A God in the Mechanism: German Language Theater and the Atomic Bomb, 1945-65

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ABSTRACT

Patrick Lang: A God in the Mechanism: The German Language-Theater and the Atomic Bomb, 1945-65 (Under the direction of Jakob Norberg)

This dissertation compiles and analyzes postwar theatrical representations of the nuclear threat to show how German-language theater strove to establish an aesthetic and political program adequate to a post-fascist, Cold War age. Drawing on more than 25 atomic plays written between 1945 and 1965, the dissertation demonstrates that competing aesthetic paradigms—the aesthetically conservative director-dominated theater (Intendantentheater), burlesques and grotesques, socialist realism, and the documentary drama—incorporated the threat of technological destruction, manifested in the Cold War arms race, to articulate conflicting positions on the viability of a completely secular society. Skirting obvious geopolitical issues, the atomic plays treated the atomic bomb as the symbol of a new technological unfreedom in a society stripped of religious authority and comprised a discourse on the prospect of reestablishing human agency. The dissertation examines eight works in depth: Max Frisch's Die Chinesische Mauer, Curt Langenbeck's Der Phantast, Carl Zuckmayer's Das kalte Licht, Alfred Gong's Zetdam: Ein Satyr-Spiel, Friedrich Dürrenmatt's Der Erfinder and Die Physiker, Rolf Schneider's Prozess Richard Waverly and Heinar Kipphardt's In der Sache J. Robert Oppenheimer. Analyzed across the 20 years of their relative prominence, the atomic plays evince a loose developmental trajectory. Experimental attempts to render the atomic bomb stageable in the 1940s gave way to a tendency toward classical dramatic principles in the 1950s via the inclusion of the physicist as a protagonist. At the end of the 1950s and into the 1960s, these socalled physicist dramas were in decline. Their dominant theme, a binary setting religion and agency against technology and determinism, were undermined in tragi-comic works. In the 1960s, the documentary drama reframed the question of agency and the atomic bomb as an institutional, rather than primarily moral issue. Viewed collectively, the atomic plays evince the evolving cultural and political expectations of the postwar and the unique formal problems the atomic bomb posed to the theater.

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TABLE 1: The Atomic Plays

INTRODUCTION: THE ATOMIC PLAYS AND THE PHYSICIST DRAMAS

On April 6th, 1945 the United States dropped an atomic bomb on Hiroshima in Japan; three days later they dropped a second such bomb on Nagasaki. The cities were leveled and tens of thousands were killed in the initial blasts. Thousands more suffered from radiation poisoning, slowly dying in their hospital beds. All told, more than 200,000 people were killed in the attacks. According to the American government, the nuclear bombing was a military necessity aimed at quickly ending the war in the Pacific, and the bombings saved the American military a long, perilous, and expensive ground invasion of Japan—in terms both of dollars and of troops. Critics argue, however, that Japan was already at the brink of surrender: The civilian deaths of Hiroshima and Nagasaki resulted from American generals' gusto to try out their new weapon and their concern that the Soviet Union, having overcome the war on its western front, would now turn its attention eastward and, under the guise of aiding its American ally, would in truth be vying for partial control of Japan at the war's end. If, as this suggests, the dead of Hiroshima and Nagasaki were the first collateral victims of a still tentative Cold War, it would soon be

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¹ Writing on the death toll of the bombings of Hiroshima and Nagasaki, Andrew Rotter notes the necessity of accounting for all who lost their lives while acknowledging that "the dispute over numbers is somehow obscene." His estimates allow for a degree of error: "In August 1946, a year after the bombings, the Information Department of the Hiroshima City Office estimated that 118,661 civilians and approximately 20,000 military personnel had died to that point. Among the hurt were 30,524 rated as 'seriously injured' and another 48,606 as 'slightly injured.' Many of those in the first category presumably died subsequently of their injuries. In Nagasaki the toll seems to have been around 70,000 killed, virtually all of them non-combatants. It is perhaps worth recalling that some 90,000 were killed in incendiary raids on Tokyo in the spring of 1945." (Andrew Rotter, *Hiroshima : The World's Bomb* (Oxford; New York: Oxford University Press, 2008), 222.)

² cf. Rotter, 2–3.

evident that the future of nuclear weapons would be determined by this emerging conflict between the US and USSR entirely. In 1949 the US atomic monopoly was broken as the Soviets tested their first bomb. Competition intensified from there. In 1953 both countries tested hydrogen bombs for the first time, and they worked intently throughout the 50s to increase their kilotonnage and improve their delivery systems.

The first atomic bomb projects, carried out in the United States and United Kingdom, however, were motivated neither by Japan nor by the Soviet Union, but by the fearful possibility that the Nazi Germans were working on such a project themselves. The possibility of an artificially induced chain nuclear fission reaction had been most directly discovered by Otto Hahn and Lise Meitner working in Dahlem, a suburb of Berlin, in 1938. As exiled scientists living in the US came to understand that this could lead to an atomic bomb, they petitioned Western governments to pursue its invention as a deterrence to Hitler's tentative bomb eventually leading to the Manhattan Project.³ At the end of the war in Europe, it became apparent that the Nazis had not considered such a project necessary for the war effort. Still, the role German scientists played in making the bomb possible (and the related myth of the conscientious objector scientist), paired with Germany's new position in the Cold War, meant that the ground was fertile for intent discussion of atomic weapons in German-speaking countries in the postwar. The year 1949 brought the formal division of Germany as the eastern German Democratic Republic and the western Federal Republic of Germany, each assigned to its respective position in the Cold War divide. These divisions intensified as each Germany initiated rearmament and

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³ For a journalistic account of the international scientific community in the first half of the 20th century: cf. Robert Jungk, *Brighter than a Thousand Suns; a Personal History of the Atomic Scientists.*, trans. James Cleugh, [1st American ed.] (Harcourt Brace, 1958). Leo Szilard and Eugene Wigner's efforts to alert Franklin Delano Roosevelt to the necessity of an atomic bomb project are described on pgs. 78ff.

Decame increasingly integrated into respective military blocs—the North Atlantic Treaty

Organization and the Warsaw Pact—in 1955. If there were to be another war, it became clear,

Germany would be the battlefield and Germans would be shooting at one another. Raising the

stakes, the CDU government under Adenauer sought to bring nuclear-capable missiles to the

Bundeswehr as part of rearmament. Popular opposition to the plan developed into the first

autochthonous popular political movement in the Federal Republic, *Kampf dem Atomtod*, with

which many German activists, artists, scientists and religious figures associated themselves. By

the mid-1950s, several German scientists became active participants in the anti-atomic

movement, taking on the role of public intellectuals and educators. For example, in 1955, Otto

Hahn held a widely-received radio address warning of the dangers of such weapons. Famously,

in 1957, a group of eighteen respected Göttinger scientists, many of whom were Nobel Prize

Laureates, signed the *Göttinger Erklärung* in opposition to the Adenauer administration's

nuclear ambitions. Given the salience of atomic weapons in every day discourse, it follows that
they would leave a mark on artistic production as well.

The Atomic Play and the Physicist Drama

Given the salience of the atomic bomb in the German-language public discourse, it is not surprising that it became an important topic in the theater as well. German-language studies of the plays that address the atomic bomb generally call them by one of two names: the "atomic play" (*Atomstück*) or the "physicist drama" (*Physiker-Drama*). This study uses both terms and distinguishes them in a loose typology. The atomic play is the broader term. It encompasses all

⁴ cf. Ilona Stölken-Fitschen, *Atombombe und Geistesgeschichte. Eine Studie der fünfziger Jahre aus deutscher Sicht.*, Nomos Universitätsschriften Kulturwissenschaft 3 (Baden-Baden: Nomos, 1995), 109–10.

⁵ For a historical account of the *Göttinger Erklärung*, see for example: Stölken-Fitschen, 205–15.

works written for theater that deal with the issue of the atomic bomb and the threats associated with it, regardless the specific approach taken to the topic—whether the work presents military and government officials, researchers, or other figures of a wide variety of identities and relationships to the atomic bomb: fishermen and sailors, gangsters, fairies, bourgeois bunker-dwellers, and gods. The term encompasses a wide range of formal approaches as well: analytical drama, epics and station plays, a sketch, a cabaret number, a documentary drama and other stage works. One can arguably include some radio plays among these, too. The atomic drama simply names the preoccupation with a pervasive concern or theme of the postwar period, the menace of the nuclear bomb.⁶

The physicist dramas, more narrowly defined than the atomic plays, address the atomic bomb and present a physicist as either their protagonist or their antagonist. Commentator Klaus-Detlef Müller has described the term "Physiker-Drama" as "deskriptiv und pragmatisch," rather than concerned with any specific "poetologisch[e] Ansprüche," meaning that the term describes the material inspiring the genre's plots, rather than the aesthetic and formal decisions made by their authors. This practical approach can be useful. However, this study will argue that the physicist drama emerged as it did because of formal issues inherent in the selection of the atomic bomb and arms race as dramatic material in the 20th century. The popularity of the physicist

⁶ While their form and content vary widely, it is notable that in contrast to a work like Friedrich Dürrenmatt's short story *Der Winterkrieg in Tibet*⁶ (from the mid-late 1940s) or Arno Schmidt's 1957 novel *Gelehrtenrepublik*⁶ none of the German-language atomic plays written before 1968 are set in a world post-nuclear apocalypse. This can inpart be attributed to the time required for the understanding of atmospheric radiation to be publicly understood. The fact that prose forms such as the novel and short story could turn to the post-apocalypse, but theater found it difficult, can likely be attributed, to theater's concern with the possibility of human action—in this case, action toward the prevention of mass extinctions, of mass annihilation. See: Friedrich Dürrenmatt, "Der Winterkrieg in Tibet," in *Der Tunnel und andere Meistererzählungen* (Zürich: Diogenes, 2011), 161–238.; Arno Schmidt, *Die Gelehrtenrepublik: Kurzroman aus den Rossbreiten* (Karlsruhe: Stahlberg, 1957).

⁷ Klaus-Detlef Müller, "Brechts Leben des Galilei und die Folgen - Physiker als Gegenstand literarischer Phantasie," in *»Scientia poetica«: Literatur und Naturwissenschaft*, ed. Norbert Elsner and Werner Frick (Göttingen: Wallstein, 2004), 387.

drama amongst playwrights resulted from the continuing desire (and/or inherent demand) to render one's material stageable according to the precepts of drama: i.e., to contextualize it firmly in a plot presenting an interpersonal conflict between an embodied protagonist and his or her antagonists. However, the material of the atomic bomb is not necessarily appropriate for representation through drama. Compounding matters, this small segment of theatrical history took place in an age that questioned the possibility of individual agency, as central such a concept is to the classical dramatic form. Throughout its period of relative salience, the authors of the physicist dramas struggled to transform the material of the atomic bomb and arms race convincingly dramatic, but their efforts are collectively worth examining as an example of the transformations taking place in the theater of the postwar. This study will show that the thematic material and the selected form never quite cohered over two decades of theater development and that the lack of a fully dramatic correspondence generated successive solutions, each one departing from and seeking to transform the preceding one.

Most of the secondary literature to address the German-language atomic plays and physicist dramas as a literary phenomenon concentrates on a small set of works by relatively well-known authors. These works include: Bertolt Brecht's *Leben des Galilei* (1943/45), Max Frisch's *Die Chinesische Mauer* (1946/55), Carl Zuckmayer's *Das kalte Licht* (1955), Friedrich Dürrenmatt's *Die Physiker* (1962) and Heinar Kipphardt's *In der Sache J. Robert Oppenheimer* (1964). Occasionally, secondary literature considers further works as well. As stated, however, it is not merely my intention to provide an encompassing theory of the atomic play, but to demonstrate its development over time. Therefore, I have identified and accessed as many atomic plays as possible. This search took place via varied means, including the existing secondary literature on atomic plays, literary histories of the 20th century, literary and cultural

histories of the 1950s, key word searches on online databases (for example, WorldCat), and advice from colleagues. Occasionally, luck intervened as well.

As a result of such research, this dissertation has taken as its starting point a larger corpus of atomic plays and physicist dramas than any study preceding it. The corpus consists of 24 pieces written for the stage, some of which also had televised versions or audio versions, as well as 7 radio plays. The stage works are the focus of this study. They represent of a variety of formal genres, including dramas (adhering in varying degrees to the analytical ideal), station dramas, epics, a cabaret theater sketch, a cabaret number, a political cantata, and others. In my research, I was restricted first and foremost by theme and by linguistic category: the significance of nuclear weaponry and the German language. My research turned up works by authors living both in East and West Germany, in Switzerland, Austria, the Alsace, and, in the case of Alfred Gong, an author from the Bukovina who in the meantime had moved to New York and yet continued to write in German.⁸ The titles and authors of these plays are listed in the appended table "The Atomic Plays."

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⁸ Of course, atomic plays were written in other languages as well. The atomic plays of the English-Language theater have been addressed, for example, by Charles Carpenter. (Charles A. Carpenter, Dramatists and the Bomb: American and British Playwrights Confront the Nuclear Age, 1945-1964 (Westport, Conn: Greenwood Press, 1999). Many prominent British and American playwrights wrote plays about or commented on the atomic bomb, including Upton Sinclair and a partial draft by George Bernard Shaw. Several British playwrights contributed to the antiatomic movements in the United Kingdom in the late 1950s and early 1960s, including David Compton's A View from the Brink, which was performed at the Easter March 1960, J.B. Priestly's Doomsday for Dyson, and David Mercer The Climate of Fear. (cf. Raimund Kurscheid, Kampf dem Atomtod! Schriftsteller im Kampf gegen eine deutsche Atombewaffnung, Hochschulschriften Gesellschafts- und Naturwissenschaften 84 (Cologne: Pahl-Rugenstein, 1981), 227–28.) Finally, it is worthwhile to mention a late English contribution to the thematic cluster that can be considered both a physicist play and, though stylistically unique from them, an heir to the best of the earlier German atomic plays: Michael Frayn's Copenhagen, which premiered 1998 in London and in 2000 in New York. The play draws on the trope of memory debate and reconstruction. The voices of Niels and Margrethe Bohr, as well as of Werner Heisenberg, debate and reconstruct the meeting that took place between Bohr and Heisenberg in 1941, as Bohr's Denmark was under Nazi occupation and Heisenberg had remained loyal to the German government. (see: Michael Frayn, "Copenhagen," in Plays: 4 Copenhagen, Democracy, Afterlife (London: Meuthen, 2010), 1–153.)

TABLE 1: The Atomic Plays

▼ 7	A 41	TOTAL	(Intended)
Year	Author	Title	Medium
1945	Brecht, Bertolt	Leben des Galilei (2. Vers.)	Stage
1946	Frisch, Max	Die Chinesische Mauer	Stage
1947	Eggebrecht, Axel	Was wäre, wenn	Radio
1947	Müller, Paul	Atombombe odder D'Dama han s' Kommando	Stage
1948	Denger, Fred	Bikini	Stage
1948	Dürrenmatt, Friedrich	Der Erfinder	Stage
1948	Wessel, Oscar	Hiroshima	Radio
1949	Langenbeck, Curt	Der Phantast	Stage
1950	Eich, Günther	Träume	Radio
~1950	Schneider-Lengyel, Ilse	Hier Welle Nullpunkt. Achtung Stickstoff.	Stage
1952	Becher, Ulrich	Die Kleinen und die Großen	Stage
1952	Becsi, Kurt	Atom vor Christus	Stage
1952	Weisenborn, Günther	Die Familie von Makabah	Stage
1954	Becher, Ulrich	Feuerwasser	Stage
1955	Dürrenmatt, Friedrich	Das Unternehmen der Wega	Radio
1955	Gong, Alfred	Die Stunde Omega	Radio
1955	Weyrauch, Wolfgang	Die japanischen Fischer	Radio
1955	Langner, Ilse	Cornelia Kungström	Stage
1955	Zuckmayer, Carl	Das kalte Licht	Stage
1957	Pfeiffer, Hans	Laternenfest	TV, Stage
1957	Weisenborn, Günther	Göttinger Kantate	Stage
1958	Jahnn, Hans Henny	Die Trümmer des Gewissens	Stage
	-		Radio,
1958	Schneider, Rolf	Prozeß Richard Waverly	Stage
1959	Kleffel, Hellmut	Der bucklige Stern	Stage
1960	Rehfisch, Hans José	Jenseits der Angst	Stage
1961	Gong, Alfred	Zetdam	Stage
1962	Dürrenmatt, Friedrich	Die Physiker	Stage
1963	Heym, Heinrich	Asche im Wind	Stage
1964	Kipphardt, Heinar	In der Sache J. Robert Oppenheimer	TV, Stage
1968	Rubenstein, Hilde	Das Tiefgefrorene Reh	Stage
1984	Mueller, Harald	Totenfloß	Stage

My study is limited to a short period of dramaturgical writing between 1945 and 1965, what one might consider the postwar and the early Cold War. In some sense, one can theorize

that the popularity of the atomic play follows the trajectory of the first 'crescendo' of the nuclear arms race, from the bombing of Hiroshima and Nagasaki in 1945, through the development of the hydrogen bomb by the US and USSR in 1953, intensifying at the very beginning of the 1960s and calming following the signing of the nuclear test-ban treaty in 1963. This period includes important, tense developments specific to Germany, including the Berlin Air Lift, the rearmament of both East and West Germany, and the efforts of the Adenauer Government to arm the Bundeswehr with nuclear-capable missiles, evoking a broad peace movement. After 1964, the bomb becomes a less significant theme for new dramatic writing in Germany. Later documentary dramas, such as Peter Weiss's *Viet Nam Diskurs* (1968) and Rolf Hochhuth's *Soldaten* (1967) include references to the atomic bomb, but do not concentrate on it, instead including it as one element in a broader discourse on civilian targets in air wars. Atomic plays written in German after 1964 are few and far-between. I have only identified Hilde Rubenstein's *Tiefgefrorenes Reh* (1968) and Harald Mueller's *Totenfloß* (1986). Notably, these are distinct

⁹ cf. Stölken-Fitschen, Atombombe und Geistesgeschichte, 1995, 146–47. According to Stölken-Fitschen, following relatively recent crises including the construction of the Berlin Wall (1961), the Bay of Pigs Disaster (1961), and the Cuban missile crisis (1962), as well as a period of rapid hydrogen bomb tests reaching phenomenal kilotonnage, the Limited Test Ban Treaty, which banned surface testing of nuclear armaments, provided a "psychologische Zäsur." As she writes: "Dies fand ihren sichtbaren Ausdruck darin, daß die Herausgeber des Bulletin of Atomic Scientists die berühmte Uhr [the doomsday clock] auf dem Cover [of their magazine] wieder zurückstellten. Zum einen schien damit die radioaktive Verseuchung der Atmosphäre gebannt, zum anderen – und dies war der entscheidende Punkt – war mit dem Verschwinden der täglichen Bilder von Atompilzen am Horizont die atomare Bedrohung gleichsame unsichtbar geworden. Die Gefahr durch die Bombe, nicht mehr sinnlich wahrnehmbar oder am eigenen Leib zu spüren, wurde wieder zu einer abstrakten. Angesichts der gleichzeitig einsetzenden zaghaften Ansätze einer Entspannungspolitik verschwand die Bombe dann auch vorläufig aus der öffentlichen Debatte." From this perspective, one can argue that dramatists ceased producing new atomic plays largely because the atomic bomb had become less salient in daily discourse. Of course, this did not interrupt the success of Kipphardt's In der Sache J. Robert Oppenheimer in 1964 or, in the United States, of the films Dr. Strangelove and Fail-Safe, both also released in 1964. (Stanley Kubrick, Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb, Comedy, 1964; Sidney Lumet, Fail-Safe, Drama, Thriller, 1964.)

¹⁰ Peter Weiss, *Diskurs über die Vorgeschichte und den Verlauf des lang andauernden Befreiungskrieges in Viet Nam als Beispiel für die Notwendigkeit des bewaffneten Kampfes der Unterdrückten gegen ihre Unterdrücker sowie über die Versuche der Vereinigten Staaten von Amerika die Grundlagen der Revolution zu vernichten* (Frankfurt/Main: Suhrkamp, 1968); Rolf Hochhuth, *Soldaten. Nekrolog auf Genf* (Reinbek bei Hamburg: Rowohlt, 1979).

from the other atomic plays in that they imagine the wasted world following the radioactive apocalypse, rather than the intrigues and deliberations of actors hoping to prevent it.¹¹

Interlocutors

Several valuable assessments of the atomic plays and physicist dramas already have been written. To address these, however, it is necessary to first briefly reflect on the work that has widely been viewed as the initial physicist drama, Bertolt Brecht's *Das Leben des Galilei*. While Brecht's *Leben des Galilei* was originally written in 1938 and 39, before the invention of the atomic bomb, the second version of the play, completed in collaboration with Charles Laughton in California and later translated back into German, was rewritten in response to the atomic bomb specifically. At the play's end, Galileo implicitly addresses the physicists of the 20th century:

Ihr mögt mit der Zeit alles entdecken, was zu entdecken gibt, und euer Fortschritt wird doch nur ein Fortschreiten von der Menschheit weg sein. Die Kluft zwischen euch und ihr kann eines Tages so groß werden, daß eure Jubelschreie über irgendeine neue Errungenschaft von einem universalen Entsetzenschrei beantwortet werden können. – Ich hatte als Wissenschaftler eine einzigartige Möglichkeit. In meiner Zeit erreichte die Astronomie die Marktplätze. Unter diesen ganz besonderen Umständen hätte die Standhaftigkeit eines Mannes große Erschütterungen hervorrufen können. Hätte ich widerstanden, hätte die Naturwissenschaftler etwas wie den hippokratischen Eid der Ärzte entwickeln können, das Gelöbnis, ihr Wissen einzig zum Wohle der Menschheit anzuwenden!¹⁴

¹¹ Hilde Rubinstein, *Tiefgefrorenes Reh: Stücke, Lyrik, Prosa*, 1. Aufl, Dialog (Berlin: Henschelverlag, 1987); Harald Mueller, "Totenfloss," *Theater heute*, 1986.

¹² This tendency is for example reflected in the title of Klaus-Detlef Müller's article on the subject, which poses the atomic plays to follow *Galileo* as its direct descendants. (Müller, "Brechts Leben des Galilei und die Folgen - Physiker als Gegenstand literarischer Phantasie.")

¹³ cf. Heinz Geiger, *Widerstand und Mitschuld. Zum deutschen Drama von Brecht bis Weiss* (Düsseldorf: Bertelsmann Universitätsverlag, 1973), 69–70.

¹⁴ Bertolt Brecht, *Leben des Galilei* (Frankfurt/Main: Suhrkamp, 1963), 126.

The statement, made after Galileo has succumbed to the threat of torture and recanted his studies supporting the Copernican system, places a pressure on scientists to follow something like the "Hippocratic Oath" for their own discipline—that, in contrast to the previous commandment of science, contributing to knowledge for knowledge's sake alone—future scientific research must be oriented toward the good of mankind, reinventing a displaced humanist paradigm for the 20th century. At the same time, Galileo's words place disproportionate emphasis on the significance of his *individual* act of resistance; if *he alone* had resisted the Catholic Church's pressures to recant, he could have "summoned great tremors." By this he means that the moral action of a single individual; the resistance of a single rational being to a corrupt regime, has the capacity to make a significant impact on the future development of the world.

In a 1962 essay, Hans Meyer outlined the foundational tension within the genre of the physicist dramas via a comparative analysis of Bertolt Brecht's Galileo and Friedrich Dürrenmatt's *Die Physiker*. The basis of this comparison lies in the tension field between the possibility that an individual might make an active, positive intervention in the fate of mankind and the impossibility of doing so. As Mayer notes, the arguments presented in this play reflect Brecht's belief in "die Möglichkeit verantwortungsvollen Handelns: nicht bloß im Jahrhundert des Galilei, sondern auch in der Lebenszeit des Bertolt Brecht." In contrast, Dürrenmatt's *Die Physiker* rejects this possibility. Drawing on Dürrenmatt's *21 Points*, a series of thesis that accompany *Die Physiker*, Mayer argues that the play demonstrates that "Opfer des Einzelnen sind heute sinnlos. Der Einzelne kann die Welt weder durch Opfer erlösen noch durch sein Denken und Handeln von Grund auf verändern, und sei er selbst der größte Physiker der

¹⁵ Hans Mayer, "Dürrenmatt und Brecht oder die Zurücknahme," in *Über Friedrich Dürrenmatt*, ed. Daniel Keel, Friedrich Dürrenmatt, Werkausgabe in dreißig Bänden 30 (Zurich: Diogenes, 1986), 61. (Mayer's essay was originally published in 1962.)

Menschheitsgeschichte."¹⁶ In other words, the days in which individuals can have an influence on world development are long past. Thus he identifies the fundamentally counterpoised models of human agency in these plays: one promotes the belief that individual action can have influence in world affairs; the other rejects this notion. Without acknowledging that Brecht's *Galileo* and Dürrenmatt's *Physiker* factor into a range of plays addressing similar themes, Mayer nevertheless formulated the basis of later descriptions of the physicist drama as a thematic genre—they are arguably about agency.¹⁷

In 1968, Joanne Hines Talbot's investigation of five major "Atomdramen" described the thematic genre of atomic plays and identified their major parameters. The dissertation expands the field of atomic plays: it discusses Bertolt Brecht's *Das Leben des Galilei*, Carl Zuckmayer's *Das kalte Licht*, Heinar Kipphardt's *In der Sache J. Robert Oppenheimer*, Friedrich Dürrenmatt's *Die Physiker*, and Hans Henny Jahnn's *Die Trümmer des Gewissens*. Talbot acknowledges the common questions of these plays, starting from the fundamental distinction between scientific research pursued as an activity in its own right and scientific research pursued for the improvement of mankind's position. This distinction raises further issues, including the collective nature of modern scientific research, the scientist's lack of control over future

¹⁶ Mayer, 78.

¹⁷ Regarding later works, I am referring to Klaus-Detlef Müller (Müller, "Brechts Leben des Galilei und die Folgen-Physiker als Gegenstand literarischer Phantasie."), whose interpretation draws on Charbon explicitly, the chapter on drama in Ilona Stölken-Fitschen (Stölken-Fitschen, *Atombombe und Geistesgeschichte*, 1995, 215–28.), which concentrates on the way that Kipphardt's play contributed to the myth of the conscientious objector scientist in Germany, and concludes with a comparison between the three dominant physicist plays: "Aber anders als Kipphardt und auch als Brecht will Dürrenmatt die Welt mit seinem Stück nicht zum Positiven verändern, er liefert dem Zuschauer nur eine Analyse des Weltzustandes, in der die 'schlimmstmögliche Wendung' (21 Punkte) bereits eingetreten ist." Franz Norbert Mennemeier concentrates on Brecht and Dürrenmatt, much to the same end, however, he also acknowledges more explicitly than other authors the chronological distance between Brecht and Dürrenmatt ("die Erfahrung einer Generation") and suggests that Dürrenmatt's pessimistic worldview had already been on the rise amongst authors in the 1950s. (Franz Mennemeier, *Modernes deutsches Drama : Kritik und Interpretation*, 3., verb. und erw. Aufl., vol. 2: 1933 bis 1970er Jahre (Berlin: Weidler, 2005), 166.

applications of their discoveries, and the tensions displayed between the scientists and the political configuration in which they work. ¹⁸ Talbot acknowledges, however, that each of the concerns presented here is significant foremost in its relationship to the individual responsibility of the scientist. And while these plays generally suggest that their scientist-protagonists will have to reconsider their dedication to the principle of the "scientific contribution" at the expense of ethical considerations, ¹⁹ the plays ultimately propound, Talbot concludes, that "one can only speak of the 'responsibility of the scientist' in a limited sense. It is a problem that belongs to all of society, not to the scientists alone." ²⁰ In this respect, Talbot identifies the same argumentative poles as Mayer, but organizes them in the realm of the sciences specifically.

Following Talbot, the 1970s saw two important contributions to the study of the physicist dramas. In *Widerstand und Mitschuld, zum Deutschen Drama von Brecht bis Weiss*, Heinz Geiger's chapter on the physicist dramas significantly expanded the number of plays considered by contrasting the plays based on historical precedents to those "freely invented" by the author; i.e. Brecht's *Das Leben des Galilei* and Kipphardt's *In der Sache J. Robert Oppenheimer* in opposition to everything else. The distinction between historical and freely invented materials helped to outline what might be viewed as the standard form of the physicist drama genre. In this, an invented dramatic conflict develops out of the personal opposition between scientists

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¹⁸ These topics had already been discussed occasionally, for example, in reviews of individual plays in German theater magazines, especially following the premiere of Dürrenmatt's *Die Physiker*. Talbot's reference to *Theater und Zeit* from 1962 is just one example of the theater magazine's and feuilletons' attention of the themes she discusses. (cf. Joanne Hines Talbot, "The Theme of 'the Scientist's Responsibility in the Nuclear Age' in Contemporary German Drama." (Diss., Boston University, 1968), 6.) Nonetheless, Talbot's dissertation constitutes the earliest comparative investigation of the genre.

¹⁹ cf. Talbot, 222. Talbot features several quotations that reflect the scientists' dedication to the "wissenschaftlicher Beitrag," a phrase borrowed from Brecht's *Das Leben der Gallilei*.

²⁰ Talbot, 222.

who support and who oppose the further development of nuclear technologies. Geiger acknowledges the difficulty of transforming the material of the physicist and atomic bomb into a strictly dramatic form, but he dismisses nearly all physicist dramas as inferior—with the exception of those by Dürrenmatt, Brecht, and Kipphardt—without adequately investigating why their authors have chosen their respective formal approaches.²¹

Finally, the appearance of Geiger's chapter was closely followed by Rémy Charbon's *Die Naturwissenschaften im modernen deutschen Drama* in 1974. The book opens with detailed historical background information on the role the sciences play in the 20th century, integrated thoroughly into the sphere of geopolitics, while concentrating on the atomic bomb. Charbon's most significant contribution to the discussion of the atomic plays is his acknowledgement of the concept of *Sachzwänge*, or practical constraints. ²² The production of an improved weapons system places pressure on rival geopolitical actors to match and outmatch these improvements. What Charbon terms the "Eigengesetzlichkeit des technischen Fortschritts," is, in the given context, concerned primarily with military hardware. Nonetheless, its implications for life in the 20th century are far-reaching:

Die Entsinnlichung und zunehmende Unüberschaubarkeit unserer Umwelt, die Ohnmacht gegenüber einem selbstgeschaffenen Apparat, dessen einzelne Teile sich allmählich verselbstständigen, und die daraus resultierende Vorherrschaft der von vermeintlichen Sachzwängen motivierten Verwaltungsbürokratie über die politische, dem Volk verantwortliche Führung.²³

²¹ cf. Geiger, *Widerstand und Mitschuld*, 94 f. In addition to works by Brecht, Kipphardt, Dürrenmatt, Zuckmayer and Jahnn, Geiger integrates valuable descriptions of Günther Weisenborn's *Die Familie von Makabah*, Hans José Rehfisch' *Jenseits der Angst*, Kurt Becsi's *Atom vor Christus* and Curt Langenbeck's *Der Phantast* and analyzes them collectively to establish a concept of the atomic plays based on "freely invented materials." Geiger, 86–89.

²² Rémy Charbon, *Die Naturwissenschaften im modernen deutschen Drama* (Zürich; München: Artemis Verlag, 1974), 27. Charbon's study is somewhat more inclusive than Talbot's, including, in addition to those works discussed by Talbot, brief considerations of Georg Kaiser's *Gas* and Rolf Schneider's *Prozess Richard Waverly*. His work concentrates on Brecht, Dürrenmatt and Frisch.

²³ Charbon, 30.

The same practical constraints that feed the development of the Cold War manifest in all aspects of political life. As matters concerning human collective decision-making are ceded to an incomprehensible and complex, albeit man-made, environment and to the technocrats, democratic politics decline and detach from practical decision-making. This leads Charbon to an important reinterpretation of Dürrenmatt. As he writes "[Zu Dürrenmatts] These, was alle angehe, könnten nur alle lösen, erfindet er eine Handlung, die jede Lösung ausschließt." As a result, as Charbon effectively articulates, the discursive axis of the physicist dramas takes place between two poles:

Einerseits das Wissen um biologische, historische und soziale Determinationen, dramatisch fruchtbar gemacht seit Ibsen und den Naturalisten, anderer seits das erstarkende Selbstbewußtsein des Menschen, die Überzeugung, daß «Schicksal» nicht verhängt, sondern von Menschen gemacht also von Menschen gestaltbar sei. ²⁶

Such an assessment effectively leaves the interpretation of Brecht untouched, but significantly reinterprets Dürrenmatt. This constitutes an important turn from the initial thesis posed by Mayer and Talbot: The question is less one of "to whom does responsibility belong—the physicists or the politicians?" and it is not even merely, despite the misleading indications of Dürrenmatt's 21 Punkte, one of "to the physicists or to society?" It is far more fundamental, and perhaps more familiar—a question of the possibility of responsibility and agency itself. Can one, as Brecht claims, intervene in the world at all? Alternatively: To what degree, as is argued in Die Physiker, is one conditioned by and trapped in the apparatus, thoroughly enclosed, such that one cannot in any reasonable degree take action that would intervene in the unfolding pressures of the current system of political, social and economic relations that define the world?

²⁴ Charbon, 30.

²⁵ Charbon, 230.

²⁶ Charbon, 232.

