another mythic figure was dramatized. Around 1590 Dr. Faustus appeared in Christopher Marlowe's play, *The Tragical History of Dr. Faustus*. Faustus has an almost endless desire for knowledge, and while much of this knowledge is occult, he is also presented as a scientist, especially since astrology is considered an early form of astronomy. Like Prometheus, Faustus became the centerpiece of many technologically oriented plays. In the eighteenth century, the German literati became interested in Faustus, notably exemplified by Goethe's *Faust* (1808, 1831), and they were also fascinated by Prometheus. Goethe (1749-1832) began but never finished a play about the Titan, but several lesser lights did finish theirs. Science and technology were extolled in the theater of nineteenth-century Germany in a manner seldom equaled. The obvious
progression from the continent would be to England, but except for Percy Bysshe Shelley's (1792-1822) *Prometheus Unbound* (1820), an unproduced dramatic poem, the English stage was disdainful of science and technology.

Still, German poets of the nineteenth century did have competitors in the veneration of science and technology, not in England, but in England's former colony, the United States. American playwrights could not compare in quality or stature to the German poets, but they bowed to no one in their admiration for science and technology. The most successful, as noted in chapter one, was Dion Boucicault (1822-1890), an Irish import who dominated the American stage and who often introduced new technology as a startling element in his plays, such as *The Octaroon* (1859), in which the murderer is caught because the newly invented camera catches him in the very act. Native-born dramatists were equally emphatic in their use of technology. In play after play that new technological eraser of time and distance, the railroad, was featured. Augustin Daly (1836-1899) presented the railroad as almost a leading character in *Under the Gaslight* (1867) and James J. McClosky (1825-1913) did star it in *Across the Continent, or Scenes from New York Life and the Pacific Railroad* (1870). Other scientific marvels appeared in American plays as well. William Gillette's (1855-1937) *Secret Service* (1895) revolved around the telegraph, James Herne (1839-1901) wrote a paean to the dedication of the
lighthouse keeper in *Shore Acres* (1892). The list could continue, for playwrights who included references to the burgeoning new technology reads like a Who's Who of nineteenth-century American dramatists, including Clyde Fitch (1865-1909), Bronson Howard (1842-1908), David Belasco (c. 1854-1931), and William Vaughn Moody (1869-1910), among many others.

The generally positive tone taken toward science and technology on the stage in the 1800's was merely reflective of general approval in the mind of the public. The playwrights themselves did not hesitate to reveal its dangers when necessary for an exciting denouement. Edward Harrigan (1845-1911) featured a spectacular explosion in a fireworks factory in *The Major* (1881), and in *The Octaroon*, Dion Boucicault was not above burning and then sinking that supposedly impregnable idol of the steam century, the river steamboat, in what must have been an amazing staged disaster spectacle.

These negative images, while rare in America, were the rule in England, which fit in with the general disdain for science and technology found among the British intellectuals of the nineteenth-century. Among the English intelligentsia only Shelley and Lord Byron could be construed as friends of science. Its detractors, meanwhile, were numerous. Typical of their attitude was Keats, who said in his poem *Lamia* (1820):

Do not all charms fly
At the mere touch of cold philosophy?
There was an awful rainbow once in heaven:
We know her woof, her texture, she is given
In the dull catalogue of common things.
Philosophy will clip an Angel's wings (98).

Matthew Arnold, a major figure in early English education, went so far as to say:

. . . rather than have [science] the principal thing in my son's mind, I would gladly have him think that the sun went round the earth, and that the stars were so many spangles in the bright blue firmament (Barnett 5).

In addition, while Percy Shelley might have presented Prometheus as a hero in Prometheus Unbound, another member of the Shelley family was more representative of the British attitude toward science. Indeed it might be said that the first play concerned with science and technology in the modern sense, involving scientists and their science, was a pirated stage version of Mary Shelley's novel Frankenstein, or the Modern Prometheus (1818) in 1823 called Presumption. Truthfully, much of the success of Frankenstein must be laid at the door of the various dramatizations; in 1823 four adaptations appeared, and after that the stage frequently saw new versions or restagings of old ones. T. P. Cooke was the first to play the monster, and Emily Sunstein, one of Mary's biographers, tells us that the "play did for Cooke what the 1931 film did for Boris Karloff" (243). Even with the immense success of the 1931 movie and all of its sequels and remakes, Mary's cautionary tale of the dangers inherent in
humanity's scientific endeavors remains alive to the stage. A famous Living Theater production of it was mounted in the sixties, but even a cursory scan of current play catalogs reveals over a dozen variations on Frankenstein available for production today.

The British distaste for science and technology was nothing, however, compared to the hatred felt by German expressionists at the end of the 1800's and early in this century. As if to make up for the reverence in which the previous generation had held those subjects, the expressionists criticized with vitriolic pens what they saw as the four interlocking elements of the machine age: the scientist; the technologist or engineer who turned the theoretical science into reality; the capitalist who funded the creation of the engineer's factories, dams, and war machines; and finally the technological creations themselves. Working in a style new to the stage, utilizing intentionally stereotypical characters, a dehumanized, telegraphic language, and abstract, metaphoric settings, the expressionists attacked science and technology. Examples include such works as Gerhardt Hauptmann's Before Daybreak (1889) and Georg Kaiser's Coral (1917) and Gas I (1918) and Gas II (1920), in the last of which science and technology manages to bring disaster upon all of humanity. Although it predates the expressionist movement (but rediscovered and produced by Max Reinhardt at approximately the same time) Georg Buchner's Woyzeck (1836) also
castigates the modern world's fascination with science and technology.

The idea that literature, science, and technology have relationships to one another is a modern concept, just over a hundred years old. In 1882, when Matthew Arnold wrote his essay "Literature and Science," he discussed art and science as representing the sum of all knowledge, rather than in their relationship to each other. However, the subject once raised would appear repeatedly, especially after World War I. Dr. C. Lloyd Morgan's Lewis Fry Lecture at Bristol College in 1928 was named Science and Drama, though it touched very little on the latter of the two. More influential was Max Eastman's The Literary Mind: Its Place in an Age of Science (1931), which is still quoted and debated more than half a century later. The real furor, however, began with C. P. Snow's The Two Cultures in 1951. Snow claimed that the modern intellectual world had completely divided into two camps, the literary and the scientific, and that communication no longer existed between them. The frenzy aroused and the fierce and often vicious debate that raged over his assertion does not directly impinge on this study, but it did give rise to the aforementioned modest interest in the relationship between science and technology and literature.

When this study was begun, no full-length works existed which treated both science and drama. Since that time one has been published that deals specifically with
that topic, *The Moral Dilemma of the Scientist in Modern Drama: The Inmost Force* (1996) by Allen E. Hye. While not dealing exclusively with drama, another work does include much of interest concerning that pairing, *From Faust to Strangelove: Representations of the Scientist in Western Literature* (1994) by R. D. Haynes. The former includes for discussion only one American play, *Inherit the Wind* (1955) (from a later date than this study) while the latter, a brilliant and encyclopedic work, covers all forms of literature and so broad a time span that only passing references are possible to the drama of any one time period. More numerous are articles that deal with both science and drama. The best of these, and the closest in nature to this study, is Bernard K. and Susan Duffy's "Theatrical Responses to Technology During the Depression: Three Federal Theatre Project Plays" from *Theatre History Studies* in 1986. While dealing with drama that could only be considered significant in the historical sense, the article does juxtapose the elements important to this study. Two essays which cover the same material, but deal only with works after the Second World War are "Dystopian Visions in the Plays of Elias Canetti" by Ralph Willingham in the March, 1992, issue of *Science Fiction Studies* and James Reynold's "The Failure of Technology in *The Glass Menagerie*" in the December, 1991, issue of *Modern Drama*.

The modest interest in this field must be demonstrated negatively since it is the absence of material that defines
the territory. Time and again in works responding to technology in early twentieth-century America, drama is not mentioned. Moreover, in works on drama, even those which explore political drama, or the drama of protest, science and technology are completely absent. Not only are science and technology missing from the contents page of such works as Jane Bonin's Major Themes in Prize-Winning American Drama (1975), but science, scientists, automation, machinery, and technology are completely absent from even the index. However, as will be seen in the following chapters, these topics, while missing from the criticism, abounded in the plays produced from 1913 to 1941.
Chapter 3:
THE CLOCK, THE CAR, AND ELECTRONIC COMMUNICATIONS

Norman: How long is the drive to Toulon? 
Tom: Fifty minutes, Mr. Rose.

Tom: I know what! I'll telephone about it!

--Hotel Universe
--Philip Barry

The best way to begin an examination of the relationship between a society and its science and technology is probably to examine its relationship with the creations of that science, the articles of technology that the members of that society interacted with each day. Common articles, items in everyday use, often elicited strong reactions, either positive or negative. Hundreds, perhaps thousands, of technological creations cluttered the daily lives of Americans in the first half of this century, but certain types of items appear repeatedly in the drama of the era. Reactions to machinery designed to create music, quite common in the form of the radio or the early phonograph, can become difficult to assess in terms of reaction, since most often the characters in the plays respond to the music being played and not the technological nature of the source. More interesting in the case of music is the availability of the mechanical means of creating music; their appearances in plays span the gamut of the economic levels of society, from the wealthy playwright in S. N. Behrman's No Time for Comedy (1939) to the poverty stricken grandfather in Clifford Odets' Awake
and Sing! (1935). All have access to this technology and choose to use it. The most pervasive articles of science and technology in the drama between 1913 and 1941, however, are those associated with communication and as such they deserve serious discussion here. But before considering the tools of modern communication and the mixed appreciation they received in the era, two more quotidian items that occurred frequently in the drama deserve consideration since they seemed to embody the conflicting attitudes towards science and technology. One was portrayed in an almost wholly negative manner, while the other was presented very positively. One becomes the technological metaphor for regimentation and control, a scientific warden demanding obedience, the other the very manifestation of freedom. They are the clock and the car.

The Clock

The clock, not the steam-engine, is the key-machine of the modern mechanical age. For every phase of its development the clock is both the outstanding fact and typical symbol of the machine; even today no other machine is so ubiquitous.

--Lewis Mumford
--Technics and Civilization

Me: Can't you guess? I'll give you time.
Him: Time is the because with which some dolls are stuffed.

--e. e. cummings
--him

The rhythmic ticking of the wind-up clock placed in the crib to soothe a crying baby, the soft chimes of the
venerable grandfather clock telling an old married couple the hour, the exact clicking of intermeshed cogs and gears splitting each second precisely from the next in a businessman's fine Swiss watch; these are the sounds of the useful clock, the beautiful clock, the triumph-of-craftsmanship clock that filled our childhoods and our literature. Still, another face of the clock exists: in the drama between 1913 and 1941 the time piece often fosters regimentation.

Religion and science are often perceived as opponents, but in the Middle Ages science was the obedient servant of the Church, being used only to "prove" already accepted Biblical truths or advance some agenda of the Church; and the Church desired a more accurate method of distinguishing the hours of prayer than the sundial, the hourglass, or the waterclock. It was this desire, according to Lewis Mumford, that led to the laboriously carved and shaped wooden wheels, gears, cogs, and pendulums that characterized the medieval clock. Taking up the tale at that point, Eric Mottram tells us, "Once the wooden clock mechanism was replaced by metal parts it could regulate factories and railroads" (100). This created the strict regimentation of time that is so associated with the machine age. At the beginning of this century, with the work of the time and efficiency expert Charles Taylor¹ and

¹ Charles Taylor, more than any other individual, was responsible for the mania for time and efficiency
the wholehearted adoption of his theories by Henry Ford, time and the clock took on a significance never before seen in history. The clock no longer told only isolated communities of monks when to pray, it commanded everyone to do everything according to its exacting horological dictates. The clock became the first and most successful technological tyrant.

The stokers in The Hairy Ape (1922) were forced to slave to feed the insatiable maws of the engines of their mighty liner. The coal miners in Processional (1925) had to endure backbreaking labor within the claustrophobic wombs of their tunnels. The average nine-to-five Joe in the average play had to toil to make his car payments. All were in thrall in some fashion or another to science and technology; but every one of them were also subjects of the ubiquitous clock. The stokers worked not upon need, but in shifts, called at precise times, as did the coal miners and the average Joe, and those shifts were controlled by the clock.

Time no longer waxed and waned with the sun, but instead was sliced by mechanical workings that chopped each day into hours, each hour into minutes, each minute into seconds. By the time this study begins in 1913 the clock

management that swept American industry at the beginning of this century. His ideas were taken up by Henry Ford and the resulting movement is sometimes called Taylorism and sometimes Fordism.
pervaded every facet of American life, and, at least in the drama, inspired almost universal resentment.

Commentary upon the clock in the drama of the era takes two major forms: first, complaints about its tyranny and the regimentation it imposed on modern man; second, the broken clock. This second image divides as well into two levels of meaning. Initially, and most persuasively, this should be seen as symbolizing the breakdown of technological society. However, almost as often, the clock is anthropomorphized and becomes a representation of the breakdown of the clock's owner. Sometimes it represents both of those things.

A few unimportant pieces like Edmund Wilson's odd play-ballet-pantomime, *Cronkhite's Clocks* (1929), took the clock and time as their primary theme, but only one important drama in the era actually revolved around the clock. Susan Glaspell's *Tickless Time* (1916) assumes significance because of its Pulitzer Prize-winning author and its anticipation of clock-associated themes that would occur throughout this era. Glaspell in her play explored all the themes mentioned above--the tyranny of the clock, its fallibility, and the human tendency to identify with and anthropomorphize the clock--but she also emphasized unique clock-based subject matter, the discrepancy between the center and the edge of a time zone.

Glaspell's protagonist, Ian, upset by the twenty minute discrepancy between the actual time as measured at
his home and the time he is forced to use,\(^2\) takes all the

clocks from his house and buries them in the yard. He

convinces his wife that they must rely on a sundial that
gives the actual time of day at its exact location, thus
freeing them from machinery and putting them in touch with
nature. "When you take your time from a clock you are
mechanically getting information from a machine. You're
nothing but a clock yourself (279)," Ian tells his wife,
Eloise. This concern, that allowing the clock to dictate
their actions reduces humans to machinery, would be
repeated over and over between 1913 and 1941; within this
play the dictatorship of the technological clock quickly
replaces the unique and interesting concern with time-based
localism, or temporal community spirit\(^3\), that initiates the
play. The wife, also anthropomorphizing the clock, though
in a more positive manner, admits to feeling more
comfortable with clocks than with such huge and universal
concepts as time and space. "That's one nice thing about a
clock," she says. "A clock is sometimes wrong" (279).

Nevertheless, Ian insists on burying the clocks, in effect
executing them for the ills they have created in the
machine age:

\(^2\) Since a time zone is approximately the distance the sun
passes over in an hour, time at any one point within the
zone is only approximately correct. Noon within that time
zone should be when the sun is directly overhead at the
middle of the zone. Actual noon for either edge varies as
much as thirty minutes. Ian objects to this approximation.

\(^3\) Ian is in effect acting as a booster for "local time,"
much as others support local teams, or local businesses.
"What is a clock? Something agreed upon and arbitrarily imposed upon us. Standard time. Not true time. Symbolizing the whole standardization of our lives. Clocks! Why, it is clockiness that makes America mechanical and mean! Clock-minded (281)!

In the very act of burying the clocks, Ian anthropomorphizes them even more, calling the holes in which he buries them graves (281-285). Eloise reveals her sentimental attachment to the clocks, calling one a wedding gift, one a graduation gift, and even tries to hide the alarm clock from Ian because "I like to hear the ticking of a clock" (282). When the alarm clock's muffled voice sounds from beneath the dirt, she finds herself forced to "rescue" it, to dig it free. Still, that appreciation for clocks pales when compared to her fear of being isolated because she is temporally out of step with the world around her.

Eloise: (Running to the sunflowers [where she has hidden the alarm clock] and spreading out her skirts before them) Oh, Ian, not the alarm clock! How would we ever go to Boston? The train doesn't run by the sun.

Ian: Then the train is wrong.

Eloise: But, Ian, if the train is wrong we have to be wrong to catch the train (285).

Ian manages to convince Eloise that being "true" in their time is more important than matching other people's schedules, but their friend Eddy prophesies a very lonesome future for the two of them (295). In the end, however, none of the philosophical or emotional arguments dictates
which time arrangement the couple lives by, but the habits of their cook. Most important to the smooth running of the household, the cook is not only a servant of the clock, she does not know how to exist in a universe without it, and she emphatically does not wish to learn. Her efforts to time a soufflé with the sundial end in defeat and lead directly to her resignation. To keep her from leaving, the buried clocks must be exhumed and restored to their various places of honor. Ian is defeated and unhappy.

Ian: We will bow down, as of old, to the mechanical. We will have no other god but it (308).

The only theme concerning the clock that Glaspell does not consider in Tickless Time is the broken clock, and even that gets mentioned briefly in Eloise's affectionate reference to the little clock that can be wrong.

In other plays of the era the broken clock appears frequently and elicits little affection. That this machine, the most common piece of technology, is so often presented as inadequate to its task reveals much about the society of the day. Science and technology made extravagant claims early in this century. The man who extravagantly claimed that "God himself couldn't sink the Titanic," had nothing on Charles Taylor and his claims of the productivity made possible through the efficient use of time. Just as the loss of the Titanic cast doubt on every engineer's excessive boasts, so the daily wear endured by the common man trying to live up to the efficiency experts'
expectations created reservations about the regimentation created by the clock. Technology could not live up to its claims in either case, and so the broken clock showed up in the plays of the foremost authors of the era, including Susan Glaspell in *Tickless Time* (1916) and *Alison's House* (1930), Clifford Odets in *Awake and Sing!* (1935) and *Clash by Night* (1941), Zona Gale in *Miss Lulu Bet* (1920), Owen Davis in *Icebound* (1923), George Kelly in *The Show-off* (1924), Lillian Hellman in *The Children's Hour* (1934), S. N. Behrman in *End of Summer* (1936), Philip Barry in *Tomorrow and Tomorrow* (1931), and Eugene O'Neill in *The Hairy Ape* (1922) and *Ah, Wilderness* (1933).

The broken or stopped clock, a malfunctioning example of the earliest and most ubiquitous technology, must be seen as symbolizing doubts about science and technology, but cannot be seen only as that. Plays are first and foremost about people, and in the best plays the technology is developed to say something about the human condition. Humans may have mistrusted clocks, and, as will be seen later in this chapter, intensely resented them, but they also identified with them. In many plays the broken clock is used as a metaphor for the frailty of the human condition, especially in relation to age. Mrs. Fisher and her kitchen clock in *The Show-off* present a perfect example of this. "That old clock of ours has stopped again," she says early in the play, and again later, "... the old clock needs fixin'." The clock here may play the dual role
of metaphor for the depredations of age which all humans fall heir to, or, on a more complex level as the replacement of all of Mrs. Fisher's generation by a younger one. The clock measures the passing of time and therefore often becomes a metaphor for that very phenomenon. Here Kelly uses it to represent the passing of an older generation (in the person of Mrs. Fisher), whose values of hard work and forthright honesty are being replaced by the generation of Aubrey, whose generation does not seem to want to work and boasts of doing far more than they do.

A markedly similar comment occurs in Clifford Odets' *Awake and Sing!*. "The clock goes and Bessie goes," Bessie, the aging mother of the protagonist, says, "Only my machinery can't be fixed" (96). In Philip Barry's *Tomorrow and Tomorrow*, another type of personification exists for Hay, the scientist who can cure everything but his own life. In this case the broken timepiece does not represent the passing of a generation, but dysfunction. Hayes has planned and lived his life perfectly, with one exception. He is in love with Eve, another man's wife.

**Hay:** --It's funny about this watch.

**Eve:** What?

**Hay:** The crystal keeps coming out.

**Eve:** I had one like that. It's annoying, isn't it?

**Hay:** It's a confounded nuisance. For something like fifteen years this damned crystal has been coming out. The fact of the matter is, it doesn't fit, and never has.
Eve: Can't you get one that does?

Hay: I always intended to, but somehow I never get around to it.

Eve: I know. I was that way with mine.

Hay: I've been counting on it breaking eventually. But look at it: not a crack.

Eve: My father never carried a watch. He said there was always someone only too anxious to tell you the time when you wanted it (168-169)

The technology is not broken here. Like the human who owns it, it continues to fulfill its basic function. Also like the human, however, it is flawed, and will never be quite right. Hayes' life has not ended, not even stopped functioning, but it has been "cracked" and he cannot find the method to fix it. The final irony is highlighted by Eve's father's advice. If one is willing to step outside the normal bounds of society, one can avoid the problems associated with that society. Hayes, however, cannot do this. He will not go without a watch, and will not take another man's wife in the face of the societal strictures against that act.

Perhaps the most touching anthropomorphism is Yank's sad admission in Eugene O'Neill's The Hairy Ape (1922). After all his earlier glorification of technology and his identification with the grandest, strongest elements of it, at this point he can only compare himself to a broken pocket watch. "I don't tick, see--I'm a busted Ingersoll, dat's what" (159).
In Owen Davis's *Icebound* (1922) and Zona Gale's *Miss Lulu Bett* (1920), the defective clock may symbolize not the passing of a generation nor a broken-down individual, but an entire dysfunctional or broken-down family, a family in which the normal machinery has either malfunctioned or never worked right to begin with. *Icebound* begins with the family clock striking four, which immediately precipitates an argument within the family about the exact time. "That clock's been fast for more'n thirty years," we are told, approximately the amount of time the family has been torn apart. In *Miss Lulu Bett* the family clock also functions incorrectly. "That clock is a terrible trial (111)," Dwight, the father of the family says, and then argues about exactly how inaccurate the clock is, either seven or nine minutes. In both plays the obsession with the minutiae of time reveals much about the respective playwright's concerns. Technology, in the form of the mechanized clock, has made the characters in the plays more conscious of smaller divisions of time than previously in human history. Trivialities as measured by technology replace the natural rhythms of nature, leaving the individuals alienated from their normal sense of time.

Resentment evoked by the regimentation enforced on modern life by the clock is reflected in several plays of the era. Grandpa, the philosophical head of the family in *You Can't Take it With You* (1937), tries to explain it to Mr. Kirby, father of the young man, Tony, who wants to
marry into Grandpa's family. "I think you're missing something (981)," he tells Mr. Kirby, and goes on to tell him how time can be wasted. "I used to get down to the office nine o'clock sharp, no matter how I felt." But Grandpa wised up and got out of the rat race. ". . . I've had thirty years nobody can take away from me . . ." By the end of the play Mr. Kirby has been converted, and like Grandpa he is willing to put time back in its natural place as valued assistant and not allow himself to be ruled by it.

Neil, the protagonist of Beggar on Horseback (1924) decides to marry into the business- and time-conscious Cady family. Soon thereafter, he falls into a dream state where he inhabits a horrifying example of a Cady world, in which art is turned out on the assembly line according to the dictates of the time and efficiency experts. Fortuitously, upon awaking he finds that not only are his feelings about time and art not shared by his fiancée, but her other life values, specifically promiscuity, also differ from his. She releases him from his engagement, and he breathes a sigh of relief at having escaped joining that clock-dominated society.

In early twentieth-century drama the clock is resented in a way that few things are, but not all responses to the clock are negative. Occasionally a situation arises in one of the plays that points out the need for it. The rhythmic ticking could be soothing, as Eloise noted in Tickless Time.
above. Of course, it also could irritate, as Mae complains in Odets' *Clash by Night*, "The clock was pounding. I put it in the closet" (172). More often, characters favored exactly that quality that was resented in other plays, the sense of order the clock could create. In Lillian Hellman's *The Children's Hour* (1934), all the trouble starts when Mary, a difficult child, is reprimanded for being late. Ironically, at the end of the play, after malicious Mary has done all her damage, leaving Karen and Martha devastated because the verdict in their libel suit went against them (meaning that in the public mind they have been convicted of the "crime" of lesbianism), there are no schedules left to be kept, no being late. They no longer have work, because all their students have left; they can no longer shop, being objects of morbid curiosity; and they no longer have friends or visitors. Absolutely freed of what are normally considered time's annoying demands, they are not happy, but lost.

Martha: What time is it?
Karen: I don't know. What's the difference?
Martha: None. I was hoping it was time for my bath.
Karen: Take it early today.
Martha: (Laughs) Oh, I couldn't do that. I look forward all day to that bath. It's my last touch with the full life. It makes me feel important to know that there's one thing ahead of me, one thing I've got to do. You ought to get something like that. I tell you, at five o'clock every day you comb your hair. How's that? It's better for you, take my word. You wake up in the morning
and you say to yourself, the day's not entirely empty, life is rich and full; at five o'clock I'll comb my hair (58).

Only moments later Karen reverses roles and asks Martha what time it is. Martha's response encapsulates the hopelessness of their situation, "There isn't any time anymore" (59). The lack of an orderly schedule in their case engenders not freedom, but emptiness.

The most fervent praise of the clock and its necessity comes from the most unlikely source, a young rebel. In S. N. Behrman's Biography, Kurt, a fiery young man who wants to puncture the pretensions of the pompous and overturn all the shibboleths of society, delivers an impassioned paean to punctuality.

Kurt: I wrote this lady a business letter asking for an appointment. She granted it to me at four o'clock. It is now six. In that interval I've climbed these five flights of stairs three times. I've lost an hour of my life going away and coming back. An hour in which I might have read a first-class book or made love to a girl or had an idea--an irreparable hour. That's rudeness if you like (116).

The final commentary on the clock comes in a play in which there are no clocks other than "an old white rooster—one of Father's pets--his clock he calls him" (165). In Philip Barry's Hotel Universe (1935) Stephen Field, "the only first rate physicist we've ever had" (13), has retired from the rat race to an obscure part of France, taking his daughter Ann with him. When Ann's friends question her about how long she has lived in France, she replies, "Ever since we came my sense of time has been confined to music"
(21). While this element of timelessness is not the only theme of the play, it is an important one. Stephen, who is actually holding off his own death by an act of will while trying to get his daughter back with the man she loves, encapsulates it thus:

Stephen: . . . Well--let us set the hour-glass on its side, and ask the Old Gentleman to put his sickle by, and sit down with us and rest a moment (100).

Perhaps most telling, in two of the most important works of the era the clock ends the play, George Kelly's 1925 Pulitzer-prize winning Craig's Wife and Susan Glaspell's 1930 Alison's House, also a Pulitzer-prize winner. In Alison's House the stopped clock has been restarted by the father to count down the minutes to midnight and their final farewell to Alison, an Emily Dickinson-like poet. At midnight Alison's house will be sold to a new owner, but, while the fate of the house is decided, the fate of some previously suppressed poetry that the family views as too revealing has not, and the clock counts down the seconds until the decision is made to either affirm her life and her talent, or hide it forever from view. Right after the father hands the poetry over to his daughter to be published, the clock victoriously chimes midnight, ending one day, but beginning a new one.

An ending of the opposite nature occurs in Craig's Wife. Mrs. Craig has isolated herself from every single person in her life, as will be discussed more fully later.
in this chapter, and stands completely alone on the stage. Kelly, a consummate craftsman who chose every line of dialogue and every stage direction carefully, finishes the play this way:

A clock out in one of the adjoining rooms strikes nine with a mournful gong. After the fourth gong her eyes wander in the direction of the clock and she moves slowly across towards the portiere.

The mournful clock reemphasizes that time has become meaningless to Mrs. Craig. Without some event to be measured, time almost doesn't exist, and Mrs. Craig no longer can look forward to her husband returning home at five o'clock, or to dinner at eight. The time of rising in the morning is immaterial if no one else is there to share the morning with. Time has become a vast vacuum for Mrs. Craig, just as it had for Karen and Martha in The Children's Hour.

In keeping with normal American love of freedom, the clock in the drama of the early twentieth century was occasionally welcomed, but seldom loved, and far more often was cordially detested. Characters like Kurt in Biography might sing its praises, but theirs was a lonely chorus. Far more frequent were those like Ian of Tickless Time and Grandpa from You Can't Take It With You who resented its control over their lives. However, between those extremes lay some affection for the clock, such as that felt by Eloise in Tickless Time for the soft ticking of a clock, and that of Mrs. Fisher from The Show-Off and Bessie from
Awake and Sing! who identify with their clocks. More than that, the clock was seen as a connection to times past, as was noted about Mrs. Fisher, and more directly in Alison's House when Alison's niece and nephew discuss the clock:

Eben: The clock is going.

Elsa: I wanted it to tell---the last hour.

Eben: As it told the hours for Alison (683).

The clock in Alison's house is here a direct connection between the niece and nephew's time and Alison's time. Usefulness, affection, and connection to previous times notwithstanding, its overtly mechanical nature and the regimentation it imposed on daily life often caused it to be used in the drama of the day as the symbol of the worst of the modern age.

The Car

And now they're bringing in these auto-mo-biles, the best thing you can do is just stay home. Why, I can remember the time when a dog could lie down all day in the middle of Main Street and nothing would come to disturb him.

--Thornton Wilder

--Our Town

As with anything considered important, the car acquired numerous names--the horseless carriage, the steamer, the sportster, the jalopy, the heap, the automobile, and countless brand names. Ford, Oldsmobile, Studebaker, Bentley, Dusenberg, and Mercedes, the names float through the drama of the era with perfect confidence on the part of the playwright that the audience would
recognize them not just as cars, but as symbols of the relative wealth and daring of their owners. So ubiquitous was the car and so accepted as the symbol of positive technology that one of the most common sobriquets for it was simply "the machine."

Common sense dictates that it should have been "the machine," i.e., the car, and not the clock which drew the resentment aimed at the modern machine age. The car was a massive technological monster with a frame of iron and steel surrounding and barely containing a series of dangerous explosions that propelled those tons of metal forward so rapidly that the car became a more dangerous and destructive implement than any weapon yet invented. Large, expensive, and dangerous, the car should easily have eclipsed the small, cheap, and never life-threatening clock as the very manifestation of technology's drawbacks. It did not.

The car, while undoubtedly the embodiment of technology, was also the embodiment of freedom. The clock and the car come together at this point, because, as seen in the quote from Tom in Hotel Universe at the beginning of this chapter, distances were no longer measured only in miles, but also in hours and, since the introduction of the automobile, even minutes. In the generation before the car a man might be born, live a long life, and die without ever traveling more than fifty miles from his home, since that was several days' journey. With the advent of the
automobile such a journey took not days, nor even hours, but as Tom said, only fifty minutes. Therefore, in a very real sense, the car freed people from one of the constraints of the clock.

This quality of mobility was what first charmed Americans about the car, but it was not long before other positive qualities were assigned to it. "I've got a date with Miss Dusenberg (274)," Joe says of his new car in Clifford Odets' *Golden Boy* (1937), transforming it from an inanimate metal vehicle to the equivalent of a beautiful woman, thus echoing millions of car owners both before and since. The car, this large chunk of metal and rubber--materials never identified with elegance--became a symbol of beauty. Sleek and dangerous, the car, as most often described in the drama between 1913 and 1941, sounds like a kind of mechanical mistress.

Why should the large, dangerous car become so well loved while the small, inoffensive clock was hated? Simply because the clock took control away from people, while the car returned it. Just as the drama documented the technological tyranny of the clock, so too did it reveal the empowerment offered by the car.

In the early years this empowerment was the privilege only of the wealthy. In one of the earliest plays considered in this study, Jesse Lynch Williams' *Why Marry?* (1917), the attractions of the wealthy young suitor are made manifest in the form of cars. The girl he is wooing
comments that he owns a sportster. No, she is told, "he
has five sportsters" (6). The neighbors in Miss Lulu Bett
(1920) suddenly become worthy of attention because they are
seen driving a limousine (125). In Our Town (1938), the
first automobile "belonged to Banker Cartwright, our
richest citizen" (989).

As time passed, ownership of the car became more
widespread, but the more elegant models continued to be
used as a sign of wealth. Joe's Dusenberg in Golden Boy
symbolizes his newly acquired wealth from boxing. The
neighboring Chatfields' new Mercedes in Long Day's Journey
into Night (1941) points out their affluence. Tony, in
They Knew What They Wanted (1924), tops his list of riches
(with which he is reassuring himself of his worthiness)
with "I got one Ford car" (142).

The lack of a car, or the ownership of a less than
prestigious car, was also used to denote poverty. Aubrey,
the show-off of George Kelly's The Show-Off (1923), must
borrow a friend's car to attend the automobile show where
he hopes to acquire one for himself, an upscale Jordan 6
despite his lack of funds. So prestigious does he see
ownership of a car that he tries to borrow money to
purchase one, even while his other bills are going unpaid.
Part of this need to acquire stature and importance through
ownership of an automobile is due no doubt to Aubrey's
braggart nature, but it also stands as an example of the
overpowering allure of the automobile. Just as Joe's
acquisition of a Dusenberg in *Golden Boy* points out his wealth, his brother-in-law Siggie's desire for a cab that he cannot afford reveals his relative poverty. Frenchy, the destitute fellow dentist in Odets' *Rocket to the Moon*, owns not a fancy car, but a jalopy. "This jalopy cost me ninety bucks (403)," he says. And his joy from owning such a cheap car? "Three times I took her apart and put her together again. Does General Motors himself get more fun?" (403). The broken-down state of the Lester's jalopy in *Tobacco Road* is representative of the cruel poverty they live in. The inevitability of that poverty for these characters is emphasized when Bessie and Dude buy a brand new one for eight hundred dollars and within a day have reduced it to a wreck with smashed headlight, bent wheels, and burnt out engine. Finally, representing the greatest step down in prestige, Rudolf, the deposed Prince in Robert Sherwood's *Reunion in Vienna*, who once was chauffeured in a limousine, now drives a cab for a living.

Perhaps even more attractive than the prestige of the car was the power. The idea of forcing the most destructive event in nature, the explosion, to do one's wishes was irresistible. Especially since it led to that most alluring of modern ideas, acceleration. Lewis Mumford informs us that "the very concept of acceleration, which is part of our daily mechanical experience, was not formulated until the seventeenth century" (22). Individual control of
speed becomes a powerful reality for the common man in the twentieth century.

"I got it up to 86 (60)," the husband chortles in O'Neill's early play, Reckless (1913). "When you sit in a car and speed you're looking down at the world. Speed, speed, everything is speed (266)," says Joe in Golden Boy, talking about his Dusenberg that can go "150 per" (277).

Even those who bought a car primarily for prestige are proud of its ability. Winifred, the rich spinster in Kaufman and Harts' The American Way boasts about her car's quality, "the newest model, right from the factory. A Pope-Toledo" (355). She also brags about its speed factor. "She can do thirty miles an hour if I let her out" (355).

The lack of acceleration is also used to characterize people. In response to Winifred's claim above, a nearby matron, Mrs. Brockton, says stiffly, "I do not believe in scorching along the roads. I do not let Mr. Brockton go over fifteen" (355). Poor Mrs. Brockton, condemned from her own mouth as staid and stuffy. She is bound to be considered mean-spirited by the audience, along with all the other characters who refuse to speed. "Charlie's like a fussy old woman about his car" (677), we are told in O'Neill's Strange Interlude (1927), reinforcing the already cautious delineation of Charlie's character. A long wait in S. N. Behrman's Rain from Heaven (1934) draws this impatient explanation from an irritated daughter, "It's
just Father telling the driver to go slow. He's so damn cautious" (899).

Speed was the essence of daring, the lack of it a condemnation for over-cautiousness if not outright cowardice. It could even serve as an aphrodisiac. In Golden Boy Joe has been obsessed with Lorna Moon without receiving much positive response from her. Near the end of the play she suddenly turns to him and the following exchange takes place:

Lorna: Tonight? Joe, we ride in your car. We speed through the night, across the park, across the Triborough Bridge--

Joe: (Taking Lorna's arms in his trembling hands) Ride! That's it, we ride--clear my head. We'll drive through the night. When you mow down the night with headlights, nobody gets you! You're on top of the world then--nobody laughs! That's it--speed! We're off the earth--unconnected! We don't have to think!! That's what speed's for, an easy way to live! Lorna darling, we'll burn up the night! (316).

Despite the reverence in which cars were generally held, the characters in the plays realized there was a dangerous side to them as well. "Those cars are poison in my blood (266)," Joe says earlier in Golden Boy, and like poison they can be deadly. Hope, the bartender in O'Neill's The Iceman Cometh (1940), claims that his fear of the "damned automobiles" (673) keeps him from ever leaving his bar. The chauffeur in Reckless is intentionally sent to his death in a faulty vehicle. Tony, in They Knew What They Wanted, drinks too much and as a result crashes the Ford automobile he is so proud of, leaving him in a
wheelchair for the rest of his life. The new neighbor in Craig's Wife is a widow, having lost her husband in an automobile accident. Gus, the handyman in Paradise Lost (1935), lost his wife in a freak auto accident. In Tobacco Road Bessie and Dude back their car over Ada, Dude's mother, killing her when she tries to stop them leaving. Finally, Joe and Lorna in Golden Boy burn through the night to meet their end in a fiery car crash.

Despite its deadly potential, however, the car remained a favorite possession of characters in the drama between 1913 and 1941, just as it remains today. The danger, in fact, seemed to have added an exciting edge to ownership of an automobile. The American love affair with the car was well represented in the theater of the day.

Electronic Communications

Treat him good, he owns us all, the guy that holds the wires . . . he laughs, he makes death, he telegraphs--.

--John Howard Lawson
--Processional (1925)

Some products of technology, such as the clock, had been in use for so long as to have seemed to the common man to have always existed. Some, like the car, had been invented in the previous century, but only came into widespread use during the years discussed and so seemed new and worthy of awe. Electronic communications, like the car, had been invented in the nineteenth century, but by the turn of the century became so widespread that as early
as 1909 a character in Clyde Fitch's play, The City, could casually say, "Mother, if you want to see us after dinner, telephone" (853). Still, despite their widespread acceptance, some element of the marvelous did cling to electronic communications, so that in Robert Sherwood's The Petrified Forest (1936) the old grandfather could like two visitors simply because they worked for the telegraph company. "Hope you'll call in again, boys. I always enjoy talking to anybody in the telegraphing business," Grandpa says (14). Similarly, in Clifford Odets' Paradise Lost, the revolutionary Pike alludes to the near-mystical quality with which some elements of electronic communications were imbued by their ability to span enormous lengths of time and space. "All these years one thing kept me sane: I looked at the telegraph poles. 'All those wires are going someplace,' I told myself" (191).

A negative reaction to electronic communications existed as well, though like the positive side it was not generally deeply felt. Time after time the telephone interrupts various characters in the plays, so much so that Lady Lael Wyngate in S. N. Behrman's Rain from Heaven (1934) will not have a telephone on her estate. The negative equivalent to Pike's comment above exists in Paul Green's In Abraham's Bosom (1926), "... when de white folks hung Charlie Sampson on a telegram pole . . . ." (347). The only use of telegraph poles mentioned here is to hang Negroes.
Any commentary on electronic communications, either positive or negative, was rare. Far more common than either of these positions was simple acceptance. Moody, the fight promoter in Clifford Odets' *Golden Boy*, compares Joe to the most common thing he can think of. To him, Joe is "Like this telephone. I pay the bill and I use it" (288).

The importance of electronic communications technology in drama lay especially in what it said about the people both receiving and initiating these communications, and perhaps in the characters it replaced on stage. The first element is perhaps the most obvious. Characters were deemed important by the number of electronic communications they received. "Any calls for me?" (316) asks Moody in *Golden Boy*; "Any calls for me?" (829) echoes Ferguson, the young doctor in Sidney Kingsley's *Men in White* (1933); "Did anyone call for me?" (84) asks Ellicott, the ambitious lawyer and silent partner in Lillian Hellman's *Days to Come* (1936); and so on.

Repeatedly characters use this ploy to puff up their self-importance, a tactic that backfires on Ellicott above when the maid not only lets him know that he has no business receiving calls at his employer's home, but reminds him pointedly of an embarrassing call he once received there from a young lady of questionable virtue.

The use of electronic communications to denote importance is near-universal in the plays of the era. We
are led to understand the importance of Phillpots, the reporter in John Howard Lawson's *Processional* (1925) by his continual need for the use of a telephone and a telegraph. Psinski, a revolutionary in that play, puts it even more strongly in the quote that began this section:

> Treat him good, he owns us all, the guy that holds the wires . . . he laughs, he makes death, he telegraphs--(27).

The vast importance of the Cavendishes, the ersatz Barrymore family of actors in Kaufman and Ferber's *The Royal Family* (1927), emerges, at least partially, through the continual flurry of phone calls and telegrams the family receives throughout the play. Lael Wyngate's refusal to have a telephone in *Rain from Heaven*, as mentioned above, frustrates Hobart, her businessman guest, not only because he is out of communication, but also because he is denied one of his customary means of showing his consequence, something Lael recognizes and obliquely twits him about.

> Lael: I could have a ticker-tape in your room?

> Hobart: (Smiling grimly) A telephone would be some help (925).

Noticeably, even while being teased, Hobart cannot resist requesting what he considers at least the minimum of modern communication.

In the political plays of the era, such as Kaufman and Ryskind's *Of Thee I Sing* (1931) and Maxwell Anderson's *Both Your Houses* (1933), the characters are constantly in touch
via electronic communications. In Kaufman and Ryskind's Of Thee I Sing (1931) the idea of electronic communication as the province of the powerful and important is emphasized when President Wintergreen opens a supermarket somewhere in America by merely pushing a button on a board at the White House. Maxwell Anderson’s indictment of politics in America, Both Your Houses (1933), begins with a telephone conversation, followed by constant use of and references to telephones and telegrams. One of the characters in this play, Levering, recognizes the element of importance assigned to electronic communications but denies its validity. When told that the entire country favors a pork-laden bill because the telegrams received are all in favor of it, he replies:

Not the country. Don't confuse the country with the people who still have money to send telegrams. They represent a very small fraction of the country (784).

The same sense of importance conveyed by continual electronic communication applies to the doctors and scientists in Men in White. Hardly a scene goes by that does not include a phone call involving the doctors, either summoning them to an emergency or for consultation with a patient.

For Robert Sherwood's There Shall Be No Night (1940) to be effective, the audience must accept immediately that Dr. Kaarlo Valkonnen is an important and significant scientist. Consequently, besides references to eminent
awards he has received, such as the Nobel Prize for Science, Sherwood begins the play with the doctor participating in that most prestigious of electronic communications at the time, the radio broadcast. The breadth of coverage given the broadcast also points out his importance, since we learn it is being listened to in both America and Germany. The significance of the Lindbergh-like aviator in *Rain from Heaven* is shown not by a broadcast by him, but by one about him. The importance of the boat race in which young Gordon competes at the end of O'Neill's *Strange Interlude* is denoted by its being broadcast on the radio.

The most emphatic use of this device to show the importance of a character is depicted in Kaufman and Hart's *The Man Who Came to Dinner* (1939). When Sheridan Whiteside first appears, he immediately demands and receives the sole use of his reluctant host's telephone, since his communications are so important. Not only a bestselling author and columnist, Whiteside is made a radio personality, giving him that cachet on top of his other fame. His importance is constantly reinforced throughout the play by the number of important people trying to contact him electronically: H. G. Wells, the President of the United States, and various stars of stage and screen. He gets veritable sheaves of telegrams and, after receiving a Christmas call from Walt Disney and the voice of Donald Duck, boasts that he gets a call like it every Christmas:
Whiteside: Mr. Disney calls me every Christmas, no matter where I am. Two years ago I was walking on the bottom of the ocean with William Beebe, but he got me... (456).

In this and other plays, Kaufman not only uses this mania for communication to establish the importance of his characters, he also satirizes it. In Kaufman and Connelly's *Beggar on Horseback* the tendency to assign extreme importance to electronic communications is skewered. "When I get a foot away from the telephone, I'm lost" (49), Mr. Cady, the self-important businessman, tells Neil, the protagonist, early in the play. Later, when Neil goes into his extended dream, the mania for electronic communications is made manifest by the businessman's having a phone grafted onto his chest, and by the businessman's idiot son Homer constantly working on a radio that broadcasts the same words over and over. "Stock market reports! Stock market reports (158)!

Enhancing the significance of a character through electronic communications happens often in plays of the era, but another theme truly dominates their use on stage. The messenger, a standard device of the theater since the Greeks invented theater, is replaced in the drama between 1913 and 1941 by electronic communications.

Time and again in plays prior to this era, characters are introduced who do little but relate offstage happenings to characters onstage. In the works of Sophocles, Shakespeare, and even as late as Ibsen, characters exist
whose sole function is to perform that duty. With the advent of the telegraph and the telephone those characters could be dispensed with, and were.

Sometimes the message carried was simply convenient for the playwright, allowing him to continue a scene without the interruption caused by the entrance of another character while still allowing new information to be injected, as in S. N. Behrman's No Time for Comedy when Gay and Linda, a husband and wife fortuitously played by the real-life husband and wife team of Alfred Lunt and Lynn Fontaine, get news by phone that Linda's escort for the evening is downstairs waiting, allowing the magnificent duet scene to continue without the necessity of including a third party. Jesse Lynch Williams employs a telegram as a messenger to tell the audience of the happy ending to the subplot involving the judge and his wife in Why Marry? Reference to an electronic messenger is used to add some strained humor in Odets' Rocket to the Moon (1938). "Send me a wire before you elope (392)," an unfaithful husband uneasily teases his wife. In S. N. Behrman's Biography (1932), a telegram provides the happy ending, telling Marion, the protagonist, a painter in need of work, "Can get you commission to paint prize-winners Motion Picture Academy--wire answer at once" (181). In addition, in John Howard Lawson's Processional a telegram from President Coolidge supposedly announces the end of the strike when he wires that "all men are brothers" (214).
Just as the conventional messengers used from ancient Greek times to the present so often bring news of terrible offstage happenings, so too did the electronic messenger often bring news of death and disaster. In O'Neill's Reckless, the play begins with the telegraph employed to announce the imminent arrival of "the husband" to the other two points of a love triangle. The plot develops because a broken garage telephone has failed to act as a messenger, causing "the wife" to commit her indiscretion to paper. The telephone is then used as a messenger by the husband to send orders to the chauffeur, his wife's lover, to take the car and drive like hell for medical help for the wife who is supposed to be ill. Since the husband knows, and the chauffeur does not, that the car is broken, this is the equivalent of murder. Finally, the success of the husband's devious stratagem is announced by a telephone call as the husband repeats the news aloud. "Ran into a boulder, you say? He's dead" (65).

In Robert Sherwood's Idiot's Delight (1935), the telegraph is the equivalent of a messenger to the gods, in this case the "authorities." Various parties must wait in a hotel at a border until receiving an electronic decision from the authorities that will allow them to pass on to safety or force them to stay in a war zone where bombs will be dropping at any minute. At the end the telegraphed message spells doom for Irene since the authorities refuse to allow her passage. In Golden Boy no messenger appears
to tell of the tragic deaths of Joe and Lorna. Joe's brother Frank simply answers the phone and then repeats to the news he receives to those around him, "Both of them... they were killed in a crash--" (320).

Sometimes the messenger is diverted or simply fails. O'Neill's work is full of instances where technology either miscarries, or is imperfectly adapted to its human interface. In Reckless, as already noted, the failure of the garage telephone leads directly to the murder of the chauffeur. In Warnings (1913), the wireless operator of an ocean liner fears to admit his encroaching deafness. The wireless works perfectly, but since he cannot hear it he fails to hear warnings from other ships. The ship collides with a partially sunken derelict and sinks because of the Captain's misplaced confidence in modern communication. The radio broadcast of the boat race in Strange Interlude fails at the crucial moments, frustrating the listeners. In Beggar on Horseback the telephone does not work just when Neil most needs to use it to call off his disastrous engagement to the boss's daughter.

Electronic communications run through almost all of the plays of the era that are not set in previous, pre-electronic times, from George and Emily pretending to have "a kinda telegraph" (997) in Our Town to the continually communicating Sheridan Whiteside in The Man Who Came to Dinner. The usage of electronic communications most
critical to the plot, however, comes in George Kelly's *Craig's Wife*.

The complications in this play begin when the maid casually gives Mrs. Craig a telephone number her husband had left with her the night before in case he needed to be reached. She finds it impossible not to check on this number. It turns out to be the phone number of a house where a double murder had taken place the night before, and Mrs. Craig's inquiries bring unwanted attention from the police. Oddly enough, in this play, the sensational item, the murder, is a red herring, of no particular significance. What is significant is that in her untutored attempt to use the electronic media to check on and control the people around her, Mrs. Craig inadvertently reveals her true nature. The ultimate manipulator, she attempts to finesse a number of electronic communications. She refuses to let her niece's boyfriend, Frederick, speak to that niece on the telephone and then lies to the niece about it. She indulges in a flurry of calls checking on her husband, and ends up incriminating him in a very serious crime, then lies to him about it. Not only does she abuse the trust of her family by manipulating their electronic communications, in the end it is her lack of sophistication about them that betrays her lies. Ethel, the niece, inevitably gets in touch with Frederick and finds out about Mrs. Craig's lies. When Mr. Craig starts to call a friend to learn the latest development in the murder case, Mrs. Craig is forced to
stop him. "Don't you realize that that phone is being watched--(357)," she blurts out, because, after her undisclosed conversation earlier with the police, she is convinced their phone must be tapped. When her husband presses her for an explanation of that startling statement, it leads directly to the revelations about her various telephone perfidies and from there to his realization of her manipulative character.