The contributions of Mayer, Talbot, Geiger and Charbot are all important to the interpretation of the atomic plays and physicist dramas, and they cumulatively formulate the relevant and central question of agency in these works. They have identified the problem: the issue of agency and drama in the age of the nuclear bomb. However, none of these authors has adequately and comprehensively studied the problem of the nuclear bomb as an issue for drama in historical context, through its changes in the 20th century; they neglect drama's formal dimension and ignore the wide variety of formal-dramatic solutions provided over two decades. The approach I take in my dissertation therefore first significantly increases the number of works taken into consideration and then also analyzes them in chronological order in terms of the formal problems which arise when attempting to stage the bomb in the theater. As I argue, the early atomic plays—those of the 1940s—largely represent an experimental effort to represent the issues of impotency and psychological anguish in the face of the bomb—often at the expense of the dramatic principle. The plays of the 1950s employ the figure of the physicist to produce a more convincingly "dramatic" form, propping up the notion of individual responsibility—as I will show—through the exploitation of a religiously-tinted immaterial/material divide. But this approach soon withers along with the principles of classic drama. In the late 50s and early 60s, new works arrive which reject the physicist dramas of the 1950s, sometimes appearing to parody them, at other times rejecting dramatic principles outright in favor of a more politically deliberative atomic play. In this dissertation, the atomic play emerges as an evolving generic field, in which solutions to a difficult aesthetic and formal problem—how to stage nullified agency in the age of the nuclear bomb—arise and are superseded by other solutions, which turn out to be equally flawed.

Argument

The atomic bomb's treatment in the context of German-language theater results from several factors. Its content is influenced by the role German scientists played in advanced research into nuclear mechanics—contributing to the possibility of nuclear weapons.

Simultaneously, the popular myth of the German physicist as conscientious objector helped as well. The popularity of this myth is fueled in-part by another factor influencing the treatment of the atomic bomb in the German theater: the discourse on German guilt and responsibility following the Second World War and the Holocaust. This discussion debated the relationship between individual and collective guilt for the crimes of Nazism; concepts of individual and collective guilt, as well as the possibility of moral action in a system of oppressive disciplinarity were widely discussed and readily available for interpretation within related contexts such as the nuclear sciences. The widespread belief that German scientists had quietly but resolutely sabotaged the government's efforts to develop an atomic weapon provided a welcome counter to discourses of mass complicity in Nazi crimes. And then, the new political developments of the

²⁷ Ralf Trinks notes that the theater, alongside the newspapers, served as an important medium for the discussion of German guilt in the early postwar. However, the stage was most often concerned with the release of Germans from guilt rather than honest Auseinandersetzung: "Zwar gab es eine intensive Auseinandersetzung mit der Vergangenheit, doch blieb diese im Wesentlichen auf das Kriegserlebnis beschränkt. Der Reflexion über Strukturen und Ursachen des Nationalsozialismus wich man auf diese Weise aus, die Deutschen erschienen als Opfer des Hitler-Regimes. Ihre Schuld resultierte weder aus politischer Mitverantwortung noch aus individueller Beteiligung an den NS-Verbrechen, sondern war in ihrem Überleben zu suchen." (Ralf Trinks, "Schuldlos schuldbeladen': Entlastungsstrategien und Schuldbekenntnis in der frühen Nachkriegsdramatik," in Schuld und Sühne?: Kriegserlebnis und Kriegsdeutung in deutschen Medien der Nachkriegszeit (1945-1961): internationale Konferenz vom 01.-04.09.1999 in Berlin, ed. Ursula Heukenkamp, Amsterdamer Beiträge zur neueren Germanistik 50 (Amsterdam; Atlanta, GA: Rodopi, 2001), 226, https://find.library.duke.edu/catalog/DUKE003073554.) Trinks notes that these plays had a tendency to describe the Nazi-Regieme as if it were an irresistible natural force: "Das 'Dritte Reich' wurde dämonisiert, als Naturkatastrophe oder Schicksalsprüfung, als unüberwindliche Macht dargestellt. Man versuchte zu beweisen, daß Widerstand unmöglich gewesen war und bestritt damit die eigene Verantwortung." (Trinks, 219.) The physicist drama has a similar starting point—the Cold War and the arms race are beset by practical necessities; the scientist's hand often appears forced, if not by the government, then by other historical determinants. In its concern for a *future* catastrophe, however, the atomic play shows that the protagonist can at least attempt to take a moral standpoint and rise above political and historical forces.

²⁸ Stölken-Fitschen has noted that Werner Heisenberg first introduced the idea that the German atomic scientists could have built that atomic bomb but chose not to, but the idea was especially promoted by Robert Jungk in *Heller*

1940s-1960s, most significantly the gradual rise of autochthonous political movements in West Germany around environmental concerns (including atmospheric radiation) and both the rearmament of the Bundeswehr and its tentative armament with nuclear capabilities play a role as well.²⁹ There were, in other words, a host of interlinked historical factors and political developments that served to focus German discourse on the atomic bomb.

Simultaneously, certain aesthetic, philosophical and ideological considerations played a role in the treatment of the atomic bomb in German-language theaters. Despite the ruinous state of their theaters, Germans, with the approval of the occupying forces, took to organizing theatrical entertainments with gusto following Stunde Null.³⁰ Nonetheless, the era of Nazi rule had interrupted Germany's relationship to the avant-garde theater of the rest of the world. Its expressionists had been run out of the country and their works destroyed; it would take some time before they returned, and longer yet before Germany would redevelop its own modern

als Tausend Sonnen in 1956: "Im Gegensatz zu den amerikanischen Wissenschaftler, die mit aller Energie an der neuen Waffe gearbeitet hätten, obwohl sie – in einem freien Land lebend – keinen staatlichen Zwängen ausgesetzt waren, geraten die deutschen Atomphysiker zu moralischen Helden" who had followed their consciences to resist the construction of the atomic bomb. In reality, Stölken-Fitschen notes, the German physicists were in fact never faced with the prospect of such a project due to "fehlenden Möglichkeiten und Mittlen." (Stölken-Fitschen, Atombombe und Geistesgeschichte, 1995, 216.)

²⁹ Although the environmentalist movement would not come into full swing in Germany until later, Frank Uekötter acknowledges individual, localized precursors to the movement already that emerged in the 1950s, including, for example, opposition to a dam project in the Wutach Gorge in the Black Forest and activism to protect the Knechtsand (a "nondescript sandbank in the estuary of the Weser") from becoming a Royal Air Force bombing range. (cf. Frank Uekötter, *The Greenest Nation?: A New History of German Environmentalism*, 2017, 60–65.) The anti-atomic movement and its concerns about atmospheric radiation gave budding German environmentalism a global aspect, especially following the "Lucky Dragon V" incident, in which a Japanese fishing ship, working outside of the restricted zone, was irradiated with fatal and economically catastrophic effects following a U.S. hydrogen bomb test in the Pacific. (cf. Uekötter, 76–77.) For a discussion of German literature in the context of the anti-nuclear movement, see: Kurscheid, *Kampf dem Atomtod!* Notably, only few of the dramatists considered for this dissertation were directly involved in the *Kampf dem Atomtod!* movement: Wolfgang Weyrauch (*Die japanischen Fischer*, 1955) and Günther Weisenborn (*Die Familie von Navada*, 1952/58; Göttinger Kantate, 1958).

³⁰ See, for example: Hans Daiber, *Deutsches Theater seit 1945 [i.e. neunzehnhundertfünfundvierzig] : Bundesrepublik Deutschland, Dt. Demokrat. Republik, Österreich, Schweiz*, 1. Aufl. (Stuttgart: Reclam, 1976), 11–19.

theatrical movements: As Franz Mennemeier has noted, "bis in die sechsziger Jahre ist modernes Theater in Deutschland, jedenfalls in der Bundesrepublik, so gut wie identisch mit ausländischem Theater." The dominant modern theater of the postwar period was comprised largely of imports represented in names such as Jean Anouilh, Tennessee Williams and Samuel Beckett. In this way, the dramatic treatment of the atomic bomb was influenced by wider European and international aesthetic and ideological trends, but also, importantly, by Germany's exclusion from aesthetic developments during the period of National Socialist rule, affecting the tone and the theatrical devices that would be implemented by the country's practitioners.

The Atomic Bomb as Problematic Material for the Drama

In contrast to other studies, this dissertation begins from the position that the atomic bomb and the physicist both constitute problematic material for the formal demands of the theater. It is not, I should say, the purpose of this study to impose an outdated prescriptive aesthetics on the form of the drama—especially writing today, in an era where post-dramatic and directorial theater is so thoroughly engrained as to nearly elide the formal principle of drama entirely. Nonetheless, reference to a prescriptive formal ideal of classical drama provides a backdrop before which one can compare theatrical works. Additionally, even if the classical precepts of dramatic construction were well in decline by the mid-20th century, there were nevertheless still tendencies toward them and they still had their proponents in the 1950s. (The lasting strength of this formal ideal, despite movement toward new theatrical forms in the 20th century, is reflected in articles written in the late 1940s in the postwar theater magazine, *Theater*

³¹ Mennemeier, *Modernes deutsches Drama*, 2: 1933 bis 1970er Jahre:124.

³² cf. Friedrich Michael and Hans Daiber, *Geschichte Des Deutschen Theaters*, 1. Aufl. (Frankfurt am Maim: Suhrkamp, 1990), 138.

der Zeit, to be discussed in Chapter 2.) A quotation from Peter Szondi helps to outline the core of the classical dramatic conception.

Das Drama der Neuzeit entstand in der Renaissance. Es war das geistige Wagnis des nach dem Zerfall des mittelalterlichen Weltbilds zu sich gekommenen Menschen, die Werkwirklichkeit, in der er sich feststellen und spiegeln wollte, aus der Wiedergabe des zwischenmenschlichen Bezuges allein aufzubauen. Der Mensch ging ins Drama gleichsam nur als Mitmensch ein. Die Sphäre des >Zwischen</br>
schien ihm die wesentliche seines Daseins; Freiheit und Bindung, Wille und Entscheidung die wichtigsten seiner Bestimmungen. 33

Several key ideas are expressed in this short statement. The origin of the drama in the renaissance implies its relationship to an emerging secular humanism, in which mankind in general and the individual human being in particular stands at the center of the European worldview. It is in this context that it becomes possible to establish the drama as the artwork per se that depicts—in Szondi's definition, at its very core—the space of interaction between human beings, of their will and decision-making power, as it contrasts to the wills and acts of others. Given this formal precept, the atomic bomb presents a problem to the requirements of classical dramatic form. The atomic bomb is only dramatic in a limited sense. Most of the people who live under the threat of a future nuclear war, or in its aftermath, do not experience the bomb as the direct outcome of their actions. It can only with difficulty constitute the object of the relations between individuals. At best, it presents the hazy and threatening background of future destruction, entering the experience of individuals through no identifiable action of their own (and therefore in most cases interrupting, rather than contributing to a unity of action).

Due to the need to present social and systemic issues in terms of interpersonal conflict, very often the physicist and his opponents formed the basis for the conflict in the atomic play:

Hence the physicist drama. In the physicist one can establish a clear hero or villain—sometimes

³³ Peter Szondi, *Theorie des modernen Dramas* (1880 - 1950) (Frankfurt/Main: Suhrkamp, 1963), 14.

both—, but in any case a single focal figure and therefore, when opposed by a protagonist or antagoinist—dramatic conflict. And yet this, too, presents its own formal issues, foreseen by Gustav Freytag in his 1863 treatise on the technique of the drama, long before the invention of the atomic bomb. Freytag explicitly warned his readers against the otherwise seductive inclination to select the artist, the thinker, or—importantly—the *inventor* as the primary protagonist of the drama. There were several issues at hand in such a process, some stemming from audience unfamiliarity or bias toward the chosen figure.³⁴ Most significantly, however, such figures are likely to lack "stageability," due to their association with visually unrenderable "*inward struggles*" As Freytag claimed,

the making use of anecdotes from the life of such great men, the meaning of which does not show itself in the action but in the non-representable activity of their laboratory, is intrinsically right undramatic. The greatness in them is non-representable; and what is represented borrows from a moment of his life lying outside the piece.³⁶

In other words, the most important contributions of such a figure could not be represented dramatically. While an internal motivation may be included in drama, it cannot be the main idea of a drama. As Freytag notes, the drama presents a struggle. Though with "strong perturbations of the soul," the protagonist takes action and faces opposing forces which "must be made visible

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³⁴ First, if the audience did not know the historical figure, Freytag reasoned, it would be necessary to introduce him or her through extensive, non-dramatic expositional materials. Second, if the audience was familiar with the figure, the play would be doomed to sink or swim not on its own merits, but on account of the audience's preconceived personal views on the validity of that figure as a subject of the work. (cf. Gustav Freytag, *Technique of the Drama; an Exposition of Dramatic Composition and Art.* (B. Blom, 1968), 68–69.) The necessary inclusion of expositional materials is notably apparent, and interestingly executed, both by Brecht in *Galileo* and Zuckmayer in his fictionalization of Klaus Fuchs. It is perhaps telling that both authors choose to use epic, rather than dramatic forms to present their respective figures. In a sense, a similar approach is true in Kipphardt's *In der Sache J. Robert Oppenheimer*, in the sense that, in this play, action is generally replaced by deliberatively presented material on the life of the inventor.

³⁵ Freytag, 68.

³⁶ Freytag, 69.

in a human representative."³⁷ The process of thought, of research, of lonely hours spent pouring over books, pen and paper, experimental hardware, alone in the workshop, or even working collectively as a team to produce a new instrument or gizmo simply does not contain, at least when taken alone, material capable of being rendered in dramatic representation. Such material does not include the moment of the deed in human interaction the contest of embodied wills. The suffering conscience of the implicated physicists can only become dramatic when they are forced to disclose this suffering conscience or high ideals through actions they take in opposition to those who would force them to do otherwise. Despite Freytag's warning, the physicist *as* physicist was the most common solution to the formal issue of the atomic bomb. And his concerns often prove true as well: the physicist dramas and the atomic plays more generally tend toward discourse and deliberation, declamation and description, even where they successfully invent dramatic plots. In the atomic plays and the physicist dramas, as deeply and centrally preoccupied with the possibility of human action as they may be, the actual dramatic display of human action is almost marginalized by discourse on the atomic bomb.

Crisis and Hope in the Search for Agency

The issue of material selection is compounded by a further issue: the less human beings believe in the possibility and efficacy of collaborative or individual action, the less possible it is to create drama in the classical sense intended by Szondi and Freytag. A disillusioned view of the efficacy of human action is not the best premise for a playwright wanting to follow the precepts of dramatic action in a theatrical production. Drama had to contend with a pervading sense of nihilism and the difficulty of the individual in achieving agency in a 20th century that often appeared to have ceded it to concepts of the mass, mechanical determinism, behaviorism,

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³⁷ Freytag, 104–5.

or political necessity. The atomic plays and physicist dramas remain eminently concerned with the problem of a perceived decline in human agency throughout all these phases of their development. This was a broader issue of the theater, related to the historical relationship between dramatic form and human action. A perceived decline in human agency via the prominence of the mass and of the scientific analysis of individual behavior had already registered in the theater in the 19th and early 20th centuries. The naturalism of Gerhardt Hauptmann's Vor Sonnenaufgang (1889) and Die Weber (1892) touched upon the issue of the drives and the mass respectively, and expressionist plays such as Georg Kaiser's Gas II (1920) and Ernst Toller's Masse-Mensch (1921) further address a form of human being reduced to a product of nature and nurture, a natural or mechanical force in a broader apparatus or determined universe. Arguably, the sharp turn toward the externalization of interiorities in expressionist drama, as well as demands for the "New Man," constituted an often frantic effort to reestablish the notion of will and agency in the individual against the backdrop of mechanistic or biological determination.³⁸ The physicist drama of the 1950s occasionally draws on similar energies toward similar ends: now with the possibility that human beings, if they allow themselves to be subject to this determination, can only expect that they will bring about their own extinction by atomic bomb. At the same time, however, it carries notions of rejuvenation of humanity helped through mixed humanist intentions, religious transcendence and, on occasion, elements of nuclear

³⁸ For a discussion of this development, see: Paul Edward Wyler, "Der 'Neue Mensch' im Drama des deutschen Expressionismus" (Dissertation, 1943). As Wyler writes: "Der 'neue Mensch' wird hier nicht nur einem 'alten Menschen' entgegengesetzt. Das auch! Doch in erster Linie geht es um den Menschen überhaupt, die Erhaltung der Person, jenes Wesens zwischen Tier und Gott, dessen Existenz bedroht ist. Wieder gilt es den Menschen in die Mitte zu rücken, seine Würde zu retten. Im Wort vom 'neuen Menschen' aber spricht sich auch Kampf aus, Revolte gegen eine Zeit und ein Geschlecht, das vom Menschen den Gott subtrahiert, ihm zum unfreien Tier, zur entgeisteten Maschine entwürdigt hatte. Es spricht sich darin sowohl Entwertung als auch Neuwertung aus und schliesslich auch Neuschöpfung. Die Erneuerung des Menschen, dies hat sich der Expressionismus zur Aufgabe und Pflicht gesetzt." (Wyler, 2.)

physics—such as the difficulty of predicting natural nuclear decay and Heisenberg's uncertainty principle—which promised to overthrow ideas about determinism inherited from classical mechanics.³⁹ As a result, the atomic plays constantly examine the tensions between determinism and free will.

Chronology

The acceptance of the physicist drama's formal solution changes over the roughly twenty years of the atomic play's relative prominence. As such, this study has a historical scope. It posits an incubation period of greater variety in imagining solutions to the formal issue of the atomic bomb in the 1940s and early 1950s. Just to illustrate the variety of works in this category, one can reflect on Max Frisch's *Die Chinesische Mauer* (1946, the topic of the first chapter), Fred Denger's *Bikini* (1948), Ilse-Schneider Lengyel's *Hier Welle Nullpunkt*. *Achtung Stickstoff* (most likely late 40s/ early 50s),⁴⁰ or Ulrich Becher's *Feuerwasser* (1954). The last of these, in which a New Yorker barkeep and former champion boxer outpaces a mafia boss with access to nukes, is perhaps the most successful in combining the atomic material with dramatic form. As

³⁹ The sense of diminished human agency in the mass was compounded by advances in mechanical sciences in the 18th and 19th centuries which had—sometimes inadvertently—provided fodder for materially deterministic worldviews. Despite Newton's theological intents, his Principia Mathematica helped promote the possibility of an entirely mechanistic universe, an idea that remained influenced for a long time. This was carried further in the 19th century, by Pierre-Simon LaPlace at the latest, out of this develops the concept of scientific determinism. If one knew the status and mechanical laws of all things in the universe, he posed, would it not be possible to foresee the unfolding of the entire universe? (cf. Stephen Hawking, A Brief History of Time, 10th Anniversary edition (New York: Bantam, 1998), 55.) If this mathematical predictability is true, why should it not extend to living beings as well, including the human? By the mid-twentieth century, increased knowledge of subatomic particles had helped to put an end to this. The lifespan of the radioactive isotope, which could be conceived statistically in terms of its halflife, but not determined for any one atom of an element (and seemed to exceed determination regardless what observations might be made) helped to slay LaPlace's demon. Heisenberg's uncertainty principle, placed limits on the measurements that could be made for the direction and speed of subatomic particles. (cf. Helen Beebee, Nikk Effingham, and Philip Goff, Metaphysics: The Key Concepts (Abingdon, Oxon; New York: Routledge, 2011), 103.) As a result, the tenability of transposing physics into claims about human will and agency grew increasingly questionable.

⁴⁰ While I have not been able to ascertain the date at which Schneider-Lengyel wrote this work, it is most likely the late 1940s or 1950s, a time at which she was especially prolific in her production of surrealist lyric.

generally—displaces dramatic action. *Bikini* depicts the tense interactions between the crew and passengers of a ship destined for the Bikini islands for witnessing the Operations Crossroads bombing. There is no clear dramatic plot; the play, rather serves as a canvas for the display of characters' anxieties as the onset of the nuclear age. *Hier Welle Nullpunkt* is a trippy surrealist rollercoaster in which God is put on trial for allowing the atomic bomb to exist (and is rejected by his son, Jesus), but it, too, lacks dramatic action. Frisch's play contains a dramatic plot—between the contemporary protagonist and the ancient emperor Hwang Ti—but only treats the atomic bomb first and foremost through episodic, declarative, and metaphorical means, rather than including it in this plot directly. Interestingly, Dürrenmatt's cabaret number, *Der Erfinder*, already sets the precedent for his later dramatic treatment of the atomic material in *Die Physicist* by not only representing the physicist but treating this physicist as the node of hidden geopolitical and economic forces. But this is still several years away; in the late 1940s, there seems to have been no clear consensus on the treatment of the atomic material.

Starting in 1949, a consensus would begin to form in the physicist drama; by the mid1950s, a single technique for the staging of the atomic bomb materialized in Germany. The plays that reflect this consolidation might most properly be collectively referred to as physicist dramas. These include Curt Langenbeck's *Der Phantast* (1949), Kurt Becsi's *Atom vor Christus* (1952), Günther Weisenborn's *Die Familie von Navada/Die Familie von Makabah* (1952/58), Alfred Gong's *Die Stunde Omega* (1955—despite having been conceived as a radio play), Ilse Langner's *Cornelia Kungström* (1955), Carl Zuckmayer's *Das kalte Licht* (1955), Hans Henny Jahnn's *Die Trümmer des Gewissens* (1958), Hans José Rehfisch's *Jenseits der Angst* (1960), and Heinrich Heym's *Asche im Wind* (1963). With a few exceptions, their authors attempted to

adhere to classical dramatic forms: unity of time, place and action. They all feature one or more physicists—generally as the protagonist, occasionally as the antagonist; sometimes as both. In most instances, this physicist is a nuclear scientist. Where he or she is not, the protagonist's science is nonetheless bound to some form of weapon of mass destruction, and therefore effectively operates as a stand-in for the invention of the nuclear bomb. Most importantly, however, these plays provide their physicists with unlikely sway over proliferation and utilization of their discoveries, as well as with antagonists bent on sharing and/or utilizing them. While Brecht's Galileo realized the dimension of the scientist's social responsibility too late to do anything about it—effectively at the very end of the drama and in retrospect, in these plays the moment of dramatic action is triggered by the acknowledgment of social responsibility and the analytical conflict of the drama plays out as a result of this recognition. 41 These works' pursuit of dramatic form and to embodied, staged action requires attention to a reinvigoration of human agency, which the dramatist tries to resolve through reference to a higher plane of existence, be it moral, religious or mystical. Recourse to a form of religious thought reinvigorates the possibility of the soul and therefore independent action. This might save the human from mere materiality, but the possibility of saving humanity from the atomic bomb is never left completely free of doubt.

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⁴¹ This tendency was strong enough that Joachim Kaiser, writing in *Theater der Zeit*, commented on it in the early 1960s: "Der Forscher lässt sich vom wissenschaftlichen Erkenntnisdrang und begreiflichen beruflichen Ehrgeiz auf eine (staatliche vergoldete) Bahn locken, die unter Umständen zur Katastrophe führt. Irgendeine Stimme, sei es die des eigene Gewissens, sei es, dass das eigene Gewissen aus der Gattin, der Geliebten, dem Freund, dem aufgeklärten politische Gegner spricht – beginnt nun, unseren Forscher zu warnen: "du bist auf dem falschen Weg." Der Gelehrte trägt jetzt den Konflikt aus, entscheidet sich, mach um seines Volkes willen weiter, hört um der Menschheit willen auf, begeht Selbstmord oder wird Träger eines Staatspreises." Chapter 2 will address the inadequacy of this claim. Nonetheless, it is worthwhile to acknowledge this turn towards a more schematic approach. (Joachim Kaiser, "Die Welt als Irrenhaus," *Theater Heute* 3, no. 4 (April 1962): 5–6. Cited in: Talbot, "The Theme of 'the Scientist's Responsibility in the Nuclear Age' in Contemporary German Drama.," 6.)

The end of the 1950s and the early 1960s marked a decline in the new production of physicist dramas. It brought plays that can be read as meta-critiques of the physicist dramas' adamant recourse to religion or mystical beliefs for the recovery of agency. Here I have in mind both Alfred Gong's Zetdam: Ein Satyrspiel (1961) and Friedrich Dürrenmatt's Die Physiker (1962). Each of these works expresses an implicit critique of the physicist drama in its own way, though common to both is the prevalence of comic grotesque themes, as well as a criticism of the idea that invocations of moral codes, aesthetic processes, or a religious imaginary can help one overcome the crisis of agency and face down the atomic bomb. Their emergence overlaps with a turn (or return), in theater, toward what Gong demands and what Dürrenmatt doubts is possible: theater as an intervention in political life. If the physicist drama's dependence on moral victory and political failure is read as a part of the 1950's broader rejection from political themes, then the changes taking place in the late 1950s and early 1960's—perceptible in Günther Weisenborn's Göttinger Kantate (1957), Rolf Schneider's Prozess Richard Waverly (initially 1958) and Heinar Kipphardt's In der Sache J. Robert Oppenheimer (1964)—help to bring the atomic play more in line with the 1960's trend toward more explicitly political literature. Weisenborn's connections to Kampf dem Atomtod and Schneider's and Kipphardt's ideological proximity to socialist concerns of the German Democratic Republic are evident. Weisenborn's play pursued political action by directly petitioning members of the German Social Democratic Party to reject Adenauer's plans for nuclear rearmament. 42 Schneider's and Kipphardt's plays pursued political influence through fervent critiques of US ideology and nuclear policy and by educating the public about the history of the atomic bomb (except when Kipphardt deviates from

⁴² Weisenborn was commissioned to write the piece for the SPD's Stuttgarter Parteitag in 1957. The succession of operatic musical performances pursued a minimum of theatricality and acting, and the tone was intended to represent "dignity" rather than "agitprop." (cf. Kurscheid, *Kampf dem Atomtod!*, 310.)

his documentary transcript and puts words in the historical Oppenheimer's mouth). These plays have done away with action on the stage in their entirety, and turned entirely to deliberation, even if this deliberation is presented in an aestheticized or theatrical form.

This study identifies a historically or temporally unfolding morphology in the thematic genre of the atomic play. The genre originates in sundry, experimental, and uncertain forms. It finds—for a period—its most stable form in the guise of the physicist drama. These forms are often specifically dramatic rather than generally theatrical; even where the Aristotelian principles of unity of time and place are rejected in favor of epic plots, unity of action is generally maintained, and the conflict are lodged in the space of interactions between humans. This relationship remains unstable, however. Even as authors seek to discuss moral precepts rather than specific political events, the physicist drama is bogged down by the need to pontificate on the real hazard facing the world. Though these dramas present the form of action demanded by principles of classical drama, they are unable to imagine a form of action that could make a real intervention in an unfolding world history. Their victories must instead be articulated through a praise of action regardless of its material efficiency; action instead becomes the watchword for the reclamation of agency through dedication to a humanist religiosity that separates human existence from mere materiality. In the late 1950s, the physicist drama therefore collapses due to the same principles that allowed it to survive in the mid-1950s. The inadequacy of its moralaesthetic solution reflects a dissatisfaction with moral aesthetic solutions more generally. This dissatisfaction is expressed in implicit and explicit commentary within the theater itself, which critiques the metaphysical appeals of the physicist dramas in favor of real-world, practical interventions into the arms race and those who pursue it to their own profit (most sharply expressed in Alfred Gong's Zetdam.) Throughout this transformation, questions of agency and

individuality never subside. They do, however, transform. What begins as a general effort to overcome a given weakness of human agency as a result of the current historical moment transforms, especially in Kipphardt and Schneider's works, into a direct investigation into the pernicious efforts on the part of governments to actively smother agency, enabled in part through the crisis politics of the arms race.

The irony of this morphology is—when viewed broadly—the chiastic structure established between the 1940s and the 1960s. The physicist dramas' dedication to dramatic form, especially the notion that the drama should put on display action taken in a space between rational actors, was always impaired by the sense that first and foremost, the atomic threat needed to be *discussed*. This holds as true for Max Frisch's *Die Chinesische Mauer*, in which expositional and declarative discussions of the bomb almost eclipse the dramatic structure, as it does for Curt Langenbeck's *Der Phantast*, in which the dramatic plot is consistently weighed down by long discussions on the danger of the bomb and possibility of scientific responsibility. For all of this, these plays reflect efforts, in terms of aesthetic form, to maintain drama as the depiction of human agency embodied in human interaction defined by speech.

Time progresses, this effort implodes. Dürrenmatt's *Die Physiker* is less a drama than a simulation of a drama. As I will argue, his antagonists are ever more the synthetic masks for underlying political and economic processes, rather than thinking, acting human beings.

Elsewhere, the political moment of the theater is raised to a new height. *Göttinger Kantate*, *Prozess Richard Waverly*, and *In der Sache J. Robert Oppenheimer* are most adamant about the capacity of the play to make a real, political intervention in the discourse on the nuclear arms race. However, the greater the effort to impose a political message, the less capable—or less interested—these works are in actually depicting action. Their deliberative, argumentative and

propagandistic elements are incisive and honed, and the latter two, especially, are apt for their capacity for realist reproduction of the courtroom space. However, the courtroom is not the space for dramatic action. It becomes, rather, the space for reconstructing memory, for interpreting the recent past, and for vocally externalizing the inner emotional contradictions of historical figures. This is narrative rather than plot-driven, psychological rather than social, and theatrical, perhaps, but not a depiction of action. As such, the atomic plays represent one strand in the historical development of theater from drama to post-drama. In them, as the call to action becomes evermore intense, the capacity to imagine action in plotted, visual-temporal performance becomes ever more depleted. A genre that from the beginning was focused on the declining significance and efficacy of individual and collective human action, and became increasingly political (rather than theological) in the course of two decades, nonetheless also became formally less dramatic—this is the paradox that emerges from a sustained historical reconstruction of the genre over time.

Chapters

This dissertation consists of four chapters presented in roughly chronological order. Each chapter discusses two atomic plays. The intent behind this structure is to include both widely discussed atomic plays and those with little historical staying power, both to place the canonical and semi-canonical plays in an aesthetic-historical context, and to compare and contrast their authors' approaches beside those of others writing about the atomic bomb in the 1940s, 50s and 60s. This approach has had two primary advantages. First, it shows the continued popularity of dramatic form amongst German writers in the 1950s. Second, it shows the significance of the axis of science, religion and spirituality in the atomic play generally, and by relativizing the content of the canonical plays amongst those which have been forgotten, it helps to articulate how these, too, did not emerge in a vacuum but were written in reaction to broadly significant cultural stimuli. The chapters proceed as follows:

<u>Chapter One: Early Solutions to the Atomic Form Problem. Max Frisch's Die Chinesische Mauer and Friedrich Dürrenmatt's Der Erfinder.</u>

This chapter explores two early attempts to resolve the problem of form in Max Frisch's Die Chinesische Mauer and Friedrich Dürrenmatt's Der Erfinder. Frisch confines his dramatic plot, which has little to do with the atomic bomb, to a small portion of the play. Concurrently, he expands expositional, episodic, and symbolic representative content in reference to the bomb. The play is pessimistic regarding humanity's ability to take collective action against the bomb and doubts the artist's capacity and willingness to confront the issue of the bomb in a productive and direct manner. Dürrenmatt's cabaret number, *Der Erfinder*, takes a different approach to the formal issue of the bomb. It integrates the bomb directly into the staged conflict. To do this, however, it must reduce the atomic bomb to the size and function of a conventional weapon, enabling the possibility of a staged "stand-off" between the protagonist and antagonist. Arguably, the sketch is a forerunner to aesthetic principles that Dürrenmatt will develop more thoroughly in *Die Physiker*—the antagonist "inventor" does not represent an individual human being in his own right, but is rather the only apparently independently acting synthetic composition of political, social, and economic forces. Each play reflects techniques further authors will use in differing degrees: increased dependence on stage deliberation, on the one hand, and the figure of the physicist as uniquely positioned to act, on the other.

<u>Chapter Two: "Die Zeit des heiligen Ungehorsams": The Physicist Drama on the Example of</u> Curt Langenbeck's *Der Phantast* and Carl Zuckmayer's *Das kalte Licht*.

This chapter examines the "physicist drama," the 1950s' standard solution to the formal problem posed by the atomic bomb. Generally speaking, in this format, skeptical state scientists experience a moral awakening that empowers them to oppose the bomb—embodied in representatives of state and science who pursue it. In Curt Langenbeck's *Der Phantast*, a three-

part Aristotelian drama respecting unity of time, form, and plot, a physicist's conscience is moved such that he destroys a dangerous formula he has conceived and earns the fury of the American Government and public for it. In Carl Zuckmayer's station play *Das kalte Licht*, an atomic spy is moved to regret his actions and ultimately turn himself in. In both instances, as in the physicist dramas more generally, the atomic threat is displaced from political considerations onto metaphysical considerations of the tension between material and technological determinism and freedom via discovery of the soul, moral reason and religious fortitude. This transfer reflects a dominant of tendency of 1950s theater generally by answering to the allegedly redemptive demands of spirit over politics.

Chapter Three: "Der Sieg des Geistes über den Ungeist der Materie"? The Implosion of the Spirit in Alfred Gong's Zetdam and Friedrich Dürrenmatt's Die Physiker.

This chapter examines two plays that reject the sharp distinctions of the 1950s physicist dramas' dichotomy between material determinism and moral reason. Gong's *Zetdam* is a self-described "satyr-play," nearly the comic reprise to his own physicist drama written a few years earlier. It rejects the principles of the physicist drama on two accounts. First, it lampoons the idea that religion could automatically provide proper ethical guidance relative the issue of the atomic bomb. Then, albeit by aesthetic means, it denounces through the *Sprachrohr* of the protagonist the idea that art and moral precepts serve as adequate and valid tools for opposing the political and economic forces that benefit from the destructive potential of the military-industrial complex. Dürrenmatt, for his part, employs his grotesque dramatic principle to render the ostensibly faceless forces of the complexly overlain economic, political and social systems dramatizable in the figure of Dr. Zahnd. His play parodies the idea of religiously-inspired resistance to technological advancement while simultaneously practicing the process of mythologization itself. Through this process, the play seeks to "capture" or render representable

the atomic bomb in a dramatic setting. To do so, however, it must corrupt the basis of the drama itself, replacing the mimesis of human action with the symbolic representation of an apparatus.

Chapter Four: "Politische Exempel." The Apparatus of the Atomic State in Rolf Schneider's

Prozess Richard Waverly and Heinar Kipphardt's In der Sache J. Robert Oppenheimer.

The final set of plays leaves earlier trends in the physicist drama behind them entirely. They take advantage of the mimetic parallels between the courtroom and the stage in order to present realist summaries of significant trials against individuals who, having previously contributed to atomic projects, grew to oppose the project and came under the scrutiny of the state. In both cases, the defendant loses the trial. However, the audience witnesses, in fact, an inversion of the process: In the courtroom of the stage, the atomic state puts itself on trial, inadvertently condemning itself before the theater public. Schneider's *Prozess Richard Waverly*, loosely based the competency trial of Hiroshima pilot Claude Eatherly, presents an explicitly socialist-realist attack on the United States atomic bomb project and anticommunist hysteria. Kipphardt's In der Sache J. Robert Oppenheimer is a documentary play developed from the transcripts of Joseph Oppenheimer's 1954 security clearance hearing. While this play is generally interpreted to present a modern update to Brecht's 'Hippocratic Oath for physicists," my interpretation focusses instead on the care with which the hearing is marked is posed as an explicit attack on liberal freedoms in the name of the atomic crisis, as well as on Kipphardt's interpretive intermezzos, which transform the piece into a reflection on the pernicious efforts of the state not only discipline its scientists, but create a standardized and obedient national populace.

Agency and its erosion are from the beginning the thematic focus of this genre, and the *representation* of agency is its formal focus—these are the dual concerns of the atomic play and the physicist drama. The chapters of my dissertation describe a trajectory in which a problem of

form is first identified, temporarily but unsatisfactorily resolved, then debunked, ridiculed, and superseded by an expressly deliberative and analytical form. In the succession of dramatic solutions, from the early plays to the metaphysical physicist play to the documentary drama about the oppressive nuclear state, one never finds a compelling solution to the problem that the plays themselves present, namely that *the problem of action and its representation in the nuclear age*. Nonetheless, the variety and similarity between the plays serves as an interesting illustration of a moment in the history of the German language theater, in which, its previous modernist development having been interrupted, it attempts to represent 20th century issues in an 18th and 19th century medium before continuing the development toward postwar modernism.

CHAPTER ONE: EARLY SOLUTIONS TO THE ATOMIC FORM PROBLEM. MAX FRISCH'S DIE CHINESISCHE MAUER AND FRIEDRICH DÜRRENMATT'S DER ERFINDER

In July 1946, far from Europe and the United States alike, in the Pacific, a flotilla of spectator ships gathered around a large fleet determined for breakage in the most spectacular manner. World dignitaries and a large press corps found themselves among those voluntarily present. Through their binoculars and telescopes they could peer out into a distant horizon lined with decommissioned ships, and spy upon them a menagerie of animals, who, if displaced from their familiar surroundings, nonetheless patiently chewed their feed placidly on deck, slowly swaying on the Pacific waves.

Operation Crossroads, otherwise known as the Bikini Tests, were the first publicly attended and broadly publicized atomic test explosions. They carried a heightened sense of spectacle. They reflected the qualities of a gigantic, open-air show. The operators of the demonstration used code words such as "Broadway" and "Stage" to describe the target area. Some media readily took up the theatrical references in their reporting, gleefully describing "recitals" and "audiences." Other newspapers such as the *Hamburger Freie Presse* and the *Economist* criticized the "theatrical" and even "circus-like" atmosphere of the event. 44 This

 $^{\rm 43}$ cf. Stölken-Fitschen, $Atombombe\ und\ Geistesgeschichte,\ 1995,\ 31–32.$

⁴⁴ Ilona Stölken-Fitschen, *Atombombe und Geistesgeschichte: eine Studie der fünfziger Jahre aus deutscher Sicht* (Nomos, 1995), 31.

circus received a liturgical double when, thanks to the pigs and goats on the target ships, reminiscent of Noah's Ark, the event was dubbed the "Great Flood of Bikini."⁴⁵

By some accounts, the Americans staged something of a savage farce. Despite fanfare and high expectations, the outcome was largely a disappointment.⁴⁶ The bomb exploded off-target. The audience members removed their protective goggles to find that only few of the ships had capsized. Those remaining afloat rocked agitatedly in the test zone, perhaps slightly charred, but ultimately whole. Many of the farm animals even survived the impact. The super-weapon, which had been popularized in the world press as an object of natural-catastrophic proportions, of divine beauty and apocalyptic power, had provided quite a show, but did not seem far more destructive than the conventional weapons familiar from the previous world war.

Half a world away, sitting in a Zürcher Café, the Swiss playwright Max Frisch read about the weapons demonstration in a local newspaper. He would later record his thoughts in his *Tagebuch*:

Etliche Stunden nachdem die Atombombe losgegangen ist, steht der Rauch wie ein schwarzer Blumenkohl. Mit einer gewissen Enttäuschung vernimmt man, daß die Kreuzer und Zerstörer, die in dem Atoll verankert lagen, noch ziemlich vorhanden sind, also nicht so, daß man sie aufs Brot streichen kann. Die Ziegen, die für diesmal die Menschen vertraten, leben sogar und kauen ihr Futter, als wäre nichts geschehen; die Affen vertragen es schon weniger.⁴⁷

He noted the failure of the bomb to decimate the living beings onboard the ships. However, he went on to anticipate, in theatrical language of his own, that the perpetrators of this test would soon improve upon the errors of this "Hauptprobe," implying a future 'premier' in which the

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⁴⁷ Max Frisch, *Tagebuch 1946-1949* (Frankfurt/Main: Suhrkamp, 1963), 66–67.

⁴⁵ cf. Stölken-Fitschen, 32. ("Sintflut von Bikini.")

⁴⁶ cf. Stölken-Fitschen, 34.

bomb is as deadly as planned.⁴⁸ With dismay, he added that the inadequacies of the test "ändert nichts an der grundsätzlichen Freude, die d[as] Ereignis auslöst[e]."⁴⁹ The world, he observed with disgust, had welcomed the atomic era with blithe frivolity. But for Frisch, the atomic bomb presented a qualitatively new moral problem to human beings. As he wrote, the

Fortschritt, der nach Bikini führte, wird auch den letzten Schritt noch machen: die Sintflut wird herstellbar. Das ist das Großartige. Wir können, was wir wollen; am Ende unseres Fortschrittes stehen wir da, wo Adam und Eva gestanden haben; es bleibt uns nur noch die sittliche Frage.⁵⁰

He anticipates that all questions of instrumental capacity will soon be resolved for human beings. Following their resolution, the only question that remains will be the moral question: what to do, rather than how to do it.

As I will discuss below, Frisch had already addressed this moral question nearly verbatim in his play about the atomic bomb, *Die Chinesische Mauer*. He was not alone in his effort to discuss the bomb on stage. The late 1940s and early 1950s saw numerous attempts to render the issues presented by the atomic bomb stageable. While they could not achieve the same level of theatricality and spectacle as Operation Crossroads, they nonetheless had the capacity to reflect on the moral questions of agency, collective decision making, and survival to which Frisch refers.

The late 1940s and early 1950s saw several plays attempt to address the atomic bomb on stage. Fred Denger premiered *Bikini*, at the Göttinger Schauspiel-Studio in 1948.⁵¹ The play depicted interactions and anxieties of crewmembers and guests aboard the "USS Mount

⁴⁸ Frisch, 67.

⁴⁹ Frisch, 67.

⁵⁰ Frisch, 67.

⁵¹ Gertrud Runge, "Bikini," Die Zeit, January 22, 1948, http://www.zeit.de/1948/04/bikini.

MacKinley," a spectator ship, as it approaches the Bikini Islands and awaits the dropping of the bomb. ⁵² In the same timeframe, Friedrich Dürrenmatt's first attempt at a stage piece addressing the atomic bomb, *Der Erfinder*, would play at the Cabaret Cornichon. Setting the world's political states to sea as yachts, it recalls the Bikini bombings when a dangerous scientist threatens to destroy these boats in the name of research. Plays and sketches such as these constitute some of the earliest efforts to address the atomic bomb on stage. As such theatrical interpretations of the atomic bomb attest, however, one cannot depict in dramatic fashion an inanimate object—one that, notably, falls in from outside of the scene—and at the same time attend to the centrality of both *human interactions* and the *unity of action* in drama.

In the wake of the Second World War, the difficulty of addressing contemporary issues in the drama was already on the minds of the writers at the time. Writing in the newly founded postwar theater magazine, *Theater der Zeit*, Julius Hay commented on possible pitfalls when dramatizing the experience of war. In a drama, it might be possible to demonstrate the dark atmosphere that war brings, as well as to stage the embodied suffering and punishment it implies, but nonetheless many writers would still need to learn, he noted, that the sufferings of war would not automatically constitute dramatic material. Drama would only be achieved insofar as the plot demonstrates a struggle between human actors. Insofar as one wishes to depict war, one must actually depict "einen Kampf, den einzelne Menschen im Rahmen des Krieges unter der Einwirkung vom Krieg geschaffenem ungewohnlichen Lage gegenander führen." War, he continues, must be relegated to a background condition:

⁵² Fred Denger, *Bikini* (München: Drei-Fichten-Verl., 1948).

⁵³ Julius Hays, "Ist der Krieg dramatisch?," *Theater der Zeit*, December 1946. Cited in: Matthias Elsdörfer, *Ein tiefer blick in "leere" Schubladen: Deutsches im Nachkriegstheater 1945-1948* (Frankfurt am Main: P. Lang, 2007), 29.

In diesem Fall kann [man] ein Drama schreiben, und nichts steht im Wege, dass es ein großes und sehr dramatisches Drama wird. Aber es wird kein Drama über den Krieg sein; der Krieg wird nur seinen Hintergrund bilden, ebenso wie eine Überschwemmung, ein Brand, ein Erdbeben, der Ausbruch eines Vulkans Hintergrund eines ähnlichen Dramas sein kann.⁵⁴

War, though man made, is too often perceived as natural catastrophe. Insofar as the war is dramatic, it must be presented in terms of a conflict within or between individual human beings.

From Hay's assessment of war in the theater, it is possible to extrapolate similar issues faced when selecting the atomic bomb as dramatic material. The bomb itself can pose a problem, but as an inanimate and non-human object, it will not constitute the antagonist of a drama. One might become the victim of the atomic bomb, but given the importance of unity of action and the inner logic of the drama, for such victimhood to be rendered dramatic, this victimization would have to result from a struggle between human beings—say, a protagonist and the madman with his hand on the button—and otherwise present the explosion as the logical origin or outcome of dramatic action. In the case of an atomic explosion, however, one can expect that most of those affected will not experience the bomb—i.e., its explosion—as the logical outcome of their own actions. The explosion is instead experienced as an intrusion of external force into their lives, without anticipation or foreshadowing. This issue becomes more complex when one considers that in the 1940s and 50s, popular discourse often framed the atomic bomb in ways that placed it outside of human control. In the period immediately following its invention and its first usage, the bomb was all too commonly discussed as if it were a natural or supernatural force.⁵⁵ Somewhat later, even in the minds of more cautious philosophical and literary types, such as

⁵⁴ Hays, "Ist der Krieg dramatisch?", cited in: Elsdörfer, Ein tiefer blick in "leere" Schubladen, 29.

⁵⁵ cf. Stölken-Fitschen, *Atombombe und Geistesgeschichte*, 1995, 20 ff. Stölken-Fitschen credits the American science writer William Lawrence with the popularization of tropes that treat the atomic bomb in both a natural and supernatural light, though he was far from alone in promoting these views.

Friedrich Dürrenmatt or Günther Anders, the horror of the bomb stemmed not only from its destructive power, but from the notion that its usage had been or would be ceded to technological systems outside of human control. The battle against those systems might be worrisome, but unless these systems gained sentience and human capacity for decisive action, they would remain—with the bomb—distinctly undramatic. If one extrapolates from Hay's discussion, neither the psychological strain of life under the Damocles sword of the nuclear arsenal (theorized in the late 40s, but certainly not extant in the sense that it would be by the late 50s), nor the struggle of the individual against the hardships of life following the nuclear war, can be considered adequate to dramatic representation.

This first chapter considers two early attempts to render the problem of the atomic bomb stage-ready: Max Frisch's *Die Chinesische Mauer* and Friedrich Dürrenmatt's *Der Erfinder*.

Each author transposes the issue of the bomb into a dramatic key—a contest of human wills—through his own means. Accompanied by substantial declarative discussion and episodic excess thematizing the possibility of nuclear disaster, Max Frisch expounds upon the issue the nuclear

⁵⁶ In the opening to his short story, *Die Panne*, Friedrich Dürrenmatt himself reflected on these systems while considering the 'electronic brain,' an early computer charged with calculating the expediency of an atomic attack: "Selbst der Krieg wird abhängig davon, ob die Elektronen-Hirne sein Rentieren voraussagen, doch wird dies nie der Fall sein, weiß man, gesetzt die Rechenmaschinen funktionieren, nur noch Niederlagen sind mathematisch denkbar; wehe nur, wenn Fälschungen stattfinden, verbotene Eingriffe in die künstlichen Hirne, doch auch dies ist weniger peinlich als die Möglichkeit, daß eine Schraube sich lockert, eine Spule in Unordnung gerät, ein Taster falsch reagiert, Weltuntergang aus technischem Kurzschluß, Fehlschaltung." The electronic brain, Dürrenmatt reasons, is susceptible to manipulation; this, however, is not nearly as "embarrassing" (note a certain vindictiveness his use of the word) as the possibility (a possibility that clearly fascinates him) of a technical malfunction that leads to apocalyptic consequences. (Friedrich Dürrenmatt, "Die Panne," in Der Tunnel und andere Meistererzählungen (Zürich: Diogenes, 2011), 26.) Although Dürrenmatt clearly finds the use of these computers ridiculous, he is not as devastated by them as his contemporary, Günther Anders, for whom the application of the electronic brain "stellt die epochalste Niederlage dar, die die Menschheit sich jemals zugefügt hat." "Nie zuvor," writes Anders, "hat sie sich eben so tief erniedrigt, den Richterspruch über ihre Geschichte, vielleicht über ihr Sein oder Nichtsein, einem Dinge anzuvertrauen." Günther Anders, Die Antiquiertheit des Menschen. Über die Seele im Zeitalter der zweiten industriellen Revolution (Munich: Beck'sche, 1956), 61. Whereas Dürrenmatt's concern regarding the guile of the system remains at the level of its material existence, as well as its demonic capacity to malfunction, Anders's concerns are as such not limited only to what these early calculators mean for the survival of the human race, but more precisely what they indicate regarding the self-respect of the human being as the master of his world of objects more generally: He wants to maintain the human superiority over mere materiality.

disaster via a separate conflict: that between the tyrannical autocrat and the critical intellectual. While opening with and consistently returning to exhortations of the bomb's threat, Frisch does not address it directly through a dramatic conflict, but can at best treat it as a thematic window dressing that provides a tone for the plot and on which the plot indirectly comments. Frisch's conclusion, that all efforts toward resistance are easily coopted by state powers, devours his effort to make a political statement through art even in the very moment of its evocation. In Friedrich Dürrenmatt's *Der Erfinder*, the audience encounters in Professor Zweistein a prototype not so much to the physicists that will grace the stage in the 1950s, nor even to Möbius of his later drama, Die Physiker, but, rather to the antagonist of Die Physiker, Dr. Mathilde von Zahnd. Zweistein is the embodied compendium of the diverse, man-made, yet inhuman forces of an unruly econo-political world system. Via this embodiment, Dürrenmatt presents the atomic bomb, and the (nominally) faceless systems of its propagation, as if they were a human being capable of participating in the interhuman conflicts that serve as the basis of drama. He also unwittingly anticipates a future tendency of the atomic plays—the foregrounding of the physicist—though his particular physicist figure, as a type of mad scientist, is actually a minority in the physicist dramas.

The shared national origin of these two plays arguably helps to explain the continuity of some of their primary tropes. Ralph Yarrow has noted the unique position of Swiss theater in central Europe. "Swiss theater has its own folk tradition, still to some degree extant—though commercialized and sanitized—in the carnivals of Basel and Luzern; another branch of this tradition emerged in the strong (mainly anti-fascist) cabaret scene of the 1930s and 1940s."⁵⁷

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⁵⁷ Ralph Yarrow, *European Theatre*, 1960-1990: Cross-Cultural Perspectives (London; New York: Routledge, 1992), 96.

Frisch's play frames itself with a cabaret-inspired prologue; Dürrenmatt's work was itself written for a politicized cabaret. Both draw heavily on grotesque tendencies of this theater and the principle of carnival. But far from the alleged liberational potential the likes of which Bakhtin identified in the carnival's grotesque inversions, Dürrenmatt finds the purpose of the grotesque in the technique of visualizing agency where there arguably is none; for Frisch, grotesque tropes help put a lack of agency to the stage directly.

The grotesque is notably difficult to define, given the continuous shifts in commentators' understanding of the trope, but most broadly it can be understood as "the inverse of beauty and design so central to the classical ideal." Initially referring to ancient Roman and Greek arabesque wall decorations in which body parts of humans, plants and animals intermingle, resulting in strange and surprising figures, it was soon applied also to the chimeric composites constituting demons in Medieval depictions of the Last Judgment. It has likewise been brought into contact with the forms of the carnival, marked by "coarse satire, bawdy and exuberant, and mixed with a dark underlay of disorder and chaos," and later yet with the ineffable combination of the horrific, the disgusting and the comic, or even, following the Enlightenment era, a sobered notion which has forgotten the comic and knows horror and disgust alone. When one considers these developments, it is important to keep in mind the strand that was established, already under the Romans, between the visual métier of the grotesque and the irrational. There has

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⁵⁸ Frances S. Connelly, "Grotesque," in *Encyclopedia of Aesthetics* (Oxford University Press, 2014), http://www.oxfordreference.com/view/10.1093/acref/9780199747108.001.0001/acref-9780199747108-e-344.

⁵⁹ Connelly.

⁶⁰ Connelly.

historically been a sense that the completed forms of classical beauty correspond to expressions of beauty; the composite, incomplete, and mutilated to madness.

In these stage works, this vision of the grotesque is the apparent jovial madness of a humanity carelessly prancing to its own extinction. Each play presents its own assessment of this madness, though they both ultimately meet similar conclusions. For Frisch, this is the false belief in human agency against a historical and species determinism. This determinism promises cyclical violence until, in the final phase, destructive capacities grow so great that humanity extinguishes itself. For Dürrenmatt, the human ability to act has been ceded to a complex and formless rat-king of economic, political, and social power relationships. These defy representation but can be rendered on stage nonetheless through the grotesque. Even visualized, however, their existence as stage "agent" is a mere illusion, as is the distinction between them and any individual who appears in earnest to oppose them. The implication is an all but guaranteed complicity in one's own destruction through the system.

The modern view of the human being has largely dissolved the agency of the individual into the formless mass. And yet, the drama, as the art form of the depiction of human relations, will and decision, requires the display of agency as if this were not so. The grotesque, in both Frisch and Dürrenmatt, operates as an aesthetic signifier that this artificial leap has taken place: That a world stripped of agency has been forced, for the sake of representation, into the straight-jacket of autonomy. A formless world has been forced into the mold of the image. The absence of agency, floating on stage like a formless cloud, attempts to imitate agency for the sake of drama. It can only achieve this in degrees.

Radium, oder Der freie Wille des Selbstmörders: Max Frisch's Die Chinesische Mauer

The Zürcher Schauspielhaus at which *Die Chinesische Mauer* premiered enjoyed a special status amongst the theaters of the German-speaking world. In the 1930s, it had

established itself as a theater manned primarily by exiles and had operated as the preeminent politically free German-speaking theater. Even as its displaced artists could consider moving to theaters in formerly Nazi-controlled Germany and Austria following the war's end, the Schauspielhaus, under the leadership of Kurt Hirschfeld, maintained a trailblazer function throughout the late 1940s. It was the first theater in the German-speaking world to premier many of the world-class plays being produced at the time, including works by Albert Camus, Jean-Paul Sartre, Tennessee Williams, Arthur Miller and others. Frisch's play therefore opened in good company.

When *Die Chinesische Mauer* premiered on October 10th, 1946 under the direction of Leonid Steckel, Frisch had already established a following. In 1945 his *Nun singen sie wieder* had brought him "overnight fame" in Switzerland and Germany; his *Santz Cruz* followed soon thereafter. Upon the premiere of *Die Chinesische Mauer*, a commentator in the *Schweizer Monatshefte* noted that "Das Erschienen eines neuen Dramas von Max Frisch immer ein Datum schweizerischen Theaterlebens [ist]." The reviewer noted that one might be suspicious of this playwright, previously so stern in tone, who had now labeled his most recent work a comedy. However, she reasoned, one would be satisfied to find that it was, rather, a "Farce von böser Welt, in der es ein Witz ist, wie wenig der gute Willen auszurichten vermag." Darkly comic themes of political and moral impotence pulse through the piece, and apparently they did not fall

⁶¹ cf. Henning Rischbieter, "Theater," in *Die Geschichte der Bundesrepublik Deutschland*, ed. Wolfgang Benz, Aktualisierte und erw. Neuausg., vol. 4, Kultur (Frankfurt am Main: Fischer Taschenbuch Verlag, 1989), 89.

⁶² "Theater: Max Frisch Schlägt Alarm - DER SPIEGEL 48/1948," accessed September 22, 2016, http://www.spiegel.de/spiegel/print/d-44419782.html.

⁶³ Elisabeth Brock-Sulzer, "Zürcher Schauspielhaus," ed. Gesellschaft Schweizer Monatshefte, Schweizer Monatshefte: Zeitschrift fur Politik, Wirtschaft und Kultur 26, no. 8 (November 1946): 509.

⁶⁴ Brock-Sulzer, 509–10.

on deaf ears. Describing the German premiere at the Hamburger Kammerspiele under the direction of Ulrich Erfurt in 1947, *Der Spiegel* wrote that at the plays end, "[d]as mit Kulturprominenz gefüllte Parkett [...] sich die Weltuntergangsstimmung von der Seele [klatschte], die das Stück vorbereitet hat."⁶⁵ The statement reflects broad acceptance, even as the notion of 'clapping away' an apocalyptic mood does more to confirm the artistic impotence Frisch expresses in the work than to overcome it. ⁶⁶

Max Frisch's play was the first to address the arriving nuclear age in a German-language theater. Commentators have noted that while theatrical, the work is only weakly dramatic. The aforementioned *Monatshefte* review described the production as not so much a drama as a work of theater, drawing on all aspects of the visual and auditory capabilities available to directors at that time. This assessment was shared by later, academic commentators as well. Michael Butler for example, praised the play's spectacularity: thanks to the "exuberance of its theatrical formulation," and its "intricate exploitation of dance, music and mask [it is] Frisch's most stimulating work for the theater." In effect, the review locates the strength of the piece not in honed dramatic structure, but on the exuberance of it stage effects and performance aspects.

^{65 &}quot;Theater: Max Frisch Schlägt Alarm - DER SPIEGEL 48/1948."

⁶⁶ Frisch revised the work multiple times throughout his career (for example, cf. Michael Butler, *The Plays of Max Frisch* (New York: St. Martin's Press, 1985), 33.) The 1946 version first opened at the Schauspielhaus Zürich under the direction of Leonid Steckel. A new version 1955 Berlin premier in the Theater am Kurfürstendamm under the direction of Oscar Fritz Schuh. In 1965 a new, never published version premiered in Hamburg and 1972 saw a version premier in Paris. In 1965 a film version was realized. Although I consider the initial version's premier in 1946 significant both to Frisch's approach and to the development of the Atomstück, I am basing this chapter on the 1955 edition. The decade's difference reflects, arguably, an increase in Frisch's literary maturity, as reflected, for example, his intention to increase the use of direct quotations in the lines of his literary-historical figures. While certain updates are made between versions, the overall structure of the play remains the same. This chapter examines the 1955 version of the play because of its relative availability as the version used in the published Frisch collections. (Max Frisch, "Die Chinesische Mauer. Eine Farce (1955)," in *Stücke I* (Frankfurt/Main: Suhrkamp, 1969), 149–245.) The interpretation provided is readily applicable also to the 1946 version of the play.

⁶⁷ Butler, The Plays of Max Frisch, 46.

Another commentator, Manfred Jurgensen, has seen in this spectacularity a mismatch of material and medium. For him, *Die Chinesische Mauer* is more of a "meditation" on what it means to be human than a drama, and the farce, as such, "hätte sich jedenfalls besser als Prosaskizza geeignet." The meditation to which Jurgensen refers is motivated by the atomic bomb, and is a process of reflection that takes place largely in parallel to the dramatic action of the plot.

The play is complexly layered; it opens with a burlesque-inspired prologue presented by the protagonist, a young intellectual contemporary of Frisch's time, who announces that the audience will be witnessing a celebration this evening. ⁶⁹ The ancient emperor of China, Hwang Ti, is celebrating the defeat of the Mongol hordes and the completion of the Great Wall. The celebration's attendees include a motley collection of figures from history and literary tradition. As the play opens, these figures rambunctiously dance a polonaise across the stage. The protagonist soon approaches them and mingles, attempting to warn them of the danger of the atomic bomb. The dramatic plot takes place only following this extensive episode, when the protagonist meets the princess Mee Lan and her father Hwang Ti. Mee Lan falls in love with the protagonist. Hwang Ti, though elated by his victories over his Mongol enemies, is hungry to defeat his last domestic enemy as well, Min Ko, the voice of the people. He puts a mute peasant on trial, believing this man to be Min Ko. The protagonist, motivated by Mee Lan, argues to free the mute. His status changes from stranger, to court fool, and eventually to literary laurate, but leaves no mark on the practices of the court. The play ends when an angry mob, led by a

⁶⁸ Manfred Jurgensen, Max Frisch. Die Dramen (Bern: Lukianos-Verlag Hans Erpf, 1968), 65.

⁶⁹ Moving forward, this young intellectual, who carries no specific name, will simply be referred to as "the protagonist."

disaffected Chinese prince, overthrows the court in the name of the people, though assumedly only to establish an oppressive state of his own.

From this plot description, one could reasonably conclude that the play is not about the atomic bomb. Several analysts, for example, concentrate on the details that establish Imperial China as a metaphor for 20th-century totalitarian states⁷⁰ However, the atomic bomb remains the central theme throughout. The protagonist, for undisclosed reasons, considers the soiree to be the proper moment to warn humanity of the bomb's dangers; he does this intently both with the masks of the polonaise, and with Mee Lan, and even during the trial, in a speech given to Hwang Ti. Thanks to his discussion of the bomb, it could hardly be described as an afterthought. However, from the perspective of the dramatic content of the play, the bomb is all but sidelined.

In what follows, I will describe the explicit claims of the play and the way they relate to its formal content. (1) Frisch's protagonist meditates upon the dangers of the atomic threat and employs figures extraneous to the plot to help illustrate the absolute destruction of humanity and human tradition following atomic extinction. (2) The figures of the polonaise are themselves visual symbol for the threat of the atomic bomb. They simultaneously index the absolute loss of human tradition that will follow nuclear war, as well as the apparent incapability of human beings to collectively decide to prevent the apocalypse. (3) Frisch executes this hypothesis by demonstrating the impotence of the artist (represented through the protagonist), foregrounding not only his tendency to be ignored or coopted toward unintended political ends, but also his tendency to move in an imaginary niveau, foregoing true political intervention in favor of

⁷⁰ For example, Wilhelm Ziskoven, who interprets much of the play element by element, identifies qualities of totalitarian dictatorship including utopian discourse, ideological control, a centrally controlled economy, weapons monopoly, and terrorist police violence, among other things. (cf. Wilhelm Ziskoven, "Max Frisch," in *Zur Interpretation des modernen Dramas. Brecht Dürrenmatt, Frisch*, ed. Therese Poser and Rolf Geißler (Frankfurt/Main, Berlin, Munich: Diesterweg, 1970), 133 ff.)

fanciful conversations with tradition and history. This arguably anticipates the qualities of later atomic plays. First, the play thematizes the possibility or impossibility of human agency (though it is sooner concerned with a historical or species determinism that the material determinism of the later dramas). Second, it argues that the theater is incapable of providing effective commentary on contemporary political events.

Setting the Stakes

The most virtuosic monologue of Max Frisch's *Die Chinesische Mauer* begins by identifying itself as a platitude. Facing the impotence of the word, the man of today must begin from a position of humility. "Was ich zu sagen habe," he says, "ist banal, Sie lesen es in jeder Tageszeitung . . ."⁷¹ He must admit the banality of his speech, index its quotidian powerlessness, because he is speaking ostensibly to the Chinese court, but in practice to a theater audience—an audience all too aware of the outcome of an impending nuclear war. What should this discussion mean for the audience out in the theater seats? What is it meant to achieve? If one looks to inform others or oneself about the dangers inherent in nuclear weapons, one serves one's ends better by publishing or reading the newspaper or scientific materials than turning to the theater.

However, if the theater merely re-disseminates the information everyone already knows, it nonetheless enjoys the advantages of art. Helped by its sensibility, it enjoys the capacity to take the stakes outlined already by the politicians, scientists, and journalists and transform them from a rhetoric of *logos* and *ethos* to one of *pathos*.⁷² The protagonist takes this route. Continuing his speech, he first suggests that the bomb fundamentally changes the function of geopolitical power

⁷¹ Frisch, "Chinesische Mauer (1955)," 231.

⁷² Not that politicians, journalists and scientists did not also make emotional appeals during this time.

on the planet. Later, he does his best to make clear the absolute quality of the bomb's destructive power.

Wir befinden uns, meine Herrschaften, im Zeitalter der Wasserstoffbombe, beziehungsweise Kobaltbombe,[73] das bedeutet (ohne in die Erkenntnisse der heutigen Physik näher einzutreten): Wer heutzutage ein Tyrann ist, gleichgültig wo auf diesem Planeten, ist ein Tyrann über die gesamte Menschheit. Er hat (was in der Geschichte der Menschheit erstmalig ist) ein Mittel in der Hand, um sämtlichem Leben auf dieser Erde – aus einem Bedürfnis heraus, das absurd erscheint, jedoch bei schweren Neurotikern nicht selten ist – den Garaus zu machen.⁷⁴

A single, neurotic individual, reportedly, can hold the entire world in his fist; he can finish with all life on earth with little effort. This intimate relationship between insanity and nuclear weaponry will be a recurrent theme in the nuclear discourse. More broadly, the atomic and hydrogen bombs establish a form of monarchy never before seen; they serve as the theoretical guarantor of a state of world-rule. As it is articulated here, this is not so much a matter of trained and specific control, not so much a form of discipline or biological nationhood (i.e. a biologically conceived population under totalitarianism), with which later atomic plays will continue to concern themselves. This is a new form of power. It exists absolutely as long as there

⁷³ The reference to the hydrogen and cobalt bombs was new to the 1955 version. In a widely publicized February 1955 radio broadcast, the chemist and Nobel laureate Otto Hahn warned that approximately 10 hydrogen bombs fitted with a shell of radioactive isotope cobalt 60 would spread enough extended half-life radioactive dust in the atmosphere to seriously inhibit the further existence of the human race. (cf. Stölken-Fitschen, *Atombombe und Geistesgeschichte*, 1995, 109–10.) Other atomic plays from the mid-fifties, such as Dürrenmatt's *Das Unternehmen der Wega*, also make reference to the cobalt bomb.

⁷⁴ Frisch, "Chinesische Mauer (1955)," 231.

⁷⁵ For a compelling contemporary discussion of the antidemocratic effects of nuclear arsenals, see Elaine Scarry, *Thermonuclear Monarchy: Choosing Between Democracy and Doom.* For Scarry, it is not only the nuclear arsenal in itself that is destructive of democracy (domestically) and autonomy (internationally), but rather the structures of crisis decision-making that were produced in their wake. On the one hand, the radical asymmetry between state and public capacities of force, is symbolically eliminated by the atomic bomb (arguably it would not exist regardless), eliminates the second amendment's protections against the occupation of the citizenry by the government. On the other hand, the system by which the nuclear codes are in the possession of the executive branch undermines the congressional prerogative to declare war radically enough as to render this power moot. cf. Elaine Scarry, *Thermonuclear Monarchy: Choosing Between Democracy and Doom*, First Edition edition (New York: W. W. Norton & Company, 2014), 31 ff.

is a monopoly over the technology that enables it.⁷⁶ Like older forms of sovereign power, it rests on the direct decision to kill or to let live. But here this power has spread its range widely; it encompasses the entirety of the earth and all life on it.

On the stage, bellicose generals such as Napoleon, represented as literary and historical masks, are placed beside the military power of the 20th century; they are intrigued by the nuclear weapon, and they desire it for themselves. "Wieso darf ich nicht auch Radioaktivität haben?" laments Hwang Ti, concerned that he has lost the spotlight. "[Heißt] das: Man vertraut mir nicht?" Thanks to the triumph of science and engineering, all his achievements, all his defensive and offensive measures, his Great Wall, are rendered, in the words of the contemporary, "eine Farce." Their power is miniscule beside the violence that was possible in the 1940s and 50s. Whereas the spear's progression to the musket is a mere question of range, and the shift from ground artillery to carpet bombing may represent a change in quantity of victimization that becomes a change in quality, the atomic bomb's capacity to extinguish all life on earth is uniquely new. It all stands, following the mushroom cloud, with "Schweigen – radioaktives Schweigen."

The Problem of Morality in Collective Decision-Making

This speech is an impassioned description of the threat of nuclear weaponry. But does it provide a roadmap, a project or a message for its audience? It fits, as it were, into a broader set of moral insights that Frisch had been turning over in his mind at least since the end of the Second

⁷⁶ Such a monopoly did indeed exist when *Die Chinesische Mauer* first premiered in 1946. The Soviet Union tested its first atomic bomb in August 1949.

⁷⁷ Frisch, "Chinesische Mauer (1955)," 233.

⁷⁸ Frisch, 156.

⁷⁹ Frisch, 161.