While neither the clock nor the car nor electronic communications could be called a dominant theme in the drama of the era, each earned its place. Their inclusion in a play revealed something about society and its relationship with its burgeoning technology. The human longing to be free of constraints is reflected in both the detestation of the clock and the regimented world it created, and in the love for the mobility granted by the car. Electronic communications remained important because of their ubiquitous nature and for the importance they conveyed to the individuals receiving electronic communications, and for their use as replacement for the role of the traditional messenger.

Each was characterized differently. The clock, so old and so ubiquitous a technology as to no longer be regarded as technological, was considered almost an old friend, one that could be irritating and demanding, but one that was
often helpful. So much so that people compared themselves to it.

The automobile was loved. The dangers associated with it were portrayed, but in the end it was given an affection no other item of technology was given. The pleasure of possession, the pleasure of mobility, and the pleasure of acceleration were all the gift of the automobile in the drama of the era.

Electronic communications did not draw either the negative response the clock sometimes received, nor the affection given the car. Their importance cannot be denied since they were the single technological item most often mentioned in the era. They allowed replacement of the traditional messenger and conferred importance on those who used them, but elicited little emotional response. Characters never compared themselves to the phone as they did to the clock, and one cannot even imagine a character giving his phone a name, the way Joe in Golden Boy affectionately dubbed his car, "Miss Dusenberg."
Chapter 4:
THE SCIENTIST

Leonie: I love scientific men. They're usually so nice and understanding.  
--S. N. Behrman  
--End of Summer

Theodore: Oh, you scientists!  
--Jesse Lynch Williams  
--Why Marry?

"God does not play dice with the universe," Albert Einstein declaimed near the beginning of this century (Quotations 200) and transformed himself into the archetypal scientist for those who wanted to believe that great intelligence, extensive scientific knowledge, and solid religious belief could be reconciled. Kindly, brilliant, and wise not just in science but also in the ways of humanism, Einstein's only scientific rival for the affections of the era was the incredibly energetic champion of the common man, Thomas Edison. "Genius is one percent inspiration, ninety-nine percent perspiration," Edison said, (Quotations 199) lending credence to the idea that anyone could be an inventor if they just worked hard enough. Excluding medical scientists, this pair were used as models for more than ninety percent of the scientists on the stage between 1913 and 1941.

Capitalism and technology are two subjects which the intellectuals of the 1920's and 30's, especially playwrights, felt free to disparage. Therefore it comes as no surprise that the number of portraits of charming, well-liked, laissez-faire capitalists in the drama of that era
can be counted on the fingers of one hand. The same is not true of the scientist. While a few less-than-admirable scientists emerge, the drama written between the wars depicts likeable, kindly, wise scientists; and, more amazingly, these scientists are often truly perceptive in understanding and insight into life, not merely knowledgeable in science as might be expected. The complex love-hate relationship between dramatists and technology is nowhere so evident as when the vilification of technology and the machine age (which fills so much of the theater that chooses to discuss technology) is contrasted with the images of the very scientist who invented the technology that created the age.

Historically, early scientists on the stage were not presented as good men. One of the earliest, Christopher Marlowe's Dr. Faustus in *The Tragical History of Dr. Faustus* (1604), appeared in the era when science was still mixed with the occult. Such a complex character could hardly be said to be merely a villain, but his pact with the devil ultimately damned his soul to hell.

The eponymous conniving scoundrel of Ben Jonson's *The Alchemist* (1610) another early example of the scientist on stage, is presented as a false scientist. The attacks continued during the restoration, with satirical portraits that ridiculed scientists in plays such as Thomas Shadwell's *The Virtuoso* (1676) and Aphra Behn's *The Emperor in the Moon* (1687), among others.
Scientists gained a sympathetic hearing on the stage in early nineteenth century Germany. Prometheus held the same fascination for German romantic playwrights (many of whom considered themselves scientists) as he did for Percy Bysshe Shelley in the England of the same era. Faust was revitalized and rehabilitated in numerous plays written by various German romantics (Haynes 78). Goethe laid aside his play on Prometheus, never to finish it, but completed the first part of his extraordinary Faust in 1805, adding a second part in 1832. Goethe's Faust, a heroic figure, becomes redeemed in the end, unlike Marlowe's. Georg Buchner, representative of what would become the German tradition with the advent of the expressionists, presented a scientist in Woyzeck (1837), a cold, dispassionate creature who put his science above humanity. The English romantics, even those attracted by science, such as Shelley, still disdained much of its knowledge, especially those facets which could lead to the destruction of nature. However, Shelley's fascination with science, and specifically his discussion with Lord Byron concerning Erasmus Darwin's experiments in "animation," led to the creation of an extraordinary novel about scientific creativity.

Mary Wollstonecraft Godwin Shelley, inspired by her husband and Byron's discussion of the possibility of a scientific creation of life, wrote Frankenstein, or the Modern Prometheus, published in 1816. In 1823 Presumption,
a pirated stage version of *Frankenstein*, met with such success that imitators sprang up like weeds. According to Donald F. Glut in his compendious *Frankenstein Catalog* (1973), theatrical versions of *Frankenstein* have been continually available since 1823 (133), and cursory examination of current dramatic publishers' catalogs reveal over a dozen versions in current use. The presumption of *Presumption*'s title was the hubris shown by its young scientist protagonist in daring to challenge the gods themselves by creating life. The many adaptations have changed nearly everything about the story, from the protagonist's name to the creature's sex, yet one element has remained constant: the scientist, in his single-minded search for knowledge, arrogantly draws down punishment on himself and those around him.

Despite the efforts of Goethe and the nineteenth century German romantics, prior to the twentieth century the representations of the scientist on the stage have been generally negative. In *From Faust to Strangelove: Representations of the Scientist in Western Literature* (1994), Roslynn D. Haynes tells us that even in the twentieth century, surveys "conducted among various social groups to evaluate how scientists are generally perceived have invariably yielded results that indicate an almost wholly negative estimate" (1). One of the suggestions made in Cecilia Tichi's *Shifting Gears: Technology, Literature, Culture in Modernist America* is that from 1890 to 1930 (the
era covered by her book), science was perceived positively in popular art and negatively in "high art." In general that has been borne out in this study, with science and technology finding their warmest reception in the comedies of the era, while the few plays antagonistic to those entities were at least intended to be significant art. But while science may have been excoriated in the important drama of the day, the creator of that science, the scientist, is almost deified. In the most common art of the era leading up to World War II, the moving pictures, the scientist was usually portrayed as arrogant, opportunistic and unfeeling, as in Fritz Lang's *Metropolis* or in any of the cinema versions of *Frankenstein* from Edison's two-reeler created at the very birth of film to the famous Boris Karloff movie in the 1930's. In drama, even in Pulitzer Prize-winning drama, which must surely fit into anyone's definition of "high art", that simply was not true. Scientists, especially if the inventor is included in the category, were sympathetically drawn figures in the plays of many of America's best playwrights. Eugene O'Neill, Philip Barry, S. N. Behrman, George Kelly, Robert Sherwood, and many others either featured scientists or commented on them, most often favorably.

In Jane F. Bonin's *Major Themes in Prize-Winning American Drama* (1975), science and scientists do not even make the index, much less the contents page. Still, scientists were the protagonists in three of the twenty-
three Pulitzer Prize-winning plays within this study's range, including the first ever winner, Why Marry? (1917), and the last within the era, There Shall be No Night (1940). In the middle, Men in White (1933) featured a promising young doctor and scientist forced to make a choice between continuing his research training or marrying his love. Other Pulitzer Prize-winning plays of the era featured scientists in lesser roles. Dr. Edmund Darrell, an important character in Strange Interlude (1928), begins as a research scientist in the field of mental illness, and by the end of the play finds redemption as a biologist sponsoring an even more promising young biologist. Robert Sherwood's Idiot's Delight (1936) offers the least favorable depiction of a scientist in the Pulitzer Prize-winning plays. Waldersee, a German biologist, whom Sherwood in his preface to There Shall Be No Night calls "this German victim of Nazism" (xxi) is presented favorably at first. Waldersee is obsessed with finding a cure for cancer, an admirable objective, but, by the end of the play nationalistic fervor causes him to return to Germany to prepare for biological warfare. Finally, a scientist makes a brief but favorable appearance in Thornton Wilder's Our Town (1938). Thus, six out of twenty-three Pulitzer Prize-winning plays, or just better than one-fourth of the plays adjudged the most significant of the era, contain favorable or fairly favorable images of scientists.
The most unabashedly complimentary portrait of a scientist, in an era filled with complimentary portraits of those individuals, is depicted in *Why Marry?* (1917). Earnest Hamilton, a Pasteur-like figure, has discovered an antitoxin that will save the lives of thousands of children. His assistant at the discovery is Helen, a young woman of wealthy background whose family is financing Hamilton's work. Helen has already defied her family's disapproval of her choice of careers and is set to become Marie Curie to Earnest's Pierre, whether in wedlock or out. When her brother's wife criticizes her for not holding Hamilton at a proper distance, Helen discourses on the night the antitoxin was invented:

> . . . And, just think, I had a hand in it, Lucy, a hand in the unwomanly work of saving children's lives! But, of course, an old-fashioned spinster would have blushed and said, "Excuse me, Doctor Hamilton, but we must now let a year's work go to waste because you are a man and I am a woman, and it's dark outdoors!" . . . (8).

Most of the important elements of the play can be found in that short speech. First, despite not having the credentials, Helen is a scientist with a scientist's viewpoint. Second, the importance of scientific work is emphasized in the phrase "saving children's lives." Third, and most important to author Jesse Lynch Williams' overall theme concerning marriage, bowing to society's conventions has become less important in the new scientific age than encouraging scientific discovery. In 1940 William Lyon Phelps in his introduction to the collected Pulitzer Prize-
winning plays gives the opinion that Why Marry? wouldn't have been considered for the prize in the 1930's ([ix]). It probably would not be considered today either, for too much of its nineteenth century melodramatic ancestry, mixed as it is by the author with some serious homage to Shaw, shows through. The apparently insoluble problem of the entire play is wrapped up in a neat bowstring in the last five minutes by a contrivance. Still, a play is not selected as the best play of any year if it does not have some merits. Williams does a masterful job of keeping what is, after all, a philosophical argument moving on the stage in a manner Shaw would have recognized if not envied, and a major component of that discussion centers around the place of the scientist.

Helen, the protagonist, and the scientist she works with, Ernest Hamilton, are in love. John, her brother and the holder of the purse-strings in this wealthy family, has been underwriting Ernest's research and thinks that his scientific work is incredibly important. Earnest is "one who with capital back of him would soon become the greatest scientist in America" (50) and must at all costs continue his research. But not with John's sister, please. This dichotomy concerning the role of the scientist runs throughout the piece. Although everyone is full of praise for science and scientists, no one thinks Helen should marry one (they cannot even comprehend the idea that she has become one), because scientists do not make enough
money to support a wife in style. Throughout the play, while marriage and the possibility of life without it, both chaste and unchaste, continue as the major theme, the worthiness of science and the lack of a reward commensurate with that worth is also reiterated. This play puts into words the favorable estimate of the scientist that many other plays of the era only insinuate: the scientist is more important to society than its boardmembers and bankers, but is not paid in a manner that reflects that importance. Even those characters who are aggressively antagonistic to Earnest praise and respect his career. With the exception of continued reference to the lack of money to be made in science, the worst thing said about scientists comes when a rector, who has lost an argument about marriage to Earnest, says ruefully, "Oh, you scientists!" (26). That is a kindly indictment indeed.

Sidney Kingsley's Men in White (1933), besides having an idealistic young scientist as its protagonist, is peppered with complimentary references (either in the lines or, unusually for a play, in extensive footnotes) to historical as opposed to fictional scientists. George Ferguson, a promising young intern, is scheduled to go to Vienna for special scientific training under one of the great minds in his field. His fiancée, after a series of broken dates, tells him to choose between science and her. Dispirited by this seemingly impossible choice, he is seduced by one of the nurses at the hospital where he is an
intern. He finally agrees to give up science for his fiancée, but meanwhile the nurse, having become pregnant during their night together, has had a botched abortion. When she is brought to the hospital, Ferguson and his team fail to save her, and in his remorse he rededicates his life to medical research.

*Men in White*, although melodramatic, provides a meticulous recreation of hospital life and is the direct progenitor of numerous hospital movies and hospital television series. The protagonist, though more fully realized, is similar to Earnest Hamilton of *Why Marry?*, and the financial backing of the rich fiancée's family is also common to the two plays. Finally, though the two plays have little in common stylistically, both plays treat the scientist with great respect.

Robert Sherwood's *Idiot's Delight* (1936) epitomizes the dichotomy mentioned earlier between favorable portraits of scientists and unfavorable portrayals of the technology they have created. Constantly within the play the technological elements of war are mentioned either fearfully or disparagingly. However, Dr. Waldersee, a German scientist, while not presented as a clean-cut hero in the manner of Earnest Hamilton or George Ferguson, is shown as being basically admirable. He is arrogant and demanding, but in the service of his science. Convinced he is on the verge of a cure for cancer, he is furious at being obstructed by fools playing at war. "Oh--God in
Heaven," he cries, "--why don't they let me do what is
good?" (881). However, by the end of the play his
scientific objectivity has deserted him and nationalistic
fervor is driving him back to Germany:

Dr. Waldersee: (fiercely) Why should I save
people who don't want to be saved--so they can go
out and exterminate each other? Obscene maniacs!
... Then I'll be a maniac, too. Only I'll be
more dangerous than most of them. For I know all
the tricks of death (912).

Even here, while obviously planning to help with
biological warfare, Dr. Waldersee is not made completely
unsympathetic. Modern knowledge of the horrors of
biological warfare might make this seem unlikely, but
Sherwood's comment about Waldersee as a victim of Naziism
quoted earlier, combined with the liking felt for the
doctor by Harry Van, the touchstone character of the play,
do indicate this.

The brief appearance of a professor in Our Town to
give "a kind of scientific account, you might say" (994) is
a very minor event in that play, but it demonstrates the
respect the scientist held in the playwright's mind as an
authority figure. Wilder follows later with expressions of
the Stage Manager's gratitude to the "scientific fellows"
who found a way to preserve "reading matter" in a local
time capsule (1002). However, it would be wrong to make
too much of this as the local newspaper editor is called
upon for an account of the town as well, and neither fare
well as authority figures when compared to the Stage
Manager.
Robert Sherwood, the author of *There Shall be No Night* (1940), was faced with a difficult dilemma when writing this play. Only a few years before, his *Idiot's Delight* (1936), which also won the Pulitzer Prize, was widely regarded as being against all war, holding that war was the equivalent of God playing a particularly pointless game of solitaire (*Idiot's Delight*) with the human race as cards. Sherwood himself, in the preface to *There Shall be No Night*, denies any inconsistency. However, his protagonist begins as a pacifist and learns that sometimes it is necessary to fight for what one believes in. Sherwood's choice of a scientist for the protagonist was not accidental. The plays already discussed in this chapter, and many of those yet to come, show that playwrights of the era considered scientists admirable and, moreover, thought that the public did as well. And few scientists are as admirable as Dr. Kaarlo Valkonen, the protagonist of *There Shall be No Night*. His scientific credentials are impeccable: internationally respected, he has won the Nobel Prize for Science, though the exact science he is expert in is intentionally left vague. His human qualities are equally admirable. A devoted son, loving husband, and proud father, everyone likes him. Consequently, the audience could be expected to travel the difficult road from pacifism to resistance with him. Sherwood, however, left little to chance, and so in Kaarlo's last scene, just
before he makes his most moving speech, it is revealed that he ended his last scientific tome with words from the bible, "How long, O Lord, before we shall be given to see the true revelation?" (150). Thus, as he makes his own final revelation, he is scientist, father, priest, and philosopher. His most important speech is not intended as good science, but rather as effective evangelism:

We have within ourselves the power to conquer bestiality, not with our muscles or our swords, but with the power of the light that is in our minds. What a thrilling challenge this is to all Science. To play its part in the ultimate triumph of evolution. To help speed the day when man becomes genuinely human, . . . (154).

This usage of "human" as a state to be striven for, rejecting both the bestial and the angelic, is echoed in Maxwell Anderson's Key Largo, as detailed in the next chapter which deals with "Dehumanization in the Machine Age." In the end it is not Dr. Valkonen's scientific knowledge that Sherwood asks us to applaud or emulate, but his basic humanity.

Chronologically, Strange Interlude (1928) should have been included in our discussion of the Pulitzer Prize-winning plays that have a scientist as a character. However, Eugene O'Neill occupies a unique place in American drama, and not only for his multiple Pulitzer Prizes, but for his artistic concerns with technology and its high priests, scientists, themes that recur in many of his plays. Nevertheless, he had published thirty plays and written several more before creating a play with a
scientist as a major character. In *The First Man* (1921) Curtis Jayson, an anthropologist, has subdued all emotions except his love for his wife, replacing them with a scientific zeal for anthropology, and especially for discovering the remains of the first human, hence the title of the play. After the unexpected death from illness of his two young children, Curtis has retreated with his wife into research to cope with the pain. Time and nature having helped his wife to regain her natural ability to feel, she becomes pregnant, and Curtis's obsession with science over everything drives them apart. When she dies in childbirth, Curtis can barely be constrained from leaving on a research trip long enough to claim the child as his own.

Despite the excuse of Curtis's loss that caused the initial flight into science, his obsession seems to dehumanize him. Still, O'Neill makes Curtis not villainous, but misguided. Martha, Curtis's wife, manages to combine scientific zeal with an ability to love again.

In a brief episode in *Marco Millions* (1924), Marco becomes the epitome of the irresponsible Western scientist, interested in what can be invented merely because it can be invented, without thinking of the consequences. He follows the invention of paper money with that of the cannon:

... consider these two inventions of mine in combination. You conquer the world with this--(he pats the cannon model) and you pay for it with this--(he pats the paper money . . . .)(428).
Here, unlike in *The First Man*, the enemies of science are not seen as petty, but as admirable and sympathetic. Chu-Yin, the gentle, wise old advisor to Kublai Kaan, undercuts the value of Marco's science, "... I believe that what can be proven cannot be true" (429).

From these two examples one could conclude, at least provisionally, that O'Neill, unlike most of his contemporaries, disliked or distrusted scientists. But in *Strange Interlude* (1928) he introduces an upstanding scientist, albeit one with flaws. Also, the protagonist, Nina Leeds, had originally trained as a scientist. "I most decidedly think you should finish your science course," her father tells her, "and take your degree ..." (646). Something of the power of science to influence the common man is also parodied in Sam's effort to sell powdered milk through the endorsement of "Metchnikoff, eminent scientist" (693), but the true scientist of the piece Edmund Darrell, or Ned, as Darrell is called, is depicted as admirable at the beginning of the play. Moreover, as he falls under Nina's spell and becomes less admirable, trying to steal her from his friend Sam, he also moves away from his science. At the end of the play, science, in the form of biological research that he has taken up, becomes his redemption, even if that redemption must come mainly in sponsorship of a younger scientist. A direct correlation exists between Ned's devotion to science and our perception of his worth. The characters in *Strange*
Interlude, more complex than the stylized caricatures of The Hairy Ape, have human failings. When Ned and Nina engage in a most unscientific action--having an adulterous affair--they both repeatedly refer to it as being "scientific." O'Neill reflects, and undercuts, the common man's exaggerated respect for science that allowed behavior to be countenanced under the guise of scientific research that would be banned under any other circumstances. Nina, unashamedly abuses the term "scientific," using it as a talisman that helps her seduce Ned. A similar usage of "science" to justify otherwise unacceptable behavior also occurs in The Iceman Cometh (1940), when Mosher rejects Hickey's teetotalism: "My opinion is the poor sap is temporarily bughouse from overwork. (musingly) You can't be too careful about work. It's the deadliest habit known to science, a great physician once told me" (614). Mosher continues in this vein and in the end uses science to justify drinking a pint of whiskey every morning before breakfast.

O'Neill's works do not permit one to draw simple conclusions about his use of scientists. Besides The Hairy Ape (1922), his most powerful anti-technology piece, his plays reveal that he has serious reservations about technology, and he, unlike some other playwrights, stretches this concern to cover the scientists who created the technology. Nevertheless, Ned Darrell and his science are presented positively in Strange Interlude. Perhaps
this happens because Ned, when first met, is a doctor, a profession O'Neill shows great respect for in all of his plays. Despite his ambivalence, O'Neill still gives us the most negative portraits of scientists in any of the plays of the era that actually featured a scientist as a character.

If O'Neill's work shows the least admirable scientists in the drama, then Philip Barry perhaps represents the most positive stage portrayals of wise scientists. Though primarily known for his comedies, Barry wrote several serious pieces. Two of those, Hotel Universe (1930) and Tomorrow and Tomorrow (1931), featured scientists who were really more than mere scientists, being extraordinary individuals gifted with insight into the true human condition and not just into scientifically verifiable facts. This trend began in a comedy of his, Paris Bound, in 1929. Although Paris Bound has little or nothing to do with science, within the play a composer is writing a ballet in which science and the ethereal are combined. "Well, there's a lot of religion in it, and a lot of test-tubes and microscopes . . . " (79) the composer says. In the ballet a germ is accidentally made man-size by the scientific application of thyroid enzymes. It becomes friends with an angel named Mike who had been dancing on the head of a needle with the germ and follows it up to man-size. This confusing scenario is played mainly for easy laughs; for example, the germ is named Pat so the pair
is a clear indication of what Barry thought a creative spirit in his era should be concerned with, the fusion of religion and science, a theme he continued to investigate in his next play. In Hotel Universe (1930), Ann Field's father Stephen is "one of the foremost electrical experts in the country" and "the only first-rate physicist we've ever had" (13). That statement aside, Stephen Fields behaves not as a physicist, but in a mystical manner. He seems to be an occult guru, in tune with the supernatural rather than the scientific secrets of the universe.

Several of Ann's friends have come to visit her in France, after suffering a traumatic experience when a young man committed suicide in front of them. At Ann's home, supposedly the former Hotel Universe of the title, Stephen guides each of them through a mystic form of regression therapy, helping them to acknowledge their pasts and enabling them to face their futures. His knowledge, when he is questioned, shows no sign of the objective, factual mentality expected of a scientist. Instead, like Sherwood's Kaarlo Valkonen, it suggests that of a priest or a philosopher:

I have found out a simple thing: that in existence there are three estates. There is this life of chairs and tables, of getting up and sitting down. There is the life of one's imagining, in which one wishes, dreams, remembers. There is the life past death, which in itself contains the others. We dwell now in this one, now in that--but in whichever we may be, breezes from the others still blow upon us (106).
He calls this wisdom "more natural than nature" (113). Stephen has gone so far along this path that he can even hold back death until his self-appointed tasks are finished (122).

Barry's next play, *Tomorrow and Tomorrow* (1931) also includes a scientist wise beyond science. Dr. Nicholas Hay, a research scientist interested in endocrine glands, turns out to be the fount of wisdom that Eve Redman, the protagonist, has been seeking. Although not modest, (he observes to his servant, "... the future of my findings may be the future of the human race--" (29), he can laugh at himself. When Eve asks if he can make "mountains out of mole-hills," he replies, "It's part of my profession to [make mountains out of molehills]" (32). Eve observes, "I have an idea you know many obscure things well, and that is why you have such grace about the plain things" (36), which perhaps captures Barry's feelings about scientists. Hay has come to Eve's home to lecture at the college founded and maintained by the money of her husband's family. He has a brief, passionate night with Eve and then leaves. Gail Redman, Eve's husband, believes that the child of that union is his, but the child shows the signs of his actual inheritance: a polymath, able to do many things incredibly well, including make a telephone (124), despite being "not yet eight" (111). A fall from a horse, combined with the unrealistic expectations of his father, sends him into a
coma and Dr. Hay is summoned by Eve. He cures the child, apparently by sheer determination, and then, always the scholar and gentleman, quietly accepts his dismissal from Eve.

Barry's scientists are indeed graceful about the plain things. Neither demonstrates any particular scientific knowledge, but both show clearly their knowledge of human nature. Fields, in particular, is almost a stage representation of the popular view of Albert Einstein, a scientific genius who still ranked God as more important than science. However, to create these paragons within the confines of a stage, Barry found it necessary to emphasize their extraordinary humanity and their wisdom rather than their scientific expertise.

S. N. Behrman had no major characters who were scientists, but in No Time for Comedy (1939), an obviously self-referential work, a playwright wrestles with the fear that his works, facile comedies, are irrelevant in the increasingly dangerous and frightening world just before World War II. When the writer, with the help of a pretentious young woman, decides to write something "meaningful," he chooses a scientist as his protagonist. As Behrman's playwright altar-ego in the play says, "The scientists are the lucky ones. . . . Absorbed in the passion for truth" (95). This scientist, similar to Barry's in Hotel Universe (1930) and Tomorrow and Tomorrow (1931), goes beyond pure science into the realm of the
paranormal. He believes he has a psychic communication from his son who has been reported dead in the Spanish Civil War. Publishing that experience leads him into a new career. He becomes one of the world's great experts on paranormal events. His son, who did not die, reappears. Not recognized because of war wounds, he decides it would be nobler to kill himself rather than ruin his father's new career. This of course would hide the truth, but Behrman, like Barry, is more interested in the "wisdom" of the scientist than his science. This becomes irrelevant, however, as Gay, the playwright within the play, decides to write a comedy about the fact that this is no time to write comedy, rather than finish his "meaningful" play. Interestingly, this play does contain one of the few sympathetic portraits of capitalists in the drama of the era in the admirable Philo Smith, a financier who "really has the detachment you mistakenly attribute to scientists" (96).