World War. If the contemporary must struggle to awaken his audience to the danger of nuclear weapons, it raises likewise the question of what their awareness can achieve. Technology creates a moment of pure instrumental potential, which, in Frisch's view places into the human being's hands the power to decide whether humanity will exist or not. New technological capacities force a return to questions of morality which had, for centuries, been sidelined by questions of instrumentality. And thus one comes back to the insight that he found so important as to include in *Die Chinesische Mauer* and repeat in his *Tagebuch*:

Zum ersten Mal in der Geschichte der Menschheit [...] stehen wir vor der Wahl, ob es die Menschheit geben soll oder nicht. Die Sintflut ist herstellbar. Technisch kein Problem. Je mehr wir (dank der Technik) können, was wir wollen, um so nackter stehen wir da, wo Adam und Eva gestanden haben, vor der Frage nämlich: Was wollen wir? Vor der sittlichen Entscheidung.⁸⁰

Where all questions of instrumental capacity have been resolved, human beings have no option but to return to the fundamental question of morality so effectively masked when they preoccupy themselves with matters of what they *can* do rather than whether they should do it. The question of 'ought' is posed in the most substantial terms possible. Human beings decide whether or not there should be a humanity. These words ultimately provide the moral framework for the play. "Die Sintflut ist herstellbar": While Frisch does not dwell on the theological implications of this sentiment, the statement goes a long way to index what will be one of the primary concerns of the atomic play throughout its twenty years of significance. Human beings have acquired a destructive power formerly reserved for the deity alone. The second half of this statement, "ist herstellbar," is no less significant in its precise wording. *Herstellen*, with its implication of manufacture, does not merely outline the fact that the deluge is 'produce-able,' but highlights its emergence in an industrialized, secularized, modern world. In this sense, the "deluge"—a

⁸⁰ Frisch, 232.

metaphor for human extinction borrowed from biblical sources—becomes possible first and precisely in an age where belief in God is in radical decline.

Technological advancement thrusts human beings into the position once reserved for the deity, producing a hitherto unseen capacity. For the first time, they find neither nature nor God, but themselves in the ultimate position of responsibility over their continued existence as a species. They will decide, as the contemporary exhorts, whether they will continue to exist or not. "Entscheiden wir uns also," the contemporary proposes, "Es soll die Menschheit geben!" Frisch and the contemporary have both done what they can to alert their audience to the stakes. However, here the central contradiction in a play riddled with tensions comes to a head: Can collective moral decisions of this type exist in reality? This question reflects the fundamental problem present in the protagonist's claims. He presents the decision to survive as a species as collective, and nonetheless he also claims it rests in the hands of just a few individuals. The tyrant, in his neuroticism, acts individually to destroy the world. Nonetheless, the play poses the end of militarism and the release from the atomic bomb as a collective decision. In other words, he confronts his audience with contradictory demands at the center of his argument.

The problem of the collective decision is met by another question more fundamental to the play: Whether it is possible for human beings to collectively display freedom and will, to escape a world of mere cause-and-effect, stimulus-response determinism in the first place.

Without the agency to intervene, the decision which must be made is rendered moot. The contemporary, however, believes that this type of action *is* possible, and it is the new physics of the atom that guarantees it.

Man erfand das Mikroskop. Aber je schärfer man die Schöpfung durchforschte, um so weniger war von einem Schöpfer zu sehen. Man heilt sich, um Gott zu ersetzen, an das

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⁸¹ Frisch, 232.

Gesetz von Ursache und Wirkung. Alles andre galt als Unfug. Aber plötzlich, siehe da, ein Atom mit dem freien Willen des Selbstmörders: das Radium-Atom. Und überhaupt das Verhalten der Elektronen! Die Materie, die Einzige, woran wir uns halten können, was ist sie? Ein Tanz von Zahlen, eine Figur des Geistes... Soweit sind wir heute: Gott, der nicht im Mikroskop zu finden war, rückt uns bedrohlich in die Rechnung; wer ihn nicht denken muß, hat aufgehört zu denken.⁸²

In the contemporary's historical schemata, the advancement of scientific research undermined a belief in God, but more importantly, replaced him with the determinism of cause-and-effect.

Nuclear physics, however, which reveals the presence of particles and decay rates which, while subject to the statistical tendency of the half-life, are nevertheless not subject to simple, observable cause-and-effect. As the protagonist claims, they thus display the "freier Wille des Selbstmörders"—a suicidal free will—in so far as they decompose freely of external determinism. For the protagonist, this is evidence that there is a human will, a human freedom, and a human agency that exists beyond mere material determinism. He calls this a form of "spirit," and despite whatever teleological preordainment a belief in God might elsewhere reflect, takes God as the guarantor of this spirit, a capacity for free will beyond crass material determinism. Unfortunately for him, the rest of the play draws the possibility of such freedom into question, and, where it appears to be possible, suggests it to be of little worth in the struggle against atomic weapons. The suicidal free will of the atomic isotope indexes the suicidal free will of humankind.

If one accepts the idea that the atomic bomb embodies the inevitable resolution of all questions of instrumental capacity (with all of their utopian and catastrophic consequences), how does the play discuss this development's ultimate effect, that human beings are essentially thrown back upon the fundamental question of morality, "What ought I to do?" If Frisch's play

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⁸² Frisch, 180.

provides an answer, it is bound in the numerous oppositional cruxes it presents, where one is pinned between temporal progress and cyclicality, the agency of the individual and the apparent historical determination of the population at large, and artistic activism and powerless cooptation. These qualities are embedded, respectively, in literary-historical masks and their role in the play and the role played by the contemporary in his effort to effect the outcome of events at Hwang Ti's court. The artist, for his part, suffers not only from the danger of cooptation, but, rather, readily disarms himself in his preoccupation with aesthetic and moral rather than physical and political engagement.

The Dominance of Exposition: The Theatrical Masks

In the prologue of Frisch's play, the protagonist, presenting himself as a cabaret-inspired master of ceremonies, introduces the so-called theatrical masks. "Was im übrigen den heutigen Abend betrifft, so verlese ich Ihnen, damit keine falschen Erwartungen entstehen, die weiteren Figuren unseres Spieles," he announces, listing, among others, Romeo and Juliet, Philipp of Spain, Pontius Pilatus, Inconnue de la Seine, Brutus, and Don Juan Tenorino, and Napoleon Bonaparte. This sundry and jovial congregation enters the stage through dance and music: They are performing a polonaise. They appear in the costumes of the theater, as if there had been a raid on the inventory. The protagonist speaks to certain masks without these conversations contributing to the plot per se. The figures, as a group, have multiple representative functions within the play. First of all, they serve as a sounding board for the contemporary's atomic fears. He baffles and intrigues his anachronistic stage mates as he reflects poetically on the nuclear age,

⁸³ Frisch, 151.

⁸⁴ Various commentators have attempted to divide the masks into various categories, such as perpetrators, victims, and thinkers. While these discussions provide interesting insight, the distinctions ultimately add little to an interpretation of the play in its entirety; more important are the military men and the stage function of the masks in sum.

on the immense threat posed by the atomic bomb and its intensifications and iterations, seeking to share with the court an urgent message about scientific advancement's consequences for the future of the world. Albeit with camp deference, he warns Napoleon and King Phillip of Spain that mass military approaches and broad oppressive measures of past decades are no longer feasible in the atomic age: "Exzellenz," he warns, "das Atom ist teilbar [...] Der nächste Krieg, den wir als unvermeidlich erklären, wird der letzte sein." In this respect, the masks represent the public itself, humankind in dire need to recognize the need to change its warlike ways.

In another capacity, the masks contribute to the play's effort to alert the audience to all that stands to be lost in a nuclear war. While primarily confined to the traditions of Europe, the figures collectively reflect inclusivity and serves metonymically to represent the sum of human cultural and historical accumulation. As a representation of this tradition, they render the loss of tradition by putting tradition on display. Nowhere is this clearer than when the intellectual speaks before the masks about their own precarity. What stands to be lost? The answer: Human beings'

ganze Geschichte, angefangen bei Moses oder Buddha, inbegriffen die Akropolis, die Tempel der Maya, die Dome der Gotik, inbegriffen die ganze abendländische Philosophie, die Malerei der Spanier und Franzosen, die Musik der Deutschen, Shakespeare, inbegriffen dieses jugendliche Paar: Romeo und Julia. Und inbegriffen uns alle, unsere Kinder, unsere Kindeskinder.⁸⁷

The list is essentially an extension of the list already formulated by the masks in the polonaise; it is a metonymic account of the sum of human culture and tradition. The end of things, the nuclear war, is not merely a loss of the plant and animal life of the world and the biologically extant *homo sapiens* with whom it is concerned, but also of the cultural existence bound to the

⁸⁵ Frisch, "Chinesische Mauer (1955)," 160.

⁸⁶ It is fair to ask whether the Eurocentric tendency of this list disqualifies it for Frisch's goal of inclusivity, but there is still enough variety in his menagerie to consider it a metonym for all human cultural achievement.

⁸⁷ Frisch, "Chinesische Mauer (1955)," 161.

human being not as animal but as distinctly human. It promises the dissolution of the bonds of human activity and cultural inheritance and the very notion of a future.

In their third capacity, the masks index the problem of agency at the center of the play, the question of a human will. The prescribed choreography of the masks on stage carries a separate, but related meanings: death and artifice. In his reflections on the final rehearsal before the premier, Frisch noted that the dancers' movement "teilweise verwundert oder gar entzückt, teilweise auch ekelt." This same grotesque marriage of wonder and disgust is likewise described by the masks themselves. Responding to La Inconnue de la Seine, herself representing anonymous death in vain, the mask Don Juan describes the evening's festivities as a "Todestanz." Additionally, an earlier description, given by Romeo, takes these assessments of grotesque movement in a related, but slightly different direction.

ROMEO: [...] Mir graut vor der Gesellschaft hier. Es scheint, Sie haben alle Truhen aufgetan: Kostüme wimmeln, und es riecht nach Mottengift. Es ist, als sei'n sie tot, doch reden sie Und tanzen auch und drehen sich im Kreis, Wie sich Figuren einer Spieluhr drehen.⁹⁰

Romeo fears this society of fools, born from the costume chests of a masquerade or of a self-referential theater, smelling of moth balls. Not the figures themselves, in his estimation, but their *costumes* writhe, highlighting both corruption and infection, as well as artifice and disguise. The dance and dancers, he suggests, are mechanical and repetitive "wie eine Spieluhr," though the

⁸⁸ Frisch, Tagebuch 1946-1949, 124-25.

⁸⁹ Frisch, "Chinesische Mauer (1955)," 204.

⁹⁰ Frisch, 158.

artifice nonetheless provides the illusion of life. The beings occupy a space between life and death.

In this respect, the dancing offers two hermeneutic modes simultaneously: the *danse macabre* on the one hand and, on the other, the automaton. Each of these has significance toward an interpretation of the play. The historical *danse macabre* was most prevalent in wall paintings and later in chapbooks; it depicted the castes and figures of feudal and early modern society led away by demons or skeletons. Sometimes they appeared as a continual ring dance; at other times they were divided into individual frames depicting the moment when one is dragged to the beyond. Fundamentally, these served a didactic purpose as a *momento mori*. Death awaits all regardless of position, and one must be prepared to meet one's maker at any time. 91 Frisch inclusion of this visual metaphor is both intelligently conceived and overdetermined. It introduces an undercurrent of European popular religious thought, binding his didactic claims to an older tradition. Visually, the variety of dancers in their masks mirrors the inclusivity of the late medieval and early modern *danse macabre*. The rancorous gluttony the court celebration—

⁹¹ According to Franz Eybl, the didactic ends of the early modern Totentanz functioned on the principle of the "mirror metaphor" via "mimesis and reflection": "Als Objektbezug bezeichnet die Spiegelmetapher die Summe, Zusammenfassung oder Darstellung eines spezifischen Wirklichkeitsbereichs. Als Subjektbezug hingegen thematisiert sie das Gegenüber des Wahrnehmenden, seine Verdoppelung und seine Möglichkeit der Selbstreflexion." (see: Franz M Eybl, "Narrenbuch und Totentanz: Frühneuzeitliche Lektüren der Selbstbespiegelung," *Internationales Archiv für Sozialgeschichte der deutschen Literatur* 39, no. 1 (2014): 206.) It is thus based in a double operation. Firstly, of empiricism, by which the Totentanz serves as an objective compendium of the folly of estate, class and personality types. Secondly, one of internal self-reflection, by which a reader imagines oneself in the role of the condemned and, via this reflection, is able to bridge the cleft between the objective knowledge of folly and wisdom and practical effort to overcome one's own folly. Insofar as Frisch is enacting this metaphor, the play must encourage the audience to reflect upon its own passivity in the face of the nuclear threat.

For a fantastic, illustrated history of the Totentanz as trope in art, literature and culture, see: Uli Wunderlich, *Der Tanz in den Tod: Totentänze vom Mittelalter bis zur Gegenwart* (Freiburg i. Brsg.: Eulen, 2001).

particularly in a time of crisis—is suggestive of deadly sin. Willfully ignorant of the crisis at the doorstep, the world congas toward its death.⁹²

The second dimension of the masks' dancing, to return to the problem of determinism, is their 'mechanicity.' This problematizes the play's discussion of moral responsibility. In a world where all questions of instrumental capacity are or will soon be resolved, we are returned to the "sittliche Frage." This issue can, however, only be discussed seriously from a perspective that posits the existence of human freedom. As the figures of a "Spieluhr," their movements suggest that they actually lack control over their own actions, that they lack freedom and will, and that rather than acting, there is another, hidden force that acts through them. This mechanicity must be performed on stage, but it is also acknowledged where their speech—primarily quotations from literary objects from which they have been borrowed—is repetitive and derivative. Above all, this mechanical tendency is perhaps nowhere more prevalent than in the play's visually

⁹² The Totentanz was a popular trope in the 20th century, making appearances both in other works by Frisch and in other Atomstücke. In *Nun Singen Sie Wieder...*, the cast of which is eventually revealed to have been dead throughout is bound closely to the concept of a remorseful singing. His *Andorra* likewise employs Totentanz forms in an altered context, whereby interspersed between acts the varied figures who interacted with Andri leading up to his death address the audience on an individual basis. These figures are identified primarily by their career or title, just as the figures of the Totentanz are identified by caste. Rather than defend themselves against death or their mortal sin, as would the figures of a Totentanz, they here attempt to defend themselves against the guilt incurred through Andri's execution. Nonetheless, this form reiterates the structure of the individualized dialogues between death and the dying, wherein each figure laments his or her passing and is given to know by death why he or she has earned death in his or her own way.

As in Frisch's works, in the other Atomstücke the Totentanz is divorced from this medieval and early modern format. Ilse Schneider-Lengyel's *Hier Welle Nullpunkt*, alongside its further surreal and baffling displays (the red-eyed calf, the towers of water. the "shot-through lung"), includes a "Totentanz der Skeleten ohne Schädel," who, having lost their own heads, now demand that God be beheaded. ("Wir fordern sein Haupt/ wir finden unsere Schädel nicht mehr!" Ilse Schneider-Lengyel, "Hier Welle Nullpunkt. Achtung Stickstoff. Ein Atomdrama." (Photocopied Manuscript, Unknown Date), 18, Bayrische Staatsbibliothek.) Fred Denger's *Bikini*, likewise, makes an implicit reference to the concept, where a wide range of social and career classes are represented, and are assigned (albeit only in the character list) medieval roles, as if to file the caste-inclusivity of the earlier *danse macabre*. (cf. Denger, *Bikini*, 3.) And even the stylistic realism of Carl Zuckmayer's *Das kalte Licht*—to which we will return in the coming chapter—makes an obtuse reference when the nuclear physicist protagonist leads his colleagues from the stage in a congo line, announcing "lasciate ongi speranza" [abandon all hope]—the message on the gate to Hell in Dante's *Inferno*—just seconds before a radio announces the bombing of Hiroshima to an empty stage. (Carl Zuckmayer, "Das Kalte Licht. Drama in drei Akten.," in *Dramen*, vol. IV, Gesammelte Werke (Fischer, 1960), 437)

poetic ending. After popular pressure mounts against the oppressive Hwang Ti, a violent uprising takes place, installing a new leader, who will likewise rule oppressively, much as Hwang Ti did. The masks participate in this uprising en masse. They then return to their polonaise, as now the stage directions dictate, "in der Art einer Spieluhr." "[J]ede Figur," Frisch prescribes, "wenn sie vorne ist, hat das Wort und dreht sich um sich selbst weiter." The masks continue their mechanical dance and repeat, without development, the words voiced earlier in the play. These movements imply that the masks, taken together, are not truly agents. They instead act out preordained or otherwise determined motions; they are not so much acting, but are rather subject to determinate forces acting through them."

Taken together, the masks and their polonaise suggest that this moral conundrum, the problem of the atomic bomb ("Soll es eine Menschheit geben, oder nicht?") cannot serve as a moral question, because morality is dependent on the existence of agency, and the population understood collectively does not appear capable of such agency.⁹⁶ It is instead a figure of history

⁹³ Frisch, "Chinesische Mauer (1955)," 243. (Italics in the original)

⁹⁴ Frisch, 243. (Italics in the original)

⁹⁵ Alongside the speech and polonaise, Max Frisch highlights this idea of action and responsibility in yet another way. Never blind to the implications of his medium, he also displays the parallels implied in the theater where the masks and other figures break through the third wall and speak out of character, as if speaking as the actor or actress portraying the mask. Beside the immediate moment of *Verfremdung*, this technique likewise illuminates the notion of projected agency present in theater. The figures on stage are not agents, but rather a representation of what the dramatist, director and actor imagine agency to look like. The figures only gain the appearance of agency by following a predetermined script as carefully as possible. And this is likewise subject to a diegetic nesting: Even where character is broken, the audience only ever encounters a simulation: a representation of agency that masks or—depending on the audience point of view—reveals that there is none.

⁹⁶ The concept of a human species incapable of *willing* in the aggregate, even when it appears to do so individually, reflects Immanuel Kant's ideas. In the opening of *Idea for a Universal History with Cosmopolitan Intent*, individual appears as freedom and agency, in the aggregate, as a matter of biological or historical determinism. "No matter what conception one may form of the freedom of the will in metaphysics, the phenomenal appearances of the will, i.e., human actions, are determined by general laws like any other events of nature. [...] Thus, (it is to be hoped) that what appears to be complicated and accidental in individuals, may yet be understood as a steady, progressive, though slow, evolution of the original disposition of the entire species." (Immanuel Kant, "Idea for a Universal History with Cosmopolitan Intent," in *Basic Writings of Kant*, ed. Allen W. Wood, trans. F. Max Muller and Thomas K. Abbott, Modern Library edition (New York: Modern Library, 2001), 119.) The contrast between agency

that unfolds according to forces that act outside of it or through it, rather than of its own accord.

This leaves little hope for a solution. However, it gets worse: Even where there is the appearance of agency, Frisch injects doubt that it can present serious opposition to the nuclear threat.

The Impotence of the Artist

The human species in aggregate, as represented by the masks, moves in a cyclical temporality. Their motions and behaviors seem artificial and determined, lacking agency. Before this background of masks, however, stands the contemporary, presenting himself as an intellectual, and an individual before the audience and therefore the figure best poised to achieve some form of agency. He seeks to intervene in the deaf, belligerent march of history and the control of the totalitarian state. As already discussed, it is his goal, from the very beginning, to warn history's most prominently bellicose kings, emperors and generals of the dangers inherent in their historical actions and in the rise of the atomic bomb. However, in the pessimistic tone of Frisch's *Die Chinesische Mauer*, even this broad claim to agency is crushed in the end.

The details of the Chinese court reflect a totalitarian state marked by ideological control and terror. These features locate Frisch's play in the immediate postwar (i.e., they reflect on Nazi and Soviet totalitarianism) while also acknowledging the revolution taking place in China.⁹⁷ The

and historical or biological determinism is ultimately a question of lens, scale and narrative mode. As the *Fundamental Principles for a Metaphysics of Morals* argues, however, *morality* is only logically possible if one accepts, without necessarily the capacity to demonstrate conclusively, the possibility of will and freedom, defined as such: "The *will* is a kind of causality belonging to living beings in so far as they are rational, and *freedom* would be this property of such causality that it can be efficient, independently on foreign causes *determining* it [...]" Immanuel Kant, "Fundamental Principles of the Metaphysics of Morals," in *Basic Writings of Kant*, ed. Allen W. Wood, trans. F. Max Muller and Thomas K. Abbott, Modern Library edition (New York: Modern Library, 2001), 203. Italics in original.) It is in-part in this respect that a population-at-large—represented collectively in the masks—cannot be subject to the "sittliche Frage" posed by the atomic bomb. Even if the intellectual is capable of responding to it individually, the possibility of a collectively delivered response to moral imperatives appears impossible.

⁹⁷ Frisch mentions the civil war in China explicitly in his *Tagebuch* in relation to incapacity to extend one's moral imagination around the globe. Our moral imagination "reicht [natürlich] über unsere Sinne hinaus, aber nicht unbeschränkt; es reicht nicht um die Erde; wir sprechen von Zeiten des Friedens, wenn der Krieg in China ist." (Frisch, *Tagebuch 1946-1949*, 56.) While it is apparent that the idea of revolution in China influences Frisch's play,

oppressive Chinese emperor serves as a symbolic placeholder for bad government generally. Still, the embodied personage of the Chinese emperor creates the possibility of a more classical dramatic form: Frisch establishes an antagonist against which the protagonist can struggle in the name of good governance, peace, and liberal democratic values. This means, already deep into the play, the work begins to move beyond the exposition of the masks and enter something approaching a dramatic plot. In this struggle, however, the agency displayed by the protagonist is nevertheless easily neutralized. The dominant outcome of the plot is, in fact, the shift in the standing of the protagonist from a dignified and self-confident intellectual to a comically debased figure. Neither he nor his antagonist, the emperor, are victorious, but something more akin to a violent force of history.

Early in the play, the protagonist seems to take pride in a 20/20 hindsight view of history that nonetheless fails to conceive of it in its entirety. Consider, for example, his brief conversation with Napoleon.

DER HEUTIGE: Warum ich Ihnen in die Verbannung melde? Ganz offenheraus: Sie dürfen nicht wiederkehren, Exzellenz, auch keine hundert Tage. Die Epoche der Feldherren (und wäre einer noch so vortrefflich) ist vorbei.

NAPOLEON: Und wenn die Völker mich rufen?

DER HEUTIGE: Das tun sie nicht. Die Völker wollen leben. 98

The exchange displays the protagonist's primary objective: To announce that the age of atomic weaponry has finally brought the "Epoche der Feldherren" to its end. By this he means that, given the potential disaster of a nuclear war, the planet can no longer sustain the governance of military-minded individuals. Be that as it may, the error in the contemporary's reasoning follows

which depicts a revolution two millennia removed, it is generally understood that the China in Frisch's work, as in many other German literary works, serves primarily as a space for creative projection and *Verfremdung* than as a depiction of China per se. (cf. Thomas Lange, "China als Metapher: Versuch über das Chinabild des deutschen Romans im 20. Jahrhundert," *Zeitschrift fur Kulturaustausch* 3 (1986): 341–49.)

⁹⁸ Frisch, "Chinesische Mauer (1955)," 161.

where he speaks for "Die Völker," claiming that they no longer call for Napoleon's return—and, by implication, the return of any other great military leader, either.⁹⁹ While it poses an admirable idealistic view of the world's peoples, the play itself suggests that the protagonist is mistaken. Where Hwang Ti is overthrown, the people throw their full support behind the successful young general who leads the campaign. The parallel between ancient China (which itself also indexes the violence of the Chinese Revolution taking place at the time the first version was written) and Napoleon's time is meant to mirror the contemporary's era as well. He speaks to the past while unable to fully comprehend his own time.

The protagonist's folly is most explicit in his interactions with the Chinese Court. In the presence of Hwang Ti he undergoes a visual transformation from an intellectual to a fool. When he meets the emperor he introduces himself alongside his title of Dr. Jur., a doctor of law, Hwang Ti tells him that he "[kommt] wie gerufen." ¹⁰⁰ In the context of the impending trial against the mute, it would appear as though his juridical capabilities could be of use. In fact, it soon becomes apparent that the previous court jester has died and the contemporary will provide a convenient replacement for him: the protagonist is named court fool. ¹⁰¹ The process of debasement, however, continues. Following his shaming as a fool, the protagonist, with the encouragement of his love interest, Mee Lan, stands up for the mute victim of Hwang Ti's court

⁹⁹ According to Ziskoven, the masks "Alexander der Große, Napoleon Bonaparte und Philipp II. spiegeln den Diktator [Hwang Ti] in verschiedenen Zeiten wider, der im Stück in der chinesischen Geschichte zu Hause ist. Andeutungsweise werden auch die modernen Gewaltherrscher einbezogen; "Die Herren aus Moskau" und "ein Herr namens Hitler. [...]" (Ziskoven, "Max Frisch," 137.)

¹⁰⁰ Frisch, "Chinesische Mauer (1955)," 193.

¹⁰¹ In the 1946 version of the text, this shift is more explicit. While in the 1955 version the contemporary continues to be labeled as "Der Heutige," in the original version the label changes from "JUNGER MANN" to "NARR" and remains so for the remainder of the text. The status of the intellectual is therewith also directly that of the fool; a fool who is allowed to speak freely, enjoying the associated privileges of the Narrenfreiheit, but whose statements are reduced to utter triviality.

and even presents the speech about nuclear weapons discussed above. Ironically, this speech—aimed toward awakening awareness of the possibility of perception's complete loss, is immediately captured and contained by the Court: "Der Große Preis des Kung Fu Tse [i.e. Confucius], [...] alljährlich verliehen an die Geisteskraft, die der Welt zu schildern vermag, was dieser Welt bevorsteht, wenn man es wagen sollte, unser [d.h. des Kaisers] Feind zu sein." Linguistic intervention into state repression and violence, as well as warnings about the atomic bomb, are easily trivialized and contained, as art never frees itself fully of its *Fürsichsein*, and political paroles are easily subsumed into hegemonic ideological apparatuses targeted at (real or imagined) external enemies. The banality identified by the contemporary is recognized. His words cannot be more than words. The issue, however, is not simply one of free speech (or speech made under the auspices of the Narrenfreiheit) that fails to create change, but rather free speech that is even less than speech—a mere self-serving daydream.

The Daydream of Literary Intervention

For all of the contemporary's difficulties, the play presents one issue which, in its given form, is truly inescapable, a note introduced quickly during the play's *Vorspiel*, announced quickly as the action begins and easily overlooked.

Das Spiel beginnt! ... Ort der Handlung: diese Bühne (Oder man könnte auch sagen: unser Bewußtsein. Daher beispielweise die Shakespeare-Figuren, die nun einmal durch unser Bewußtsein wandeln, und Bibel-Zitate und so.) Zeit der Handlung: Abend. (Also in einem Zeitalter, wo der Bau von Chinesischen Mauern, versteht sich, eine Farce ist. ¹⁰³

The protagonist stands on stage at its opening and announces that the setting of the play is "our consciousness." The object of exposition is not so much a particular reality with which one can

¹⁰² Frisch, "Chinesische Mauer (1955)," 235.

¹⁰³ Frisch, 156.

truly interact. It is, rather, a thought experiment, an artificial landscape conjured by the protagonist. In it, he encounters the human tendency to worship violence and the grotesque, repetitive, and seemingly deterministic appearance of historical struggles. But he has also essentially stripped the drama—insofar as one can refer to the play as a drama—of its mimetic role. The limited dramatic action presented to the viewer, as a thought experiment, is no longer a depiction of interpersonal conflict, but rather the depiction of a daydream.

The protagonist acts as the audience's guide in this daydream. He functions at first as an outside observer and a critic, but progressively becomes more involved as he transforms from an observer of the polonaise to an activist against Hwang Ti. Nevertheless, despite this movement from observation to intervention, the contemporary never escapes the mode of thoughtexperiment. Should it not seem strange that this protagonist, an intellectual from the 20th century, allegedly politically motivated and concerned about the atomic threat, practices his anti-atomic activism first and foremost by conversing with figures who—regardless of the atrocities for which they were responsible in their own day—lived hundreds of years ago and by his own admission only wander through "our minds"? Die Chinesische Mauer inscribes itself in consciousness alone. None of the acts involved, neither the contemporary's interaction with generals, emperors and mass-murders, nor his love of Mee Lan, nor his decision to face down Hwang Ti should be attributed to a plane representing dramatic interactions in real time, or even a diegetic 'real life.' Even the Kung Fu Se poetry prize bestowed upon the contemporary by Hwang Ti can be interpreted as a daydream of the intellectual, representing the desire for critical success even as the artist regrets (or has to present as regretful) the fact of the cooptation it signifies. The intellectual, following his thought experiment, pursues the stale historical words and enemies of the classics to address the atomic threat, but he is not facing modern adversaries

so much as chasing ghosts of the past. In this sense, one encounters an ambiguous mode of self-criticism in the play. The warnings about the atomic bomb are spoken; undeniably, the message of its danger is shared with the audience. However, the playwright ascribes to his work a poverty of agency. Even if heard, the message is lost in the fact that it is mere art. If not suppressed, its message can just as easily be contained through its treatment as 'mere' poetry.

Frisch's atomic play seeks impassionedly to awaken his audiences to the danger of the atomic threat. It renders in creative terms the loss of human beings' cultural tradition following the nuclear war. It investigates the contemporary notion of morality, which must, in the contemporary's view, decide that human beings should continue to live on the earth, and to this end must resolve to end violent conflict. However, it posits that human beings are incapable of such a decision collectively. First, it implicitly asks whether collective decision-making is possible, especially in a condition where a single, powerful and privileged individual tyrant can decide to extinguish the population. Secondly, it suggests that on a mass scale, human beings show greater tendency toward determinism than to agency. Thirdly, it suggests that where the individual seeks to intervene as an agent, and in the process displays significant agency, his or her efforts are subject to the massive tide that is collective mass as subject to history. The play thus systematically stamps out the message of warning and action it also seems to want to convey, without a clear program of promoting collective agency. If there is a glimmer of optimism in the play, as is noted by Butler, it emerges out "defiant hope against overwhelming odds."104 I read it in the "free will" of the radium atom, the one indication, that, despite these overwhelming odds, there is an escape from the cause-and-effect, i.e. one can attempt to become an independent cause, and the march toward atomic destruction need not be inevitable. "Der freie

¹⁰⁴ Butler, The Plays of Max Frisch, 44.

Wille des Selbstmörders," however macabre it might be, entails the possibility that he chooses life, however low these chances might be.

In the end, the play both addresses the atomic bomb and delivers a plot, but it is only tangentially capable of bringing these two elements into conversation. Certainly, there are parabolic overtones to the atomic bomb: The Great Wall stands in for the atomic bomb as the great military innovation and deferent, and the revolution that overthrows the emperor bursts in with minimal relation to the plot, just as the bomb might tear into its victims' lives as if ex nihilo. The significance of the emperor, too, reminds the audience that ultimately that the struggle against the bomb is not, in fact, leveled against the bomb itself, an inanimate object, but against governments. Max Frisch loosely maintains the form of the drama in his play, encapsulated in the struggle between the protagonist and Hwang Ti. Nevertheless, this dramatic plot is marginalized in favor of an episodic exposition and outshined by the protagonist's emphatic monologue in the court of Hwang Ti. The atomic bomb may have little role to play in the plot of the Die Chinesische Mauer. Nonetheless, it is maintained as a primary focal point of the play because it is addressed in the protagonist's expositional and episodic interactions with the masks, as well as his monologue to the emperor. This is the first solution to arise in the formal problem reflected in the undramatic material of the atomic bomb. Frisch writes a drama and allow its plot to be about something other than the atomic bomb. Perhaps the meekness of action, the suppression of plot by deliberative elements, and a conclusion that overwhelms the plot with a revolution that bursts in laterally—is only appropriate to a play about our extremely limited capacity to intervene in the worst.

Friedrich Dürrenmatt's Der Erfinder

If Friedrich Dürrenmatt is to receive disproportionate attention in this dissertation, addressed first, here, for *Der Erfinder* and later, in Chapter 3, for *Die Physiker*, this only follows

from his creative productivity around the atomic bomb. Dürrenmatt was already fascinated by images of apocalypse in his childhood. One reads of his apocalyptic drawings, depicting "Sintfluten und Schweizerschlachten." Elsewhere his earliest play is mentioned, written while still in school, which likewise featured apocalyptic themes. Arguably, the atomic bomb provided attractive material for a young Dürrenmatt already imbued with the catastrophic visions of expressionists like Georg Kaiser and intrigued by the eschatological implications of his Protestant upbringing.¹⁰⁶ Before writing *Der Erfinder*, his early prose work *Der Winterkrieg in* Tibet depicted in horrific detail the outcome of a future nuclear war in Switzerland, and afterwards he would address the bomb repeatedly in various works. *Der Erfinder*, however, is of significance because the cabaret number presents an early manifestation of the dramaturgical technique he would later achieve more thoroughly in *Die Physiker*, to be discussed in Chapter 3 of this dissertation. The sketch places an inventor, Dr. Zweistein, on stage, but the inventor, even if he is presented as a human endowed with the capacity of reason, is also nothing more than the visual cipher for a posited conglomerate of intricately intertwined social, political and economic forces that would otherwise elude representation on the stage. The bombs of Professor Zweistein, the protagonist, are not his per se, because, one might argue, he only exists as a aesthetic tool. Certainly, there were men who invented the atomic bomb, but its invention and use results from many complex factors; the bomb is, the play and its author ultimately imply, an outward expression of invisible geopolitical relationships. Zweistein's logic is the expression not of an individual human being, but of a system—a system, which he claims, at the very least, does not

¹⁰⁵ Friedrich Dürrenmatt, "Geschichte meiner Stoffe," in *Über Friedrich Dürrenmatt*, ed. Daniel Keel, 3rd ed., vol. 30, Werkausgabe in dreißig Bänder (Zürich: Diogenes, 1986), 20.

¹⁰⁶ Gerhard Knapp, *Friedrich Dürrenmatt*, vol. 196, Realien zur Literatur (Stuttgart & Weimar, 1993), 4; cf. Roger Crockett, *Understanding Friedrich Dürrenmatt* (Columbia, SC: University of South Carolina, 1998), 18–19.

instrumentalize the human, but treats it as utterly incidental, and is fully willing to condemn it to eradication. Nonetheless, by allowing these forces to constitute a human body, Dürrenmatt renders modern political relations and their outcome in the bomb dramatizable.

The Evening Program

Der Erfinder was produced in the context of the young dramatist's short engagement with Zürich's Cabaret Cornichon, a variety theater founded in the early 1930s. The Cornichon was already in decline by the time of Dürrenmatt's collaboration, 107 but nonetheless widely appreciated as a key contributor to the Swiss state's so-called "Geistige Landesverteidigung" during the years of German Fascism. Although the term "Geistige Landesverteidigung" has been used broadly and variably throughout the 20th century in Switzerland, the Cabaret Cornichon presented itself and was seen as an instance of popular national culture in opposition to fascist ideology during the years of Hitlerite Germany. 108 In 1948, when Dürrenmatt made his contribution, the Second World War had ended, but its fallout persisted, reflected both in attention to the ideological tug-of-war between Communist East and Capitalist West in which Switzerland found itself, 109 and in the need to address the continued question of war refugees and other displaced persons' right to remain in the Confederation following the (approximate) return to normalcy. 110 This notion of a postwar Switzerland—an ostensible "safe space"—provided a

¹⁰⁷ cf. Elsie Attenhofer, Cabaret Cornichon: Erinnerungen an ein Cabaret (Bern: Benteli, 1975), 308.

¹⁰⁸ cf. Frank Gerber, "«Es dürfte hier eingeschritten werden müssen …» Das Cabaret Cornichon und die Zensur 1939-1945," in *Theater in der Nähe. Beiträge zur Theatergeschichte der Schweiz*, ed. Andreas Kotte, Theatrum Helveticum 9 (Zürich: Chronos, 2002), 360 ff. Gerber also notes that although the Cornichon presented itself as political, the bulk of its sketches tended to be primarily humorous and erotic in nature, and only to a lesser degree political (cf. 348).

¹⁰⁹ This was a primary theme of the Cornichon evening program from the year 1947, as its title, "Zwischen Whiskey und Wodka," reflects, but remained salient through 1948. cf. Attenhofer, *Cabaret Cornichon*, 306 f.

¹¹⁰ Peter Michael Keller, *Cabaret Cornichon*. *Geschichte einer nationalen Bühne*, Theater Helveticum 12 (Zurich: Chronos, 2011), 345.

convenient backdrop to strike out at an apparently hegemonic ideology of science at a moment when it could become an existential threat.

The evening program to which *Der Erfinder*—originally titled "Apoktalyptisches"—belonged, *Arche-Noah*, imagined the Swiss Confederation as a large yacht on a world ocean. Because cabaret numbers need not be read as individual pieces, but can rather be seen to collectively constitute an evening program, the other number Dürrenmatt contributed to the program, *Der Gerettete* helps to set the stage for *Der Erfinder* as well. The sketch, which depicts the unpleasant welcome received by a 'shipwrecked' refugee, uses the ark metaphor to convey the controversy surrounding refugees and displaced persons in the immediate postwar.¹¹¹ Thus, as the *Arche-Noah*, Switzerland stands for an ostensible beacon of salvation, a position from which one escapes the catastrophes befalling the world. However, access to this country is difficult and exclusive, and outsiders are not necessarily welcome. *Der Erfinder* presents the viewer with the same ship, but suggests that the Swiss Ark, in the atomic age, is itself imperiled.

Though the latter offers the most to this study, it will be useful also to consider "Der Gerettete" as well, given that Cabaret is not experienced as individual numbers, but as an entire evening program. This first number is a short and scathing allegory on Swiss refugee politics following the Second World War. It stages a conversation between two figures, Dr. Blauhals, the director of the department for "shipwrecked persons," and Armin Schlucker (whose last name could be rendered into English as "Gulper") and who has just been fished out of the open sea. The concept is simple: Schlucker reasonably requests further assistance upon the ark, and the director of the office for the shipwrecked responds curtly that rescued persons have no claim to further assistance, that they have not suffered so badly, and that they are expected to express continued and undying gratitude to the bureau that has rescued them. The conversation is interspersed with clear metaphorical references to Nazi or communist threats in the form of sharks; it ends when the shipwrecked man, from a position of complete despair, launches himself back into the perilous, shark-infested sea. (Friedrich Dürrenmatt, "Der Gerettete," in *Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett*, vol. 17, 30 vols., Werkausgabe in dreißig Bänder (Zürich: Diogenes, 1980), 127–35.)

Interestingly, *Der Gerettete*'s director "Dr. Blauhals" was a direct reference to the leader of the Eidgenossiche Fremdenpolizei [Confederal Migration Police] at the time, Heinrich Rothmund. The "blue throat" of Dürrenmatt's character is a play on the name "red mouth," of the real figure. The joke led to a dispute between Rothmund and the Cabaret. It was the beginning of the end of Dürrenmatt's cooperation with the Cornichon, where his work was deemed too theatrical and too politically scathing for the light atmosphere of a cabaret, and his reference to Rothmund went largely unappreciated, as it was considered by theater direction to be "over the head" of most cabaret attendees. (cf. Keller, *Cabaret Cornichon. Geschichte einer nationalen Bühne*, 345 f.)

The sketch proceeds as follows: The illustrious father of the atomic bomb, Dr. Zweistein, arrives to the yacht of the Swiss state to visit the Swiss president and his wife. Formal niceties soon give way to contradictions and conflicts of interest in the inventor's various public personas. He is an inventor, but also salesman and promoter of nuclear technologies, and even the president of the 'International Committee for Fighting Fear Amongst the Public.' Before long, Zweistein's dangerous insanity comes to light. He has been traveling between yachts and islands and testing his miniature atomic bombs on them, destroying them, and measuring the effects of the explosions. Zweistein plants atomic devices also around the Swiss yacht, as he had in others, with the intention of later recording with scientific objectivity the effects of their explosion. The Swiss President tries to protect his ship, removing the bombs and returning them to the scientist, and finally confronting him with a pistol. Eventually, Zweistein agrees to leave the ship will all his bombs. However, the departure of the scientist and his assistant resolves little. In a short offstage romp prior to his departure, Zweistein had planted a bomb in the Frau President's blouse. The stage lighting dims as the Frau and the President realize this. Of the two paintings adorning the set, a portrait of Wilhelm Tell and a copy of Böcklin's *Toteninsel*, only the latter remains illuminated; the island of the dead signifying, instead, death at sea. The salvific potential of the Swiss yacht has been drawn into question in the atomic age—both for the Swiss and for those who seek refuge in Switzerland.

The setting of the ship evokes several interesting historical and thematic references. Just a few years previous, the widely-promoted spectacle of the Bikini Atoll tests established a strong link between the object of the ship (and the ark in particular) and the idea of nuclear testing. As mentioned in the opening to this chapter, the "Nohan" arks of Bikini invert the ark from a place of salvation to a place uniquely targeted for destruction. This concept is the central material of

Dürrenmatt's number, and he allows it to progress to its necessary conclusion. Alongside this contemporary reference, Dürrenmatt's number resonated with the storied metaphorical tradition of seafaring in the West. The concept of the "Ship of State," first imagined in Plato's republic, enjoyed popularity in the 19th and 20th centuries: it is interpreted literally in Dürrenmatt's yachts, though divorced from the political form for which Plato had conceived them. Similarly significant, given the subject matter of the *inventor*, is perhaps Horace's warning against seafaring as a transgression of natural boundaries. He places this act alongside Daedalus' flight and Prometheus's theft of fire as punishable offenses against the order of the gods. 112 Notably, these metaphors of transgression are commonly employed for technical advancements of the 20th century and the Prometheus metaphor would be especially common in the physicist dramas of the 1950s. Finally, one might consider the ship of fools in this context as well. While the biblical ark would imply the survival of the divinely elect few, Sebastian Brant's Narrenschiff suggests very different crew members and passengers. Though the 16th-century emblem book does not generally press the idea of the ship in the text itself, its opening poem describes the wide variety of ships and other vehicles the fools rush to fill (after all, "ein Schiff könnt nicht alle tragen, so groß ist der Narren Zahl"). 113 The possibility of a Narrenschiff reference is encouraging for the examination of the sketch in terms of the "fool" trope, useful when one considers—as I will discuss momentarily, the antagonist of the piece to be a 20th-century resuscitation of the scholarly fool. This is a fool that has transgressed natural boundaries in pursuit of nuclear technologies, as well as the foolish world that rewards him for it. Thus, the ship metaphor carries

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¹¹² cf. Hans Blumenberg, *Shipwreck with Spectator : Paradigm of a Metaphor for Existence* (Cambridge, Mass.: MIT Press, 1997), 11.

¹¹³ Sebastian Brant, "Eine Vorrede zu dem Narrenschiff," in *Das Narrenschiff von Sebastian Brant - Text im Projekt Gutenberg*, accessed October 1, 2016, http://gutenberg.spiegel.de/buch/das-narrenschiff-2985/1.

with it a stewing mix of sundry phenomena: The state is equated with the fool, the fool placed beside the idea of transgression of boundaries, and—through the idea of the ark, the transformation of a salvific location into a place of death.

Dürrenmatt's Grotesque

Though it is a cabaret number rather than a drama, Dürrenmatt incorporates the atomic bomb far more tightly into his work's plot than Frisch had. Life and death are immediately at stake through in an atomic bomb presented directly on stage. This is made possible through the artist's invention of the miniature atomic bomb. Arguably, this transformation renders the bomb functionally indiscernible from a conventional warhead or even a gun in a stand-off, and it thereby loses its specific status of the atomic weapon that results from its unique destructive power. However, this piece of artistic license also makes a direct standoff between individuals possible, and although *Der Erfinder* does not strive to realize the classical ideals of drama, it nonetheless fulfils the dramatic expectation of a direct conflict between protagonist and antagonist.

Despite the transformation of the atomic conflict into one that functions visually as if between individuals and therefore appropriate for the stage, the sketch arguably also plays out at the level of the geopolitical relationships that define the use of the atomic bomb. In many ways, it anticipates an aesthetic principle articulated several years later in Dürrenmatt's essay on drama theory, *Theaterprobleme*. If one understands dramatic action to be the struggle that takes place between human beings as unified and contoured rational beings, for Dürrenmatt, the issue at

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¹¹⁴ Notably, this was also at a time where the distinction between nuclear and conventional weapons was still not widely understood. Radioactive fallout would not become a matter of widespread public concern until the 1950s.

¹¹⁵ A standoff with real nuclear warheads was eventually captured most effectively in *Dr. Strangelove*—on Film. A bomb from above, by contrast, enters and ends one's life outside of all unity of action, and is therefore undramatic.

hand is not merely the undramatic quality of the atomic bomb, but the emergence of a world that no longer lends itself to dramatic representation more generally. In the 18th and the beginning of the 19th century, Dürrenmatt claims, Schiller and other dramatists of the era were able to write as they did because the world in which they lived "sich noch in der Welt [spiegeln konnte], die [sie] schrieb[en], die [sie] als Historiker erschuf[en]."¹¹⁶ This was a world of clearly delineated individual identities who existed as whole figures. Their actions, even when taken collectively, were the collective acts of individuals with personalized capacities for rational deliberation and decisive power. In the classical drama, the figures on stage might be subject to external forces, but they are understood as individuals with clearly delineated identities, as decision-makers and agents. When their rational decision-making capacity fails, it is most often the result of a personal failure of the individual, rather than an expression of the outside world's conditioning of that figure.

Such figures, in Dürrenmatt's estimation, had disappeared from the world by the midtwentieth century. Political actors of the twentieth century—even the most apparently powerful, authoritarian, or totalitarian—are merely "zufällige, äußere Ausdrucksformen" of the power they represent, rather than powerful in their own right, and, as such, are "beliebig zu ersetzen." This same configuration is true not just of political figures but of human beings in general.

Dürrenmatt laments that there are "keine Schuldigen und auch keine Verantwortlichen mehr.

Alle können nichts dafür und haben es nicht gewollt. Es geht wirklich ohne jeden." There is no guilt, no responsibility, each human component of the apparatus appears expendable, fungible,

¹¹⁷ Dürrenmatt. 62.

¹¹⁶ Friedrich Dürrenmatt, "Theaterprobleme," in *Theater: Essays, Gedichte, Reden*, Werkausgabe in siebenunddreißig Bänder 30 (Zürich: Diogenes, 1998), 59.

and replaceable. Individuals have been stripped of power and responsibility; these are now, rather, systemic concepts. Power "ist zu weitverzweigt, zu verworren, zu grausam, zu mechanisch geworden und oft einfach auch allzu sinnlos" to render directly as drama. The result is a world without form, without a visual expression of its own. Human beings are no longer agents, but mere outward expressions of power in a complex, faceless, abstract economic, social and political configuration. As such, these powers do not lend themselves to immediate representation on stage.

This constitutes a hurdle for dramaturgy, but also an opportunity, and Dürrenmatt terms the solution that he conceives the "grotesque." For him, the grotesque is associated with the creation of visualized stage presences out of the unruly, contradictory, and invisible forces that govern them. "Unsere Welt hat ebenso zur Groteske geführt wie zur Atombombe, wie ja die apokalyptischen Bilder des Hieronymus Bosch auch grotesk sind. Doch das Groteske ist nur ein sinnlicher Ausdruck, ein sinnliches Paradox," Dürrenmatt writes. ¹²⁰ For Dürrenmatt, the grotesque is a "sensual expression" imposed upon a formless world. The world is presented as a "sensual paradox" precisely because it has no visual cipher and can nonetheless be seen, just as its inhabitants seem capable of action and yet are either impotent or mere expressions of systemic power, rather than agents in their own right. Just as the apocalyptic figures of Hieronymus Bosch are the expression of a process that has no graspable, plastic, visual form, the atomic bomb stands, for Dürrenmatt, as the embodied expression of power in a formless world,

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¹¹⁸ This is arguably not unproblematic in the postwar period, a problem of in the light of the assignment of guilt for the Second World War and the Holocaust. The generalization of guilt is a strategy of guilt displacement from real perpetrators; Dürrenmatt is arguably giving in to a discourse that, by generalizing guilt, renders it inoperable.

¹¹⁹ Dürrenmatt, "Theaterprobleme," 59.

¹²⁰ Dürrenmatt, 62.

and as an image of power in a world that has stripped itself of agency. This is his paradox:

Human beings must appear as actors in the means through which we describe them, the language and visual form they take, but there is in fact no agent at the basis of this action, but rather only the mechanisms of intangible power flows.

According to Dürrenmatt, the same relationship of the visualizable atomic bomb to invisible power flows in the real world corresponds to the representation of unrepresentable power relationships on the stage in the grotesque. The stage renders in visual form not just the visual world but the invisible structural function of the mass or apparatus. Embodied, this creates a mirage of agency. The aesthetics of the grotesque parallel the moment in which agency is imagined out of invisible mechanisms. It is the process of bringing forth the fundamentally incomprehensible system and giving it form. This likewise forms the basis of comedy. "[D]as Komische darin besteht, das Gestaltlos zu gestalten, das Chaotische zu formen."¹²¹ It is here that the Dr. Zweistein is capable of being conceived, in his paradoxical existence as both individual being, and expression of the broader apparatus, both physical presence, and allegory. Just as Hieronymus Bosch's monsters formulate the delights and terrors of an inaccessible metaphysical other world, Zweistein, the antagonist of *Der Erfinder*, lends a temporary stage face to the ineffable systems of human interaction which appear both to strip human beings of agency and become agents, even as one recognizes that a composite system, however much it might seem otherwise, does not possess agency in its own right.

There are several indications that the figure Zweistein does not merely stand for *the inventor* himself, but for a complex of contemporary social, economic, political, military relationships which appear to have produced him. These are expressed most explicitly in the

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¹²¹ Dürrenmatt, 61.

multiple and contradictory offices he is said to occupy. He is the inventor of the atomic bomb (and therefore a scientist). He is a salesman of nuclear technologies and nuclear armaments (economics). He is the president of the International Committee for Fighting Fear amongst the People (non-governmental or supranational organizations). This office would appear to contradict his role as a salesman of atomic weapons, though in Zweistein's view, his weapons sales "[tragen] viel zur gegenwärtigen freundlichen Weltlage [bei]." Assessed as a specimen of Dürrenmatt's grotesque concept, however, Zweistein is in fact the aesthetic solution to a contradiction; the embodied expression of the complex and theatrically untenable interplay of systemic forces.

The visualization of complex, interacting societal, economic and political forces is marked by the inclusion of various forms historically associated with the grotesque. The sketch is filled with forms of comic bodily violence and gleeful degeneration. These range from the violent slapstick of the atomic explosions (achieved by placing the bomb in a fish tank, a kangaroo's pouch, or in one instance, by feeding it to an elephant), ¹²³ and through code switching between the high German and the comfortable local dialect ("Gertrud, der Ma isch da, wos Atombömbli erfunde het!" However, it is Zweistein, decked out in his goofy safari garb (who, one reads, is "freely invented" despite the play on the name 'Einstein' naively self-

¹²² Friedrich Dürrenmatt, "Der Erfinder," in *Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett*, vol. 17, Werkausgabe in dreißig Bänder (Zürich: Diogenes, 1980), 138.

¹²³ Such references to animals also evoke once more both the Ark of Noah and the 1946 Bikini bombing.

¹²⁴ Dürrenmatt, "Der Erfinder," 1980, 137. The Cabaret Cornichon naturally employed the Swiss dialect nightly in their shows. Here the contrast between the dialect and the "high language" has a special value: It is set into an inversion where the ostensibly 'clearer,' high German of the Inventor becomes the language of insanity, and the dialect of the Swiss the language of reason. This also has the additional comic advantage that the diminutive nouns means the "Atombombe" becomes the somewhat sweeter "Atombombeli."

¹²⁵ Dürrenmatt, 136.

congratulatory, insane by his own admission, and wildly lascivious who stands at the center of this grotesquery. His debauchery and delinquency harken back to the earlier theatrical tradition of the scholar of the carnival play in the German linguistic space. 126 The scholars of the carnival play inverted the expected characteristics of the learned man along the axis of the mind-body dichotomy popular in the late Middle Ages. The scholar is lampooned for his 'Weltentfremdung,' for his overdependence on cranial function and for having allowed his bodily drives to shrivel. 127 The scholars of the carnival play—doctors, jurists, theologians and others—saw themselves reunited with their bodily existence as a correction to their previous imbalance. Their lofty, pious, or intelligent characteristics are replaced by ubiquitous social incompetence and the baser pleasures of their self-interest and corporeality. Reflecting such a tradition, Zweistein is well-united with his corporeal existence, seething with sexual energy marked by his attractive secretary and his pursuit of the Swiss President's wife. However, unlike the carnival plays in which the surmounting of the scholar's "Weltentfremdung" served as the central idea, for Zweistein this has already been achieved and reflects the subjection of the world to his whims. His sexuality proves magnetic and is central to the sketch's outcome. He seduces

¹²⁶ In his discussion of Dürrenmatt's collaboration with Cabaret Cornichon, Keller notes that the "scientist" figure entered the Swiss cabaret with the work of Alfred Rasser. cf. Keller, *Cabaret Cornichon. Geschichte einer nationalen Bühne*, 352.

¹²⁷ cf. Klaus Ridder, "Der Gelehrte als Narr: Das Lachen über die artes und Wissen im Fastnachtspiel," in Artes im Mittelalter, ed. Ursula Schaefer and Mediävistenverband (Berlin: Akademie Verlag, 1999), 393. As Klaus Ridder has shown, the vectors of scholarly transformation seem to be relatively well-defined: "Das Rollenkonzept des Gelehrten als Narr wird im Fastnachtspiel auf eine eigene Weise entfaltet: Gelehrtheit und Liebestorheit, Gelehrtheit und mangelnde berufliche Kompetenz, Gelehrtheit und allgemeine Lasterhaftigkeit stehen im Mittelpunkt einer Reihe von Spielen. Die literarische Konzeption wird auf verschiedene Berufsgruppen bezogen (Mediziner, Juristen, Astrologen, Theologen) und auf eine variable Weise sprachlich-stilistisch (Grotesksprache, obszöne und grobianische Metaphern, etc.) in unterschiedlichen Spielzusammenhängen in Szene gesetzt." (395 f.)

the president's wife with ease and plants in her blouse the atomic bomb that will eventually, one must expect, destroy the Swiss ark and its inhabitants.¹²⁸

In an additional inversion of the calm piety of the scholar, Zweistein is also insane. By his own admission, he has only recently escaped a carefully guarded insane asylum, and has no need for sanity because "Ein normaler Mensch erfindet nichts." His insanity and misanthropic self-interest align him with the figure of the mad scientist. On stage, Zweistein appears neither calculating nor conniving. He deposits his bombs in a doubly irresponsible fashion, that is, both in terms of his disregard for the victims and with a silly lackadaisicalness or idiocy that suggests that he either does not care whether he is caught or that he, despite his intelligence in scientific questions, is incapable of gauging his own poor secrecy. This apparent idiocy almost creates the sense that there is no real actor or agent behind the placement of these atomic bombs, but it is, rather, the result of a series of unsteered systemic mechanisms, playing out freely, without any particular calculation or purpose. As the visual embodiment of a composite system rather than as

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¹²⁸ This process of seduction begins immediately upon their meeting. The Frau President tells him that she has "always had a burning interest in the atom bomb," the scientist responds suggestively, by saying "I am certain you'll show full understanding for my passions." (Dürrenmatt, "Der Erfinder," 1980, 137–38.) This, too, could be read to reflect the tendencies of the scholar in the carnival play. After all, an important element of the scholar's debasement comes from the reduction also of his or her discipline to the level of—to borrow a term from Bakhtin—his lower belly. In one Nuremburg carnival play, the knowledge forms of the liberal arts (such as rhetoric) and the tools of geometry (such as the compass and square) become clear metaphors instructional for sexual acts. (Ridder, "Das Gelehrte als Narr," 397.) Unfortunately, Dürrenmatt's misses the opportunity to instill the sketch's dialogue with high-quality sexual innuendo based in nuclear physics. Something like: "I'll trigger *your* critical mass." Or "I'll beam *your* nucleus with *my* protons." In passing it is necessary to note, though beyond the frame of this study to investigate, the implicit patriarchal suggestion here that female sexual infidelity condemns the ark community to destruction. For the ends intended here, it is enough to give Dürrenmatt credit for allowing Zweistein to "sow the seeds" of destruction with multiple shades of meaning.

¹²⁹ Dürrenmatt, "Der Erfinder," 1980, 140.

¹³⁰ Allen Hye defines the mad doctor simply as a one "whose bizarre experiments demean and endanger mankind." Controversially, he identifies the doctor from Georg Büchner's *Woyzeck* as an example of this. Whether appropriate or not, both Zweistein and the doctor from Woyzeck share a demeaning neglect for the well-being of individual human beings. Allen E Hye, *The Moral Dilemma of the Scientist in Modern Drama: The Inmost Force* (Lewiston, N.Y.: Edwin Mellen Press, 1996), 34.

a thinking, rational individual, Zweistein's destructive actions appear to result from mental illness, but the underlying truth is structural. His actions are the product not of an agent capable of rational outcomes, but of the criss-crossed forces of the composite system he embodies.

The Marginalization of Humanity

If one takes seriously the claim that Zweistein is the visualized embodiment of a system, one must accept that he possesses nothing more than the illusion of a subjectivity. Dürrenmatt's work is concerned, however, not with the absolute conversion of an aesthetic idea into practice, but with the end result of a play on the stage. Dürrenmatt endows Zweistein not only with the ability to act, but to speak, to reflect on the meaning of his actions, and splits no hairs in his assessment of this system. When threatened by the President at gunpoint, Zweistein claims that in contrast to the era "der Hexenverbrennung und der Nationalkriege," the primary conflict of the postwar takes place "zwischen der Erhaltung der Menschheit und der Erhaltung der Wissenschaft."131 Dürrenmatt makes Zweistein and his atom bomb the prophetic monstrum of the world submitted to the scientific principle of the 'wissenschaftlicher Beitrag' raised to an axiom: His insanity reveals the spiritually void, mechanistic scientific ideology prominent in society and driving it to ruin. When the Herr President finally confronts the scientist, the scientist's speech may be bizarre and self-contradictory, but he speaks clearly.

PRÄSIDENT: sachlich Sie betreiben Massenmord.

ZWEISTEIN: noch sachlicher Man muß den Menschen übersehen, um den Fortschritt unserer Zeit zu sehen.

PRÄSIDENT: entschlossen und gläubig Der Mensch darf nicht übersehen werden.

ZWEISTEIN: noch entschlossener und noch gläubiger Politik ist nur möglich, weil sie den Menschen übersieht.

PRÄSIDENT: In-die-Luft-Sprengen ist keine Politik.

ZWEISTEIN: Jede Politik hat den Menschen am Ende in die Luft gesprengt.

¹³¹ Dürrenmatt, "Der Erfinder," 1980, 147.

PRÄSIDENT: Es ist mir unerklärlich, wie Sie gleichzeitig Erfinder der Atombombe und Präsident des internationalen Komitees zur Bekämpfung der Furcht unter den Menschen sein können.

ZWEISTEIN: Ich bin Präsident des internationalen Komitees zur Bekämpfung der Furcht unter den Menschen, weil ich gegen die Nazistaaten, die Geldstaaten und die Sklavenstaaten bin.

PRÄSIDENT: Diese Staaten können keinen schlimmeren Massenmord als Sie treiben.

ZWEISTEIN: Ein Nazistaat treibt Massenmord, um die Menschen in Tiere zu

verwandeln, ein Sklavenstaat, um sie in Dinge zu verwandeln, und ein Geldstaat, um sie in Dollar zu verwandeln.

PRÄSIDENT: Und in was verwandeln Sie die Menschen mit Massenmord?

ZWEISTEIN: In Nichts. Darum geht allein meine Rechnung auf. Ich bin der einzig berechtigte Massenmörder der Welt. ¹³²

Zweistein expounds the belief that one must overlook the human in order to seek progress. This is both a necessity, and it is an improvement upon previously dominant political configurations. These previous configurations do, in fact, concern themselves with humanity, but only insofar as they are able to transform human beings into something of use. National Socialist states transform people into animals, "Geldstaaten," or capitalist states, transform them into dollars, and slave states transform them into things. There is no need to concern oneself with the adequacy of this tripartite division, whether these categories are accurate, how these categories overlap, or whether there are categories Zweistein has overlooked. More important is the meansends binary reflected in the transformations proposed here. The Swiss president, in his plea that human beings not be overlooked in politics, means—in proper humanist fashion—that the good of the human must remain the ends of all politics. As Zweistein argues, the dominant political and economic systems, whether they do this out of individual greed or out of the displacement of the human through a perceived ideal, transform the human into a means to an end other than itself, such as the pursuit of a posited national ideal or personal gain. In contrast to these, Zweistein views his project as uniquely novel in that it dispenses with the means-ends dichotomy

¹³² Dürrenmatt, 142 f.

in its entirety. The human being, in his concept, will be neither means nor the ends of any posited political goal or notion of progress. The human is instead completely incidental to this process and possesses significance only insofar as it must be eliminated when it attempts to stand in the way of an otherwise self-perpetuating loop of scientific progress.

Here one must also consider the proposed stage identity of Zweistein as the embodiment of composite systems. Insofar as one chooses to reads him as such a composite, his words may be read as the principles of the system. Insofar as the human being is marginalized, the implicit claim is not so much that a single individual named Zweistein values science highly and devalues the human being, but that the complex of systems he represents, which, though set in motion by human beings, no longer takes them into account. Where he praises scientific advancement, this need not be understood as science per se, but science as the process by which nature—both in its human and non-human manifestations—is ever more effectively subsumed into these systems. Whereas nature was once subsumed into these systems for the good of humankind, the reduction of humankind to the level of material rendered them both subject to and invisible to the system. It now exists only to self-perpetuate.

How does the cabaret number reflect on these ideas? It neither confirms nor rejects them in their entirety. Nonetheless, it poses the possibility that humanity has been reduced to a mere behavioral systematicity and is complicit in its own destruction. The president of the Swiss ark explains that his yacht runs on American "Demokrazin" rather than the "billigere[r] Volksdemokrazin." This "echte[r] Demokrazin," also used by the Swiss, is "amtlich geprüft, kalt gelagert, in Flaschen abgefüllt und muß vor Gebrauch geschüttelt werden."¹³³ In other words, democracy is manufactured and highly manipulable, leaving the view of citizens, as actors in

¹³³ Dürrenmatt, 138–39.

their own right, somewhat dim. One is repeatedly informed of the various ways in which the inventor has managed to destroy countries with his bombs. His victims contribute to the maintenance of his horrendous personage and are integrated into his destructive acts. The Swiss yacht is no exception in this regard. Zweistein has received honorary doctorates from more than 3,303 universities, including a doctorate in theology from the university upon the Swiss yacht. As the President of the International Committee for Fighting the Fear amongst the People, Zweistein has had free access to any ship he would like to board. The Swiss President and his wife warmly welcome the inventor aboard their ship, and despite his effort to plant bombs aboard, politely allow him to leave when he is ready—such that the president's wife even ("tief beglückt") tells him that he is "trotz allem ein edler Mann." The destruction of the Swiss yacht is made possible by the warm and obsequious welcome the inventor receives upon his arrival there, just as it was made possible by the warm welcomes he received on other such 'Ships of State.' The people of the world do not appear as fully fledged, independent actors who could reasonably oppose the destruction to which the atomic bomb condemns them. They are rather, despite their best intentions, deeply complicit in the systems that threaten to eradicate them.

On stage, however, everyone appears as a fully-fledged human being. This is a trick of the light. We are not dealing here with individuals fully capable of acting independently, but they appear to us in this guise nonetheless. Nor are we dealing with an individual who in his own right is capable of triggering an atomic bomb. We are dealing with a conglomerate of contradictory forces that bring the atomic bomb to bear. But summarized in the neat composite of Zweistein, it becomes possible to render the struggle against these faceless forces productive for a dramatic conflict.

¹³⁴ Dürrenmatt, 150.

These two plays mark some of the earliest attempts to present the issue of the atomic bomb on stage, but they were not alone. In 1948, Paul Denger's Bikini was staged during a Göttingen Theater Festival. 135 The piece applied implicit tropes of folly and death in an impassioned plea to reconsider the dangers of the atomic bomb. 136 However, the piece is ultimately undramatic. The bomb hangs overhead as an impending threat, but despite the numerous, sometimes tense, interactions between the characters, no conflict emerges beyond the inner stress the cast feels about the upcoming demonstration. In the late 1940s, Paul Muller wrote a comical short work for the Alsatian folk theater, Atombombe odder d' Dame han s'Kommando. 137 Here, a young wife, worried for her husband's job, cross-dresses as a nuclear scientist and uses a fake atomic bomb to trick the village's all-woman government to surrender the mayoral office back to the men. The Schwenk features both the bomb and presents a structured conflict, but it is ultimately more about the recently achieved suffrage of French women than about the bomb. Finally, it was most likely at the end of the 1940s—during the short period she was an engaged member of the Gruppe 47¹³⁸—that Ilse Schneider-Lengyel wrote Achtung Stickstoff: Hier Welle Nullpunkt, ¹³⁹ a feminine-mystical surrealist drama that exchanges comedy for ritual. The play is highly experimental, mixing graphic projection technologies with stage action, and performs a grotesque inversion of hierarchies when a caste of suffering,

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¹³⁵ cf. Runge, "Bikini"; "Theater: Bikini hinterm Bullauge," *Der Spiegel*, March 1948.

¹³⁶ Denger, *Bikini*.

¹³⁷ Paul Müller, *Atombombe odder D' Dame han s' Kommando Schwank in e. Akt* (Mulhouse: Editions Salvator, 1950). I unfortunately could find no production data for this work.

¹³⁸ Eva Chrambach, "Schneider-Lengyel, Ilse Maria," *Neue Deutsche Biographie*, *Band* 23, 2007, https://www.deutsche-biographie.de/gnd119490927.html#ndbcontent.

¹³⁹ Schneider-Lengyel, "Ilse Schneider-Lengyel (1903-1972) Nachlass."

graphically-rendered figures, visions of a 'rent body,' put God on trial for allowing the atom bomb to "happen." The plot of the play, however, is entirely lost in the piece's long, lyrical monologues, and is unconcerned with dramatic form.

Frisch and Dürrenmatt's stage works, in contrast to these, both seek to bring the discussion of the atomic bomb into a dramatic form. For Frisch, the significance of the bomb is expressed primarily in expositional and episodic materials; the plot, about the relationship between a tyrant and his court is only tangentially, and possibly parabolically concerned with the nuclear threat. Still, the work as a whole expresses a concern and contradiction at the core of the nuclear threat: that it inevitably effects everyone, and arguably requires a collective decision to overcome—but that human beings are incapable of making decisions collectively. As a group, they are far more likely to be subject to conformism, manipulation, behaviorism, and historical determinism. Dürrenmatt, by contrast, includes the bomb directly in his plot. To do so, however, he must remove the bomb from its normal context, reducing its scale, such that it could appear as if a weapon in a standoff between individual human wills. At the same time, however, this transformation is accompanied by slight indications of his future technique of the grotesque—by which he renders complex and invisible forces visible on stage—and allows them to appear dramatizable.

Each play contains qualities that will be maintained as the material of the atomic bomb congealed in the dramatic form of the physicist drama. The discursive tendencies of Frisch's *Die Chinesische Mauer* are very clearly carried over into the physicist dramas of the 1940s, though

¹⁴⁰ In the dissertation of Catherine Guthrie, the feminine surrealist drama is explored in the works of other woman dramatists, but the basic theoretical procedures remain exceptionally applicable also to Schneider-Lengyel's unique and baffling work, which reflects apocalyptic, erotic, spiritual and ritualistic elements. cf. Catherine Guthrie, "Refiguring the Sacred: Surreal Theater as the Space of Alterity in the Works of Leonora Carrington, Djuna Barnes, Angela Carter, and Audre Lorde." (Washington State University, 1996).

somewhat reined-in. Unlike in Frisch's play, they no longer threaten to eclipse the plot entirely. As for Dürrenmatt, the nuclear physicist becomes a mainstay of the physicist drama, though the works of the 1950s rarely present a type of mad scientist, and none of them pursue the complex symbolic staging of inhuman forces that Dürrenmatt has begun to develop here.