Behrman makes it clear that scientists are admirable creatures, so admirable in fact that a writer of light entertainment like him should not even attempt to create a scientific protagonist. Despite this flattering view of scientists, he, like Barry, found it impossible to create an admirable scientist busy at the work of science.

Probably the most influential play featuring scientists that did not win the Pulitzer Prize was *Yellow Jack* (1934) by Sidney Howard in collaboration with Paul de
Kruif. In an attempt to dramatize the scientific method, *Yellow Jack* is presented in an odd, nested format. Similar to Russian nesting dolls, each layer of the play is removed via flashback to reveal another, earlier layer. Then, at the end, the layers are put back on bringing us full circle to the present. Specifically, the play begins in "present day" London with a scene depicting a fictional scientist named Stackpoole trying to build on earlier scientists' work to find a cure for *Yellow Jack*, which is more accurately known as yellow fever. Stackpoole mentions an earlier scientist, Stokes, an actual historical figure and his research. This causes the scene to shift to Africa a decade before where Stokes is presented trying desperately to find an experimental animal that can contract yellow fever in the same manner as humans. Stokes finds the rhesus monkey, a possible contender for that dubious position, but will not be able to prove its suitability until a human is dissected side by side with a rhesus monkey after both died of the disease. He mentions Walter Reed, another actual historical scientist, and his earlier research on mosquitoes as vector for the disease. Immediately the action shifts to Cuba at the turn of the century where four courageous soldiers volunteer to be guinea pigs for Reed. The two isolated in a house contaminated by yellow fever victims do not get the disease. One of the two exposed to mosquitoes that had fed on yellow fever victims does get the fever. This is
considered promising but not conclusive, until the second young man, O'Hara, who wants desperately to follow in Reed's footsteps and become a scientist, courageously exposes himself to the mosquitoes a second time and contracts the disease. The shifts in time that began the play occur again, and we flash forward from Reed's Cuban hospital to Stokes' African lab where a spokesman is announcing that an experimental animal has been found and that the disease the species contracts has indeed been confirmed as yellow fever. He also announces the sad news of Stokes' death. Stokes himself turned out to be the human dissected side by side with a monkey to prove his theory. The action jumps forward again to the fictional Stackpoole's lab in London where, building on the knowledge gained by Reed and Stokes, he has just discovered a method to inoculate people against the disease.

Summarizing this complicated play is difficult, perhaps because of the complexity of the scientific research being presented. Each glimpse of the truth vouchsafed to the scientists excites them, but, in the true scientific spirit, confirmation of the truth is what climaxes the play. As Finlay, another historical figure, says while congratulating Reed on the success of his experiment, "I conceived a truth! You delivered it into life! Together we have added to arsenal of the world's knowledge!" (147). While presented as humans, irritable and all too human, scientists in this play are presented as
more than mere mortals, as demi-gods in fact. Under the circumstances, O'Hara's willingness to risk death to emulate them is quite understandable. Even more interestingly, a theme used subtly elsewhere becomes manifest here: things that would be bad if done by an individual for his or her own purposes are not only acceptable but admirable if done for science. More importantly, unlike Barry and Behrman, Howard created scientists who were admirable for their science, and practiced it on the stage.

If inventors are admitted as scientists, then George Kelly's *The Show-Off* (1924) belongs in this list. Joe Fisher, the son of the family that Aubrey, the show-off of the title, marries into, invents things. Though constantly doubted, Joe succeeds with each piece of technology he approaches. At the beginning of the play he is working on a radio set and he continues to tinker with it for the entire act despite general disparaging remarks and assurances that he is being foolish to bother with it. Act II begins with the mother listening to the completed radio. During this time, in one of the ironies of the play, Aubrey, showing off for Mother Fisher and having forgotten where he had heard the scientific material, repeats one of Joe's attempts at invention but garbles the formula. This gives Joe an idea that will make the formula successful. In the end, Joe's scientific triumph becomes Aubrey's negotiating triumph, because the businessmen to whom Aubrey
presents himself as Joe's agent are desperate to have the formula.

Kelly does not glorify technology. Indeed, the dangers inherent in automobiles are portrayed within the play, but like so many other playwrights of the period, he obviously thought well of the creator of technology.

Oddly, the clean-cut, likeable Joe of The Show-off has a dark doppelganger in Kaufman and Connelly's Beggar on Horseback (1924). The son of that family, Homer, is also always fooling with a radio set, but unlike Joe, he represents not independence and inventiveness, but sloth and greed, and when he triumphantly proclaims he has fixed his radio, it merely repeats the words "Stock report" "ad infinitum" (158).

Clifford Odets, the chronicler of the life of the common man, created only one scientist among his characters. Miller, the lab assistant of the "Lab Assistant Episode" of Waiting for Lefty (1935) is confronted with a moral dilemma, either spy on his friend and scientific mentor, Dr. Brenner, for Fayette, the villainous businessman who seeks to discover how the scientist's work can be used for chemical warfare, or lose his job. He unhesitatingly takes the higher moral path and sacrifices his job. Beyond that, he also shows that men of science needn't be bookworms or poor physical specimens when he floors the businessman with a well-delivered punch.
Sometimes scientists are commented on in plays in which no scientist appears. Mr. Prince tells Cleo in Odet's *Rocket to the Moon* (1938), "My girl, I've studied you like a scientist" (414). King and Victor in Maxwell Anderson's *Key Largo* (1939) discuss what scientists have discovered that reduce the significance of humanity (20-22). E. E. Cummings in *Him* links scientists with what he considers disgusting knowledge about our interiors and germs. And in Kaufman and Hart's *Once in a Lifetime* (1930), George Lewis, an affable idiot, is presented to the movie world as a scientist to add credibility to the scam his friends are trying to pull off. The movie executives are so impressed with his false scientific credentials that they unquestioningly obey his every outlandish suggestion (all of which happen to prosper).

Occasionally historical scientists are mentioned, but not often. For while the stage scientist was respected, scientists who are actual historical figures appear to be almost unknown in the drama of the era. Despite Sidney Kingsley's efforts to give credit to them in *Men in White* (1933), references to the names of actual scientists are few and far between. Even the well-known biography plays featuring scientists, such as Sacha Guitry's *Pasteur* (1919) or Brecht's *Galileo* (1938), are of foreign origin. Madame Curie's radium is mentioned in far more plays than she is. Newton and Galileo are each referred to a few times and Einstein shows up in at least one unexpected place: In *Golden Boy*, the somewhat less than classically educated
hanger-on Roxy brings the great scientist up, with a comment we cannot quite believe is meant as a compliment, despite the adjective. "Einstein lives in a college--a wonderful man in his line" (254). However, the name that meant scientist to the average American was obviously none of these, but that of the all-American inventor, the Wizard of Menlo Park, Thomas Alva Edison. Repeatedly he is held up as the incarnation of the modern machine age man. In Owen Davis's Pulitzer Prize-winning Icebound, a play almost without technological references otherwise, the family's resistance to change is dramatized by saying that not even Edison and his ilk could affect them. "It takes more than a few Edisons to change the Jordans" (201). Joe, the inventor-son of the Fisher family in George Kelly's The Show-Off is called "little Tommy Edison" by Aubrey (157). And finally, in Clifford Odets' Clash by Night (1941) the protagonist, Jerry, with his life in ruins around him, remembers his childhood dreams:

That bell buoy used to tell me a sweet story when I was a kid. Had a dream I'd be a big man--make all the people happy, like Thomas A. Edison . . . (185).

Not only does Jerry know his hero's name, he knows his middle initial, and shares it with us.

Certain trends can be discerned in this survey of dramatic material. First, scientists who are also medical doctors merit more respect than their already well-respected colleagues. Doctors, in fact, are the only group
treated even more favorably than scientists in the drama of the era. They are particularly well treated when they are both M.D. and scientist as in O'Neill's *Strange Interlude* (1928), Barry's *Tomorrow and Tomorrow* (1931), Kingsley's *Men in White* (1933), and, especially, Howard's *Yellow Jack* (1934). Second, scientists are depicted as wise beyond the knowledge required for competency in the area of their expertise. They were considered authority figures not just on science, but on almost everything. Despite this generally rosy view of scientists, dramatists of the era found it difficult to portray scientists who actually engaged in science. Ned Darrell in O'Neill's *Strange Interlude* was an exception, and all the scientists in Howard's *Yellow Jack*. Finally, scientists in this era are not blamed for the destruction wrought by their inventions, in sharp contrast to the general public outcry after the Second World War and the invention of the atom bomb. The technologically assisted destruction wrought in World War I was certainly horrific, but the American public and the American playwright apparently blamed the men who ruled the countries at war and not the scientist who invented those technologies of war.
Chapter 5:
DEHUMANIZATION IN THE MACHINE AGE

This is the way the world ends
Not with a bang but a whimper.
--T. S. Eliot
--The Hollow Men

Yet we have gone on living,
Living and partly living.
--T. S. Eliot
--Murder in the Cathedral

Dehumanization is the probably the most common of all the reproaches leveled at modern technology by its critics. The proponents of this criticism claim that in this machine age humanity is ground away in the cogs of a machine alien to the very nature of humanity. Those basic elements that make us human are eroded in the process, reducing humanity to something bestial or mechanical. Since this is the most common theme of the anti-technologists it is not surprising to find that it is the most common overt focus of this kind in the drama of the era. This motif appears in American literature at least as far back as Nathaniel Hawthorne, and even then authors struggled to find the proper method to express it. Leo Marx, in his essay "The Machine in the Garden," makes this claim:

... the unprecedented [technological] changes then taking place may have provided a direct impetus to the use of symbolic techniques. Hawthorne admitted as much in explaining why he required the image of the railroad to convey that sense of loneliness in the crowd he thought characteristic of the new America. This image, he said, enabled him to present the feeling of a "whole world, both morally and physically... detached from its old standfads and set in rapid motion" (117).

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Even in drama, alienation from friends, family, and society is certainly not a new theme, having been the subject of plays from the earliest Greek writers to the most significant playwrights of the era just before the first World War. The subject continued to be popular after the Great War, attributed at that time either to the same social ills as before, or to such new causes as the trauma of the war itself in plays like Eugene O'Neill's *Shell Shock*, and, to a lesser extent, in the first acts of his *Strange Interlude*. Though speaking, often quite eloquently, to the new era and its inhabitants, these plays had much in common thematically with their forebears. However, a new variation on this theme appeared in American drama for the first time in the years between the wars. Increasingly the major concern of the theater dealing intentionally with technology in this era, specifically the 1920's, came to be the human being, fragile and often confused, struggling to escape being crushed in the gears of the machine that the modern world had become.

The genesis of this theme can be dated to the beginnings of the industrial revolution in Great Britain. Carlisle, who coined the very term "machine age," warned against it as did many other Victorian authors. In his book *Victorians and the Machine* Herbert L. Sussman found a prejudice against technology in the writings of all the major Victorian authors concerned with social problems, except H. G. Wells and the young Kipling, and in his later
years even the former came to distrust machinery. In America the machine was considered a blight on the landscape by Hawthorne, Melville, Thoreau, and Emerson, to name but a few. As drama however, the focus upon humanity's dehumanization by its own created machines flowered first among the expressionists in Germany.

Most of the technologically oriented themes covered in this study owe little or no debt to any particular style of production or theatrical movement with the exception of expressionism. This theatrical movement attacked almost all aspects of technology, and, specifically, the idea of technological alienation as presented in American drama is associated inextricably with expressionism. Virtually without exception those works that focus upon the dehumanization of humanity in the machine age also choose to use the expressionistic style pioneered by German playwrights only a few years earlier. The concept that humanity is being diminished to something like a cog in its own machinery appears in other plays that are not expressionistic, but only peripherally. Expressionism first emerged on the Continent as an artistic style as early the middle of the nineteenth century. From there it found its way into literary criticism and eventually, just after the turn of the century, the ideas expressed in that criticism coalesced into a theatrical movement. Mardi Valgemaes, in *Accelerated Grimace* (1972), her book on expressionism in American drama in the twenties, defines
the movement this way:

... expressionism attempted to penetrate through life's surface reality and portray man's inner world. In order to present subjective states on the stage, a radical change in dramatic form became necessary (2).

She goes on to list the changes required; a dream-like quality, often nightmarish; compressed syntax, exaggerated characters rather than three-dimensional portraits, and an episodic style with brief scenes.

In Germany, of course, many and varied themes were approached in this style of theater. In Malcolm Pasley's attempt to define German Expressionism, the modern mechanistic world is not even mentioned. The thematic elements he lists emphasize "the assault on the sacred cows of the Wilhemine bourgeoisie from a left-wing internationalist position" and "spiritual regeneration or renewal" (Furness 1). Obviously this covers more ground than mere technological alienation, though it is broad enough to include that. Nevertheless, one finds that in the significant German expressionist works, the precise theme of dehumanization in the modern world is commonplace. Certainly, a number of American expressionist works focus on non-technological themes. Many of O'Neill's plays, such as The Emperor Jones (1920) and The Great God Brown (1926), use expressionistic staging devices; Susan Glaspell's The Verge (1921) utilizes the stage setting to reflect the protagonist's approaching insanity; Paul Green's Johnny Johnson (1937) reflects expressionistic influences without
being overtly anti-technological (although it is certainly anti-war); and Edna St. Vincent Millay's *Aria da Capo* (1920), while indebted to expressionism, never mentions machinery or even the modern world. In this chapter our attention will be focused specifically on those plays that have, as R. S. Furness phrases it in *Expressionism* (1973), "a concern for man crushed by pitiless machinery and ruthless cities" (3). And many plays meet this precise criterion. In American drama the theme of humanity displaced in the machine age is often cited as the defining characteristic of expressionism. In *American Drama between the Wars: A Critical History* (1991), Miller and Frazer define expressionism as

"the portrayal of human figures as helpless insignificant figures who lack individual identity in an impersonal mechanistic world" (34).

As with so many experiments and movements in the theater, tracing German Expressionism's influence on subsequent playwrights and productions in America is not always possible. Often its influence may be seen in stylistic production elements in plays that thematically are completely divorced from the movement. The most common theme, the loss of individuality in the modern age, appears in plays written in a conventional realistic style, such as Robert Sherwood's *The Petrified Forest* (1936). Even more confusingly, sometimes a playwright employed an expressionistic theme while utilizing expressionistic
staging, but then denied being influenced by expressionism. This is the case with the two most famous expressionistic plays produced by the American theater, Eugene O'Neill's *The Hairy Ape* (1922) and Elmer Rice's *The Adding Machine* (1923). Both playwrights are unwilling to admit a debt to the German Expressionists, going so far as to deny having even read them (Valgemae 62-63). At any rate, what the pair probably were denying was not in actuality "influence" but "imitation." Everything the playwright is exposed to may be considered an influence, and O'Neill and Rice had certainly seen *The Cabinet of Dr. Caligari*, an expressionist film. O'Neill saw it in 1921 and Rice even earlier in 1919 or 1920 (Valgemae 34, 64), and both he and Rice, living as they did at the heart of theatrical activity in America, were certainly aware of the experimental German style. More tellingly, both used the word "expressionistic" in notes given during the production process. O'Neill wrote that he hoped Robert Edmond Jones would design "the eight sets, which must be in the Expressionistic method" (Valgemae 31). Rice sent a memorandum to the actor playing Mr. Zero in *The Adding Machine*, saying "in the expressionistic play we subordinate and even discard objective reality and seek to express the character in terms of his own inner life" (Valgemae 63).

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4 Another giant of American Expressionism, John Howard Lawson, also denied any debt to German Expressionism, claiming in the preface to *Processional* that the play's stylistic origins were in American vaudeville. Certainly the American version of Expressionism was much lighter, interpolating more comic elements than the darkly serious Germans.
Whatever their origins, three major plays from the 1920's employ expressionistic devices in their depiction of the dehumanization of the protagonist in the machine age: Eugene O'Neill's *The Hairy Ape* (1922), Elmer Rice's *The Adding Machine* (1923), and Sophie Treadwell's *Machinal* (1928). The most important plays of the anti-technological movement in the theater, these plays deserve careful consideration and detailed analysis.

On Thursday, March 9, 1922, Eugene O'Neill's *The Hairy Ape* opened at the Provincetown Players, America's first dramatic exploration of the theme of humanity disenfranchised in the age of machinery. Yank, O'Neill's protagonist, at the beginning of *The Hairy Ape* considers himself a vital part of his ship and the engines that move her. "I'm the steel," is his refrain, repeated again and again throughout the first half of the play, "It's me makes it move!" (128). He identifies himself with first the powerful steamship and then the construction of a soaring skyscraper, and through them with the entire world of modern machinery. Belonging to the modern age is very important to Yank. Yank's descent from king of the stokehole to being rejected by even a baboon in the zoo is familiar to most students of the modern theater. Less obvious may be O'Neill's use of three metaphors for the modern world that run throughout the play. The first is "the new." Newness in the vocabulary of Yank is a synonym
for greatness. The second, a combination of movement and speed, is "acceleration." The third and most important of these metaphors is "steel." Only near the end of the nineteenth century had technology advanced enough that the lighter, stronger steel could economically be used in place of iron in the construction of ships, thus it became the most modern of all elements. Steel dominates the play. Yank claims kinship with, gives allegiance to, feels betrayed by, and finally completely rejects, steel.

In the beginning of the play Yank is so much a creature of the modern world that he has no use for a time before engines and steel. "Nix on that sailing ship stuff! All dat bull's dead, see?" he says in one of his first speeches (123). He has no time for the old sailor Paddy's description of the clean skin, clear eyes, and straight backs of the men who sailed in sailing ships (126), qualities missing in the crew of this modern ship. Paddy, as the representative of this mythically perfect pre-machine and therefore natural world,\(^5\) becomes the voice of wisdom in the play. In the same speech, memorializing the life aboard clipper ships, where men and the ship and the sea were all one, compared to the hell of the stokehole of a modern steamship, Paddy shows his perspicacity when he first suggests that Yank considers himself an actual part

\(^5\) That O'Neill was intentionally romanticizing the sailing days is proven by the descriptions of the hardships of those days in his other plays, such as *Ile, Where the Cross is Made*, and even *Anna Christie*. 

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of the modern ship with all its disgusting sight and sound pollution; and he, not Yank, first introduces the all important metaphor of steel. 6

"Is it one wid this you'd be, Yank--black smoke from the funnels smudging the sea, smudging the decks--the bloody engines pounding and throbbing and shaking---wid divil a sight of sun or a breath of clean air--choking our lungs wid coal dust--breaking our backs and hearts in the hell of the stokehole--feeding the bloody furnace--feeding our lives along wid the coal, I'm thinking--caged in by steel from a sight of the sky like bloody apes in the Zoo! (with a harsh laugh) Ho-ho, divil mend you! Is it to belong to that you're wishing? Is it a flesh and blood wheel of the engines you'd be (127)?

Paddy sees the stokehole as a steel cage—a metaphor for the modern world often employed by playwrights attacking technology—and prophetically for Yank he compares it to a zoo. According to O'Neill's stage directions, the setting, deliberately designed to be claustrophobic, calls to mind images of a cage. But Yank does not feel trapped; in his mind he belongs. "Dis is home," he tells his fellow workers. "Who is it dat makes dis old tub run? Ain't it us guys? Well den, we belong, don't we? We belong and dey don't" (124-125). He is a man at peace with himself and in control of his universe. Like Jones from The Emperor Jones, Yank is the monarch of all he surveys; the other crewmen live in fear of his displeasure and curry favor with him through gifts of liquor. Instead

6 Indeed it is Paddy and not the debutante Mildred who designates Yank as a "hairy ape." Mildred merely calls him a filthy beast.
of being angry with Paddy's suggestion that he is one with the steamship, Yank embraces it. In answer to Paddy's lyrical paean to the clipper ships, Yank spits out a long monologue that has something of machine-age poetry to it, and possibly even suggests an aria. Movement and speed are glorified at first, as is the new. "Sure I'm part of de engines! Why de hell not! Dey move, don't dey? Dey're speed, ain't dey? Dey smash trou, don't dey? Twenty-five knots an hour! Dat's goin' some! Dat's new stuff!" (127). Then the aria moves into Yank's personal anthem, and climaxes with his identification with steel.

I'm de end! I'm de start! I start somep'n and de woidl moves! It['s]--dat's me!--de new dat's moiderin' de old! I'm de ting in coal dat makes it boin; I'm steam and oil for de engines; I'm de ting in noise dat makes yuh hear it; I'm smoke and express trains and steamers and factory whistles; I'm de ting in gold dat makes it money! And I'm what makes iron into steel! Steel, dat stands for de whole ting! And I'm steel--steel--steel! I'm de muscles in steel, de punch behind it! (As he says this he pounds with his fist against the steel bunks. All the men, roused to a pitch of frenzied self-glorification by his speech, do likewise. There is a deafening metallic roar, through which Yank's voice can be heard bellowing) Slaves, hell! We run de whole woiks. All de rich guys dat tink dey're somep'n, dey ain't nothin'! Dey don't belong. But us guys, we're in de move, we're at de bottom! De whole ting is us (128-129)!

But, as in The Emperor Jones, things quickly go wrong for the protagonist. A bored young woman, Mildred Douglas, from the upper class deck wants to descend into the stokehole for a tour. She, too, has an analogy concerning steel, which is the basis of her family's fortune. "I'm
the waste product of the bessemer process," she says. "I inherit the acquired trait of the by-product, wealth, but none of the energy, none of the strength of the steel that made it" (132). This beautiful and delicate daughter of a millionaire turns out to have a more accurate assessment of her nature than Yank, whose belief in himself and in his belonging to the steel is soon to be tested. When she comes face to face with the profane and coal dust-covered Yank in the heat and horror of the stokehole she faints, crying, "Oh, the filthy beast" (137). Yank tries to dismiss this incident but cannot get it out of his mind. As O'Neill says in his stage direction, Yank "feels insulted in some unknown fashion in the very heart of his pride" (137). He no longer belongs. Whether or not we as audience identify with Yank prior to this scene, he has certainly earned our respect; and when we see how fragile his connection to the steel was, how easily shattered is his sense of belonging, we must suspect that something is wrong in the world he was just lauding. Once he leaves the stokehole, Yank's adventures are less obviously technological, and after the trauma of his experience with the ethereal Mildred he never uses the metaphor of the new again; but the metaphors of acceleration and of steel as embodied in Yank himself still stand for the modern world. Yet even if technology were never mentioned again in the play the theme would already be established and set. Yank has believed in the false gods of technology and machinery,
and in his crisis they have let him down. In a sense this play begins where the same author's *Dynamo* (1928) ends.

The Fifth Avenue sequence, where Yank is surrounded by the well-to-do and wealthy, all of whom ignore him, is a demonstration of the oft repeated expressionistic belief in the connection between technology and capitalism, a connection not made in most non-expressionistic plays condemning science and technology. O'Neill's stage direction for the crowd leaving the church describes a "procession of gaudy marionettes, yet with something of the relentless horror of Frankensteins in their detached, mechanical awareness" (147). When Yank realizes that to the hurrying throng on the rich street he is invisible and unimportant, he calls once again on his anthem, this time somewhat more desperately.

Yuh don't belong, get me! Look at me, why don't youse dare? I belong, dat's me! (Pointing to a skyscraper across the street which is in process of construction--with bravado) See dat building going up dere? See de steel work? Steel, dat's me. Youse guys live on it and tink yuh're somep'n. But I'm in it, see! I'm de hoistin' engine dat makes it go up! I'm it--de inside and bottom of it! Sure! I'm steam and steel and smoke and de rest of it! It moves--speed--twenty-five stories up--and me at de top and bottom--movin' (148)!

But Yank's anthem fails him and he resorts to shouting insults at the affluent crowd ignoring him.

Youse simps don't move. Yuh're only dolls I winds up to see 'em spin. Yuh're de garbage, get me--de leavins--de ashes we dump over de side (148)!

His attempts to physically attack the crowd are
futile; they not only ignore him, but turn their attention to "monkey-fur" displayed in a shop window. Finally, he is beaten by a throng of policemen and arrested for impeding acceleration, i.e., making a man miss his bus.