In the next chapter, this presentation of the physicist as a figure in the drama of the atomic bomb will continue. I will examine the most common solution to the aesthetic problem of the atomic bomb: the physicist drama.

CHAPTER TWO: "DIE ZEIT DES HEILIGEN UNGEHORSAMS." THE PHYSICIST DRAMA ON THE EXAMPLE OF CURT LANGENBECK'S DER PHANTAST AND CARL ZUCKMAYER'S DAS KALTE LICHT.

High-profile scientists and nuclear physicists were continually in the public eye at the end of the 1940s and through the 1950s. The Eastern and Western blocs of the Cold War competed to win former German scientists to their cause, not only for the practical application of their knowledge, but for the prestige that comes with it. As the threat of the nuclear arms race became more pronounced, several scientists, including Leo Szilard and Otto Hahn, became increasingly public figures, speaking out against the dangers of nuclear weapons and the arms race. The physicists were, however, also contested figures, given that many who had moved to the US before the Second World War had directly contributed to the invention of the atomic bomb, and many of those who had not had willingly worked on behalf of Nationalist Socialism. Notably, for those who had stayed and served the Nazi military cause, their desirability in the eyes of Western and Eastern powers, as well as the prerogative to take roles as spokesmen for peace, could offer political rehabilitation and moral redemption. 141 The same was true of activism. As Frank Uekötter notes, the 1957 Göttinger Manifesto, signed by 18 atomic scientists, which demanded that the Adenauer administration refrain from arming the Bundeswehr with nuclear weapons, "served as a remarkably successful act of whitewashing for a group with a Nazi past." ¹⁴² The

¹⁴¹ Dolores L Augustine, *Taking on Technocracy: Nuclear Power in Germany, 1945 to the Present*, 2018, 25–26. As Augustine writes, "Few scholars believe Werner Heisenberg's claim that as head of an important research team working on the bomb [for Hitler], he deliberately sabotaged the project." (25)

¹⁴² Uekötter, *The Greenest Nation?*, 77.

arms race provided a context not only for the moral celebrity of German nuclear physicists but also redemption following willing collaboration with the Nazis.

Given their public standing, it is unsurprising that the physicist would feature prominently in the German theater of the 1950s and that the "physicist drama" would constitute the dominant form of the atomic play. Like the term "atomic play," the physicist drama subgroup can be described as a 'genre' with all of the limitations and insufficiencies such a category entails. It is far more a 'cluster' of works organized around a theme—i.e., that of the physicist than a strictly enforced selection of tropes and stylistic requirements. 143 Nevertheless, it is possible to discern a dominant trend in the function of the physicist dramas. They address the fear of weaponized technologies, but often are far more concerned with the regeneration of morality and the ability of human beings to make normative decisions in a world dominated by instrumental reason and scientific positivism. This tendency is, however, not merely a product of the histories of the physicists themselves, but of a broad demand for spiritual redemption in Germany and in the theater. The experience of Nazism, and the destruction of Germany at the end of the Second World War, had left an expansive sense that the political was bankrupt. Concurrently, many believed that notions of a cultural spirit, though tarnished, could be resurrected to fill this debt. The theater billed itself as a space of such cultural resurrection. This chapter will attempt to describe the scope of the physicist dramas while demonstrating that the theme of the scientist and physics is not merely incidental to the moment of spiritual redemption. Rather, the figure of the physicist is specially positioned to cast such redemption in terms of the tensions between scientific positivism and religious normativity, while the demands of drama evoke the related problem of determinism and free will. The chapter will examine specifically

¹⁴³ Müller, "Brechts Leben des Galilei und die Folgen - Physiker als Gegenstand literarischer Phantasie," 387.

Curt Langenbeck's *Der Phantast*, one of the earliest physicist dramas, as well as Carl Zuckmayer's *Das kalte Licht*, arguably the most successful atomic play of the 1950s, and show how each uses the physicist to weave a tale of conscious spiritual redemption.

This chapter seeks to fill a gap in the research by examining the moment of spiritual victory in the physicist dramas. The theme of transcendence in the physicist dramas is, in fact, related to a complex of topics and tendencies prevalent in the postwar period and the 1950s but also in the theater in general. The theater had a philosophical interest in reestablishing a sacred unity of the human being and humanity, and it had a vested interest in demonstrating its own distance from politics. However, here I argue that such transcendence not only emerges from the concerns of the time but is made to relate effectively also to the material of plays about scientists in particular. This is achieved specifically, also, for the realm of the theater, through the role of agency and free will. The non-canonical plays of the physicist drama establish a clear chain of binaries that ally modernity with determinacy and religion with will. Modernity, positivism, science, the mass, behaviorism and mechanical determinism, nihilism, and necessity are counterpoised to an alternative modernity marked by religion, normative morality, the individual, the soul, the will, belief and freedom—such is the semantic field of postwar theater. The fundamental struggle of the physicist dramas is not first and foremost the struggle between the physicist and state that the audience witnesses on stage. It is, rather, the struggle that this represents, between the possibility of a metaphysical order that guarantees the agency and worth of the human being, and the absolute loss of this order, life in pure materiality, where, robbed of the distinction of the will and reduced to equivalence with materiality, humanity is no longer willing or able to defend itself against technological destruction. In its most extreme formulations, where humanity, void of spirit, no longer distinguishes itself from mere

materiality, it has in fact already annihilated itself, regardless whether the nuclear catastrophe ensues.

Numerous works featuring physicists as lead characters were produced between the late 1940s and the early 1960s. A brief review of titles already begins to reflect the significance of the physicist, from the short cabarettesque *Der Erfinder* by Friedrich Dürrenmatt (UA 1948, Kabaret Cornichon, Zürich) and *Atombombe odder d'Dama hans s'Kommando* (~1949, Alsatian Volkstheater, no performance data), and to strictly political statements, such as Günther Weisenborn's *Die Göttinger Kantate*, performed at the SPD Parteitag in 1957. 144 The physicist dramas, as a whole, vary widely in their content, form and goals. In Müller's comic *Atombombe*, the fear of nuclear destruction, as well as nuclear physics' designation as a space of elite knowledge, helps solve the 'problem' of women's hegemony established when they receive suffrage in France in the mid-1940s. This is a far cry, for example, from the stern expressive energy of Weisenborn's *Göttinger Kantate*, in which the words of the Göttinger Manifest are rewritten as a musical proto-documentary drama to call for an end to the Adenauer administration's nuclear ambitions.

Despite this variety, it is possible to identify amongst many of the physicist dramas a common narrative structure and set of philosophical concerns. These related concerns hint toward a generic coherence that exceeds the mere image of the physicist on stage; i.e. in the physicist drama several dramatists of the 1940s discovered a solution to the formal issues raised by the material of the atomic bomb; it was possible, though imagining the physicist as especially well-positioned to act on the proliferation of nuclear technologies, to conceive of drama

¹⁴⁴ Dürrenmatt, "Der Erfinder," 1980; Müller, Atombombe odder D' Dame han s' Kommando Schwank in e. Akt; Günther Weisenborn, Göttinger Kantate: Den Aufruf der achtzehn Wissenschaftler und die großen Gefahren unseres Jahrhunderts szenisch darstellend, als öffentliche Warnung niedergeschrieben (Berlin: arani, 1984).

specifically about the atomic bomb. In the plots of the physicist dramas, the physicist, initially content with his work under the auspices of a military-industrial complex, experiences a moral awakening, after which he (on rare occasion: she) can no longer in good faith produce new knowledge about nuclear physics, or some other science subject to military exploitation. This results in a conflict between the protagonists, and specific representatives of the scientific community and the state, maintaining the dramatic requirement of human interaction. Usually, this protagonist tries to destroy his previous research, which has been recorded as a mathematical formula or set of formulae. Other times the protagonist shares it, with all of the geopolitical repercussions this necessarily carries.

For example, Alfred Gong's *Die Stunde Omega* (1955, never performed) depicts a physicist who had hidden his identity behind the guise of a shepherd to escape his responsibility for a disastrous discovery. A production incident at the laboratory he helped found forces him to face his relationship to the invention, which he had tried to leave behind. Hans Henny Jahnn's *Die Trümmer des Gewissens* (UA 1962, Berlin, Piscator) relates the story of a scientist living in a secured compound with his family. The discovery that his research has caused more deaths than he had believed, as well as damaged the genetic material of his family, sets him on a collision course with an oppressive state. Hand Kurt Becsi's *Atom vor Christi* (UA 1952, Vienna) depicts the struggle between a nihilistic nuclear scientist, bent on destroying the world, his Catholic wife, and a former American Hiroshima pilot, turned monk.

¹⁴⁵ Alfred Gong, *Die Stunde Omega*, ed. Bärbel Such (Oxford; Bern; Berlin; Bruxelles; Frankfurt am Main; New York; Wien: Lang, 2007).

¹⁴⁶ Hans Henny Jahnn, *Die Trümmer des Gewissens. Der staubige Regenbogen*, ed. Walter Muschg (Frankfurt/Main: Europäische Verlagsanstalt, 1961).

¹⁴⁷ Kurt Becsi, Atom vor Christus: ein Drama in 3 Akten (Berlin: Bloch Erben, 1952).

dedication to humanity, must eventually murder her husband and extinguish his apocalyptic ambitions. This chapter will focus on plays that feature this general narrative structure, but emphasize a prominent theme almost all share: Explicitly articulated religious overtones that transform the struggle against fatal military technologies into a statement on the redemption of human spirit in the face of an increasingly totalized positivist world. The plays have been both subtly and explicitly criticized by commentators such as Kaiser and Heinz Geiger for their schematic plots and dependence on transcendental themes. However, the attention to transcendence is in fact an expression of the German 1950s in which the plays were written, in which attention to 'spirit' was valued by audiences. The clichéd plots result from the limited means for addressing the bomb while adhering to dramatic principles (interpersonal conflict and unity of action). Regardless how one judges these plays, one must recognize that they largely result from the interplay of the atomic bomb and dramatic form.

Theater-Historical Background: Postwar Intendantentheater

The physicist dramas emerged under the theatrical paradigm of the postwar Intendantentheater. Following the war, German theater resumed the program of state-subsidized theaters run by powerful managers—the so-called Intendanten—with near complete control over individual theaters' programming. These years are marked by specific aesthetic and philosophical tendencies. The most famous Theaterintendant, Gustaf Gründgens, spearheaded an aesthetic manifesto in 1952, the Düsseldorfer Manifest, in which he and his acolytes promoted the principle of "Werktreue," or fidelity to the work. Gründgens argued in his manifesto against "arbitrary" interpretations of dramatic texts through "unjustified experiments" on the part of the director. ¹⁴⁸ In practice, this translated into a formal pluralism, where directors sought to match

¹⁴⁸ Rischbieter, "Theater," 97.

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the alleged authorial intention and the aesthetics of the age in which a work had emerged. Resultantly, directorial approaches in the 1950s depended on the works performed, ranging somewhere on the spectrum between the energetic excesses of Expressionism and the "cold pomp" and disciplined choreography and declamation of Gründgen's so-called "Reichskanzleistil." ¹⁴⁹

In the late 40s and the 1950s, artistic directors and critics often complained of a lack of new German plays. This lament, reflected in the phrase "Die Schubladen sind leer," is not entirely true. Schubladen sind leer, is not entirely true. As Matthias Elsdörfer has argued, there were many enthusiastic young playwrights looking to produce work in the postwar period, but the institutional support for beginners, both in terms of theater capacity and willingness, was very often lacking. Stather than new German works, a ripe mixture of classicism, modern 'classics' of interwar Expressionism, and foreign plays dominated repertoires. In particular, the prevalence of German classicism, through a renewed veneration of Goethe and Schiller in the postwar theater, is telling. A heavy emphasis was placed on the idea of the "Geist," often translated as "spirit" or "mind," but possessing various meanings depending on context. I will treat "Geist" here as a matter concerned with idealism, the higher-order of being that transcends materiality, the space of freedom, but also the essence of an individual or a people, distinct from their material existence. The term possesses religious or spiritual overtones, but also is emphasized as a conceptual facet of being; an object of the mind. The postwar theater's concern with Geist

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¹⁴⁹ Rischbieter, 97.

¹⁵⁰ cf. Rischbieter, 90.

¹⁵¹ cf. Elsdörfer, Ein tiefer blick in "leere" Schubladen, 27 f.

¹⁵²As Rischbieter likewise notes, the Zürcher Schaubühne was generally the first stage to produce many of the new foreign works in German. (Rischbieter, "Theater," 89.)

Cormanism, 153 best summarized in Herman Grimm's popular claim that "Die wahre Geschichte Deutschlands die Geschichte der geistigen Bewegung im Volke [ist]." 154 The claim that the German people is best represented in its spiritual, rather than political formulations, was a popular, though occasionally contested, refrain in the Federal Republic of the Adenauer Era as well. 155 In the theater, "Geist" translated into unpolitical works that elevated broadly metaphysical questions of human nature above political-historical analysis of the catastrophe of National Socialism. This approach paid off, or at least it did not alienate audiences. The German theater of the 1950s was the most successful of any decade following the war. As Theo Girshausen has noted, "the audiences attracted by the national, regional and local theaters reached a peak of 20 million in the 1956/57 season (filling 90 per cent of seats in city theatres) and were maintained for a period of 10 years until the great collapse of 1966/7." 156 The 1960s were marked by politicization not only of theatrical performances, even if the possibility of a truly political theater had also come into question by the late 1960s—but for a while the

¹⁵³ Hannah Arendt effectively characterizes the nationalist side of the discussion of "spirit" where she discusses the distinction between "violent chauvinism" and "tribal nationalism." According to her, "one is extroverted, concerned with visible spiritual and material achievements of the nation, whereas the other, even in its mildest forms […] is introverted, concentrates on the individuals own soul which is considered as the embodiment of general national qualities." (Hannah Arendt, *The Origins of Totalitarianism* (New York: Meridian, 1972), 227.) Adjusting her definitions, one might claim that the usage of 'spirit' in the postwar, while still concerned in many instances with a definition of a nation hungry for identity, divorces the 'external' spiritual achievements of the country from its material existence and marries the spiritual instead to the inner being of the individual.

¹⁵⁴ Herman Grimm, "Schiller und Goethe," in *Goethe im Urteil II*, ed. Karl Robert Mandelkov, Goethe im Urteil seiner Kritiker. Dokumente zur Wirkungsgeschichte Goethe in Deutschland, II, n.d., 450. Cited in: Robert Mandelkov, "Der 'restaurierte' Goethe: Klassikerrezeption in Westdeutschland nach 1945 und ihre Vorgeschichte seit 1870," in *Modernisierung im Wiederaufbau: die westdeutsche Gesellschaft der 50er Jahre*, ed. Axel Schildt and Arnold Sywottek (Bonn: J.H.W. Dietz, 1993), 541.

¹⁵⁵ Mandelkov, "Der 'restaurierte' Goethe: Klassikerrezeption in Westdeutschland nach 1945 und ihre Vorgeschichte seit 1870," 541–42.

¹⁵⁶ Theo Girshausen, "West Germany," in *European Theatre*, 1960-1990: Cross-Cultural Perspectives, ed. Ralph Yarrow (London; New York: Routledge, 1992), 63.

Theaterintendanten of the major cities continued to hold their offices. ¹⁵⁷ It was not until the years around 1971/72 that the dominant Theaterintendanten of the postwar lost their posts, and a generation marked by "radical skepticism" of the political and aesthetic conservativism of the Adenauer era came into clear positions of power in major theaters. ¹⁵⁸

Despite popular success, the theater of the 1940s and 1950s has received criticism both from the more politically engaged generation of theater makers that would follow in the 1960s, as well as by some contemporary practitioners. On the one hand, some critics suspected that the turn toward German dramatic classics had as much to do with a refusal to face the disaster of the Nazi past as it did with the necessity to find a foundational German identity not tarnished by recent history. After all, many of the leading theater practitioners of the late 40s and 1950s had received their start during the Nazi era, indicative of a certain continuity in the theater, which had to demonstrate that it is historically concerned with matters of spirit, rather than political concerns. ¹⁵⁹ In this respect, the turn to spirit has as much to do with self-interested self-representation of a formerly complicit class of artists. On the other hand, while the theater was popularly discussed as a "secular cathedral," in which audiences rushed toward whatever could provide a sense of the spiritual, some argued that this hunger for the 'spirit,' was answered only

¹⁵⁷ For example, Peter Steins 1968 production of Peter Weiss's *Vietnam-Diskurs* incorporated doubts about the efficacy and genuine engagement of the political theater directly into the performance: "The idea was not to present another politically committed play. That was left in no doubt: written on the backdrop and clearly visible throughout the performance were the words 'Documentary theater is shit'. In addition, the cabaret artist Wolfgang Neuss appeared in a specially inserted role as a clown, mocking theatrical commitment as an expression of hopelessness – as mere a well-intentioned, but ineffectual, substitute for real solidarity with the Vietnamese." (Girshausen, 73.) The atomic plays barely survived in popularity long enough to become resolutely politicized, let alone become the object of their own critique in the theater. Still as Chapters 3 and 4 will discuss, the plays of the late 1950s and early 1960s already begin to turn back on the principles of "cultural" rather than "political" theater dominant in the 1950s.

¹⁵⁸ cf. Girshausen, 77.

¹⁵⁹ cf. Mandelkov, "Der 'restaurierte' Goethe: Klassikerrezeption in Westdeutschland nach 1945 und ihre Vorgeschichte seit 1870," 547.

with shallow, empty aesthetic gestures. ¹⁶⁰ Writing in 1955, Egon Vietta, a longtime theater critic, argued that this so-called 'secular cathedral' of the subsidized theater of the 1950s was "nicht mehr die Bühne von 1780, von 1830, von 1910, sondern etwas, das nach dem *Vorbild* dieser Bühne weiterlebt, ohne ihren Geist zu haben"—an "Institut" rather than a theater. ¹⁶¹ When he says "Geist" he does indeed mean 'character,' but also creative energy, and the capacity to reach into an ideal world. In a similar vein, Theo Girshausen has since opined that the "Werktreue" of the *Düsseldorfer Manifest* and the theatrical pluralism of the subsidized theater actually reflected an "ideology of non-ideology." ¹⁶² In other words, while the *Intendantentheater* successfully reproduced the visual aesthetics of past theatrical feats, critics could see them as empty execution of theatrical *form* without sharing the ideological or emotional impulses that had originally produced them.

The Critical Reception of the Physicist Dramas

On the rare occasions when the lesser-known physicist dramas of the 1950s are discussed, they often, like the theater in which they emerged, receive a critical assessment. In a 1962 commentary in *Theater Heute*, Joachim Kaiser, one of the top theater critics of the

¹⁶⁰ cf. Girshausen, "West Germany," 65.

¹⁶¹ Egon Vietta, *Katastrophe Oder Wende Des Deutschen Theaters* (Droste-Verlag, 1955), 9. Later Vietta writes: "Nirgends wird so viel von Geist geschwätzt wie am Theater. Jeder alte 'Theaterhase' führt das Wort im Munde, wenn es um Erfolge oder geschäftliche Interessen geht, uns so lange die Subventionen mit diesem Vokabular verheiratet sind, ist nicht zu erwarten, daß es aus dem Schatz unbedacht gebrauchter Wörter entfernt wird. Im Gegenteil: es gedeiht bis in alle Ausschüsse hinein, und die Ährenlese des Geistes hinterläßt Berge von leeren Hülsen. Aber daraus kann man kein Brot backen./ Seit der Geist zum *Dekor* unserer Zivilization geworden ist, will ihn niemand mehr entbehren. Je mehr Säulen die Antike verwendet hat, um so hohler wurden ihre Tempel." (Vietta, 51–52.) For Vietta, it is clear that the concept of "Spirit" is highly valuable at the time of his writing in the 1950s, but as he contends, it is mere jargon with no content. "Spirit" is a virtual projection on a society that has already become foundationally materialistic.

¹⁶² Girshausen, "West Germany," 64. Girshausen attributes this phrase to Hans Meyer.

fifties, 163 playfully criticizes the aforementioned plot schematic. To this end he claims that a typical physicist drama ends when the physicist quits science for the sake of mankind, commits suicide, or wins an official prize from the state. 164 Kaiser's statement reflects the sense of aggrandizement of the physicist, as well as an excessive melodramatic energy. The most thorough scholarly discussion to include these works, by Heinz Geiger, reflects a similar sentiment. Geiger identifies the "Atom-Topoi" that these works contain, including the "formula of all formulae, apocalyptic horror visions, and the inclusion of unscrupulous figures who despise humanity."165 He is implying that the dramas contain excess emotionality and clichéd plot structures. Geiger also has criticism for the plays' resolutions. In his view, the destruction of the nuclear formulae or the death of dangerous actors serve as inept and inadequate "Schein-Lösungen"—false solutions—to the crisis of the arms race. 166 The destruction of a formula that would have led to a new weapon of mass destruction, or the death of an antagonist for that matter, supposedly saves the world from nuclear destruction. Geiger correctly notes that the destruction of such a formula would do little to halt the progression of nuclear and/or weapons technology, given that there are plenty of other state scientists to discover the same material. Kaiser's contemporary and Geiger's more retrospective critiques are also polemical reactions to a theatrical age they sought to confine to the past. In writing for *Theater Heute*, Kaiser contributed to the transformation that took place in the 1960s away from the

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¹⁶³ cf. Knut Hickethier, "Das Theater im Bundesrepublik in den fünfziger Jahren," in *Die Kultur der fünfziger Jahre*, ed. Werner Faulstich (München: Fink, 2002), 42.

¹⁶⁴ Kaiser, "Die Welt als Irrenhaus," 5–6. Cited in: Talbot, "The Theme of 'the Scientist's Responsibility in the Nuclear Age' in Contemporary German Drama.," 6.

¹⁶⁵ Geiger, Widerstand und Mitschuld, 89–90.

¹⁶⁶ Geiger, 90.

Intendantentheater. ¹⁶⁷ Heinz Geiger, for his part, wrote his analysis in the climate of politicized literature and literary analysis in the years just after 1968, and his research is conditioned by both the desire for and experience of a more political theater in the 1960s.

At least in the implicit view of *Theater der Zeit* editor Fritz Erpenbeck, however, there were arguments to be made in favor of the physicist dramas' plot structure. In a 1947 edition of his newspaper, he for the first time provided public commentary on an anonymous young playwright's script submission, a practice of mentorship he would continue for several years. For all intents and purposes, the script to which he responded, entitled *Karl Tenhoeff entscheidet sich*, invokes the key plot elements of the physicist drama. While the draft was still "unstageable," Erpenbeck noted that it showed promise, and in addition to providing copious well-meaning, constructive criticism, he also considered the basic premise of the work to be correct. The transformation of the atomic threat into an interpersonal conflict demonstrated that the author "den Ursinn aller lebendigen Dramaturgie gefasst [hat]: Einen gesellschaftlichen Konflikt ins Menschliche zu projizieren." The atomic threat held dramatic potential, but, as he noted, for the struggle to be dramatic, atomic destruction could not remain an abstract threat, like a natural disaster. The playwright had to transform it into a struggle between human beings. This young playwright would be only one of several dramatists to identify the physicist as the

¹⁶⁷ cf. Hickethier, "Das Theater im Bundesrepublik in den fünfziger Jahren," 42.

¹⁶⁸ Fritz Erpenbeck, "Brief an einen jungen Dramatiker," *Theater der Zeit*, January 1947, 3. cited in: Elsdörfer, *Ein tiefer blick in "leere" Schubladen*, 32.

¹⁶⁹ Elsdörfer likewise shows that in an earlier edition of *Theater der Zeit*, critic Julius Hay commented on the war as material for theater, arguing both the importance of writing about it, but also the importance, for the sake of dramaturgy, that the war not be transformed into an abstract experience of natural catastrophe, as people often perceive it. Insofar as the war is dramatic, it must be presented in terms of a conflict within or between humans. I would not here, that the same principle is at work in considerations of the atomic catastrophe. Elsdörfer, *Ein tiefer blick in "leere" Schubladen*, 29.

solution to the dramatic form problem posed by the atomic bomb. While well-intentioned, commentary such as Erpenbeck's expresses the expectation that playwrights in the postwar apply the principle of action in classical drama.

The Physicist Drama as Spiritual Redemption

Contrary to Kaiser and Geiger's claims, in my research I have found no physicist dramas that ended with a suicide, nor any that ended with a state prize, nor any that ultimately suggested that the destruction of a scientific formula could somehow end the arms race. It is true, these "formulae of all formulae" are often destroyed in the course of the play. This is, at the very least, the case in Langenbeck's *Der Phantast*, Becsi's *Atom vor Christus*, Langner's *Cornelia Kungstrom*, Hans José Rehfisch's *Jenseits der Angst* (UA 1962), and other works. ¹⁷⁰ However, in nearly all cases, the formula is reconstructed before the play ends, and nowhere is it suggested that the formula's destruction serves as a broader solution to the nuclear arms race. Kaiser and Geiger's criticisms are pithy, but by no means accurate. The resolution to the physicist drama was generally something very different: the scientist experiences a type of moral—usually spiritual or even religious—rebirth that motivates his or her actions. This new commitment to the spiritual serves as a victory despite his or her failures in the physical world. These failures, doubtlessly, carry consequences, but the spiritual victory persists.

In what follows, I will examine two works in which the tensions between agency and material determinism are resolved in a struggle between religion and technology. Notably, they involve the possibility of redemption, a theme just as necessary for the physicists who stayed and worked for Hitler, as well as those who helped construct the atomic bomb in the West, and even Curt Langenbeck himself—a key playwright of National Socialism for many years—, as well as

¹⁷⁰ Hans J Rehfisch, Jenseits der Angst: Schauspiel in drei Akten (Wien [u.a.]: Sessler, 1960).

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Gründgens and the broader German theater public. I will then discuss Carl Zuckmayer's *Das kalte Licht*, concentrating on key scenes in which the will and agency appear as a function of the tension between religious belief and positivism. *Das kalte Licht* represents the most successful and widely viewed physicist drama of the 1950s, and its conclusion, which depicts the reintegration of a positivist physicist into the religious context, effectively reflects the 1950's demand for "spirituality" and "soul."

Curt Langenbeck's Der Phantast as a model of spiritual reinvigoration

As previously outlined, the physicist drama emerged in the context of the broader German response to the damage incurred to national identity in the experience of Nazism, the Holocaust, and the Second World War. The bankrupt political existence of the German people found its antidote, allegedly, in a retreat to a lofty spiritual and cultural notion of the German nation. This redemption, as mentioned before, was not merely an issue for individuals, nor for the nation in sum, but a question also of distinct German institutions—including the theater, insofar as it had served the purposes of Nazi ideology. Indeed, the director Gustaf Gründgens, the most successful director of the postwar, was already active during the Nazi period. For this, he emphasized the distance between theater and politics.¹⁷¹

One of Gründgen's colleagues was Curt Langenbeck, whose career was at its height in the 1930s as he was chief dramatist in Kassel and later at the Bayrisches Staatsschauspiel in Munich. His *Der Hochverräter* (1936), an examination of the concepts of loyalty and sacrifice set in colonial New York, established him as a playwright in National Socialist Germany.

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¹⁷¹ cf. Hickethier, "Das Theater im Bundesrepublik in den fünfziger Jahren," 44.

¹⁷² cf. Günther Rühle, Zeit Und Theater: Diktatur Und Exil 1933 - 1945, vol. 3 (Berlin: Propyläen Verlag, 1972),

Disagreements with the *Reichsdramaturgie*, the official aesthetic guidelines of the Nazi state, heralded the decline of his theatrical career starting in the early 1940s. ¹⁷³ Nevertheless, Langenbeck was no exile author under National Socialism. While Langenbeck later insisted that his works had never been used to further the aims of ethnonational racism, and that he viewed himself "in produktiver Opposition zum Nationalsozialismus," speeches that he published, such as his Wiedergeburt des Dramas aus dem Geist der Zeit, praise the war effort and contribute to the cult of the Führer to the degree necessary to promote his dramaturgical theories. The success of the war, Langenbeck proposed, would not so much depend on its material spoils, but a spiritual rejuvenation to be experienced through the nation's sacrifices. The German people would have to properly understand the "Verhängnis"—the catastrophe—which the war presented to them, and through this be reborn. ¹⁷⁵ This notion of doom and redemption finds expression also in Der Phantast—albeit now sharply distanced from National Socialist ideology—in reference to the atomic bomb and the war. Much as Langenbeck had once seen the war meant as a means to provide Germans with the purifying sublime experience of privation and suffering, so too did the struggles inherent in the crisis of the arms race provide experiences of transcendence. ¹⁷⁶

¹⁷³ "Deutsche Biographie - Langenbeck, Curt," accessed March 10, 2016, http://www.deutschebiographie.de/register_pnd119520656.html. In the 1940s, Langenbeck first joined the German Navy and soon became a reporter from the front.

¹⁷⁴ Rühle, Zeit Und Theater: Diktatur Und Exil 1933 - 1945, 3:807.

¹⁷⁵ Of the war Langenbeck wrote: "Ein Sieg hat nur Sinn, wenn der Kampf, der ihn erzwang, den Sieger gläubiger und stärker und demütiger macht; andernfalls wüßte nämlich der Sieger mit seinem Sieg so wenig Gescheites und Produktives anzufangen wie zum Beispiel die Engländer mit ihrem Versailles von 1918. [...] Und Umgekehrt: Der Seig kann nur errungen werden, wenn wir ganz sicher wissen und fühlen, daß wir durch den Kampf, der zu ihm führen soll, an Glauben, an Seelenstärke, an innerer, persönlicher Berechtigung zum Starksein und zum Maßgebendsein zunehmen müssen und zunehmen wollen." Curt Langenbeck, Wiedergeburt des Dramas aus dem Geist der Zeit, eine Rede. (A. Langen, G. Müller, 1940), 14.)

¹⁷⁶ Notably, Langenbeck had also written a "Heimkehrerstück" in 1946 in which, according to Ralf Trinks, he participated in the common practice of self-exoneration as opposed to the far less common admission of guilt. The individual is presented as the defenseless before the catastrophe of National Sociaism. Langenbeck's "Heimkehrer" laments: "[...] schuldlos schuldbeladen stehen wir plötzlich da/ [...] Im Flucht ein jeder, weil er lebt! Weil er ein Sohn/ ein Enkel ist! Weil er nach-kommend ist! Nur das! – / Wir fassen's nicht!" (Curt Langenbeck, *Heimkehr*:

As the end of the war meant only the continuation of the director Gustaf Gründgen's fantastic rise, for the writer Langenbeck it meant only a final comeback attempt, as well as, arguably, a gambit for his own spiritual redemption. *Der Phantast* was written in 1947 and premiered at the Württemburgerisches Staatstheater Stuttgart in December 1948.¹⁷⁷ According to a *Spiegel* review, the director Raul Riedy "betonte das Strenge und Statuarische des

Verstandproduktes"—highlighting the highly deliberative and declarative quality of both the script and a cramped delivery in the direction. While the review dismissively emphasized

Langenbeck's popularity amongst Nazi artistic directors, it nonetheless saw in Langenbeck's return to the stage—four years after his final Nazi-era production, *Treue*—a "Phönix aus der

Asche" and noted the audience's appreciation of "die bedrückende Aktualität des gescheiten und fesselnden Stücks."¹⁷⁸ By contrast, in his review in *Die Zeit*, K. F. Keinking praised an "economic" dramaturgy and skilled cast tasked with overcoming "Langenbecks dramaturgisch stellenweise sehr schwaches Stück."¹⁷⁹ The emphatic return to religion, Keinking suggests, can only partially belie the nihilism the piece attempts to mask.¹⁸⁰

Despite what criticism the play may have received, it is required reading for this study. Not only does the work constitute the earliest performed physicist drama, it also presents the dominant content and philosophical considerations of these works more clearly than any work

tragödie. (München: K. Desch), 40.; Cited in: Trinks, "'Schuldlos schuldbeladen': Entlastungsstrategien und Schuldbekenntnis in der frühen Nachkriegsdramatik," 219.)

¹⁷⁷ Rühle, Zeit Und Theater: Diktatur Und Exil 1933 - 1945, 3:807.

¹⁷⁸ "BÜHNE UND FILM: Um Das Abendland Zu Retten," *Der Spiegel*, December 11, 1948, http://www.spiegel.de/spiegel/print/d-44421052.html.

¹⁷⁹ K. F. Keinking, ",,Der Phantast"," *Die Zeit*, December 16, 1948, sec. Politik, https://www.zeit.de/1948/51/derphantast.

¹⁸⁰ Such a statement demonstrates that Vietta's doubts about the role "spirit" was allegedly meant to play in the theater were shared also with others.

that would follow: the alliance between technology and determinism, between religion and freedom. The binary tensions between these pairings are set into a sharply defined *human* conflict (as, as discussed above, Fritz Erpenbeck noted only a few years later as a key necessity of the drama). The protagonists of this conflict believe themselves to face the very material violence of the arms race. Simultaneously, however, beyond these material concerns, their struggle gains religious and metaphysical contours; the protagonist seeks the freedom to intervene in human actions, and in failing this, finds what he calls a "freedom to God"; reinvigorating the ties between mortal and deity. *Der Phantast*, however, is also characterized by a continuation of aesthetic principles and a theatrical philosophy that Langenbeck had already conceived in the service of National Socialism. *Der Phantast* serves as a litmus test for the possibility of repurposing Langenbeck's catastrophe concept for the postwar—from the crisis of war to the crisis of technological destruction—as the means for a reinvigorated relationship between mortals and deities.