In jail Yank's first words remind us of the cell's direct connection to the mechanical world. Coming to awareness with a blood-stained bandage on his head, he immediately shakes the bars of his cell and says, "Steel. Dis is de zoo, huh?" (150). Unlike in the stokehole, this time Yank recognizes the cage that contains him, and also realizes that now he is only one among many in the cage, not the leader. Yank's world continues to disintegrate when he finds out from a fellow prisoner that Mildred's father is President of the Steel Trust. Yank's journey from certitude and belonging to displacement is completed here. First, Mildred's disgust destroyed his complacency and sense of belonging in the stokehole, then the wealthy crowd's indifference to and disdain for him threatened his vision of himself as an engine-like power. Finally, the discovery that Mildred's family creates the steel with which he has always identified is a shattering blow.

Sure--her old man--president of de Steel Trust--makes half de steel in de world--steel--where I tought I belonged--drivin' trou--movin'--in dat--to make her--and cage me for her to spit on! (He shakes the bars of his cell until the whole tier trembles. Irritated, protesting exclamations from those awakened or trying to get to sleep) He made dis--dis cage! Steel! It don't belong, dat's what! Cages, cells, locks, bolts, bars--dat's what it means!--holding me down wit him at de top! But I'll drive trou! Fire, dat melts
it! I'll be fire--under de heap--fire dat never goes out--hot as hell--breaking out in de night--
(154).

Having had his basic beliefs betrayed, Yank, if he were a normal man, should now be lethargic, or near comatose; but even in this extreme case his strength buoys him up. If he is not steel, then it is steel that does not belong. Steel is now the oppressor, holding Yank down. But Yank hasn't completely rejected the modern world yet. He still clings to acceleration as a belief--"I'll drive trou"--and he replaces steel with the element that began man's technological domination of his environment, fire. His anger flames and, using his natural human strength, he actually bends technology's steel bars, only to have the jailers respond by dousing him with fire's natural enemy as used in the machine age: water accelerated by a machine through a firehose.

When Yank is released he not only no longer claims kinship with technology, he wants to destroy it.

Blow it offen de oith--steel--all de cages--all de factories, steamers, buildings, jails--de Steel Trust and all that makes it go. . . . knock all de steel in de woild up to de moon. Dat'll fix tings (158).

When the Wobblies forcibly reject him, he in turn rejects their objective of cutting "an hour off the job a day and make me happy!" or to get "a dollar more a day and make me happy!" (159) as pointless goals. Those things are not important to him. Then in a painful interior search he tries to enunciate what is important to him.
Dis ting's in your inside, but it ain't in your belly. Feedin' your face--sinkers and coffee--dat don't touch it. It's way down--at de bottom. Yuh can't grab it, and yuh can't stop it. It moves, and everything moves. It stops and de whole woild stops. Dat's me now--I don't tick, see?--I'm a busted Ingersoll, dat's what. Steel was me, and I owned the woild. Now I ain't steel, and de woild owns me (159).

Yank's degradation is almost through. He hasn't used his analogy with "de new" since his encounter with Mildred in the stokehole; steel has completely betrayed him, and now even the element of acceleration is lost to him--"It stops, and de whole woild stops". His metaphor becomes that most useless of modern appurtenances, a broken watch. "I'm a busted Ingersoll, dat's what". He has nothing left but his life, and, in an ironic reversal, it is not the mechanical world that takes that from him.

Yank no longer belongs in the mechanical world, but by having belonged to it, he has lost his ability to exist in the natural world as well. In the final scene when he stands in front of the gorilla's cage at the zoo, Yank admits this.

I was lookin' at de skyscrapers--steel--and all de ships comin' in, sailin' out, all over the oith--and dey was steel, too. De sun was warm, dey wasn't no clouds, and dere was a breeze blowin'. Sure, it was great stuff. I got it aw right--what Paddy said about dat being de right dope--on'y I couldn't get in it, see? I couldn't belong in dat (161).

But even so he expects his end to come from technology, specifically steel, when he, along with the gorilla he claims kinship to, break out of the zoo. "Knock
'em down and keep bustin' 'em until dey croaks yuh wit a gat--wit steel" (162), he tells the gorilla. However, it is his violation of steel, when he jimmies the lock to free the gorilla, that is his undoing. Freed from its technological constraints, the natural world lashes out--the gorilla crushes Yank, and in an ironic reversal tosses him back into the cage. Yank dies inside that technological construct, unable to belong anywhere, or even to say where he should have been from, where he should by birth have belonged. His last words are an unfinished sentence, "Ladies and gents, step forward and take a slant at de one and only--(his voice weakening)--one and original--Hairy Ape from the de wilds of--"(163). According to O'Neill's stage direction it is only in this death that "perhaps, the Hairy Ape at last belongs" (163).

Even admitting Yank's intellectual limitations, O'Neill's conclusion that only in death can a strong man belong in the modern era seems pessimistic. But something compelling emerges in the case he has made for the impossibility of a man like Yank coming to terms with the modern world once he is forced to confront it. Other playwrights have been known to "stack the deck" to make an anti-technological conclusion work. In Reunion in Vienna Robert Sherwood puts extreme views on the efficacy of science into the mouth of a young scientist, expressly so he can then show those statements to be untrue. One of O'Neill's strengths is that either he can resist the urge
to resort to that kind of thing or else he does not need to. Yank's tragic end seems inevitable from the very beginning in the same sense as the great Greek tragedies have inevitable endings. This will become more obvious when it is compared to the second and third of the most important anti-technological plays of the era, *The Adding Machine* and *Machinal*.

Elmer Rice's *The Adding Machine* takes a very different approach to condemnation of the machine age. Unlike Yank, a kind of demi-god at the beginning of *The Hairy Ape*, Mr. Zero is a non-entity, not even daring to answer his wife's continuous nagging. He has spent the last twenty-five years monotonously adding rows of figures at a desk and lacks the nerve to ask for a raise. Rice uses several devices to tell the audience that it is the modern mechanical world that is Zero's problem. Besides the adding machine of the title, recurring stage directions indicate of the playwright's disgust for the modern world. Mr. Zero's apartment's walls are "papered with sheets of foolscap covered with columns of figures." "An ugly electric light fixture" hangs over the bed "with a single, glaring, naked lamp" (3). In the second scene the repetitive, mechanical nature of Zero's work is emphasized as he records the numbers Daisy calls off to him. Daisy and Zero are slaves to mathematics, that necessary precursor to technology. At the end of this scene the boss appears and tells Mr. Zero that his "efficiency experts
have recommended the installation of adding machines," and then, to be doubly sure the technological reference is not missed, Rice has the boss define an adding machine: "A mechanical device that adds automatically" (13). When this news drives Mr. Zero mad, the set begins to revolve like a merry-go-round (another mechanical device), and the sound of a "mechanical player" is heard.

Unlike O'Neill's The Hairy Ape where every scene has a technological basis, several scenes in Rice's play make no overt references to technology. Age old themes, such as racism and prostitution, are shown still to be part of the supposedly modern world.

In a courtroom scene, Mr. Zero recalls an incident on a crowded subway. This tale of racism played out on the scientifically created subway emphasizes Rice's denial of "progress" in the machine age. Finally, even in such desperate circumstances as being condemned in a court, Mr. Zero is still such a slave to mathematics that numbers intrude into his incoherent and foredoomed self-defense.

The next scene, scene v, was cut from the original 1923 production and not performed until a 1956 revival at the Phoenix Theatre in New York. In it Mr. Zero is in a cage being exhibited like an animal in the zoo, illuminated once again by a "single naked electric light" (25). This brings to mind the cages in The Hairy Ape, especially the one in the final zoo sequence. The metaphor of the metallic cage for modern life is obvious, and a second
parallel may be noted in that Mr. Zero, like Yank, is reduced to something near bestiality. The point is further emphasized when Zero is compared, mostly unfavorably, to a machine by his captor.

Zero: Well, that addin' machine. Was that a square deal after twenty-five years?

The Fixer: Certainly--from any point of view, except a sentimental one. (Looking at his wristwatch.) The machine is quicker, it never makes a mistake, it's always on time. It presents no problem of housing, traffic congestion, water supply, sanitation.

Zero: It costs somethin' to buy them machines, I'll tell you that!

The Fixer: Yes, you're right there. In one respect you have the advantage over the machine--cost of manufacture (33).

Several scenes follow that advance the plot, but do not contain technological references. One of them, the one set in the Elysian Fields, merits description because it contains a description of Rice's concept of what the ideal, i.e., non-technical, life should be.

Shrdlu: (despairingly) I don't know, Mr. Zero. All these people here are so strange, so unlike the good people I've known. They seem to think of nothing but enjoyment or of wasting their time in profitless occupations. Some paint pictures from morning to night, or carve blocks of stone. Others write songs or put words together, day in and day out. Still others do nothing but lie under the trees and look at the sky. There are men who spend all their time reading books and women who think only of adorning themselves. And forever they are telling stories and laughing and singing and drinking and dancing (53).

Mr. Zero, as Rice's representative of the machine age bourgeoisie, cannot stand the thought of even being near
people living in this depraved manner and leaves as quickly as he can.

The final scene of the play is introduced by the clicking of an adding machine. When the curtain rises we see Zero is operating the mechanism. When two apparently celestial workers appear and tell him to stop, he cannot. He must be physically removed "with enormous effort" from the machine (55). When asked a question, Zero cannot help himself, numbers begin to pour from him; he is still a slave to mathematics, and he points proudly to the maze of paper his meaningless work has created. Lieutenant Charles, one of the workers, tells Zero that this is just "a kind of repair and service station" and now Zero has to go back (57).

At the end of the play Rice demonstrates what Frank Durham calls his "tendency toward direct and explicit polemics that was to mar some of his later plays" (51). Zero's soul, which has gone through at least fifty thousand reincarnations (since "The mark of the slave was on you from the start"), has continually gotten worse. Zero was once a slave building the pyramids being whipped by the foreman, but according to Rice it was better than his modern bondage. Then he was a Roman galley slave, "again the whip," but again better than his current incarnation. Then a serf—"a lump of clay digging up other lumps of clay. You wore an iron collar then, white ones hadn't been invented." Still, according to Rice, this was better than the modern Zero (58-59).
In a final ironic twist the reborn Zero will grow up to work another adding machine.

Charles: Yes. But not one of these antiquated adding machines. It will be a superb, superhyper-adding machine, as far from this old piece of junk as you are from God (60).

And this incredible machine, which will record automatically the produce of all the miners in a mine, in a description suggestive of the grotesque limb exaggerations in Georg Kaiser's *Gas I*, will be worked "without any human effort except the slight pressure of the great toe of your right foot."

Zero: (In breathless, round-eyed wonder) Say, that'll be some machine, won't it?

Charles: Some machine is right. It will be the culmination of human effort--the final triumph of the evolutionary process. For millions of years the nebulous gases swirled in space. For more millions of years the gases cooled and then through inconceivable ages they hardened into rocks. And then came life. Floating green things on the waters that covered the earth. More millions of years and a step upward--an animate organism in the ancient slime. And so step by step, down through the ages--a gain here, a gain there--the mollusk, the fish, the reptile, then mammal, man! And all so you might sit in the gallery of a coal mine and operate the superhyper-adding machine with the great toe of your right foot!

Zero: Well, then--I'm not so bad after all.

Charles: You're a failure, Zero, a failure. A waste product. A slave to a contraption of steel and iron. The animal's instincts, but not his strength and skill. The animal's appetites, but not his unashamed indulgence of them. True, you move and eat and digest and excrete and reproduce. But any microscopic organism can do as much (60-61).
Mr. Zero has been reduced to a machine. Indeed he is almost certainly the adding machine of the title. He sits and adds figures, using no conscious thought, a definition of an adding machine, "a mechanical device that adds automatically" (13). Then, in the fifth scene, Zero is called a machine, just not a very good one. His only advantage over a created mechanism is in cost of manufacture. All of this fits well with the theme, humanity reduced by its machines to something near a machine. Rice then creates a depiction of man's history which includes suffering and subjugation by recounting the various lives Mr. Zero has endured. As bad as each of these are, the modern machine age is presented as worse, culminating as it does in the ultimate eradication of the human spirit. A machine such as Zero has become cannot think, cannot feel, cannot suffer, cannot get angry, and hence cannot even revolt against his subjugation, a privilege that his previous lives did have. Before we can consider this argument or compare Zero to Yank we need to examine a third play which considered the same theme and chose the same expressionistic style.

Treadwell's Machinal, retrieved form obscurity by a successful revival at the Royal National Theatre in London in 1993, premiered in New York in 1928, receiving good, often glowing, reviews from the critics. Selected by Burns Mantle for his Best Plays series, it achieved a respectable run of 91 performances.
Besides the title *Machinal*, which means mechanical or automatic in French, numerous instances in the play justify its inclusion in this study. However, alienation in the modern mechanical world is not its only theme. Indeed, despite the generally accepted belief in that as the theme, Sophie Treadwell's play is concerned at least as much with the male-dominated society that forces her heroine to submit to its rules, to its caresses, and to its politics. For Treadwell the modern technological world and male-dominated society seem to be one and the same.

*Machinal* begins with that inimitable mechanical clatter that was the sound of the modern business office in the era preceding computers. The brief first scene introduces a number of motifs which run throughout the play. Treadwell brings on the protagonist who is surrounded by office workers and machines.

Of these characters, the YOUNG WOMAN, going any day to any business. Ordinary. The confusion of her own inner thoughts, emotions, desires, dreams cuts her off from an actual adjustment to the routine of work. She gets through this routine with a very small surface of her consciousness. She is not homely and she is not pretty. She is preoccupied with herself--with her person (1).

Her co-workers reinforce this judgment. The Young Woman is late, a sin against the clock that rules the lives of the office. The Adding Clerk tells us that "She doesn't belong in an office," and the Stenographer adds that most damning of traits in the machine world, "she's inefficient"
Besides these obvious signs of non-adaptability to the modern world, the Young Woman cannot stand to ride the subway, with "all those bodies pressing" (6). She also cannot operate her typewriter which she refers to vaguely as a machine. "My machine's out of order" (9), she says and of course she cannot fix it, which is symbolic of humanity's dependence on machines that more and more often have to be fixed by somebody else. The telephone operator's frantic and unavailing efforts to get a number, combined with her platitudinal speech when she does make contact, signify the difficulties of communication in the machine age. In the scene's final speech, an interior monologue, the Young Woman reiterates many of these considerations. Her consideration of possible marriage vows is blended with "subway--air--pressing--bodies pressing" and "late--alarm clock--alarm clock--alarm clock--hurry--job" (11). This inability to let go of the modern world enough to even think about, much less find, love is what ties Treadwell's two themes together.

The second scene also opens with mechanical sounds, this time a buzzer and a radio. Treadwell here develops the motif of male domination—the societal training given to females to force them to obey. The same is true of the next scene, a honeymoon, but this is blended with the technological discipline in the Husband's wish, "All my life I've wanted a Swiss watch that I bought right there" (25). Even on his honeymoon he cannot escape from the
world regimented by the clock, and immediately after that comment he takes out his watch and begins timing his new wife's undressing.

Episode four, subtitled Maternal, returns to a blending of the themes of oppressed womanhood and technological dehumanization. The hospital is presented as a giant machine dedicated to "Progress!" which is represented by a riveting machine constantly clattering outside the Young Woman's window (27). The Young Woman is forced to follow the hospital's rules, her symptoms, "gagging," rewritten to fit the hospital's inflexible codes, "nausea" (29). At the same time the patriarchal nature of the facility is presented in the god-like behavior of the Doctor. The Young Woman delivers another interior monologue. This one is concerned with the pain inherent in the birthing process, but also contains many references to various male authority figures, Doctor, Husband, and God, none of whom offer comfort to her. Interestingly, the Young Woman, like Mr. Zero in his defense scene, cannot keep away from numbers or mathematics. The mention of eight puppies sends her into a paroxysm of addition and counting.

Episodes five and six are presented as interludes away from the domineering patriarch, and therefore, in Treadwell's world, away from technology. Five is set in a Speakeasy. Early in the scene, before Young Woman falls in love, a few technological intrusions occur--references to
being late indicating a need to still live by the clock, and discussion of using "the telegraph gag" to fool a wife. Once the Young Woman falls for the First Man, the speakeasy quickly becomes a haven from both domination and technology. These episodes are presented as brief interludes of compassion and caring in a world where those qualities have been made valueless by technology. At the very end of episode six, set in the Man's apartment, a technological intrusion, an electric street light, recalls the Young Woman to a realization of the time (49), and forces her back into her life with the Husband and the machine age.

Episode seven, Domestic, discusses the problems of communication in the modern world. The Husband and the Young Woman read competing headlines to each other, neither hearing the other. The Husband saves his true enthusiasm for conversations on the telephone. In a final irony, the husband repeats his wish for a Swiss Watch right before the blackout in which the Young Woman bludgeons him to death, thereby making time totally irrelevant to him.

Episode eight, "The Law", is less concerned with the mechanical world than that of patriarchal oppression. But in the ninth or last episode, entitled "A Machine", the two are blended one final time. The Young Woman is now on death row and the sound of a Negro singing a spiritual wars with the sound of an aeroplane passing overhead. Patriarchal society, in the form of the priest and the two
jailers, continues to dominate her, humiliating her by forcibly shaving patches of her hair off for the electrodes of the electric chair, which is the most obvious representation of the machine of the episode's title, although that title almost certainly also refers to the entire complex of the modern world. Even her death must be by the modern world's timetable as the reporters discuss that it is now the right time (82). Her final cry for "Somebody! Somebody--" (83) is cut off by the jolt of electricity as "the machine" kills her.

From the beginning we are given little hope for the Young Woman, but a moment happens in this scene in which the whole modern mechanical universe is called unexpectedly into question. The First Reporter asks, "Suppose the machine shouldn't work!" In this case the machine is a direct reference to the electric chair, but undoubtedly it is one that resonates in several ways. If the machinery of modern society discriminates unfairly, then this young woman is being martyred, not executed. More frighteningly for representatives of that society, if the machine failed, chaos would ensue. The Second Reporter quickly reassures the First. "It'll work--It always works!" The Third Reporter does not even like the possibility to be discussed in this of all moments and from then until the end of the scene repeats "Hush!" (82-83).

First, we should consider the strengths of each of these plays individually, then compare the three. Yank as
first presented in *The Hairy Ape* is a demi-god, absolute ruler of his realm and an extraordinary physical specimen. Therefore his inability to fit into the modern world and his consequent downfall resonate far beyond the fate of one human. If this tower of strength and determination cannot "belong" to the modern world, what hope do lesser mortals have?

Moreover, Yank identifies with the best of the modern world as it existed in the 1920's, steel and acceleration. Since these strong and attractive elements were not enough to save him, the very essence of the machine age is called into question. If a man like Yank cannot be included in the brave new world being created by steel and acceleration, the liberatory promise of machinery must indeed be considered illusory.

*The Adding Machine* takes another approach. Mr. Zero is not the strong character Yank is. He represents the opposite end of the herd of humanity, the essentially powerless. In essence Rice is returning to the biblical injunction to consider "the least of these." Zero has never been important, and never had a life that was better than mere drudgery. However, in all previous ages, that was the expected life. In this play Rice reacts to the claims of modern progress to have bettered the life of the common man by delineating the life of a common man and then claiming that man's current life is worse than any previous life he might have lived.
Treadwell objects to what she considers the inextricable linking of the modern mechanical world with patriarchal repression of women. Like Rice she presents a weak protagonist incapable of bettering herself as a means of showing that rewards of the modern age were not equally applied to everyone. Every element of technology in the play is inimical to the Young Woman and, equally, every element is under the control of men. In Treadwell's world the modern machine age means merely an extension of the historical domination of women by the male half of society. The Young Woman is confused and frustrated by modern machinery and our crowded mechanical world. However, in those scenes when the terror of enforced co-habitation with her patriarchal husband is removed, the fear of technology is also absent. In the end Treadwell's work makes an even stronger indictment of that patriarchal society than of the machine one.

All three plays remain masterful achievements, but The Hairy Ape presents the most complex and compelling depiction of humanity's vulnerability in the machine age. Rice and Treadwell show the plight of the weakest of our species, setting themselves a more difficult task, since it is easy to assume that either of those characters would have difficulty in any age. The continuing productions of The Adding Machine, while at least partially due to its clever theatricality, demonstrates that this vitriolic attack on the machine age still finds resonance among audiences.
All three of these playwrights would return to the theme of technology, though generally not as completely nor as successfully. Treadwell referred to it least in her later plays, though in Hope for a Harvest (1933) some by-play occurs comparing life working in that ubiquitous symbol of modern times, the filling station, with a life closer to nature, raising crops. Rice tried to cover very much the same territory in The Subway (1929) as in The Adding Machine. A filing clerk, frustrated by the modern world, desperately throws herself in front of a subway train. O'Neill, of all major American playwrights, was most concerned with technology. Dehumanization in the modern world, while not the major theme, emerges as a significant factor in the sequel to A Touch of the Poet, More Stately Mansions (both 1939). The young poet Simon, a Thoreau-like figure, is perfectly happy living in the woods apart from the modern world as it existed in the late nineteenth century. Pushed by his ambitious wife, Sara, he moves into the modern world of cotton mill factories, shipping, railroads, and banking. "Nothing is natural (351)," says his cold brother Joel, and Simon comes to believe it. Only by giving up all of his success in the modern world and retreating with his family to the farm where he once lived does Simon find contentment. Nevertheless, O'Neill makes it clear that Simon's retreat from the modern world will be bought at the expense of his wife Sara's "digging praties [Irish slang for potatoes] in
the field, with my bare feet in the earth like a poor ignorant bog-trotter" (556), and there are ominous indications that none of his sons will stay out of the modern rat-race.

Many other American playwrights were concerned with dehumanization in the machine age, although their plays had less significance than those discussed above. John Dos Passos, in one of his rare attempts at theater, wrote The Garbage Man (1925, staged under the title, The Moon is a Gong), which plays out a love story beset by the ills of modern machine America. Edmund Wilson published two satirical plays that reflected similar concerns: Cronkhite's Clocks (1926), has humanity's soul destroyed by rigid adherence to clocks and mechanization, while Beautiful Old Things (1930), depicts people who live in stone houses resisting the "civilization" of people who live in glass houses. J. P. McEvoy's God Loves Us (1926) includes a by now familiar scene in an office where individuality has been vanquished. Francis Edwards Faragoh's Pinwheel (1927) features an office dominated by a giant typewriter, reminiscent of the giant adding machine used in the production of Rice's The Adding Machine, and, according to the author, shows "the tangible essence of the metropolis" (3). Paul Sifton, who wrote his later plays in conjunction with his wife Claire, used an expressionistic device to dramatize the dehumanizing effects of working on an automotive assembly line in The Belt (1927).
Coming from the "left-wing" as it did, it is not surprising that expressionism as a movement reviled capitalism as much as it did the mechanical world. Quite often the two were depicted as interlocked and interchangeable. But that is not always the case. Many left-wing plays, taking their cue from the communist party, excoriated capitalism while celebrating modern technology. The plays we have chosen to discuss at length— *The Hairy Ape*, *The Adding Machine*, and *Machinal*— focus on the modern mechanism-dominated world as the problem, with occasional forays against capitalism. Some plays did the opposite. Ironically, two of the most financially successful at the time, attacked capitalism, with an occasional assault on technology and its dehumanizing consequences. George S. Kaufman and Marc Connelly's *Beggar on Horseback* (1924) was primarily an indictment of the money-mad world of the twenties. Alexander Woollcott, in the preface to the published play, called it "a relieving antidote to the worship of material prosperity" (11). It also includes a scene in which the protagonist, Neil, is sentenced to work in an "Art Factory" churning out what amounts to pre-composed, machine age music. Channing Pollock's *Mr. Moneypenny* (1928), opening just after the more serious *Machinal*, reflects another attempt by commercial Broadway to profit via portraying expressionism's disgust with profit making. Pollack, an ardent socialist, primarily is
attacking capitalism, but he also ridicules the mechanical universe of business. Workers in the office are automatons, chanting "Millions--Billions!" in unison (32), and a character chasing endlessly after a dollar bill while running on a treadmill is trapped in ticker-tape in a scene reminiscent of the last scene of The Adding Machine. John Howard Lawson's Processional (1925), although a significant drama in depicting the social and political thought of the time, is less pertinent to this study because Lawson's attack on capital overshadows the few references to technology.

Michael Gold, editor of the communistic periodical The New Masses, predictably attacks capitalism in his play Hoboken Blues (1928), but primarily devotes his attention to American racism. The dehumanization of individuals comes less from machines than from the subjugation of others by those in control. Still, within this theme room exists for Gold to "objectify the protagonist's inner state and his hatred of modern industrialism" (Valgema 88). The last three playwrights, Pollock, Lawson, and Gold, unlike O'Neill, Rice, and Treadwell, wrote virtually only from the socialistic view---reflecting the strong leftist perspective of the intelligentsia of the era.

Presumably the plays of the agit-prop or worker's theater would focus on the theme of dehumanization in the machine age. However, while it is difficult to be sure with so many of their plays unpublished, usually their
attacks were reserved for capitalism. Technology, embraced so vigorously by the Soviet Union in its various five-year plans, generally party, was not presented by leftist writers as a villain. When Paul Sifton dared to do so, in the previously mentioned The Belt, he was excoriated for not following the party line (Levine 55).