In order to highlight the role of Langenbeck's mystic aesthetic principles in the reinvigoration of human relationships to the divine, I will interpret *Der Phantast* in the context of his earlier thoughts on theater—concentrating on his 1939 speech *Die Wiedergeburt des Dramas aus dem Geist der Zeit*. Then, examining *Der Phantast*, I will outline how Langenbeck's aesthetics group technology and material necessity and oppose this group to a pairing of religion and metaphysical freedom. I will discuss Langenbeck's binary to illustrate his theory of tragedy through Brückmann's willing encounter with the *Verhängnis*—the tragic catastrophe—loss and reclamation of a religious relationship with the deity—in this case a nominally Christian God, and how this concept maps back onto the binary of technological necessity and moral normative

freedom. Finally, I will discuss how Langenbeck treats this play as a reassessment of his theatrical theories following the disaster of the Second World War.

Langenbeck's Tragedy-Concept as the Crisis of the Second World War

Langenbeck developed his dramaturgical theory during the 1930s and 1940s during debates with other dramatists regarding the proper dramatic form for the Nazi state. He is fundamentally concerned about the lost relationship to divinity that, in his view, originates with the Copernican Revolution and contemporaneous movements toward a secularity that followed. The recovery of a relationship to divinity stands at the basis of his theatrical philosophy, which views the theatrical form of the Grecian tragedy as the vehicle for this recovery. Such a recovery is enabled through a disastrous encounter with a fate imposed by the Gods. One must ultimately face this fate and submit oneself to it, although it will, in Langenbeck's calculation, ultimately overwhelm the fated individual. The protagonist in Grecian tragedy is already fully submerged in the religion of the Gods, and the protagonist in the contemporary tragedy hangs only to a faith in which this has weakened. Nonetheless, in both instances the result of the encounter with tragedy, despite the unyielding, God-imposed suffering it brings, is a reinvigoration of the relationship between mortals and gods.

Langenbeck provides a series of conditions necessary for the possibility of tragedy as he imagines it. First, one must believe that there is "no way out of one's life." Neither death nor afterlife frees one from the absolute validity of the life as lived. One must believe in God, but also have recognized that these gods "weder gütig noch mitleidend [...] sind; sondern vielmehr gewaltsam, grausam, schön – hierin nicht unähnlich der Natur, ihren Gewalten und Gesetzen." ¹⁸²

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¹⁸¹ Langenbeck, Wiedergeburt, 25.

¹⁸² Langenbeck, 25.

Arguably this condition serves as a repetition of the first—although there is a divinity, this also cannot serve to free mankind from fate. There will be no *deus ex machina* that saves the protagonist from the catastrophe—that one recognizes how fundamentally threatened one is in such a condition. As he continues:

Was demnach die Tragödie leisten muß und geleistet hat, ist klar:

Sie hat denjenigen Menschen, die, wie beschrieben, dem Unheimlichen, dem Verhängnis, der Selbstzerstörung sich preisgegeben sehen, die Möglichkeit vorgebildet, wie man dieser gefährlichsten Gefahren dadurch Herr werden kann, daß man sie, durch und durch, erleidet und dabei den Glauben an die Götter nicht nur in sich bekräftigt, sondern erst recht erringt und in der eigenen Seele wie in der Welt begründet.

Das ist der Sinn der Tragödie: den Menschen zeigen, wie er am verlorensten ist, wie er, nicht *obwohl*, sondern sogar *weil* er den besten Willen für das Richtige hat, ins Unheil stürzen kann; und wie seine Gottheit sich seiner erbarmt, obgleich es an Einsicht und Fähigkeit ihm nicht fehlt: also muß er durch seine Opferwilligkeit, durch seine Beständigkeit und Kraft und Demut sich selbst durch sich selbst und zugleich alles, wozu er beauftragt zu sein glaubte, ans Ziel bringen: dann rettet er nicht nur das Dasein der Menschen aus der Verzweiflung, sondern er rettet zugleich und vor allem das Dasein und die Wahrheit der Götter und bewirkt so, daß das Unbegreifliche, immer zu Verehrende mit den Sterblichen einig bleibe, ihnen willkommen und treu – Denn wohin ein Gott, der von den Menschen im Stich gelassen wird? Er muß sich verbergen vor diesen Menschen, und die werden schnell erfahren dann, daß sie, entwurzelt und verlassen, enden müssen. ¹⁸³

This is the conflict at the core of Langenbeck's tragic concept. One is left to face the greatest of dangers on one's own, with no aid from divinity and no opportunities for an escape or alternative. One acts, one claims agency in the face of the disaster, and one is destroyed not merely nonetheless, but specifically *because* one acted. And yet one faces this disaster, and through the self-destruction and suffering it entails, and through one's devotion, power and humility, one becomes master of one's fate. Through this sacrifice, one saves humankind from despair. This despair is *not* specifically the despair of the immanent, physical threats which face mankind, but also the despair of separation of the mortal and immortal worlds. Mankind lives on,

¹⁸³ Langenbeck, 25–26.

but more importantly, the "Wahrheit der Götter" is reaffirmed, and in this reaffirmation the relationship between Gods and mortals is rejuvenated to the benefit of both god and human being.

Langenbeck's tragedy-concept had direct implications for his dramatic aesthetics. While he recognized that it was not possible in his era to produce a tragedy as Sophocles did, he nonetheless viewed Sophoclean tragedy as the ideal aesthetic model for his time—which in his view sorely needed tragedy. 184 Langenbeck described his process in writing *Der Hochverräter*, how he found what became his ideal style. Through multiple stages of editing he stripped his *Hochverräter* draft of superfluous figures and side-plots and reduced the play to its dramatic core. The historical events on which the play was based were abstracted to present a condition of historical necessity. "Alles historisch Zufällige fiel weg," he wrote, just as he dropped all "Stimmungen, Impressionen, und interessant[e] Verwandlungen." As part and parcel to this, he reduced his characters to types. In the reduction of protagonists types, and subjects of fate, it is in part his goal to remove, likewise, their individuality, which he viewed as their 'private existence' that would be incongruous in a theatrical form that required attention to their historical

¹⁸⁴ Interestingly, in his speech on the rejection of Shakespearean forms in favor of the Greek, he makes no direct reference to the binary of Winkelmann's and Herder's arguments towards the formation of a German theatrical form, although one might argue that, rather than simply siding with Winkelmann, as his promotion of Greek forms might suggest, Langenbeck has merely allied with him in the sense that he accepts the Greek as the model for a German aesthetics, while, on the other hand, also drawing on Herder's theatrical relativism, which rejected Winkelmann's absolute preference for Greek art and promoted the idea that specific historical and cultural contexts each bring about their own perfected forms. For Langenbeck, Shakespeare is not rejected absolutely; he is, rather simply not the proper theatrical model for Langenbeck's time. In fact, Langenbeck is here participating in a debate regarding the proper dramaturgical style for the Nazi dictatorship and was arguing in direct opposition to drama theorists who continued to see value in Shakespearean techniques. For a description of this debate, see: Andreas Höefele, "The Rebirth of Tragedy, or No Time for Shakespeare (Germany, 1940)," *Renaissance Drama; Evanston, Ill.* 38 (2010): 251–68.

¹⁸⁵ Rühle, Zeit Und Theater: Diktatur Und Exil 1933 - 1945, 3:801.

existence alone. 186 At least in the abstract, he appears to streamline his plays to a dramatic form of strict unity of action.

These were not superficial aesthetic decisions. They carried the very philosophy he wished his work to express. For Langenbeck, a sheer, polished plot forced his characters to face unremittingly the imposition of their fate. This imposition allows them no "Möglichkeit der Ausflucht oder des Umgehens" when faced with their tragic fate. ¹⁸⁷ In other words, the foundational aesthetic and philosophical principle of Langenbeck's theater theory reduced the play to a model of historical necessity, in his view based on the fatedness of Sophoclean tragic heroes. This constituted a rejection of the "Alltagsspiel" which had gained significance in the late 19th and early 20th centuries, as well as of Shakespearean theater—not, however, as a dismissal of its quality. Rather, he rejected these simply as improper for the theater of his age, an age that required tragic heroes because it required the ability to face the catastrophe.

Der Phantast is a partial illustration of this process, unfolding eight years after

Langenbeck initially articulated his concept on the page. A strange dual system emerges in the relationship between tragic hero and world history. In Der Phantast Langenbeck casts his theory into the terms of the binary of the econo-technical world of material determinism, and the normative-moral world in which human action is rendered. Here, perhaps more clearly than in any other physicist drama, this binary is articulated in a way that demonstrates that agency, as conceived in these works, concerns not so much the capacity of the individual to intervene effectively into the unfolding course of events in human history, but nevertheless to demonstrate the human spirit's freedom from material causes. In what follows I will outline the clear

¹⁸⁶ cf. Rühle, 3:801 f.

¹⁸⁷ Rühle, 3:801.

divisions Langenbeck conceives between the positivism and strategic necessity, on the one hand, and religious division on the other.

Curt Langenbeck's Der Phantast

In the exposition of *Der Phantast*, the audience learns that the wizened, pious physicist Konrad Brückmann, a German working in the employ of the United States, has already destroyed his most brilliant scientific manuscripts. He has burned them to ensure that they will not, as he has foreseen, contribute to the quickly unfolding arms race. The knowledge represented in the destroyed formulae possesses the capacity to render the population of an entire city deaf and blind. Brückmann reasons that these victims, rendered defenseless, would find a gradual and laborious, but certain death. 188 Brückmann's decision is political; he has made it publicly, in the hope that others will follow his example. It is, however, also deeply religious. Brückmann sees in his action a higher calling. "[I]ch sah im Traum," he announces, "was ich tun müsste: es war ein unmissverständliches Gebot. – Also verbrannte ich meine Papiere." ¹⁸⁹ The act shall make him, as he claims, "free for God." His decision, however, galvanizes personal and popular opposition to his actions in the name of national security. In a single stressful evening of deliberation, state representatives and scientific colleagues attempt to convince Brückmann to go back on his decision. The old physicist refuses, but his efforts are ultimately in vain: His assistant and former mentee, Thomas Kreiss, reconstructs his mentor's formula and readily makes it available to the government.

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¹⁸⁸ The exact implications of Brückmann's formula and its corresponding weapon are irrelevant. They ostensibly to 'heighten' the stakes of the arms race, but ultimately serve only as a diegetic ersatz for the invention of the atomic bomb in a world where it already exists.

¹⁸⁹ Kurt Langenbeck, Der Phantast: Schauspiel in drei Akten (München: Verlag Kurt Desch), 14.

¹⁹⁰ Langenbeck, 15.

Der Phantast is structured as an analytical drama; it adheres to unity of time, space, and action and it articulates the factors which have motivated it as it builds, in its rising action, toward the disaster which faces its protagonist. Nonetheless, the play is highly deliberative. Its dramatic action is, in degrees, relativized by its characters' extensive staged deliberations on questions of science and morality. In these conversations it weaves a discourse evoking a variety of positions on the scientist's responsibility to his or her government, to his or her discipline, and to humanity. These range from director Thornbusch's proposal that a scientific consortium be formed to decide which discoveries can responsibly be passed on to industry, Frau Thornbusch's hysterical demand that Brückmann be punished for his 'traitorous' act, and, finally, the excitement of one State Department employee, Frau Helen, as she marvels at the presence of 'great men' who have a decisive influence on history. Langenbeck does not seek heteroglossia, however. While no figure is painted as abjectly evil, Brückmann's position remains dominant throughout. It stands in opposition specifically to the positions taken by his treacherous assistant, Thomas, and the Secretary of State, Cornelius Kliff, each of whom represents a distinctly amoral position which, one way or another, poses humans as subject to unsurpassable material necessities. Through these three figures, the play examines science, state and religion in a tripartite relationship. It is only the protagonist, Konrad Brückmann, who understands the import of his scientific discipline to the spiritual existence of mankind and understands that the time for action in the face of the catastrophe has come.

The reasons for Brückmann's decision are defined mainly through the claims his primary opponents, Thomas Kreiss and Cornelius Kliff. Thomas raises several points in opposition to his mentor's decision, all of which appear repeatedly in the discussions on nuclear weapons and scientific responsibility elsewhere in the physicist dramas: First, all that is discovered by one

person will one day be discovered by somebody else. Second, all scientific discoveries will inevitably find practical application, and therefore a scientific contribution cannot be neutral. The distinction in responsibility between the scientist and the engineer, in this respect, is up for debate. Finally, scientific discovery is morally ambivalent because the applications of any one discovery can be both constructive or destructive. ¹⁹¹ Most fundamentally, however, Thomas is disturbed by the idea that the capacities of scientific advancement could be hemmed by a value system foreign to it and which cannot be objectively identified through observation. "Kann die Natur-wissenschaft sich nach einem Sittengesetz richten, das in der Natur nicht vorkommt? Oder nach einem Gott, der in der Natur nicht vorkommt?" Thomas asks. ¹⁹² His material positivism rejects the legitimacy of systems, such as religious morality, not found in nature. For Thomas, in life as in science, there is no God, but only nature and its laws.

Wir haben es ganz einfach mit der Natur zu tun: Willkür, Verschwendung, Zufall! und das alles im Joch der rigorosten Gesetze. Mit der Erforschung dieser Gesetze und ihrer Wirkungen sind wir beschäftigt. Kein Platz für Gott; sehen Sie? Kein Platz für einen Gott, der jedes Individuum kennte, den Gang eines jeden bestimmte. Ja, da ist nicht einmal Platz für einen Gott, der uns vergessen haben könnte!¹⁹³

As Thomas describes, to a human ethical outlook, nature appears arbitrary, wasteful, and coincidental. And nonetheless it unfolds, in Thomas's estimation, according to the most rigorous laws. These laws found in nature are the only laws to which Thomas believes himself and human beings to be subject. Science's purpose is to study these laws and their effects. In his opinion, subjecting science to religious interdictions is not only foolish, but dangerous. When Brückmann

¹⁹¹ "Sie wissen so gut wie ich, dass ein anderer, früher oder später, finden wird, was Sie gefunden haben – dieses oder Ähnliches und Gleichwertiges! Sie wissen besser als ich, dass keine Einsicht sich dagegen wehren kann, praktisch genutzt und – missbraucht zu werden! Jede wesentliche Entdeckung nützt *und* schadet." (Langenbeck, 11.) Italics in original.

¹⁹² Langenbeck, 7.

¹⁹³ Langenbeck, 7.

asks him to take an oath that he will not reconstruct the destroyed formula, Thomas, in his lack of belief, initially suggests that he swear by the Latin goddess "Consequentia." ¹⁹⁴ In doing so, he is referring not to the idea of a moral consequentialism, but to the notion of con-sequence, i.e. cause and effect; a world ruled by physical laws.

In contrast to Thomas's insistence upon the existence of a physical world ruled by laws of causality alone, the secretary of state, Cornelius Kliff, without denying religion, translates causality into a related political and geopolitical concept. While he identifies as a Christian, Kliff distances himself, in his own view, fundamentally from political ideals and political ideologies, which for him are the foundations of totalitarian thinking. He acts as a type of pragmatist technocrat, seeking the alleged best possible outcome in the interest of his government and country in any given situation. Such a notion of action is, although in his view not subject to ideologies, nonetheless subject to strategic or instrumental rules; i.e. rules of causal necessity.

Ich bin ein Techniker, der das Nötige tut. Solange ich nichts andres sein will, ist es unmöglich, dass ich etwas falsch mache. Die Frage, die alle Menschen in Erregung hält: ob vor einer besseren Zukunft eine ins Unvorstellbare potenzierte Katastrophe liege: diese Frage lässt mich kalt. Ich bin zur Lenkung der Vorgänge da, in denen der Krieg ad absurdum geführt werden wird. Aber kein Mensch kann befehlen: mit oder ohne Krieg. 195

Human beings are not free to "make orders," because to do so, in the context that Kliff intends, would be to act on an external ideal. He instead is required to steer processes that have already commenced. While his language suggests he believes that a war of absurd violence is already on its way, he nonetheless acts only according to a perception of necessity, that is, according to a strictly instrumental paradigm where ends justify means. When acting according to an instrumental paradigm, he claims, his action cannot be judged according to moral standards, but

¹⁹⁵ Langenbeck, 53.

¹⁹⁴ Langenbeck, 10.

only according to their success or failure. In effect, his principle of alliance and animosity are also formed around the question of a causally-organized use-value as well.

Nach allem ist klar, dass Sie keineswegs unsre Gegner tätig zu unterstützen brauchen, wenn ich Sie als meinen Feind erkennen soll – es würde genügen, mir *nicht* zu helfen; ja, noch weniger: es genügt, meine Bemühungen zu ignorieren.¹⁹⁶

Kliff formulates a sharp distinction between those contribute to his cause and those who fail to contribute. Human beings are not ends in themselves, but essentially a material toward his ends; a means for his goals.

The logic of the play subtly reveals that Kliff does indeed hold, or at least claims to hold, certain ideals. He speaks of the protection of "Christian peoples" and of ideals of democratic tolerance, for example. However, Christianity, for Kliff, has less to do with Christian values and belief sets (whatever Kliff might deem these to be), than with the mere identity marker for that which must be defended (a Christian, democratic West) against that which threatens it (a heathen, communist East). Likewise, while he expresses love for democratic ideals, just as he expresses Christian identity, both ideals are relativized according to their situational utility. For him, the end justifies the means, following the Machiavellian tradition.

Trotzdem werden Sie gut tun, daran zu denken, dass schon oft mit unchristlichen Mitteln für eine christliche Welt gestritten werden musste, und dass es also nötig werden könnte, um der Toleranz willen intolerant zu sein. 197

Both qualities, Christian and Democratic ideals, can be curbed for the sake of their own survival. Here, Kliff means this as a threat to Brückmann: If the scientist does not reconstruct the formula, the state may become oppressive. But it also has broader overtones: The United States and the West are willing to implement illiberal means, ultimately, in order to achieve something like a

¹⁹⁶ Langenbeck, 55.

¹⁹⁷ Langenbeck, 56.

liberal, democratic state. They are likewise willing, if a cause reveals itself, to resort to war in order to produce peace. Kliff, in his 'political realism' at once promotes relativism and claims subjection to necessity, effectively revealing the dark side to political pragmatism.

Brückmann's opponents represent distinct, but related, value systems. For Thomas, the axiomatic significance of scientific discovery meets the mechanistic unfolding of nature according to regular laws. Kliff, for his part, subscribes to the *raison d'état*, by which the success or failure of the state in both its internal and geopolitical endeavors form the basis of his action. Other value systems exist only relative to the state, and as such he acts according to an instrumental reason which assumes geopolitics will unfold according to a course of history that can be steered but not bested; the political actor does not act freely, but rather is *necessitated* to certain actions by the material progression of historical events.

Thomas sees no space for divine intervention in matters of scientific research; Kliff, respectively, establishes very distinct spheres between the religious and the political and concludes that the logic of the former has no role to play in the latter, especially at a time of geopolitical crisis. Both represent related, though distinct regimes of necessity. Thomas's positivism suggests that the world consists of mechanical relationships alone, which neither leave space for decision-making and nor have moral significance. Kliff's strategic instrumentalism suggest that the unfolding events in history necessitate specific, calculable decisions, thus also leaving no space for decision-making and moral considerations.

Brückmann presents an alternative to both of these regimes of necessity. He acts according to an informed ideal, based in his religious principles. In conversation with Thomas, he warns that there truly are limits on the types of research and the spaces of knowledge which human beings can research.

Ich, jedenfalls, brauch nicht lange zu suchen nach den grausamen Wirkungen einer Wissensgier, die ganz vergessen hat, dass Grenzen sind, die der menschliche Geist nicht ohne zu freveln überschreitet! Das ist aber nicht eine Angelegenheit der Moral, sondern der Religion!¹⁹⁸

Brückmann's statement can be interpreted in a variety of ways. On the one hand, at its face value, it stands in reference to research ethics. There are certain modes of research that one ought not to pursue because of their inhumanity. Secondly, there are forms of research which one should avoid because of the technologies they enable. This is the key concern about research expressed in the atomic plays. However, both concerns fall also under the matter of a morality that could likewise stand on mere 'humanistic' grounds. 199 Brückmann is going further. Although he is concerned about the practical consequences of research, his thought contains a Faustian or Promethean strain as well. "There are borders which the spirit cannot cross without committing sacrilege," i.e. there is a type of knowledge which defies human access, or, when accessible, the mortal must willingly forego. It is for this reason that this is not merely a question of morality, which governs interaction with other mortals and can be culturally or logically derived, but specifically of religious belief, which governs the relationship between the mortal and the deity, and the physical and metaphysical plane. This division is underlined elsewhere when Thomas ascribes to Brückmann the claim that his discovery "sei dem 'Schöpfer' geraubt worden und müsse ihm zurückerstattet werden."²⁰⁰ The quote possesses multiple valences. In one respect it reflects the myth of Prometheus, who steals fire from the Gods and is punished for it.

¹⁹⁸ Langenbeck, 55.

¹⁹⁹ In the 1980s, Hans Jonas noted that moral philosophies were historically concerned primarily with direct interactions with other human beings. Whether consequential or deontological, they tended to concern a relatively easily perceptible spatial and temporal field, and objectively present interlocutors. As such, they were ill-equipped to confront the situations of diffused responsibility, such as the arms race and ecological crisis. (cf. Hans Jonas, *Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation* (Frankfurt/Main: Insel, 1982), 35 f.)

²⁰⁰ Langenbeck, *Der Phantast*, 6.

In another respect, it evokes the notion of original sin, eating from the tree of knowledge, and the demand for penance that follows. Finally, it evokes the story of Jesus, the hypocrites, and the denarius. While this passage often serves as a theological basis for the division between secular and religious legal jurisdictions, for Brückmann it is another indication that certain objects belong to the realm of God and that he has violated this realm.²⁰¹

By bracketing any specific inter-human moral implications and concentrating on the relationship between the deity and the faithful, one arrives at what one might call a 'desiccated' religious relationship. This relationship ultimately aids us in understanding Brückmann's intentions most clearly. He tells Thomas:

Und da [in der Religion] musst du nachschaun, wenn du erfahren willst, warum unsre Erkenntnisse uns bedrohen; warum wir die Sklaven der Waffen geworden sind, die wir selbst gemacht haben. Waffen mögen so gefährlich sein wie sie wollen: solange Gottesfurcht den Menschen regiert, haben sie keine Gewalt über seine Seele!²⁰²

Human beings are threatened by their insights and are slaves to the weapons that they have created. What, however, is this slavery? The principles of the atomic conflict have already created the arms race and the notion of crisis that evokes geopolitical strategic *necessity*, as

²⁰¹ This is the biblical passage in which the hypocrites attempt to entrap Jesus as a traitor to Ceasar by asking him

consideration is not without reason; the institution for which Brückmann works is funded by government money. When Frau Helen evokes the parallel between the denarius of the hypocrites and Brückmann's work, she is

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whether they should pay taxes. The episode continues: "But Jesus, knowing their evil intent, said, "You hypocrites, why are you trying to trap me? Show me the coin used for paying the tax." They brought him a denarius, and he asked them, "Whose image is this? And whose inscription?" "Caesar's," they replied. Then he said to them, "So give back to Caesar what is Caesar's, and to God what is God's." When they heard this, they were amazed. So they left him and went away. ("Matthew 22 NIV," accessed March 13, 2016, http://biblehub.com/niv/matthew/22.htm.) Because the passage contributes to a Christian theological foundation for the legitimacy of secular rule and a division of secular and theological power, Brückmann's employment of it could undermine his argument as well. Incidentally, Langenbeck invokes the same passage in the second act, but this time from the position of the government. Frau Helen, an agent of the State Department, expresses her confidence that Professor Brückmann will be won for the government's cause. "Im Übrigen zweifle ich nicht, dass Herr Brückmann sich gewinnen lassen wird. Denn wie könnte er die weise Verfügung überhören: gebt dem Kaiser, was des Kaisers ist?" (Langenbeck, 42) Her

suggesting that the state, by default, has placed its 'stamp' on the work produced under such conditions bought by the government. She is likewise employing the language of religion in order to convince a religiously motivated man to accept her way of thinking. The effort, obviously, will fail.

²⁰² Langenbeck, *Der Phantast*, 13.

expressed by Kliff. The perpetuation of the atomic arms race helps to squarely lock human beings into a mode of material determinism. They are not free to choose their own course, to operate as free agents, but only to re-act to given conditions, and in this state they are reduced to a merely material existence. For Brückmann, it is religion that offers an escape from this progression. The exact nature of the weapons, even weapons of mass destruction, is insignificant if one is pious. With God, they have no power *over one's soul*.

The weapons' lack of power over the soul of the pious raises various implications. First, there is in this statement the sense that there is no sovereignty greater than God, and therefore no terrestrial power that should be feared above Him. Secondly, the statement invokes the distinction between body and soul. While weapons can destroy the body, the anticipation of a heavenly afterlife, or the life of the soul in eternity, frees one from the fear of a mortal death, regardless of the means by which this death is incurred and regardless of the scale of simultaneous destruction. Thirdly, the notion of control is expressed in the statement. Weapons of mass destruction have enslaved the material world, solidified its subjection to instrumental reason, but the soul is capable of being a cause in its own right; it still free to operate as it wishes. In the context of the play, it carries also the implication of its opposite: Where one is not ruled by fear of God, the weapons do have a compelling power not only over the body, but over the soul as well. They can be seen to colonize it, to finally imbricate it in the realm of necessity, to which an individual is subject in a state of crisis. But it is through the relationship to God that the soul exists not merely in the realm of material necessity, but achieves a freedom to believe and act separately from the authority both of the secular state and the material course of events. Submission to religious law may demand that an individual act morally, but it also frees the

individual to act according to this ethics, both emancipating him or her from material necessity and compelling him or her to conceive of alternatives to it.

Brückmann's intentions are twofold. He intends the practical consequences of his act to succeed. He truly intends that he inhibit his discovery from exacerbating the arms race. As noted above, it is a public act, made also for the purpose of winning other scientists to his cause. But beyond these acts with real-life consequences is found his primary act: his act of commitment to God and to the law of God. In this respect, in so far as his act is also done for the sake of the law of God, it is deontological rather than consequentialist. The rejection of the alleged forbidden knowledge is a "good" in its own right, regardless what might follow—but also regardless how it may be perceived publicly.

Brückmann's efforts are ultimately foiled in the material plane. Thomas reconstructs Brückmann's formulae and delivers them, without hesitation, to Cornelius Kliff and the American government. Brückmann is shattered by his colleague and mentee's treachery. The act, by which the physical efforts of his act of "holy disobedience" is so swiftly and thoroughly negated, brings Brückmann to the edge of a breakdown, and even makes him fear he runs the risk of "Gotteslästerung" because he sees that God has foiled the plan that Brückmann believed to be divinely prescribed. But in this event, Brückmann comes to understand the implications of his earlier complicity, to recognize that his previous affronts against the deity cannot be undone by a simple single act of protest.

Brückmann, though defeated, soon regains his footing and reinterprets the failure both as evidence of his own past moral failure and of a divine plan.

In diesem Wortbruch ist das Grauenvolle, Unbesiegliche. Dein Triumph *ist* die Katastrophe. Gott will von Triumph zu Triumph euch stürzen lassen. [...] Mein Geschick beweist euch auch das.²⁰³

Thomas's breach of oath demonstrates the "Unbesiegliche"; the unvanquishable; it will be marked by a line of triumphs in scientific advancement, and by the continued hegemony of the positivist, materialist paradigm. Brückmann, having contributed to this paradigm, had decided to end it; but escape, insofar as it is confined to the material plane, does not come so readily. The disastrous material progress of events will continue, just as Brückmann has contributed to them, for the foreseeable future. But, as Brückmann prophesizes, they will not continue to infinity.

[...] wenn die Menschen erkennten, *was* sie verlieren, *weil* du gewinnst und siegreich stehst, sie könnten's nicht ertragen. Denn sie wissen nicht, dass die Stunde kommt, da der Herr Jesus Christus kämpfen wird mit Prometheus; welches ein Kampf sein wird, anders und gewaltiger als die wüsten menschlichen Streitigkeiten dieser Jahre. – Das ist's, was ich in einem dunklen Bilde sehe.²⁰⁴

Brückmann's Jesus Christ represents the religious paradigm with which he has chosen to align himself. Prometheus, yet another common metaphor for the dangers of nuclear physics, represents the human capacity for discovery and instrumentalization of the natural world. The mention of a "dunkles Bild" is a reference, clearly enough, to Corinthians 13:12. It emphasizes the prophetic nature of Brückmann's words, which reflect the contrast between the partiality of prophesy versus the completeness of revelation (while at the same time noting that all prophesy, to be worthwhile, must be undergirded by love). In this prophesy, then, the exact nature of this final conflict remains vague; it foresees what could be an earthly battle of human self-destruction—for example, a nuclear war. Yet more fundamentally, it indexes the moment of holy

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²⁰³ Langenbeck, 95.

²⁰⁴ Langenbeck, 95.

revelation, and the time when human beings will be saved from their material instrumentality for their *freedom in God*. However, they must also be willing to accept this freedom for themselves.

In his decision, Brückmann also draws on his experience as a Nazi scientist and his conviction that there will come a time where God will call upon his servants to rise against the state. Frau Korda relates this expectation. As she explains, as she herself and Brückmann were once sitting in the air raid bunker,

"Annette", sagte [mein Bruder Brückmann] plötzlich, "die Zeit des heiligen Ungehorsams kommt. Aber noch vermögen wir's nicht. Noch ist Gott nicht wieder in uns da. Wir müssen Ja sagen lernen zu dem irdischen Fegefeuer; das zuerst. Ich erfahre, dass alles gerecht ist, was geschieht." [...] Ja – und nun erfüllt sich *dieses* Vorhergesagt auch. Die Zeit des heiligen Ungehorsams *ist* gekommen – nicht mächtig furchtbar groß, sehen Sie, sondern mit der leisen Brückmann-Bestimmtheit.²⁰⁵

This concept, as such, becomes the core of Brückmann's active philosophy. When he destroys his formula, it constitutes a quiet act of "holy disobedience." He hopes, as he explains, to inspire others to this act. But the act requires the mental preparation to face the "irdisches Fegefeuer," an "earthly purgatory"; i.e. the social and political consequences which will follow from his act. His is, as such, an appeal to a quiet martyrdom. It is likewise this preparation that demonstrates one's freedom from the realm of material necessity. Where one is no longer subject to a material causal chain, the spirit "[wird] aus dem Knechtschaft [geführt]," and one can transcend the material necessity and be free *in* and *for God*. Holy disobedience is, on the one hand, a political disobedience, in which one refutes the demands of the state; but alternatively, it is that type of disobedience that is only possible in conversation with transcendence: The refusal to be defined by one's material conditions and events alone.

²⁰⁶ Langenbeck, 15.

²⁰⁵ Langenbeck, 9.

In Brückmann's demand that one say "yes" to the "earthly purgatory," one begins to see the interaction between Langenbeck's earlier, stated theatrical aesthetics and this postwar play. Brückmann's acceptance of the experience of disaster corresponds to the tragic hero's acceptance of the catastrophe of which Langenbeck had previously written. In *Der Phantast*, however, there is an important caveat. In Langenbeck's aforementioned wartime speeches, he considered the Second World War to be the disaster itself, and he welcomed this war insofar as it would require Germans to submit themselves to the horrors of fate it establishes. In *Der Phantast*, the status of the Second World War has been reassessed. For Brückmann, the war was not the calamity Langenbeck had previously imagined it to be, as disastrous as it may have been, but merely an educational moment preceding the future disaster. It was the experience which taught him to prepare spiritually for the coming disaster and to accept this coming disaster fully in his actions. Brückmann at first believes that the "earthly purgatory" is the social and political opposition he would face as a result of his destruction of the formula.

A solution to the bomb does not appear to be at hand. Insofar as this affirmation persists, however—it is now possible to recognize also the social function it had in a postwar culture populated by physicists, theater men, and audiences reeling from the reality of their complicity in Nazi crimes. Despite Brückmann's founding his action in religious belief, he draws on historical experience to explain the origin of his principled independence from popular and political pressure. He locates his motivational experience in the Second World War, during which he worked as a scientist in the employment of the National Socialists—just as the protagonists of other physicist dramas occasionally do.

Darf einer amoralischen Regierung die Atomenergie oder ähnlich Gefährliches zur Verfügung gestellt werden? – Diese Frage war Ende 1939 besonders quälend. Ich wurde,

wie meine Kollegen, der Entscheidung enthoben. Denn die Machthaber waren damals sehr siegsgewiss [sic] und interessierten sich deshalb nur wenig für unsre Forschungen.²⁰⁷

Brückmann is thankful to be exempted from this decision under the Nazi regime. Nevertheless, the experience of the Second World War and of National Socialism in Germany, which he did not actively resist, led him to the realization that one day a moment would come when resistance would be truly necessary. He articulates the coming need for resistance in religious terms. "Wie dankbar muss ich sein." he asks rhetorically, "dass *ich* den Krieg erlebte als ein Gericht gegen unseren Unglauben." The physicist, a former Nazi collaborator, appears as the avatar of the playwright. Perhaps not himself a party member, ²⁰⁹ Langenbeck was more than happy to stage plays and promote theories supportive of the Nazi cause. Now in the postwar years, the physicist like the playwright turn against the threat of the atomic bomb in a spiritual gesture, and, at least as they present themselves publicly, seek atonement for the sacrilege of the Nazi years.

The play *Der Phantast* was the first play to be staged to employ the physicist to resolve the formal problems presented to the theater by the atomic bomb. While inspired by Greek drama, the play reflects the principle of classical drama by lodging, as Erpenbeck would have demanded, abstract social issues within a contest of human wills. This much it achieves successfully. However, the philosophical verbosity of its figures bog down the dramatic action, largely transforming the play into a medium of deliberation regarding the danger of the atomic bomb and a purely material world. The tripartite relationship between state, science, and religion is well-distinguished; the first two constitute paths toward unfreedom and death, the third—to freedom and a form of salvation. However, several key relationships are only vaguely defined,

²⁰⁷ Langenbeck, 13.

²⁰⁸ Langenbeck, 14.