Maxwell Anderson does not usually deal with the theme of technology either for or against. Most of his plays have historical settings that mitigate against concern with modern technology. But Winterset (1935), set under the looming shadow of that technological symbol of the modern city, a giant bridge, is pertinent to our study, although the author's major concerns are less with machines than with urban corruption. Anderson concentrates not on machinery, but greed and injustice.

Anderson does depict humanity adrift in the age of machinery in one of his plays. In the prologue to Key Largo (1939), a group of Americans in the Spanish Civil War of the nineteen-thirties find out by accident that they are to be abandoned while holding a hill to cover their allies' retreat. One of the men, King, contends that this betrayal gives the group the right to run away. But another, Victor, refuses and gives this answer when asked why:

Victor: Because the sky's empty, just as you said. The scientists have been over it with a fine-tooth comb and a telescope, and the verdict is, No God, nothing there. Empty and sterilized, like a boiled test-tube. But if there's no God
there
and nothing inside me I have any respect for
then I'm done. Then I don't live, and I
couldn't.
So I stay here to keep whatever it is
alive that's alive inside me (20).

If science has proved that Victor's self-hood is all
the spirituality that exists, then he has decided it is
vital to treat the little dignity he retains as even more
important than ever. King tries to counter this argument
by diminishing Victor's importance even more.

King: It's not only the sky
that's empty, remember. They've looked us
through pretty well
and men and horses are pure chemistry
so far as anybody knows. The soul--
or psyche--has the same composition
as eggs and butter (20).

Victor rejects this. The modern scientific world has
reduced him from lord of all creation to just a man, but
that man knows "what I live by, and I'll die by it" (21).
King tries again. "--Long ago / men found out the sky was
empty; it follows / that men are a silly accident,
meaningless . . ." (22). Despite the decrease in
humanity's importance implicit in their discussion,
Victor's answer encapsulates his refusal to let scientific
knowledge rule his life. "If I went with you / I'd never
know whether the race was turning / down again, to the
dinosaurs--this way / I keep my faith" (23). Science may
have diminished Victor from the position of prized creation
of the gods to just another animal, but it certainly hasn't
made him less of a man.
In other plays characters noted this same diminishment of man's place in the universe. Jerry Wilenski, the protagonist of Clifford Odets' *Clash by Night* (1941), finds cause for reflection in it, and a certain acceptance of that less significant place in the universe. "I was thinking of the stars an' how far away they are, an' that you feel pretty small by comparison. Even when you're dead, the stars go on--"(4). His wife Mae disagrees, "I guess I'm hold-over from another century! Didn't there used to be big, comfortable men? Or was it a dream? Today they're little and nervous, sparrows" (78). Constantly the characters of this play remember a better day yesterday, their childhood, or a little schoolhouse where the teacher told you what to do. But their tragic end, when it comes, comes not from some new technological device of the modern world, but from the oldest conflict known to humanity, the eternal love triangle.

Robert Sherwood's *The Petrified Forest* (1936), a straightforward melodrama that owes nothing stylistically to expressionism, does share some of the same thematic concerns. In it Sherwood, referring to T. S. Eliot's famous work, has harsh words for humanity's so-called mastery of the planet:

_Squier_: Yes-brains without purpose. Noise without sound. Shape without substance. Have you ever read *The Hollow Men*? (She shakes her head.) Don't. It's discouraging, because it's true. It refers to the intellectuals, who thought they'd conquered Nature. They dammed it up, and used its waters to irrigate the
wastelands. They built streamlined monstrosities to penetrate its resistance. They wrapped it up in cellophane and sold it to drugstores. They were so certain they had it subdued. And now, do you realize what it is that is causing world chaos?

Gabby: No.

Squier: Well. I'm probably the only living person who can tell you... It's nature hitting back. Not just with the old weapons—floods; plagues, locusts. We can neutralize them. She's fighting back with strange instruments called neuroses. She's deliberately afflicting mankind with the jitters. Nature is proving that she can't be beaten—not by the likes of us. She's taking the world away from intellectuals and giving it back to the apes... Forgive me, Gabrielle... I can't tell you what luxury it is to have some one to talk to. But don't listen to me. I was born in 1901, the year Victoria died. I was just too late for the great War—and too soon for the revolution. You're a war baby. You may be an entirely different species, for all I know. You can easily be one of Nature's own children, and therefore able to understand her, and laugh at her—or enjoy her—depending on how you feel (62-63).

Squier obviously feels alienated and has no respect for technology and its achievements, possibly even blaming technology for his problems. The playwright, however, has the young lady he is talking to, Gabby, give him a pretty direct answer, "You know—you talk like a goddamn fool" (63).

Squier eventually decides, like the title character in Hasenclever's The Son, that the answer is for the older generation to get out of the way of the younger generation. But unlike the protagonist of The Son, it is himself and not someone else he removes.
Certain plays, from either their thematic content or their reputation, might be expected to concern themselves with dehumanization. On examination many of these turn out not to be concerned with dehumanization, or at least not as caused by technology or the machine age. Of course one can blame everything in the modern world on technology, but I am trying to restrict myself not to what has been commonly assumed, but what actually exists in the plays. John Howard Lawson's *Processional* has already been mentioned as one such. Another is E. E. Cummings' play *Him* (1927), which would seem to be a natural for this list. It is, and was intended by its author to be, entirely expressionistic. That, added to Cummings' well known dislike of science, "an abstraction that he associates with all that is wrong with the modern world and that he regards as the epitome of unfeeling reason" (Kennedy 76), should add up to an indictment of the machine age. Cummings, however, was more attracted to the lighter, more comic, nature of American Expressionism and broadcast his intentionally nonsensical attacks shotgun style at every target. It is true that the play contains such comments as "inside we may be noisome, squirming garbage cans breeding billions upon trillions of repulsive wormlike omniverous germs of cinderella: that's what scientists have just discovered" (41) and "Radium will conquer cinderella!" (42), but they are buried beneath mountains of attacks on such things as censorship, marriage, and Eugene O'Neill's *The Great God Brown*.
Sometimes it may be important to look at the themes omitted for treatment by an author. A detailed reading of the Pulitzer-prize winning plays from the first, Why Marry? (1917) until There Shall be No Night (1940) reveals not a single play that makes technological alienation even a secondary theme, although objections may emerge at times to problems of the modern, mechanized world, they are casual and quickly passed over. In Hell-bent fer Heaven the grandfather points out that the dam, a modern intrusion his family had never wanted, had been serendipitously destroyed and therefore everything had turned out well, "... the Lord's been on our side in every pop--even to blowin' up that dadburned dam that hadn't never orter been put in" (273). A brief sequence in Of Thee I Sing satirizes the way the personal human touch has been replaced by machines when President Wintergreen opens various new businesses and facilities by merely pushing buttons on an electric control panel presented to him each day (724). Knowing the theme of 1936-37's winner, Kaufman and Hart's You Can't Take it With You, one would probably expect some criticisms of the machine age. But Kaufman and Hart, like Maxwell Anderson in Winterset, place the blame not on machines, but squarely on the individual. "The world's not so crazy. It's just the people in it," Grandpa, as the voice of wisdom in the play, says (956). While he does object to a life run by the clock, and having the validity of that life measured in dollar signs, he mentions inventions in a positive light.
"There's always people that like to work--you can't stop them. Inventions, and fly the ocean. There're always people who go down to Wall Street, too--because they like it" (980). Thornton Wilder's *Our Town*, with its celebration of the warm, leisurely paced life of the small town, might be expected to condemn the fast-paced rat-race symptomatic of the modern world and the large metropolis by way of contrast, but little of condemnation for anything occurs in this remarkably gentle play. The worst that Wilder can say of the modern world is,

And now they're bringing in those auto-mo-biles, the best thing you can do is stay home. I can remember when a dog could lie down all day in the middle of Main Street and nothing would come and disturb him (1010).

Since this is followed a few pages later with descriptions of "the Sunday afternoon drives in the Ford" (1017) in an image of bucolic married life, even that can't be taken too seriously. A response to technology can be found in Pulitzer-prize winning plays such as Sherwood's *Idiot's Delight* and *There Shall be No Night*, but, as noted above, what censure these plays have for technology is bound up in technology's usage in war.

The technology of war, the ultimate dehumanization, was not as popular a subject as might be imagined. *Johnny Johnson* (1937), a fervent anti-war play, makes almost no mention of the new technologies that made mass murder so much easier. There is a "Song of the Cannons" and both gas warfare and machine guns are mentioned, but it is those in
control of the war effort who are satirized here, not the technology. Much the same happens elsewhere in the drama. In Robert Sherwood's *Idiots Delight* (1936) bombers and falling bombs are mentioned, but odium is reserved for those who order the bombers to fly, and those who profit from their manufacture. In Lillian Hellman's *Watch on the Rhine* (1941) Kurt remembers technology being only on the side of the oppressors:

Kurt: Once in Spain I waited for two days until the planes would exhaust themselves. I think then why must our side fight always with naked hands (283).

Other brief mentions reveal that Americans were aware of the horrors that had been, and sometimes were being, visited on other populations. Penny's war play in *You Can't Take It With You* (1937) is called *Gas*. Joe's brother Frank says facetiously at one point in *Golden Boy* (1937) that "... spring on the way. Flowers soon budding, birds twittering---south wind ... Cannons, bombs, and airplane raids!" (250). But the most graphic mention of the horrors technology had created for modern warfare are in Sherwood's *There Shall Be No Night* (1940). Bombs and bombers, mines, submarines, machine guns, gas, and trench warfare are all part of the characters casual vocabulary. At one point, Kaarlo Valkonnen, a Nobel prize-winning scientist, says, "I can press the trigger of a machine-gun just as well as Eric" (62). But he does not believe that technology is the answer to the enemy's technology:
Frank: [talking about Valkonen's book] He says you can't resist evil by building Maginot Lines and big navies. The true defenses of man are in man, himself . . . (160).

If we are willing to follow the lead of the expressionists as defined by Furness and consider the "ruthless city" as a machine, one Pulitzer-prize winning play would fit in--Elmer Rice's *Street Scene*, with its realistic portrayal of life in the big city. The mechanical nature of the city is emphasized in the repairs being done to the street in front of the central apartment building, in the destruction of the neighboring building, and especially in the sounds of the city.

Throughout the act and, indeed, throughout the play, there is constant noise. The noises of the city rise, fall, intermingle: the distant roar of "L" trains, automobile sirens, and the whistles of boats on the river; the rattle of trucks and the indeterminate clanking of metals; fire-engines, ambulances, musical instruments, a radio, dogs barking and human voices calling, quarrelling, and screaming with laughter. The noises are subdued and in the background, but they never wholly cease (312).

This would also allow us to consider Clifford Odets' *Awake and Sing!* with its portrait of life in a Jewish family trapped in depression-era New York. But, actually, it is the human dimension of the city that Mr. Rice finds fascinating and explores in *Street Scene*, and he even allows one of his characters to brag about his part in the creation of technology. "Looka wot Eetalian do for America--'e build bridge, 'e build railroad, 'e build subway, 'e dig sewer. Wit'out Eetalian, ees no America"
Odets tends to be positive about technology, seeing it as an amelioration of the dingy, drab, constricted city life. Technology such as Jacob's prized collection of opera records and record player and the sound of an overhead airplane are valued. At the climax of the play Ralph is excited to hear the night plane his grandfather Jacob always loved to hear. "There... hear him? The air mail off to Boston. Day or night, he flies away, a job to do. That's us, and it's no time to die" (94). In later plays Odets would be less optimistic about the modern technological world. In *Paradise Lost*, when Pearl talks about "the depression of the modern man's spirit, of his inability to live a full and human life" (199), capitalism in the main is the problem; but later in the play a character admits it might be something else, "Everyone's got notions--why, millions are homeless and unhappy in America today. Some say the machines" (229). The context, however, makes it clear that Odets does not believe that. Still, one of the first lines in *Golden Boy* is, "It's the twentieth century, Tom--no more miracles" (239). And in *Rocket to the Moon* the protagonist uses one of the standard tag lines of the dehumanization movement, "... we're two machines counting up the petty cash" (401). Also, later in the play, this exchange takes place.

Stark: ... She's a mere mechanism to you, for a night--

Wax: Certainly, I'm a mechanical man in a mechanical era (410)!

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Despite these lines Odets' overall appreciation of technology comes through. Rocket to the Moon starts with Stark, the protagonist, yearning for a new x-ray machine, presumably an obsession to sympathize with (346); also, a trip to the Planetarium is offered as enticement (388), and a character, to indicate his wisdom, says, "My girl, I've studied you like a scientist" (414). In sum, Odets cannot be said to be an enemy of technology nor of its effect on the people around it.

Missing from the list of those interested in technological alienation are two of the best comic writers of the era. While The Adding Machine, Beggar on Horseback, and Mr. Moneypenny demonstrate that the theme of dehumanization could be approached comedically, S. N. Behrman and Philip Barry eschewed it. Both wrote plays containing references to technology, but neither emphasized the theme of technological alienation. George Kelly, whose works are both serious and comic, often included references to the technology of the time, but he chose not to explore dehumanization in the machine age. Spending too much time on authors who didn't contribute to our theme may be counter-productive, but it is important to note that many of the major authors of the time referred to technology within their works without making it the scapegoat for the modern era's problems.
Of more interest might be those plays which referred to a malaise inherent in the modern world even when they do not draw a direct connection to technology. When inhabitants of the machine age complain in general of the problems of the age it seems fair to presume that the technology so prevalent in the age is at least partially responsible. Odets displayed a certain partiality for technology, but still reflected a dissatisfaction on the part of his characters with the modern world, a world that in their eyes has lost something important, even if they cannot describe exactly what that something is. Pike's comment about "the depression of the modern man's spirit" in *Paradise Lost* quoted above comes to mind. As mentioned before, in *Clash by Night* Mae and Jerry both remember better times. Peggy, a young girl in love in that play, gives voice to this discontent:

Peggy: Was it a dream? I had some sort of dream when I was a child . . . I remember words like "nobility, generosity, courage." . . . (Suddenly) I want to admire something, someone---! (122-23)

Maxwell Anderson reflects this generalized distaste for the modern age in both *Winterset* and *Key Largo*. Carr, the friend of Mio, the protagonist in *Winterset*, characterizes the age this way:

Carr: In fact, at the moment I don't think of anything you can't buy, including life, honor, virtue, glory, public office, conjugal affection and all kinds of justice . . . (29)

Besides his specific objections to science mentioned above, King, the protagonist of *Key Largo*, makes the general statement, "there's little worth doing in the world we live
in now--(54)." Alegre, the woman he loves, calls the era "this age of dying fires (89)." Similar references can be found in Robert Sherwood's *The Petrified Forest* and *Idiot's Delight*, Lillian Hellman's *Watch on the Rhine*, O'Neill's *The Iceman Cometh* (1940), S. N. Behrman's *No Time for Comedy*, and Tennessee Williams' *Battle of Angels* (1940). The connection to technology may be questioned, however, when it is realized that all of the above mentioned plays were written in the looming shadow of World War II.

What conclusions can be drawn from these plays? The dramatic theme of dehumanization caused by the modern machine age is unusual in several ways. First, it had a limited life as the central theme in plays. The first American play to take this as its major theme was *The Hairy Ape* in 1922 and the last was *Machinal* in 1928. Including lesser works, such as Edmund Wilson's *Beautiful Old Things*, the date extends to 1930. Perhaps by the thirties this theme had become so accepted that it simply became part of the background in plays ostensibly devoted to other concerns. When Robert Sherwood approached the theme of dehumanization in the thirties in *The Petrified Forest* it was no longer the modern world of technology that was at fault, but the older generation, represented by Squier, the protagonist, who were reluctant to relinquish their values to the new age of scientific progress. As early as 1927, when Lajos Egri's *Rapid Transit*, an expressionistic indictment of the modern machine world as dehumanizing, was
produced the result was, critically at least, a large ho-
hum. "If Ernst Toller had never been heard of . . . if, in
short, the expressionistic 'Rapid Transit' . . . had come
over the horizon several years ago, there's no telling how
remarkable it might have seemed," was the pronouncement of
the New York Herald Tribune reviewer (Valgema 51).
Critics might still praise a brilliant expressionistic
effort, like Treadwell's Machinal, especially if a second
theme such as the patriarchal suppression of women were
included, but overall the vogue for expressionism was past;
and the theme of dehumanization had been linked so firmly
to that style that it too was considered passe'. Which
brings us to the second thing unusual about this theme--in
its direct form it was most often linked to a specific
style of production, and that style was not realism in any
of its forms. It is possible to trace many themes in the
era and never contemplate plays that are not in the
"artistic style defined as realism, identified in America
and elsewhere as the dominant dramatic form for the last
hundred years" (Miller and Fraser 31).

The concept of dehumanization was treated in three
different manners in the drama of the era. First, and
earliest, were the direct attacks, plays that were
presented in expressionistic form and took dehumanization
in the machine age as their primary theme, such as The
Hairy Ape, The Adding Machine, and Machinal. Second were
the plays that considered this theme within some other

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context, such as *The Petrified Forest* and *Key Largo*. Third were the plays which never indicated a connection between technology and their concern about the modern world but criticized the entire age and by implication the technology that created the age, such as *Clash by Night* and *Winterset*.

All three forms had in common a dissatisfaction with an age that supposedly was the best yet known to humanity. Technology in these plays had, in general, been judged and found to be, at best, less than had been claimed, and often actually destructive to humanity's spiritual values.
Chapter 6: TECHNOLOGY AS RELIGION

The God of this world is in the machine, not out of it.

--George Meredith
--The Ordeal of Richard Feverel

In a hundred years man will put
His finger on life itself, and then
He will live as long as he likes.

--Maxwell Anderson
--Winterset

Religion has apparently always been an integral part of humanity since it appears in the oldest extant fragments of knowledge from antiquity. Certainly the earliest theatrical events we know of were associated with religions, first in Egypt and then, in a more direct line of descent for western theater, in Greece. Humans, it appears, must worship something, must consider something worthy of awe, must feel that some power exists that is greater than we are. Many things have excited this awe in the past, from the frightening and impressive power of the sun to the cold beauty of the moon, from the verdant fertility of the fields to the fecund fertility of the mother figure, and innumerable objects and concepts in-between. In the modern machine age, however, a painful dichotomy perplexed humanity: faith in something greater than mere mortals seemed more important than ever in the midst of the confusing, potentially dehumanizing mechanical universe, but that same mechanized cosmos kept delivering scientific evidence that nothing mystical existed, that nothing was worthy of worship. Under those circumstances
it is not surprising that some individuals replaced the worship of absentee gods with the worship only too frighteningly present machines. After all, gods and machines shared many traits in common. Both were extraordinarily powerful, awe-inspiring, and both were beyond the comprehension of all but a few specially appointed servants, priests in one case, scientists in the other. In addition, both were capable of giving gifts of almost unlimited bounty, or of killing without warning or mercy.

Scientific skepticism, the tendency to deny religion, or at least to denigrate it, is well reflected in the dramatic literature of the era. Emil, a young student in Robert Sherwood's *Reunion in Vienna* (1931), harangues his audience with his perception of his scientist-teacher's beliefs:

He teaches us that the forward progress of man must be regulated by the statistician's inexorable curve, and not by the encyclicals of priests or the ukases of kings. He teaches us to banish all false fear of God--to know Him, and recognize Him only as a measurable force in cosmic technology (765).

Maxwell Anderson goes even further in *Key Largo* (1939). Here God is not even a measurable force; He is not a force at all. Victor and King are debating the morality of abandoning a position that is sure to be overrun by an enemy force since their own high command has deceived and deserted them, when the following exchange takes place:

King: Then why do it? Why stay here
and get yourself murdered?

Victor: Because the sky's quite empty, just as you said. The scientists have been over it with a fine tooth comb and a telescope, and the verdict is, No God, nothing there. But if there's no God there and nothing inside me I have any respect for then I'm done. Then I don't live, and I couldn't. So I stay here to keep whatever it is alive that's alive inside me.

King: It's not only the sky that's empty, remember. They've looked us through pretty well, and men and horses are pure chemistry so far as anybody knows. The soul--or psyche--has the same composition as eggs and butter (20).

Science had met God head on, and in Anderson's play, God did not come out on top.

Therefore, the possibility of replacing traditional religion with a reliance on science and technology must have seemed seductive, and this too was reflected on the stage. *Presumption* (1823), the pirated stage version of Mary Shelley's *Frankenstein, or the New Prometheus*, perhaps the first play with a true technological theme in the modern sense, concerns humanity trying to usurp the power of the gods themselves, to substitute science for divinity. Such presumption, or *hubris* as the Greeks called it, is traditionally punished by the gods. Things were no different in that respect in the drama of the 1900's than in the 1800's, or, for that matter, in the Greek drama of the 500's BCE. Those who sought to use the power of
technology to purloin divine power inevitably came to a bad end.

The idea of technology being worthy of awe and worship, or even becoming an actual divinity, while seldom a major theme, appears often in the drama of the era from the turn of the century to the Second World War. Admittedly, these appearances came in plays devoted mainly to other subjects. Only one major play, Eugene O'Neill's Dynamo (1928), takes the direct substitution of technology for religion as its subject matter.

Sometimes in the plays technology does not replace divinity but becomes associated with it. An idea that occurs in some surprising plays. Paul Green's In Abraham's Bosom (1926), a study of the life of the rural Negro in the South, would seem to have little room for this concept, but it does appear. In Green's play, the Great Emancipator is remembered with an awe bordering on worship, and in the following line this demi-god is linked to one of the most memorable aspects of technology from his era. "... Aberham Lincoln, what drapped de nigger he freedom from de balloon . . . ." (348). Technology appears even in Marc Connelly's The Green Pastures, a folk fable retelling of the Bible from the perspective of the Negro of the 1920's. Noah's Ark, instead of the traditional wallowing lummox of a boat without sails or even a rudder and therefore guided only by divine whim, is in this play a steamship, complete with a giant paddlewheel and steamship whistle. When they
reach land, Noah tells his oldest son, "Shem, go down 'n'
drag the fires an' dreen de boiler" (627). The power of
Moses and Aaron that defeats the magicians of the Pharaoh
can do so because "It's got 'lectricity in it" (637).
Considering the tone of the piece, there was almost
certainly no intention on the part of the author to exult
technology at the expense of divinity, however, the newly
awakened desire to control nature through the understanding
and application of technology found its way into even as
devout a play as this. Finally, reminiscent of the
comparisons made to the clock in other works of the era,
God's greatest creation, humanity, is compared to machinery
when Moses, so old he can barely move, tells the Lord, "De
ol' machine's broke down" (640).

In John Howard Lawson's *Processional* (1925) the same
connection is made between divinity and technology. Sadie,
the young heroine of the play, combines them this way at
first:

> Oh God, what'll I do? Sweet God, where'll I go?
Lemme go roun' the world, lemme ride in an
aeroplane, lemme put smelly stuff on my hair
(163).

Later she makes the connection even more directly.
"She must be right because I prayed like a steam engine an'
you're here (195)," Sadie tells Jim, her lover.

Technology has not yet been deified in these
exchanges, but the aspects shared by both technology and
God--power, awe, and the ability to grant wishes--have
begun to blur the distinctions between them. Technology and God, both powerful entities, appear to be mixed up in the mind of Sadie, or at least to bear an intimate kinship to one another.

This association also appears in Robert Sherwood's *The Petrified Forest* (1935).

First Lineman: Oh, sure--I'm alive. I got a heart--I can hear it beating. I got a stomach--I can hear it growling. I got blood--I can see it, when I stick myself with one of them goddamn splinters. But where's this soul that everybody hollers about?

Boze: It's in your tongue, I guess.

First Lineman: Yeah. And maybe they got it locked up in the safe at the Postal Telegraph Company, along with the rest of their doubtful assets (8).

The First Lineman is imputing a power previously held only by divinity, the ability to constrict a soul, to a technological company. This metaphor is not taken too far, however, as only two pages later the same lineman denies the validity of any such connection between the company and the divine.

First Lineman: "Man cannot live by bread alone."

Second Lineman: Who says he can't?

First Lineman: God says so! That's who.

Second Lineman: Oh--is God a Russian?

First Lineman: He certainly ain't with the Postal Telegraph (10).

The inconsistency of the statements does not matter as much here as the fact that a company dedicated to
technology could be conceived as being so powerful that a comparison, either positive or negative, could be made to a deity.

Sometimes it is not the technology itself that acquires divinity, but individuals closely related to technology. An earlier chapter has already dealt with the scientist, the figure most often granted god-like powers in the public imagination, but one example of the scientist being regarded as divine is so apropos that it must be quoted here. In Robert Sherwood's *Reunion in Vienna* (1932) Elena, the wife of a leading scientist, is talking to Emil, the same young student of her husband who was quoted earlier:

Elena: You worship him, don't you?

Emil: All youth must worship him. He is leading us from the darkness--into the light.

Elena: Do you hear that, father? Your son is a god.

Krug: Yes--that's what they say (766).

Other professions also gained respect through association with the powerful, inexplicable, and especially the dangerous sciences of the day. Rand, the Lindbergh-like aviator of S. N. Behrman's *Rain from Heaven* (1934), is worshipped by the masses, much to his discomfort. He is venerated partially for his ability to control a new technology, the airplane, just as a witch doctor or priest was venerated for control of forces beyond the ken of the common person, but even more for living through the dangers
associated with that technology. He is the equivalent of a modern-day Daniel in a mechanized lion's den; his special worthiness is proven simply by his survival.

It is understating the case to say that reporters are not usually regarded as divinities in either real life or in the drama of the era, being far more often considered nuisances; but some people understood the power of electronic communications and the near god-like powers it conferred on those who controlled it. Psinski, a revolutionary in Lawson's Processional, allots the power of a god to the representative of the media:

Treat him good, he owns us all, the guy that holds the wires . . . he laughs, he makes death, he telegraphs--(27).

Occasionally, instead of technology being compared to religion, the opposite happens. In There Shall Be No Night (1940) Dr. Kaarlo Valkonnen, the protagonist, is said to believe in the teachings of Christ "as if they were scientific facts" (160). In a move reminiscent of Einstein as quoted above, Stephen Fields, the imminent physicist in Philip Barry's Hotel Universe (1930), lectures not on scientific facts, but on more mystical matters:

I have found out a simple thing: that in existence there are three estates. There is this life of chairs and tables, of getting up and sitting down. There is the life one lives in one's imagining, in which one wishes, dreams, remembers. There is the life past death, which in itself contains the others. The three estates are one. We dwell now in this one, now in that--but in whichever we may be, breezes from the others still blow upon us (106).
Despite his bitter denunciation of the soul as so much eggs and butter, King, the protagonist of Anderson's *Key Largo*, cannot keep from believing in some cosmic power, but he relates it not to one of the traditional views of godhead, but to a scientist experimenting with rats.

*King: No, I'm referring to the human race in general. As rats. Remembering the research fellow in the laboratory who tested the rat-brain. You remember him? He put a rat in a cage with little doors that didn't go anywhere--except for one that had a circle on it. Behind that one there was food--and so the rat learned if he jumped at this one door with the circle he could eat--no other door would do--and he jumped at that without a mistake for a year, and ate, by God, and then the experimenter fixed that door so it wouldn't open. The rat jumped and banged his head till he was bloody around the top, and sick; and when there was never anything to eat, and the circle was always wrong, he lost his mind, his poor rat mind . . . (82-83)*

In case the analogy is not clear enough, Anderson comes back to it, relating God, as "the author of the experiment" to the technological age's favorite totem, steel.

*King:... you live by that; but when the author of the experiment nails that door up, and you jump and break your head, and then you jump again with blood in your eyes and end up breaking rock--then all doors are shut, and they're made of steel and it's no use jumping (86).*

A final reference to God as a scientist, callously experimenting with the human race occurs at the climax of
the play. King must make a decision, and this is the way he perceives his choices:

King: . . . I ran from that storm of rape and murder, because I couldn't help and nobody could help, and I wanted at least to save my life, in any crawling way, and the great master of the laboratory (wearing spectacles, probably) drives me down to this bloody wharf, where I must choose again between death and the rape of a woman, between death and the murder of innocent men (109).

In general, these comparisons of religion and science end up being flattering to religion, but in Anderson's play they compliment neither. Not only is Anderson's scientist-god so weak that he is in need of aid from technology--"(wearing spectacles, probably)"--he is callous and uncaring, traits here assigned to both gods and scientists.

Frequently, in a play devoted mainly to other themes, a piece of science or technology will be briefly deified. In S. N. Behrman's The End of Summer (1936), Dr. Kenneth Rice, a therapist of sorts, is accused of being an atheist. He defends himself this way, "Because I don't believe in statistics? The new God?" (302).

"We will bow down, as of old, to the mechanical. We will have no other god but it (308)," says Ian, speaking of the clock in Susan Glaspell's Tickless Time (1916).

In Barry's Hotel Universe, the warning signal of a lighthouse is described as having a divine nature, when Ann Fields explains to her friends the sudden illumination that sweeps across the stage:
Only the light from the lighthouse on the Ile de Port-Cros, crossing the terrace here--like the finger of God, Father says (47).

As might be expected, the most thorough treatment of this theme came from the pen of the foremost American playwright of the era. Eugene O'Neill's work bristles with references to technology, both positive and negative, but with a greater emphasis on the negative. Intimations of disaster associated with the failure of technology pervade his plays. His early works include such technological misfortunes as electronic communications that fail at the worst possible moment, ships that sink, cars that wreck, and airplanes that crash. Ship wrecks, or the fear of ship wrecks, extend deeply into his work, being featured in three of his first six plays, and in twelve of his first twenty-nine. In The Personal Equation (1915), the engineer Perkins has dedicated his entire life to his engines, thinking of them as living, breathing things. Because in his mind he has animated them, given them life as it were, he ends up committing the most heinous crime imaginable: he shoots his own son to protect his engines.

Strong similarities exist between Glaspell's The Verge and O'Neill's The First Man (1921). Written in the same year, both feature protagonists who so worship their scientific research that they allow it to take the place of friends and family. Curtis, the protagonist of The First Man, goes so far as to abandon his only son to pursue it, just as Claire abandoned her daughter to pursue scientific
experiments in *The Verge*. In both of O'Neill plays, *The Personal Equation* and *The First Man*, the protagonist becomes a kind of Abraham sacrificing his son Isaac to powers he considers far greater than himself and to which he has given his allegiance.

*The Hairy Ape* (1922) was discussed in detail in the chapter on dehumanization in the modern machine age, but Yank's obvious worship of the modern technological trinity of power, acceleration, and steel bears mention here, along with the inevitable bad ending that comes to those who put their faith in what the playwrights of the era considered the false god of technology. "Steel was me, and I owned de woid. Now I ain't steel, and de woid owns me. Aw, hell (159)!" Yank says. A few moments later he is rousted by a policeman and he mockingly asks the officer where he should go from here. Typical of O'Neill's layering of meaning, the officer's response is straightforward while still retaining a metaphorically ironic flavor. "Go to hell (160)," the policeman tells Yank.

The god-like Gordon in O'Neill's *Strange Interlude* (1927), like Rand in Behrman's *Rain from Heaven*, was an aviator, but while Behrman's hero triumphed, O'Neill's did not survive his technological ordeal. "Gordon brought down in flames," Marsden muses, "... charred bones in a cage of twisted steel ... (635)," telling us at the very beginning of the play about how Nina's first lover, Gordon, met an Icarus-like death. Near the end of the play, when
young Gordon and his fiancé fly overhead in an airplane, Nina metaphorically pleads with him to capture the divinity denied her first love and his namesake:

Nina: --(with tortured exuberance) Fly up to heaven, Gordon! Fly with your love to heaven! Fly always! Never crash to earth like my old Gordon (816)!

One of O'Neill's less well-known works, written just after Strange Interlude in 1928, Dynamo shares many traits with that deservedly more famous work. Father-child conflict, promiscuity, and death of family members are all featured in both plays, but the most obvious similarity is the declamation by the characters of what would normally be internalized lines, what has been called spoken subtext. Less obvious, but more important for this study, is the continuation and expansion of the theme of technology offering both salvation and damnation to the denizens of the twentieth century.

Because Dynamo is one of O'Neill's least known works, a summary of the play emphasizing the technological aspects will be presented, followed by analysis of how the play approaches the themes already discussed in this chapter.

In Dynamo, Reuben, a confused young man, is the product of a viciously fundamentalist father and a domineering and overprotective mother. Reverend Light, the father, beats Reuben violently in the name of chastisement. A supposedly righteous man, he nevertheless has an irrational fear of that most elemental expression of his
God's power, lightning, which Reuben at first shares. The mother is so jealous of Reuben's affection for the neighbor girl Ada that she spies on Reuben, hiding in the bushes in the night like a peeping tom.

Reuben falls in love with Ada, the daughter of the Light's nearest neighbor, the Fife family. Mr. Fife is a technologist. That is to say, he has a natural understanding of machines and an ability to work with them, despite not having formal training, and despite the difficulty he has grasping the academic side of his discipline. He is presented as the direct opposite of the Reverend Light. Light is a religious man who fears lightning, while Fife is an atheist who claims to control electricity. He calls Lucifer, "the God of Electricity" and then teases Reuben concerning his fear of lightning. "I'm thinking your Jehovah might aim a thunderbolt at me but Lucifer would deflect it on to you--and he's the better electrical expert of the two, being more modern in his methods than your God!" (838). Fearing that his daughter, Ada, is falling in love with Reuben, Fife tricks Reuben by first swearing him to confidence, and then telling him a murder story borrowed from the day's newspaper and pretending to be that murderer. Reuben is torn between disgust at what he now thinks he knows of Ada's parentage and fear at what might happen to him as an accessory after the fact to the horrible crime. He turns to his mother for help. She swears on the Bible never to tell his father,
knowing all the while that his father is hiding in the closet where she has placed him, listening. As lightning from a thunder storm crackles around them, Reuben pours out his soul. The father bursts out, beats Reuben, and then immediately rushes out to gloat over Fife, thus destroying any chance Reuben ever had to win Ada. The mother further alienates Reuben by calling Ada a harlot and a slut. These traumatic events trigger a sudden revulsion in Reuben, and he violently rejects everything he has ever believed. He repudiates his father and no longer fears him or the lightning. He repudiates his mother and no longer loves her. He repudiates his God and no longer believes in him. The seeds that Fife had laughingly planted earlier now take root. "There is no God!" Reuben screams, as lightning strikes all around them. "No God but Electricity (852)!

Two years pass and Reuben returns home with a strange new hymn on his lips,

Reuben: (indicating the books he carries) I'm studying a lot of science. Sometimes I've gone without eating to buy books--and often I've read all night--books on astronomy and biology and physics and chemistry and evolution. It all comes down to electricity in the end. What the fool preachers call God is in electricity somewhere. (He breaks off--then strangely) Did you ever watch dynamos? What I mean is in them--somehow (857).

This idea finds a kind reception in the always dreaming Mrs. Fife, who has already mentioned her fondness for the giant machines and the hum they create. She tells Reuben:
Mrs. Fife: (dreamily) I love dynamos. I love to hear them sing. They're singing all the time about everything in the world (857).

Reuben has found a kindred soul, and a potential convert.

What should have been another traumatic event--the death of the mother he has returned to see--becomes in his mind only more proof of the correctness of his new beliefs, because her last words echoed those he had sent her on postcards:

Reuben: [Internalized dialogue]
"We have electrocuted your God. Don't be a fool" . . . that's what I kept writing her . . . her last words! . . . then I'd converted her away from his God! . . . the dying see things beyond . . . she saw I'd found the right path to the truth! . . . (865).

Bolstered by this, Reuben confronts his father and tells him he will now be working at Fife's plant. Light responds in his usual vein but without his former fire:

Light: --(dully) You have sold your soul to Satan, Reuben.

Reuben: --(immediately resentful--with his cold smile) Your Satan is dead. We electrocuted him along with your God. Electricity is God now. And we've got to learn to know God, haven't we? Well, that's what I'm after! (In a lighter tone--mockingly) Did you ever watch dynamos? Come down to the plant and I'll convert you! (He cannot restrain a parting shot) I converted Mother, didn't I (865)?

This new, more confident Reuben is attractive in a way the younger, insecure one could never have been. He seduces Ada almost incidentally. However, Reuben's
confusion continues. Sex with Ada becomes mixed up with the death of his mother and the ingrained response to pray for the dead.

Reuben: . . . Say, here's one on me, Ada--speaking of praying. It was out at Mother's grave. Before I thought, I started to do a prayer act--and then it suddenly hits me that there was nothing to pray to. (He forces another laugh.) It just goes to show what a hold that bunk gets on you when you've had it crammed down your throat from the time you were born! You can't pray to electricity unless you're foolish in the head, can you? (then strangely) But maybe you could, at that--if you knew how (868)!

Reuben continues to mix superstition--in the form of "perceived" messages from his mother's ghost--and the remnants of his fundamentalist upbringing with his superficial, self-acquired knowledge of science. In the end he creates his own God, or in this case, Goddess. He sees the dynamo at the plant as being alive; not merely alive, but female; not merely female, but a mother; not merely a mother, but the quintessential mother-figure of all time, a Mother-Goddess. Reuben sees himself as her prophet, her priest, and her son combined, an electrical Christ:

Reuben: . . . But there must be a center around which all this moves, mustn't there? There is in everything else! And that center must be the Great Mother of Eternal Life, Electricity, and Dynamo is her Divine Image on earth! Her power houses are the new churches! She wants us to realize the secret that dwells in her! She wants some one man to love her purely and when she finds him worthy she will love him and give him the secret of truth and he will become the new saviour who will bring happiness and peace to men! And I'm going to be that saviour-- . . . (874).
Following in the footsteps of centuries of religious mystics, Reuben decides to purify himself by mortifying the flesh, denying himself the worldly pleasure of sex, and even resorting to self-flagellation.

In the final scene of the play, Reuben and his new convert, Mrs. Fife, are at the plant communing with the dynamo. Reuben is still awaiting the grand revelation he is sure will come as soon as he has purified himself enough. Ada arrives and pretends to believe in the divinity of the dynamo to humor Reuben. Reuben then tests himself by giving Ada what is supposed to be a chaste kiss. When it turns passionate in the presence of his Mother-Goddess he is shamed beyond endurance and kills Ada. Unable to reject his belief in the Mother-Goddess Dynamo, yet unable to live with having killed his love, Reuben sacrifices himself on the fiery electrical altar of the dynamo's bushings.

Mrs. Fife, unaware of her daughter's death, is left on stage in perhaps the strangest O'Neill coda. Finding Reuben's electrocuted body, she ends the play by complaining to the dynamo:

Mrs. Fife: . . . . (She turns with childish bewildered resentment and hurt to the dynamo.) What are you singing for? I should think you'd be ashamed! And I thought you was nice and loved us! (The dynamo's purr has regained its accustomed pitch now. The lights in the plant are again at their full brightness. Everything is as before. Mrs. Fife pounds the steel body of the generator in a fit of childish anger.) You hateful old thing, you! (Then she leaves off,
having hurt her hands, and begins to cry softly). (885)

Concepts concerning the mixture of technology and religion that are merely intimated in other works, are made overt in O'Neill's Dynamo. In it O'Neill explored the theme of mechanical divinity thoroughly. Each of the themes mentioned earlier in this chapter occurs. Five variations on the relationship of technology with religion as expounded in the drama of the era have been discussed chapter; one, science and technology tend to question religion's validity; two, in the modern machine age technology often becomes associated with religion; three, individuals closely associated with powerful or dangerous technology acquire something near divinity in the eyes of the public; four, religion is occasionally compared to science instead of vice versa; and five, in the most obvious manifestation, some piece of technology draws actual worship as a deity. All of these themes are in Dynamo.

The deification of technology, while obviously the theme of Dynamo, does not actually take place until late in the play. Connections between religion and technology are first introduced and then each of the above themes is explored. First, science, in the person of Fife, the natural technologist, denies religion, going so far as to challenge the Reverend Light to a debate on the existence of God. Second, technology is associated with religion.
Reuben tells us that his mother made his father the minister "pray for electric lights in the house" (871). When Reuben tells the neighbor Fife that "You have to feel God calling you to his service," Fife responds:

Fife: --(with a leer) And how does God call you, tell me? I'm thinkin' He wouldn't use the telegraph or telephone or radio for they're contraptions that belong to His archenemy, Lucifer, the God of Electricity (838).

A strong connection is made between religion and the implements of modern communication, which then moves into a comparison of religion to technology. Electricity is not as strong as the devil; it is the devil that is the equivalent of electricity.

Third, after Reuben's traumatic revulsion against his parents and religion he begins to worship those who merely had the good fortune to work around electricity.

... every job was connected with electricity in some way. I've worked for electricians. I've gone out helping linesman, I shoveled sand on a big water-power job out West (859).

Fourth, Reuben again compares religion to technology, this time to religion's derogation, as seen in the passage from page 865 already quoted that says that both God and Satan have been electrocuted. Technology in Reuben's eyes is no longer as powerful as religion, but actually has become more powerful.

Fifth and finally, technology itself is directly deified in the persona of the dynamo.

"Electricity is God now" (865) Reuben tells his
father, but at that point it is only a nascent belief that is articulated more in defiance of his father's beliefs than as a true belief of his own. That soon changes and Reuben comes actually to believe that the dynamo is divine.

Reuben: . . . [Internalized dialogue]
It's like a great dark idol . . . like the old stone statues of gods people prayed to . . . only it's living and they were dead . . . that part on top is like a head . . . with eyes that see you without seeing you . . . and below it is like a body . . . not a man's . . . round like a woman's . . . as if it had breasts . . . but not like a girl . . . not like Ada . . . no, like a woman . . . like her mother . . . or mine . . . a great, dark mother! . . . that's what the dynamo is! . . . that's what life is! . . . (871).

While the end product is the deification of technology, Reuben's path to this idea is only superficially that of the scientist. "I won't ever be satisfied now until I've found the truth about everything (867)," he says, echoing the credo of the true scientist. One would expect from this declaration that Reuben would create from his studies a Hobbesian universe of mechanical cause and effect. Instead he attributes everything to a mystical quality in electricity. Electricity, as the important force it was, appears in other plays of the era—*Hell-bent fer Heaven*, the Pulitzer-prize winner from 1924 includes a dam built to generate electricity as an important element of the plot, for instance—but never in so central a position.
In addition, Reuben's view of electricity is unique, and unlike the traditional scientist he does not put his trust only in that which he can prove, but in feelings and intimations from the spiritual world: "... the dying see things beyond . . . she saw I'd found the right path to the truth! . . . (865)," he thinks, talking about his mother's deathbed statements. In the end, mysticism, not science, shapes his view of electricity and the dynamo.

Peter Shaffer would revisit this territory in 1973 with Equus. He used many of the same elements: a young man at the height of adolescent sexual confusion who suffered persecution from a cold father while being coddled by an overprotective mother and with an unhealthily dominating religious background. The confused young man fuses these elements into a new religion for himself that causes him to commit a strange and horrifying act. Shaffer, however, eliminated the element of technology and enjoyed a much greater success with his study of an equine religion as compared to O'Neill's electrical one.

Since this study focuses on technology, that will remain our major concern, but O'Neill actually says as much about religion here as he does technology, examining the relationship between man and God and exploring the religious impulse much as he did in The Great God Brown (1925), and Lazarus Laughed (1926), and which he would continue to consider in Days Without End (1933). There are technological connections in both of those previous works. Dion in The Great God Brown earns his living as an
architect; Lazarus, reciting that basic tenet of the expressionist movement, warned against the cities,

Out with you! Out into the woods! Upon the hills! Cities are prisons wherein man locks himself from life (574).

In the main, though, both of those plays admittedly concern themselves only with religion.

In *Strange Interlude* both religion and technology were considered, although not as major themes. Still, *Strange Interlude* is far more concerned with technology than has been previously recognized. Nina's first love, Gordon, was an aviator; Nina had scientific training; Ned, Nina's lover, begins as a medical scientist and finds salvation at the end of the play as an experimental biologist; and, finally, the young Gordon follows in the older Gordon's footsteps as an aviator. O'Neill then combined the technological themes explored in *Strange Interlude* with the religious themes of the two previous plays and the interplay between these two themes came to a climax in *Dynamo*. Apparently this satisfied O'Neill's need to explore the technology-religion duality, because his next religious play, *Days Without End*, did not refer to technology.

Technology as religion never became a dominant theme in the era, nor even a terribly important one. Still, the references that do exist tell us much about the increasing perception of the power of technology. So great had it become by the beginning of World War II that a reference to
a God as strong as a machine seemed merely descriptive rather than blasphemerous.
Chapter 7:
THE MOVIES

Sadie: 'Cause I had dream an' God come to me in a
dream and said, "Go to New York an' get a job in
the movies--."

--John Howard Lawson
--Processional

God may perhaps be forgiven for the confusion in the
directions he gave Sadie in the quote above because a
confusion has always existed in the minds of the American
public between film and the theater. After all, both are
created by directors, writers, and actors, both show us
stories, rather than merely tell them to us, and both
create personalities that seem larger than life. Of what
importance, then, are the respective coasts they are mainly
created on?

Still, an essential difference exists between film and
the theater, and that difference is technology. Motion
pictures are the child of the union of technology and
theater, and film from the beginning embraced new
technologies in a way that theater did not, and, in fact,
could not. Even the earliest films could show a train
tootling along or an automobile hurtling down a highway.
On the stage of the era automobiles could only be referred
to, as in Golden Boy (1937) or Tobacco Road (1933) where
only pieces of the auto made it onto stage. At best the
automobile could be developed within the imagination of the
audience, as in Thornton Wilder's Happy Journey to Camden
and Trenton (1934).

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Perhaps the most fascinating of the new technologies evolving during this era, movies grew rapidly from a very modest start of kinescopes, peepshows, and a few two-reelers made at the Edison Studios just before the turn of the century into the booming film enterprises of the teens, then expanded into an even larger industry and became a more important element of people's daily lives in the twenties and thirties. Thus, ironically, just as America discovered a dramatic literature worthy of the name, it largely turned away from that millennia-old tradition to a new form of entertainment, born of the theater, related to the theater, but not the theater.

Because of their enormous impact on the daily life of the average citizen and because of the incredible glamour that has always focused America's attention on Tinseltown, movies would seem to deserve an extensive treatment. In a sense film incorporates almost all of the themes explored in this study so far. It is a piece of technology that inserted itself firmly into the daily life of American's of the era, like the clock, the car, and electronic communications. Like drama, if not quite as favorably, motion pictures took the scientist as subject matter. Film contributed to the dehumanization so often complained of in the era by trivializing great events, and replacing actual relationships with imaginary ones derived from the movies. And finally, movies and movie stars were accorded an awe second only to that given religion, and in certain individuals, outshining even that.
The theater, however, was hesitant to endorse the fledgling industry, and became even more paranoid about showing it favorably as that new-born rival grew to become full-grown competition---competition that soon eclipsed its parent in the daily affection of Americans. Since drama does reflect the time it is created in, movies are included in the drama of the era, but not nearly as thoroughly as one would expect from the fascination given the film industry in other forms of media. Movies also receive little in the nature of positive regard within the limited drama that treated them, being generally depicted as the creation of lesser talents, aimed at lesser audiences. Nevertheless, some of the awe felt by the average person for the movies is mirrored, even if grudgingly, in the drama of the era.

The first dramatic consideration of movies within this era came from the most significant author of the day and, while its lack of exposure makes it unlikely to have been imitated, it launched the negative tone toward the film industry that would be continued for the rest of the era.

In 1914 Eugene O'Neill wrote The Movie Man, a play about a movie company filming a revolution in Mexico. Two movie men recording the war for newsreels do not hesitate to force the generals to arrange the time of the battles to suit their need for proper lighting. In addition, their company turns out to have staged, or at the very least to
have financed, the entire war so as to have something to film. The company has become a kind of demi-god, controlling the life and death of the people surrounding it and through them the fate of an entire nation. O'Neill's portrait of the pair of young men as movie producers is unsparing, and he is equally scathing in his satire of the growing power of the film industry. However, another element, almost in direct contradiction to the previous one, is introduced here as well. O'Neill's characterization of the two young men themselves is admirable. They fall in love, champion their ladylove, and save a good man's life, all the traditional stuff of heroes. O'Neill seems to endorse the two young men, while still condemning the industry. This dichotomy between the presentation of the film industry in general as ludicrous or even dangerous and the often appealing portraits of people engaged in that industry would also continue throughout the era.

Another early play dealing with the nascent film industry, Merton of the Movies (1922) delineates a third theme that would recur often within the drama of the era. According to George S. Kaufman and Marc Connelly, the authors, movies were the medium of the mediocre. Meteoric rises were possible there for people with little or no talent. In fact, possessing talent or intelligence was presented as a negative as far as success in Hollywood was concerned.
In the beginning of the play, Merton is an everyman, representing the American attitude toward the movies. Innocent and naïve, with no more knowledge of the industry than could be gained by watching films and reading movie magazines, Merton still is totally devoted to what he considers the worthwhile ones:

Merton: Here's a wonderful artist, on one hand, trying to do better and finer things all the time, like "Hazards of Hortense," and alongside of her they put a cheap thing like one of those Jeff Baird comedies (17).

His real life has been replaced by carefully staged imitations of life as it was presented in the movies of the day. He imitates everything from cowboys to society swells and has photographic portraits taken of himself as each. So naïve that he takes a correspondence course in acting, Merton is saving money to go to Hollywood to break into the pictures. Once in Hollywood he receives a quick and cruel education in just how false the images the motion pictures create are, but he still clings to his belief in the worth of serious film:

Merton: . . . I read where they were trying to do something bigger and finer, and I thought if I came out here---well, it's worth sacrificing to do something worth while---don't you think? (69)

In the end, his modest resemblance to an already established movie star, combined with his very modest talent, provides him success, though he must be tricked into accepting it by the combined efforts of a kind director, the Jeff Baird mentioned so slightingly above,
and "the Montague girl," an early stunt woman who has fallen in love with Merton.

Following in O'Neill's footsteps, Kaufman and Connelly present the film industry as ludicrous and out of control while painting many complimentary pictures of the people involved in the industry---the kind director, the talented older actor, and especially the young stunt woman.

Ironically Hollywood would eventually take up Broadway's derisive claim that anyone could be a movie star and trumpet it as a great thing, telling and retelling stories of stars, like Lana Turner, discovered at drugstore fountain counters.

A year later Elmer Rice included the film industry in his comprehensive jeremiad on modern society, The Adding Machine (1923). Mrs. Zero, who cannot be bothered to listen to her husband, babbles on endlessly about the films she has seen. The stars, and sometimes the characters they played, are discussed as if they were friends and family of the Zeros. This focus on the imaginary world of film at the expense of the real world would be attacked by playwrights throughout the era, though seldom with as much venom as Rice employed.

George S. Kaufman was not through with Hollywood with Merton of the Movies. A decade later, Kaufman joined forces with a new collaborator, Moss Hart, to again kid the film industry in Once in a Lifetime (1930). At first glance this play bears little resemblance to Merton of the
Movies. The protagonists of Once in a Lifetime, Jerry, May, and George, are anything but naïve about the entertainment industry, being a moderately successful vaudeville act. Rather than approaching Hollywood with awe verging on reverence, like Merton, they conceive a scheme to con the entire industry into believing they are speech teachers.

May: Most of those bozos haven't ever talked on a stage. They've never spoken lines before.

Jerry: They've gotta learn, that's all.

May: You bet they do! And who'd going to teach them? We'll open a school of elocution and voice culture. (16)

At heart, though, the two plays are very similar. Both depict the egocentric vanity and manic lunacy that the Broadway authors identify with the film industry; both emphasize that it takes no talent to succeed in films. In Hollywood mediocrity thrives. As May tells George, "you don't know anything about anything, and if what they say about movies is true, you'll go far!" (17).

A few years later and Broadway had another hit based on ridiculing the film industry in Sam and Bella Spewack's Boy Meets Girl (1935). O'Neill's The Movie Man and both Kaufman plays had focused on the actual filming of the movies, but this one emphasized the lunacy that was Hollywood by taking us behind the scenes into the lives of the producers and writers.
The plot of the play, as indicated by the title, is based on that oldest of Hollywood clichés. The Spewacks manage to play out a romance, all the while lampooning the way Hollywood did the same thing. But plot is relatively unimportant in this fable about the thoroughly uninspired insanity that reigns in the decision making spheres in Hollywood. As in the previous plays, the film industry is shown to be ludicrously overblown and self-important, a purveyor of false images, and intentionally mediocre. After claiming that their new script is great, Benson and Law, a pair of irreverent writers, summarize the Hollywood credo:

Law: (Quickly) And do you know why? Because it’s the same story Larry Toms [a western star] has been doing for years.

Benson: We know it’s good.

Law: Griffith used it. Lubitsch used it. And Eisenstein’s coming around to it.


Law: The great American fairy tale (543).

Though interwoven with the only too standard plot mentioned above, the play is basically three acts of attacks on Hollywood’s greed, lack of artistic integrity, and inability to produce anything fine or original. Musicians asked to compose something classical, play Beethoven; asked to write a popular tune, they play Jerome Kern. Law, an award winning fiction writer who talks constantly of returning to Vermont to "really" write, throws off gibe after gibe attacking Hollywood and all it
stands for. The other characters, far from resenting the attacks or defending their livelihood, merely ask him to stop wasting time.

In this play, as before, the industry is constantly harpooned while many of the individuals within the industry are portrayed quite favorably. The writers, the secretary, the manicurist, the extras, even the waitress from the commissary are depicted as honest and attractive. Those with more power, the studio head, the producer, the star, and the star's agent, are the villains of the piece.

George S. Kaufman did not write another play set in the land of motion pictures, but in other plays set within the entertainment milieu he continued to ridicule films. In The Royal Family (1927), his and Edna Ferber's pastiche of the Barrymore family, the theatrical disdain for movies is made perfectly clear. Near the end of the play, Tony announces that he has bought the rights to a new play to appear in, and his family's excitement is tempered by disbelief:

Julie: Tony, you don't mean pictures? You're going back on the stage?

Kitty: Of course. (To Tony) Don't you? (136).

The young actress in Stage Door (1941) disdains an easier and less important career in film to remain on the stage. Sheridan Whiteside, the protagonist of The Man Who Came to Dinner (1939), numbers many Hollywood celebrities among his friends. Playwrights may have been even more direct in
their disdain for filmdom when the character making the judgement was supposed to be a playwright. Beverly, a thinly disguised Noel Coward, has this to say about Tinseltown:

Whiteside: Tell me, did you have a good time in Hollywood? How long were you there?

Beverly: Three unbelievable days. I saw everyone from Adrian to Zanuck. They came, poor dears, as to a shrine. I was insufferably charming and ruthlessly firm in refusing seven million dollars for two minutes work (465).

Gay, S. N. Behrman's playwright protagonist of No Time for Comedy (1939), says something very similar and with much more heat. He is agonizing over spending time creating what he considers worthless light comedies when people are dying in terrible conflicts all around the world. He tells his wife Linda that death is rained from the heavens,

Gay: . . . And you expect me to . . . go to Hollywood and sit in endless conferences agonizing over novel methods for boy to meet girl. I tell you it's all an irrelevance, an anachronism, a callous acquiescence (48-49).

In Once in a Lifetime, Lawrence Vail, a playwright brought out from New York at an enormous salary to do nothing, says:

Vail: Dr. Lewis, I think Hollywood and this darling industry of yours is the most god-awful thing I've ever run into. Everybody behaving in the most fantastic fashion---nobody acting like a human being (72).

Ridicule for Hollywood abounds in the drama of the era. Mrs. Mortar, an aging actress in Lillian Hellman's
The Children's Hour (1934), says, "... the cinema is a shallow art" (7). The Hobo in Maxwell Anderson's Winterset (1935) makes fun of the delusional Judge Gaunt, laughing at him and saying, "He thinks he's in the moving pictures!" (96). Willy Wax, a movie producer in Clifford Odets' Rocket to the Moon (1938), is shown to have all the worst traits of previous generations' royalty without any of the redeeming ones. In John Howard Lawson's Processional (1925), as in O'Neill's The Movie Man, even the truth of what one sees in newsreels is called into question. The end of the strike and the reconciliation of all parties is to be filmed:

Man in the Silk Hat: If you'll just come with me and sign the documents, the motion picture machines are ready for the ceremony (212).

A few lines later, however, and the Man in the Silk Hat tells the Sheriff in an aside, "Make a list of the marked men and we'll get them in bed tonight." The callous usher selling candy during Neil's trial in Beggar on Horseback (1924) discusses whether he and his girl friend will go to a comedy motion picture or one of the "sad ones" while Neil's life hangs in the balance (186).

Filled as the drama was with negative representations, the love of the American public for film did not go unnoticed. The usher mentioned above, while being condemned for being callous, could be admired for being willing to earn "the price of a couple of seats to the
movies" (186). Lady Wingate, in S. N. Behrman's Rain from Heaven (1934), tells the aviator Rand, "Your triumphal return. I saw pictures in the news films" (915). Later in the play it is revealed that Lael, Lady Wingate, cannot bear to leave a film in the middle, even a bad one, because "there may be something wonderful at the end" (942).

Salvation for Marion, the artist protagonist of another Behrman play, Biography (1934), comes in the form of a commission to paint the Oscar winners from the Motion Picture Academy (181). The daughter in Kaufman and Hart's The American Way (1939) is ecstatic about having seen "Mary Miles Minter in a wonderful picture, and Episode 13 of 'The Clutching Hand'" (363). The Man Who Came to Dinner may have contained many slighting references to Hollywood, but no doubt can exist that Sheridan Whiteside's stature is enhanced greatly in the eyes of the inhabitants of the small town in Ohio by being friends with such movie stars as Banjo, a kind of combined portrait of Harpo and Groucho Marx.

Nothing else could have shown the kind of awe reserved for the films of the day as well as did the climax of Clifford Odets' Clash by Night (1941). At first only glancing references are made to the film industry in this play about a love triangle set among America's laborers. The money available in it is dramatized by the sixty dollars a week (a princely sum at the time) Earl makes as a projectionist, one of the lowest positions in the industry.
The characters go to see movies. Earl stigmatizes the movies by saying, "You're right. This one was manufactured by Repulsive Pictures" (234). But the climax, when Jerry and Earl, rivals for Mae's love, have a deadly meeting in the projection booth of a movie house while an audience watches a movie reveals how deeply the new technology held sway. The two men conduct their vicious argument in whispers and then, as they struggle, fighting to the death, Jerry keeps telling Earl, "Shh . . . quiet . . . shh!" (237). Admittedly Jerry is not thinking well at this point, but his ingrained reverence for film stays with him even in these violent circumstances.

Broadway's jealousy of its more successful child must be taken into account in any review of the dramatic literature referring to film. No doubt Hellman's Mrs. Mortar would take a film role in a moment if it were offered. The continual ridiculing of the absurd amounts of money available in Hollywood, such as Beverly's "seven million dollars for two minutes work" above, has a slightly wistful air about it. In an era (such as the 1930's) when virtually every Broadway writer of note was wooed to Hollywood by offers of money far in excess of what he or she was making in New York, it became important for all of them not to be viewed as "selling out," nor identified with lunacy and greed they attributed to movie-makers. Kaufman, Hart, Paul Green, Erskine Caldwell, Ring Lardner, Jr., S. N. Behrman, George Kelly, Robert Sherwood, Sidney Howard,
Elmer Rice, Clifford Odets, Philip Barry, and many others, all, at one time or another, became engaged by major studios as screenwriters and made their way West with the notion that seemed to justify their acquiescence to financial lures--they would upgrade the quality of film scripts, bringing Broadway artistry to a mechanical industry sorely in need of it. Actually, once there, they inevitably became disenchanted by the relative unimportance of their individual talents, since decisions about how scripts should be constructed were made by those less talented but more powerful than the writers. So, virtually all of the Broadway writers took the money and ran. The monstrous technology of the film world, with its dependence upon myriad herds of machines and technicians and endless committees of producers, drove the writers back East, richer, if not wiser, for the experience.

The desire on the part of dramatists to avoid being perceived as sycophants flattering an absurd but fabulously wealthy Hollywood meant that no other widespread innovation of the time received less attention than did film. Perhaps the most damning thing the dramatic literature of the era says in relation to the film industry is nothing. Astonishingly, almost no mention of the movies occurs in any of the Pulitzer Prize-winning plays from the era. References to the movies, to movie stars, and to going to the cinema abound in comedies, but in serious drama it is remarkably absent. O'Neill does make a movie crew the
subject of one of his earliest plays, but after that he ignored the film industry almost totally, not even referring to it. The winners of the most revered prize in the theater of the era from 1913 to 1941 and the most significant playwright of that same era ignored film so thoroughly that it cannot be coincidental. Films may have won the heart of the American public, but dramatists in general chose other, apparently more significant, issues to explore in the American landscape.

Although the drama of the era referred infrequently to the film industry, three negative themes recurred throughout the era. First, the motion picture industry, run by an army of technicians and committeemen, devalued the artistic impulse. Second, the romantic images projected by the movies confused the audience perceptions of reality; and, third, the mechanical industry produced an inferior art. These are somewhat balanced by two positive aspects; many of the characters involved in films are essentially good people (after all, Broadway authors must have likeable protagonists); also, the affection felt by the common man for the movies is reflected in drama. These last two positive factors are far outweighed by the first three negative concerns in the drama of the era. Still, despite the near unanimity of dramatic opinion concerning Hollywood, there is a gentleness to the teasing, almost amounting to affection. In the presumably happy ending to Boy Meets Girl Law stays in Hollywood at fifteen hundred
dollars a week rather than returning to Vermont to write. Kaufman and Connelly's view of the Hollywood community is no harsher than their satire of theatrical foibles in The Butter-and-Egg Man (1925). Gay, in Behrman's No Time for Comedy takes Hollywood no more severely to task than he does himself for writing light comedies to be presented on Broadway. And immediately after Gay's tirade on Hollywood quoted above, Linda, his wife, answers him, "I gather the besieged Spaniards love the American films" (49).
Chapter 8:
CONCLUSIONS

. . . the purpose of playing, whose end both at the first and now, was and is, to hold as 'twere the mirror up to nature; to show virtue her own feature, scorn her own image, and the very age and body of the time his form and pressure.

--William Shakespeare

--Hamlet

The form and pressure of the twentieth century, that which distinguishes it from any other time, is technology. Invention and change have happened in every nation and every era; even the most static ancient society slowly changed. In the first half of this century technology was changing the very way our nation perceived itself. American playwrights have always concerned themselves with the American character, and that character was changing. Americans had always prided themselves on their rural, ingenuous nature. But in the early twentieth century the portrait of the sturdy Jonathan in Royall Tyler's The Contrast (1787) was replaced by the image of the shiftless Jeeter Lester from Tobacco Road (1933). And even that portrait of rural America was a rare one. The protagonists of the vast majority of plays written from 1913 to 1941 were city dwellers. From the brilliant Austin of The Second Man (1927) to the hapless Zero of The Adding Machine (1923) plays were populated with urban denizens who found no comfort in the natural life that had been America's heritage. As Yank says in The Hairy Ape (1922), "I couldn't belong in dat" (161).
Adaptation to this new world had to be made constantly because in America in the twentieth century the rate of change itself altered at an ever-increasing pace and affected not only the rich and the well-born—the aristocracy who normally see the first fruits of any innovation—but all classes of people, including the poor. Our very definition of poverty has been forced upward and again upward as the century has progressed. Once we realize how far-reaching and important this scientifically fueled change was at the beginning of this century, the question becomes: what affect did this explosion of technology have on the drama of the time?

In considering the time period from 1913 to 1941, the answer, unfortunately, must be equivocal. Technology forced its way into the drama of the time because it was forcing its way into the lives of the people in the streets. The life of a character like Joe in O'Neal's *Golden Boy* (1937) cannot be discussed without bringing in the Dusenberg that so strongly symbolized success to him. Perkins, the engineer in O'Neill's *The Personal Equation* (1915), matters only in relation to his beloved engines. Sheridan Whiteside, in Kaufman and Hart's *The Man Who Came to Dinner* (1939), simply cannot exist without the modern communications which provide both his living and his self-esteem. Occasionally, rarely, playwrights like Rice and O'Neill chose to concern themselves with technology and intentionally consider its implications for modern life.
Far more often technology's permeation into society forced playwrights to include it, without intentionally commenting on it.

In those rare cases when the playwright consciously grappled with the new cosmos being created by technology, both exhilarating vistas and frightening visions were presented. Though I have tried to document and analyze both viewpoints, I may have tended to emphasize the positive, both because of my personal feelings--I am the descendent of Irish peasants and in any other age would be digging peat for a living rather than pursuing scholarly research--and to combat the widespread preconceptions of a negative nature. Thomas R. West is an example of the latter when he says in his *Flesh of Steel: Literature and the Machine in American Culture* (1967), "If we have encountered a dominant attitude toward the machine and its disciplines [in American literature], it is one of repudiation" (133). I doubt that is true of American literature, it is not true of American drama from 1913 to 1941.

Attacks on technology did exist, ranging from the gentle gibes of Thornton Wilder about automobiles not letting dogs lie unmolested on Main Street to Elmer Rice's vitriolic attacks on the entire modern age. But two things stand out in the significant drama of the day, the rarity of the attacks on the machine, and the often contradictory nature of the attacking playwright's attitudes toward
technology. The number of playwrights who make serious attacks on technology—O'Neill, Rice, Treadwell, Sherwood, and Anderson—pales before the gigantic number who either simply accept technology or else actively celebrate it. Besides, at times all five of the names listed above belong on the second list as well.

O'Neill was probably the most persistent critic of technology, and the most perceptive. But each of his negative references are balanced by positive ones. In Strange Interlude (1928), written a mere six years after The Hairy Ape, O'Neill presents a portrait of technology which, while not the primary theme of the piece, is far more positive. Nina's scientific background, Ned's work as a medical research scientist at the beginning of the play and as an experimental biologist at the end, young Gordon's skills as an aviator, even Marsden's ever-so-carefully driven car, are all positive examples of science and technology. Treadwell favors the scientific application of fertilizer in Hope for a Harvest (1934). Sherwood went further and celebrated the modern age in the person of Dr. Kaarlo Valkonnen, the scientist/protagonist in There Shall Be No Night (1940). Anderson, with Key Largo (1939), the very play where he bemoaned the "age of dying fires," has d'Alcala, the wisest character in the play, say,

d'Alcala: But it won't end in the dark. Our destiny's the other way. There'll be a race of men who can face even the stars without despair, and think without going mad (114).
Rice was always the most venomous of the machine age's critics and the least changeable in his opinion, but even he eventually rejected the glib attack on the modern world as the root of all evil. In *Dream Girl* (1947), a play presented a few years after the era in this study, he had the young hero say,

*Clark:* If you want to write, can't you produce something better than a lot of moony daydreaming about an idiotic young couple who can't bear escalators and modern plumbing and who go off to the great open spaces to live in simple, unwashed happiness among the mosquitoes and the shad flies? (216).

Americans have always loved technology. Many of our founding fathers were inventors. That love is reflected in the American drama of the era. It may have been different in Europe. The bitterness of German expressionism has already been discussed, and in *Representations of Science and Technology in British Literature since 1880* (1992), Earl G. Ingersoll lists various works—Corelli Barnett's *The Pride and the Fall: The Illusion of Britain as a Great Nation* (1987), Martin J. Weiner's *English Culture and the Decline of the Industrial Spirit* (1981)—that persuasively trace the fall of England's international might to a disdain for technology. No such disdain permeated American drama and no such fall followed this era for America.

Still, in truth, the negative and positive aspects of the treatment of technology in the drama are not as important as the hitherto undocumented widespread nature of
that treatment. I began my reading desperate to find a dozen plays that dealt with technology. Ultimately, I had to limit the plays considered to those having great significance or possessing a theme primarily based on my subject. Virtually every play from the era that had a modern setting (and I read or skimmed literally hundreds) contained references to technology. I was surprised to realize how significant science and technology were in familiar plays from the era, such as George Kelly's *The Show-Off* (1924) and Craig's *Wife* (1925), neither of which takes technology as its theme but both of which are totally dependent on technology for the unraveling of their plot and for their climaxes. Similar pleasant surprises awaited me with Odets, Hellman, Barry, and indeed every one of my favorite authors from the time.

Interestingly, most of the technology considered in this study was invented in the nineteenth rather than the twentieth century. In *Abe Lincoln in Illinois* (1939), a character complains of his terrifying ride in a steam car, for instance, and that play is set in the first half of the 1800's. During that century, however, its use was the sole prerogative or the rich, the well-born, and the powerful. The movement of technology into the life of the common man that characterizes the beginning of the twentieth century was the direct impetus for the vast majority of plays in this study that featured science and technology, both positively and negatively. Playwrights of the era
struggled to make sense of the vast amount of new technology that was rapidly reshaping the American landscape. Experiment after experiment was tried and discarded as a method of dealing with this new material. A few of the experiments, O'Neill's *The Hairy Ape*, Rice's *The Adding Machine*, have stayed with us. Most disappeared. Valiant attempts to create a "machine theater" such as the constructivists were attempting in Russia under Meyerhold were widely ballyhooed but never had either critical or commercial success.

O'Neill, perhaps more than any other American playwright, looked at both sides of the technology issue and while he saw much in the technological advances of the time to praise, he also perceived much that he considered dangerous and untrustworthy. These twin themes run throughout his work, though the negative clearly dominates. As late as *The Iceman Cometh* (1940), automobiles would be portrayed by O'Neill as ravenous beasts, so dangerous that they caged Hope the bartender up in his own bar (at least in that worthy's mind). Yet only a year later, in *Long Day's Journey into Night* (1941) the neighbors' Mercedes is presented as beautiful and desirable:

> There goes the Chatfields in their new Mercedes. It's a beautiful car, isn't it? Not like our secondhand Packard (738).

Having been a seaman just before the *Titanic* disaster, O'Neill was always aware of the fragility of humanity's technology when opposed to something as elementally
powerful as the sea. Taken all in all, O'Neill's objections to technology seem to be not so much to the technology itself, as they are to humans putting too much trust in it, endowing the technology with supernatural characteristics and powers it did not contain. In Dynamo O'Neill did not object to the generation of electric power. What bothers him is that Reuben (whose name was used by carnival workers to signify someone naïve and ready to be tricked) believes far too readily in the divine nature of the machine. There can be no doubt that O'Neill, like many other American playwrights, warned against a too placid acceptance of technology as the be-all and end-all of existence. This idea that it is the credulous acceptance of technology and not the machinery itself that is the problem is summarized by a character talking about a pinball game in a very early Tennessee Williams' play, *Battle of Angels* (1940):

Pee Wee: Ninety-five nickels and no pay-off! What would you call that, Mama? Dolly: Outrageous! Not the machine, but you poor suckers that play it (10).

Many areas remain to be explored when considering drama and its response to science and technology. Innumerable technological things thrust themselves into the daily life of Americans between 1913 and 1941. We considered the clock, the car, and electronic communications as being the most frequently represented in the drama and among the most important. However, a strong
case could be made for many other items. Airplanes, the electronic reproduction of music, or the construction of skyscrapers could easily be considered as more important technologies in the era. Scientists were specifically considered, but other occupations linked to technology could have been discussed, such as aviators or assembly line workers. The grand themes of dehumanization in the machine age and the actual worship of technology were contemplated. Technology as the tool of the oppressor or as ennobler of the common man could have been appraised instead. The view of the nascent film industry as presented in drama was explored, but radio broadcasting could have been chosen as being more relevant to everyday life. All of these were considered and certainly those and many other scientifically created changes in the American way of life should be examined in a later study to see how they were reflected in the drama. Other times and other nations also deserve consideration, especially the era from the Second World War to the present.

In the introduction to this study it was pointed out that America emerged from its technological and dramatic adolescence at the same time, and it was claimed that it would be amazing if the two had left no mark on each other. After reviewing the dramatic literature of the first half of the twentieth century, the conclusion is inescapable that they did have an impact on each other, and a greater impact than has been previously realized.
In this century new technology and America have become so intertwined that they are often taken as synonymous. This idea, like so many others concerning technology, appeared in the drama of the era, and even then the idea of a special American connection to science and technology was not new. Many of our founding fathers were scientists and our revolution has often been called the grand American experiment. Robert Sherwood, in general no apologist for technology, draws a connection between the American pioneering spirit and telegraphy at the beginning of The Petrified Forest (1936) when Grandpa tells stories about the efforts to spread the nascent technology across the newly settled lands. In Maxwell Anderson's Valley Forge (1934), the exuberant Lafayette draws a comparison between the mythical initiator of technology and the American revolution.

--not since Prometheus
drew the gods' fire in heaven and left them cold
to bring fire down to men, there's been no action better worth risk of stapling to the rocks
with vultures at your liver, than your defiance of Hanoverian kings (66)!

It should occasion no surprise that, in a nation so dedicated to science and technology, those subjects should have been both injected frequently into the drama of that nation, and considered important when it was discussed.

While it is my contention, backed up by the material in this study, that technology was a more important and frequent theme in American drama between 1913 and 1941 than
has been recognized heretofore, I do not claim that it was a dominant theme. Humanity reacted to the new technology surrounding it, but romance, sexuality, religion, and politics remained the major themes in the drama. But in American drama, while questions remained, the machine age was largely celebrated, if not for its accomplishments, for its possibilities. Perhaps it was phrased best by Robert Sherwood's Kaarlo Valkonnen in the Pulitzer Prize-winning There Shall Be No Night (1940):

... for the first time in history, consciousness is not just the privilege of a few secluded philosophers. It is free for all (153).


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---. There Shall be No Night. NY: Charles Scribner's Sons, 1940.

---. This is New York. NY: Charles Scribner's Sons, 1931.

---. Waterloo Bridge. NY: Charles Scribner's Sons, 1930.


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Major Field: Theatre

Title of Dissertation: Reflections of Science and Technology in American Drama from 1913-1941

Approved:

Major Professor and Chairman
Dean of the Graduate School

EXAMINING COMMITTEE:

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