²⁰⁹ cf. "BÜHNE UND FILM."

several contradictions are only vaguely resolved, such as the simultaneity of technological and divine doom that Brückmann foresees: It is unclear to what extent the technological advancement toward humanity's self-destruction is divinely ordained. Nonetheless, Brückmann's continued belief in God, as well as his belief in the "freedom to God," only becomes stronger when his practical effort fails. The catastrophe of ever-progressing technological capacities, and the impossibility of fighting this development in the material plane, only makes ever-clearer the necessity to rise above political events and concentrate on the freedom nonetheless preserved in the human spirit.

Carl Zuckmayer's Das kalte Licht: Welcoming Home a Prodigal Son

It would be erroneous to assume that all playwrights of the physicist dramas were similarly forged through National Socialism. Carl Zuckmayer, for instance, had went into exile in the United States for the years of Nazism. His *Das kalte Licht* was the most popularly successful physicist drama to premier in the 1950s. As it premiered in Hamburg in September 1955, the play was scheduled to open in more than 30 theaters in West Germany through the rest of that theater season. This success emerged from a postwar theater scene where Zuckmayer already served as the dominant German playwright. *Der Spiegel* published a 9-page biographical review of Zuckmayer's life and work on the occasion of *Das kalte Licht*'s premiere, including a table demonstrating Zuckmayer's previous dominance in the German theater. *Des Teufels General*—a play depicting a Nazi Luftwaffe general who comes to resist the war effort—had been performed more than 3000 times between the 1947/48 and 1949/50 seasons; other works by Zuckmayer also appeared repeatedly in the season top-5's between the late 40s and early 50s, including *Barbara Blomberg* and *Der Gesang im Feuerofen*, as well as revivals of *Der*

²¹⁰ Siegfried Mews, Carl Zuckmayer, Twayne's World Authors 610 (Boston: Twayne, 1981), 97.

Hauptmann von Köpenick. 211 Zuckmayer, it noted, provided a welcome exception to the otherwise so prominent "empty drawers" of the postwar period. As for Das kalte Licht, the Spiegel article expresses no direct opinion, noting only that "[i]n den nächsten Wochen [...] das Publikum entscheiden [wird], ob sich der außenordentliche Erfolg wiederholt, den Zuckmayer mit seinem Udet-Stück 'Des Teufels General' erringen konnte." On the other hand, Christian Lewalther, writing for Die Zeit, enthusiastically praised Zuckmayer's "moralisch [...] subtil durchdacht[e] Fabel" realized "unter [Gustaf] Gründgens alle Tugenden des Naturalismus wiedererweckenden Regie." He reports unanimous and long-lasting applause at the Deutsches Schauspielhaus in Hamburg.

Das kalte Licht's epic plot—in the Brechtian sense—stretches 10 years to reflect the development of Kristof Wolters, a protagonist loosely based on the historical atomic spy Klaus Fuchs. It addresses Wolters's recruitment as a Soviet spy, his involvement in the atomic bomb project both in the UK and the US, and his eventual confession. The play has it all: physicists, spy intrigue, science puns and metaphors, and dim notions of the nuclear threat, including a radio that ominously announces the "breaking news" of the atomic bombing of Hiroshima into an empty room. Those looking for a stern analysis of the political relationships of the Cold War and emphatic rallying cries against nuclear armament are likely to be disappointed, however.

Zuckmayer himself claimed, in reference to the play, that the primary problem facing the world is not the political divide of the Cold War, nor the splitting of the atom (i.e. the invention of the

²¹¹ "THEATER / ZUCKMAYER: Der Fröhliche Wanderer," Der Spiegel, September 7, 1955, 40.

²¹² "THEATER / ZUCKMAYER," 39.

²¹³ Christian Lewalter, "Gründgens begann mit Schiller und Zuckmayer," *Die Zeit*, September 8, 1955, 36/1955 edition, sec. Hamburger Präluden.

bomb), but a "Krise des Vertrauens" borne of the "Denk- und Glaubenskrise der Gegenwart."²¹⁴ As he confirms,

Hier – beim Tatbestand des ›ideologischen‹ oder gar ›idealistischen‹ Verrats – ergibt sich ein menschlicher Gewissenskonflikt, der höchstens in Zeiten der Religionskriege Parallelen findet. Die Moderne ist jedoch spezifisch abgewandt und charakterisiert durch die Abwesenheit des metaphysischen oder religiösen Motivs. An seine Stelle tritt zweierlei: der Totalitätsanspruch einer gesellschaftlichen Doktrin – und die Prädominanz der wissenschaftlichen Erkenntnis. Beide gemeinsam üben eine Faszination aus, deren greller Schein den sittlichen Aspekt verdunkelt, die einfachen Grundlagen menschlichen Rechts- und Ehrgefühls verwirrt und verblendet. 215

Stated plainly, the replacement of the metaphysical and religious motifs through, on the one hand, absolutizing ideologies and, on the other, systems of scientific positivism, threaten to render previous conceptions of human morality inoperable. The play is therefore a typical, if nonetheless excellently conceived, product of the postwar theater's rejection of politics and of materialism in favor of an investigation and celebration of the human spirit.

While Zuckmayer's claim neatly encapsulates the discourse of the period, it only takes the reader so far in interpreting the play, and in categorizing it in the general tendencies of the physicist dramas. The tension between science and religion not only "dims" morality, but also provides an opportunity to put human agency to the test. Notably, this plot represents a divergence from the aforementioned "standard" plot of the physicist drama: Rather than becoming uncomfortable with his contributions to military technology in sum, the protagonist experiences a moral awakening around his decision to share military secrets. Nonetheless, the play is about conversion and reaffirmation of religious belief. It concerns the moment of conversion, and the idea of a confirmation of faith, and the fact of the moral decision in the face

²¹⁴ Carl Zuckmayer, "Das Kalte Licht. Drama in drei Akten.," in *Dramen*, vol. IV, Gesammelte Werke (Fischer, 1960), 479.

²¹⁵ Zuckmayer, 479.

of a perceived determinism. The play can easily be reduced to its foundational conflict of material determinism and spiritual freedom, and I intend to show that here, via Wolters's characterization and the characterization of his two foils, the Jewish mystic, Friedländer, and the British investigator, Northon. These extensive, notably undramatic deliberations set up a framework for interpreting Wolters's final act in the play, in which he admits to his subterfuge and submits himself to the courts. In the context of these discussions, his act appears as a turn away from strict material determinism and back to a spiritually guaranteed capacity for will.

Wolters's Rejection of Agency

Kristof Wolters begins the play as a self-described neopositivist. Insofar as he is indeed a positivist—a matter the play also problematizes—Wolters consciously aligns himself with the negatively connoted qualities of the binary prompted by the physicist dramas more broadly: i.e., along with his neopositivism, he expresses his animosity toward religion or other sources of normative belief. Human agency is readily diminished in Wolters's worldview; the determinism of the physical world serves ultimately as the guiding force of the human, even as the human has gained an increasing hold over the powers of the physical world. Wolters's ideology is no perfect match for that of his communist contact, Buschmann, but these ideas nonetheless resonate with the materialism of the Communist ideology that subtly motivates Wolters's actions. "Wir haben uns selbst dazu bekannt, nichts als Stoff zu sein – Futter der Entwicklung, Plankton im Ozean," Buschmann tells him, "nun werden wir halt verdaut; verschluckt, verdaut, und der Rest als Gewölle ausgespien." Still, although Wolters identifies with the moral demands of Communism, his dedication to determinism does not begin from supposedly necessary historical forces, but rather from his scientific understanding of the material world.

²¹⁶ Zuckmayer, 399.

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In a conversation with Buschmann, Wolters explains that, although his father was a pastor, he had stripped himself of religion years earlier. The moral normativity of religious belief had been replaced in his life with what he describes as "nackter Verstand," pure rationality, and the numerical world. After all, he has found, "Es gibt etwas – in der Welt der Zahlen –, das ist Idee und Wirklichkeit zugleich. Das ist nur hypothetisch, nur geistig zu beweisen – und trägt doch unsere ganze Existenz."217 Granted, Wolters notes that the numerical world exists as an idea rather than as a reality; even numerism remains displaced from the physical world so long as it is a product of the human mind. Nonetheless, this system of relations and ratios undergirds existence per se. Wolters discusses his rejection of normative religious belief later in the play, during a discussion with the former concentration camp inmate and Jewish mystic Friedländer. Here he explains that he had rejected religion when he found his father's religious resistance too meek and ineffective, a false antidote to the ills of the world. In response, Wolters changed the spelling of his name from "Christof" to "Kristof," that is, "Kristof mit K statt mit Chi, um ihn von der Erlösersymbolik zu reinigen und dem Kristall anzugleichen."²¹⁸ Beyond the flexibility of transcription styles, which arguably render the name change ambivalent, Kristof's decision remains demonstrative. From its origin in the story of St. Christophoros, the "bearer of Christ," Kristof describes himself as the bearer of the crystal. The meaning is left implicit, but clear: The crystal reflects in its very shape the structures of the molecules that bind themselves one to another according to definite geometrical patterns. ²¹⁹ In such a process, with a compounding

²¹⁷ Zuckmayer, 358.

²¹⁸ Zuckmayer, 367.

²¹⁹ "Crystal" originates in ancient Greek *kystallos*, "frost," based on the belief that crystals developed out of "petrified ice." While this use is quite old in English, the Online Etymological Dictionary notes that "In the specific sense in chemistry, 'body with a molecular structure that causes it to take the form of a regular solid enclosed by a certain number of plane surfaces,' from 1620s." "Crystal (n.)," *Online Etymological Dictionary*, accessed July 1,

number of molecules, the invisible fundamental structural properties of matter become visible to the human senses. The crystal is the molecular structure of the world rendered apparent to the human eye. Wolters's 'dechristening' reflects the vigor with which he has sought to free himself of a relationship to both science and ideology in favor of pure positivism. He represents the transformation from a world understood via religious or mythological influences to one understood through rational scientific laws.

Wolters's views on positivism have bearing on his understanding of human agency as well. On various occasions, Wolters expresses belief in a strict mechanical determinism. For example, he explains that he loves chess specifically because it is no game of chance, but is, rather, free of external interventions. It—not unlike the structure of the crystal—depends on "konstante Valeurs – reine, gesetzmäßig aufeinander abgestimmte Werte, wie in Algebra und in der Geometrie." Any so-called 'luck' in the game is not luck at all, but rather a reflection of the individual player's capacity for calculation and prediction. Kristof praises chess because it serves as a model of the true structure of the world; a complex system of set values that, having been set into motion, interact with one another in a determinate manner. The illusion of chance, and with it the illusion of will, results from incomplete information and errors in speculation.

The physical determination of the world's natural laws promotes strict strategic reason, as in chess, but it also carries over into a rejection of free will. This appears in acutely physical terms near the end of the play. During an interview with the British Secret Service inspector,

2018, http://www.etymonline.com/word/crystal.) Kristof's name change thus renders its meaning approximately to "bearer of the frost" or "bearer of the crystal."

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²²⁰ Zuckmayer, "Das kalte Licht," 367–68.

Northon, Wolters invokes the example of human cell tissue, viewed under a microscope, to suggest that the physical laws of the world leave no space for a free will of the human being.

Schauen Sie sich doch so ein Häuflein Mensch an. Nehmen Sie sich ein Schnittchen Zellgewebe, einen Krümel Hypophyse unters Mikroskop. Dieses Bündel von koordinierten Reflexen, Sekreten, Corpusceln, Chromosomen – und wie das, Geschlechter um Geschlechter, auf der Erde herumschwappt, in jeder Triebregung und in jedem Gedanken von chemischen, elektromagnetischen, atomaren, kosmischen Einflüssen gegängelt, von Erbfunktionen bestimmt, von Zwangsneurosen geängstigt, und von Geburt an im Zerfall begriffen – Wie soll sowas zu einer eigenen freien Entscheidung fähig sein?²²¹

If one examines human beings in terms of their biological processes, as Wolters is inclined to do, the capacity for free will disappears. All that remains is the complex interplay of stimuli and responses—themselves only electrochemical processes, not only in terms of the physical body, but also the human mind, as well as the entirety of human interactions on the planet.

The Metaphysical Contingent

Although Wolters's viewpoint permeates the play, its plot is ultimately oriented toward one thing: his conversion away from positivism, and therefore out of the space of necessity, and back into the fold of moral normativity, the soul, and the spirit. To this end, he has two primary instructors: the mystic Friedländer and the British investigator Northon. Friedländer is the first to contest Wolters strict positivism. During the aforementioned, visually instructive, chess match, Friedländer contends that, contrary to Wolters's belief, the game of chess does to a large degree depend on "Glück": chance, luck and—possibly—a certain divine influence as well.

Considerations of chance and fortune populate the scene: Wolters meets Friedländer because they all, as citizens of an enemy power, are being deported to a Canadian prison camp during the war. A sister ship, also carrying deportees, was sunk by a German U-Boot. Is it a mere matter of

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²²¹ Zuckmayer, 460.

fortune that their ship will survive the voyage while the other sank? Friedländer's own fate serves as a lesson on chance, too: As a Jew, he survived a concentration camp and escaped to England, only to find himself detained once more as an enemy foreigner. Although he survived a hostile concentration camp, the audience soon learns that as a diabetic he will not survive the passage to North America due to the unavailability of insulin aboard the nominally friendly ship.²²² In the chess match itself, Kristof is certain of his victory thanks to his superior position and his (assumed) superior analytic capacity. But in a stroke of genius, Friedländer takes a risky move, and Wolters overlooks the danger and promptly places himself into checkmate. Friedländer wins contrary to all expectations.

For Friedländer, "luck" can influence the outcomes even of such an assumedly closed, mathematical system, to however small degree it appears. This includes the processes, such as the formation of crystals, which, though seemingly determined in their chemical structure and process, still require—as Friedländer suggests—the chance collection of their prerequisites and component materials. As he reasons, "der Mensch [braucht] noch was anderes außer Hand, Fuß und Kopf," this being, in Friedländer's terms, "Seinen Schatten, seine Seele, sein Glück – wie's ihm gegeben wird oder genommen."²²³ Human beings need more than their mere material existence and their instrumental reason, but the soul, and closely bound to it, fortune. Thus, Friedländer introduces the concept of the soul, posits the existence of a force not subject to scientific determination, that nonetheless can act on the world. In a turn of phrase reflecting Job

²²² Of course, Friedländer's diabetes makes his survival in a concentration camp all the more unlikely, though apparently this feat is not without historical precedent. See: Jack Woodfield, "Surviving the Holocaust with Type 1 Diabetes: The Story of Ernest Sterzer," *Diabetes Blog* (blog), March 26, 2015, https://www.diabetes.co.uk/blog/2015/03/surviving-the-holocaust-with-type-one-diabetes-the-story-of-ernest-sterzer/.

²²³ Zuckmayer, "Das kalte Licht," 368.

1:21, "The lord has given and the lord has taken away," 224 luck resembles a divine blessing. Luck in this sense is not necessarily the function of pre-defined values, but subject to intervention—however small or incomprehensible—on the part of chance or the deity.

As the chess match and the debate that accompanies it demonstrate, the gap between chance and agency are bridged where one has the insight to exploit small openings in an otherwise apparently logically determinable progression of events. Friedländer explains that luck concerns:

Was der Verstand allein nicht riskiert hätte. Das Glück des Einfalls: alles zu opfern, für nichts. Aber auf einmal ist das Nichts gar kein Nichts, sondern ein Zwischenraum – eine Öffnung – ein kleiner Wundkanal, da pulst jetzt der Strom hindurch, und Sie können ihn mit keiner Macht mehr aufhalten.²²⁵

Luck is here the "Glück des Einfalls," the fortune of the 'idea,' where in this instance the German *Einfall* possesses its convenient parallel in *Zufall*, coincidence. The stress is not on the visualization (as in the Greek *idein*), but on its chance appearance. It is not rendered by agency of the thinker, but "falls in," as if into one's mind from elsewhere, as if a gift of the deity. Such an *Einfall* contains the second element of luck present in Friedländer's description: the willingness to take an action that contradicts what reason would demand, but nonetheless succeeds on this risk. Such an act does not follow reason, but intuition.

Friedländer's notion addresses two moments of determination. The inner life of the human being is not entirely determined, but can be influenced by chance happenings or

²²⁴ "Job 1 Parallel Chapters," accessed July 3, 2018, http://biblehub.com/job/1.htm. The story of Job is a good example of metaphysical interventions in the bible. Both Job's fortune and his misfortune are ascribed to the will of God, these interventions are described as if to take place during progressive time rather than being the predetermined result of a mechanics designed early in life. Although the audience knows little of Friedländer's life before he was incarcerated in a concentration camp, it is apparent that reflects the same biblical wisdom as Job: the good and the bad of his life are dependent on God's influence, and despite the bad he remains faithful.

²²⁵ Zuckmayer, "Das kalte Licht," 368.

interventions that break with scientific determinism or the demands of a so-called logical reasoning. In this sense, the human being is a cause in his or her own right; the will moves beyond the internal existence and expresses itself externally in an action, which allows him or her to alter the determined course of an allegedly mechanistically determined world. Friedländer sees the chances of the *Einfall* as a type of intervention, closely related to the powers of the divine, and therefore, the soul and the fabric of the metaphysical into which human beings are anchored and through which they are capable of being agents. But Wolters is not yet ready to accept Friedländer's postulates about the world. "[D]as mit dem Glück und der Seele," he says, "das kauf ich Ihnen deshalb doch nicht ab." Friedländer, with characteristic wit, tells him it is not something one can *buy*, anyway—after all, one might extrapolate, these are not qualities available in a profane material economy. The question remains as to whether Wolters can acquire them nonetheless.

This, specifically, is the question addressed when Wolters is confronted with the government investigation into his treason. Toward the end of the play, the British government knows that a member of Wolters's research team has leaked secrets to the Soviets, and it even knows that Wolters is responsible. However, the evidence is circumstantial, and the investigators will need a confession from Wolters in order to secure a guilty verdict. The British security agent, Northon, becomes Wolters's second key influence on matters of the will and the soul. He makes it his personal goal to win a confession from Wolters not by means of cunning or force, but through open deliberation, as well as careful attention to Wolters's inner life. The figure of Northon is one of Zuckmayer's great aesthetic achievements in a play that, with many examples of diffuse mysticism, where the study of nuclear physics and the testing of the atomic bomb take

²²⁶ Zuckmayer, 369.

on cultic qualities, consistently exploits the creative tensions between scientific and religious knowledge. 227 Northon, ostensibly the secular representative of the state, evokes the class of the priest, as represented in the German *Seelensorger* ("caretaker of the soul"); he appears as a concerned *Beichtvater*, a "father confessor." In real, physical terms, he is tasked with upholding the law of the state. In the play, however, he appears far more concerned with reviving the health of Wolters's spiritual life. 228

Across several meetings, Northon argues for a confession on the basis of the political health of the lab. Wolters clearly cares for his colleagues, so if he wants to save the standing of his lab, he will have to confess rather than risk implicating them. Since Wolters rejects the possibility that free will exists, Northon homes in on a contradiction that has characterized Wolters since the beginning of the play. Namely, Wolters has professed belief in science and logic alone—while nonetheless acting, in his decision to provide the Soviet Union with secrets about the Western atomic bomb project, according to moral principles that originate outside of his professed system of pure logic. Northon asks why Wolters suffers from a tortured conscience if he believes in the mechanical determination of the world and the biological determination of the human being. Wolters casts this trait, also, in deterministic terms. It comes from his upbringing; his father was a pastor and a man of moral standing.²²⁹ Northon, however, provides

²²⁷ A prime example of the mysticization of nuclear research is expressed in the statement of Tsebaya, a Native American member of the support staff in the fictional Las Mesas research city in which Wolters is employed in the US. She reflects on the tradition of a coming 'future race' among her people. "In meinem Pueblo," Tsebaya intimates, "haben sie das gewaltige Licht gesehen, vor einige Wochen, in der Morgenfrühe, und den Donner gehört aus der Wüste. Manche denken, das sei das verheißene Zeichen gewesen" (Zuckmayer, 423..) In this, as in other instances, the realism of scientific discovery always maintains dominance over the mystical approach—after all, Tsebaya readily recognizes the true source of the strange lights—and nonetheless Wolter's transformation symbolizes the refusal to dismiss the transcendent realm.

²²⁸ Other commentators have also noted Northon's behavior as confessor. For example, cf. Mews, *Carl Zuckmayer*, 102.

²²⁹ Notably the historical Klaus Fuchs's father, Emil Fuchs, was a pastor and, according to Klaus Fuchs biographer Norman Moss, a man of striking moral standing. A Protestant clergyman, he joined the SPD in 1912 in opposition to

an alternative explanation, intended to counter both Wolters's description of social and biological determination. The conscience, he explains, only partially emerges from one's upbringing. It is also an in-born capacity of the human being, and grows with the human in the most miniscule components of his or her biological composition. It is only this, Northon claims, "das noch im Zerfall den Ausgleich herstellt – nach einer höheren Ordnung hin, einer Gesetzlichkeit, einer Harmonie. Man könnte sagen: Nach der Wahrheit." The conscience has a constant and eternal presence for and amongst human beings and binds them to a higher order of existence. Therefore, although Northon begins by referring to the body, he ends in suggesting that the "conscience" is a universal and inextricable capacity of the human that has its origins in transcendence rather than in materiality.

This conscience is also closely bound to the human agency, which in the logic of the play translates into the ability to escape material determinism. Northon sees the turn towards various determinisms—be they biological, historical, or political—as one of the gravest threats facing humanity in his time. "Der Zwang verewigt sich."²³¹ The single physical realm of necessity, as represented by Wolters, is not merely a philosophical matter, but is redoubled in technological and political orders. This must be resisted. As Northon says, "Zutiefst [...] geht es um die Selbstentscheidung des Menschen, vor seinem Schicksal, und in seiner Seele."²³² The fundamental issue is the human recognition of the agency of the soul, and the decisive power it entails.

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poverty and militarism, and remained a stern critic of the Nazis. (cf. Norman Moss, *Klaus Fuchs: The Man Who Stole the Atom Bomb* (London: Grafton, 1989), 2 ff.)

²³⁰ Zuckmayer, "Das kalte Licht," 460.

²³¹ Zuckmayer, 467.

²³² Zuckmayer, 467.

In his conversations with Wolters, Northon likewise attempts to break down the barriers between Wolters's scientific positivism and a religious viewpoint. The effort is primarily rhetorical. Nonetheless, the investigator draws on key effects of 'the new physics' that might undermine Northon's views on determinism. He draws on Plank's constant, h, which describes the ratio between the energy of a photon and its wavelength. This relationship might be an absolute represented in the deterministic space of the natural world, he tells Wolters. In matters of the soul, however, there are no such constants. As Northon argues, particle physics has made it increasingly unclear whether science can still unequivocally promote materially deterministic worldviews. He obliquely rejects LaPlacian scientific determinism, the idea that if someone had perfect knowledge of the state of the universe and perfect knowledge of its laws, he or she would be able to predict its entire future. Heisenberg's indeterminacy principle (a concept dependent on Planck's constant), as well as the unpredictability of certain nuclear phenomena (namely the moment of decay of any single atomic nucleus), draw these into question.²³³ Northon recognizes freedom in this. When Wolters laments that he "[gelernt hat] an jeder Gesetzmäßigkeit zu zweifeln [...]" and that he "kennt [diese Gesetzmäßigkeit] nur als den Flucht der Determination,"234 Northon once again invokes science in the service of his religiousmetaphysical views.

Manche Ihrer Kollegen halten das Gesetzmäßige, Determinierte, für eine statistische Ordnung, die dem einzelnen Teil eine Art von mikrophysikalische Freiheit läßt. [...] Mir scheint der alte Gegensatz zwischen göttlicher Allmacht und menschlicher

²³³ Stephen Hawking briefly summarizes the relationship between LaPlace's determinism and the Heisenberg's Indeterminacy Principle. cf. Hawking, *A Brief History of Time*, 55 ff. Helen Beebee et al. introduce the relationship between statistical half-lives and determinism, noting that although one might believe half-life measurements are necessary due to failing knowledge about the inner state of any one atom, there "are no further facts about the atom such that, if we knew them, we would know exactly when it will decay." Beebee, Effingham, and Goff, *Metaphysics*, 103.

²³⁴ Zuckmayer, "Das kalte Licht," 460.

Willensfreiheit, zwischen der Vorbestimmtheit des Ganzen und dem freien Spielraum des Einzelwesens, ein bißchen weniger unbegreiflich, seit ich mich mit Physik beschäftige. 235

A statistical order might be able to describe with relative certainty the broad developments of a mass of cells, of a population, of a physical system, but it leaves space for individual spontaneity, decision making, and freedom. With this, Northon attempts to sublate the distinction between a determined, physical and a free, interior world. The implication of Northon's criticisms of determinism is, in effect, that Wolters is thrown back upon himself at a moment of decision. He cannot hide behind notions of a determinism, depend on a 'determined' system to make the decision to—or not to—confess for him.

Confession as a Victory of the Will

At the end of the play, the moment arrives where the constant conversation has the opportunity to manifest itself in the action of the play; to present itself as an example of its own discourse, in a sequence that demonstrates Wolters's return to agency. The groundwork for Wolter's confession has already been established in a conversation with colleagues, following which Wolters is struck by visions of himself as Judas, a forceful reintroduction of religion into his being. Following discussions with Northon, Wolters decides to confess to his crimes of espionage. He has put his office in order, packed his belongings, and returned to Northon's office to write his confession. However, years earlier, Wolters accidentally left a piece of evidence, a slip of paper with an address and a meeting place, with his romantic interest, Hjördis. Hjördis, who was married to Wolters's supervisor, Ketterick, had kept the slip of paper all those years without knowing what it meant. On this very evening, however, Ketterick finds the slip of paper and immediately understands its significance. He calls Northon to inform the agent that he has a

²³⁵ Zuckmayer, 460.

piece of legally valid evidence that will prove Wolters's treason. Northon informs Wolters of this. The evidence appears to render a confession moot; as long as it exists and is in the hands of the state, a confession has no practical meaning. Wolters's confession will not serve as a true act, because it will not serve as an intervention in his fate. He must reveal the truth himself. At this point, however, the import of Friedländer's views—and the model of transcendent agency already displaced in micro during the chess match—returns in full force, inserting the major discourse of a highly discursive play to break from the mere 'theory' of conversation into the praxis of the plot.

Ketterick dies in a car crash as he drives to Northon's office, and the evidence disintegrates in the ensuing fire. This serves as the moment of fortune for Wolters, in the sense described by Friedländer. Not only does it deliver a moment of chance, but it places an emphasis on Wolters's decision-making capacity. Confess—or not confess. In this moment, the two primary non-determinate discourses of the play's deliberative dialogues, fortune and the will, coincide to present the resolution. The destruction of the single indicting piece of evidence against Wolters creates a field of action entirely dependent on the individual will. The production of this chance reflects Friedländer's theories of the relationship between material determinism and freedom, the conscious exploitation of small openings, possibly to establish great changes, but also Northon's emphasis on the human soul's capacity to trump determinism. Wolters's "bewußte Selbstaufgabe," his "freiwillige[s] Opfer," 236 serves as a demonstration of the will, in accordance with a higher moral law.

Not all audiences will buy this. While the act has a ring of Kantian morality to it, for example insofar as the supposedly moral act cannot be reduced to strategic self-interest,

²³⁶ Zuckmayer, 460.

Northon's priestly attributes make it appear more as though the confession is achieved through adherence to an externally imposed ethics, rather than one arrived at through Wolters's universal reason. This tendency would shed doubt on the claim that Wolters arrived at his confession through personal reason, and thereby leaves open the possibility that it resulted from moral conditioning instead. At the same time, Zuckmayer could have strengthened this point by intensifying the formal prominence of Wolter's deterministic beliefs. This, however, would have required greater emphasis on the mechanics of action throughout the play, perhaps at the expense of its deliberative and symbolic qualities, rather than saving this mechanism for the final scene.

Ultimately, Zuckmayer, in accordance with good aesthetic ambivalence, opens a thematic line of questioning, without closing it. Nevertheless, the author's proposition is clear: The act of the confession, made by free will, brings Wolters back into the fold of a spiritual unity, and with it, he demonstrates a will and a soul existing beyond mere materiality and its determinism. What superficially presents itself as a high-stakes political drama—namely, the dawning of the Cold War and the nuclear arms race, cast in diction of individual human action, is transformed into a story about *Innerlichkeit*, personal moral duty, and the survival of the soul and the will. The interrogation of the physicist-informant is in fact a confessional scene of penitence before a priest; a contest between political adversaries turns into a dialogue of spiritual guidance. The ideological repurposing—away from politics to religion—is achieved theatrically by means of turning the battle of wits between representatives of antagonistic Cold War blocs, engaged in an arms race, into a religious ritual.

Der Phantast and Das kalte Licht amongst the Physicist Dramas

As these descriptions make apparent, *Der Phantast* and *Das kalte Licht* reach the moment of transcendence from different starting points. Langenbeck's Brückmann is motivated by his belief in a divine order that demands his action. He is already a believer, but his belief is

reinvigorated through his action. Zuckmayer's Wolters is a prodigal son: raised in religion, he has left it behind him. His return to religion constitutes nothing less than a conversion. In both instances, however, the same pattern of materialism and transcendence is at play: materiality is the space of unfreedom, religion is the space of freedom. By turning to religion, the protagonists find freedom in the transcendence of materiality. This freedom has little to do with overcoming the real issues surrounding the nuclear bomb and the arms race, but it does provide a moment of dignity and it reconfirms the existence of the human being as human vis-à-vis its relationship to divinity and in distinction to mere materiality.

This same pattern appears also in other physicist dramas. For example, the protagonist of Hans José Rehfisch's *Jenseits der Angst* requests that the Catholic Church take his formulae for safekeeping, claiming, despite his previous atheism, "Wenn Gott uns was offenbart, [Gott] entscheidet, was wir damit anfangen sollen." (This reflects a similar notion of "rendering unto God what is God's" to that which also appears in *Der Phantast*.) The protagonist, unsure of what to do, ultimately becomes decisive. For its part, Curt Becsi's *Atom vor Christus* foregrounds notions of agency in much the same way that Zuckmayer's and Langenbeck's plays do. When the protagonist learns that the destructive formula imagined by her dangerous physicist husband, which was destroyed when she killed him, has been discovered elsewhere, she laments that all has been lost. Her friend, a Hiroshima pilot turned Catholic monk, reminds her of the religious concept of mercy: "Ein *anderes* Gesetz ist im Letzten wirksam, das unberechenbar in die Schöpfung greift, wie Hände in die Saiten der Harfe... *Weil* die Welt dieser Vernunft nach verloren scheint, - eben darum, - ist sie in Wahrheit gerettet..."

²³⁷ Rehfisch, Jenseits der Angst, 70.

²³⁸ Becsi, *Atom vor Christus*, 133.

transcendental plane reestablishes itself as the free space outside of the material necessity of the physical world, superior to human calculation and capable of intervening in the world accord to its own immeasurable principles.

If Der Phantast reflects Langenbeck's tragic concept, it also illustrates how this maps onto the themes of the physicist drama. The scientist, Brückmann, destroys his secret formula in an attempt to intervene in material events. He faces the opposition of those who suggest that material events cannot be opposed, but only catered to, and indeed, his material intervention fails. The play suggests that the catastrophic progression of technological self-destruction will continue through the future apart from all human intervention. Brückmann's tragic experience, however, nonetheless enables him to see more intensely and intimately the space of freedom, lodged in a relationship to divinity, that hovers above the kinetic thrust of the geopolitical crisis. Brückmann, despite his faith, was deeply ingrained in the historical progression driven by technological advancement. Indeed, his imbrication was self-imposed, like sin, through his collaboration with the Nazis and through his subsequent 'seduction' into continued scientific research in the service of military organizations. No matter how imbricated his physical existence in the physical progression might be, however, a facet of the man remains bound to transcendence. He has not lost his conscience, nor has he ceded his belief in agency to automata of strategic necessity. It is precisely his conscience that enables him to act in opposition to these, and even if he had strewn far afield from the deity, the experience of the tragedy, this experience of abject impotence before the force of historical developments, awakens him to his previous errors and calls him most sternly back into the renewed relationship between mortal and deity which he had sought. In this sense, recourse to the conscience, and by extension to the deity, reconfirm the existence of the human being as human being—a living consciousness distinct

from material surroundings and events. This, obviously, does not surmount the crisis of the atomic bomb. As minor as it might be, however, it serves as the victory these plays offer and it indexes what it views as the underlying cause of atomic weapons: the collapse of humanism which followed quickly the collapse of secularization, and with it the devaluation of the human being to mere material means rather than dignified, conscious end-in-itself.

As positive as this might sound, a suspicious reading of the physicist dramas will quickly identify in them the "affirmative character" which Herbert Marcuse identified also in the bourgeois culture at the end of the 19th century. In his words, this culture sought "not so much a better world as a nobler one: A world to be brought about not through the overthrow of the material order of life but through events in an individual's soul." As the previous discussions have demonstrated, this description conforms most appropriately to these physicist dramas, and an insightful reader will necessarily recognize that despite the affirmation of the human, they betray pessimism as regards the Cold War and the atomic bomb.

²³⁹ Herbert Marcuse, "The Affirmative Character of Culture," in *Negations: Essays in Critical Thinking*, trans. Jeremy Shapiro (London: MayFly, 2009), 76.

CHAPTER THREE: "DER SIEG DES GEISTES ÜBER DEN UNGEIST DER MATERIE"? THE IMPLOSION OF THE SPIRIT IN ALFRED GONG'S ZETDAM AND FRIEDRICH DÜRRENMATT'S DIE PHYSIKER.

Thanks to their concern with the binary between materiality and the spirit, the space for agency that the latter opens, and an attentiveness to the principle of embodied action, the physicist dramas are related by more than their thematic content: physicists, the atomic bomb, and the problem of scientific responsibility in the 20th century. As demonstrated in the previous chapter, the concerns of the physicist dramas of the 1950s resulted in-part from the spiritual demands placed on the theater following the Second World War, a general desire that the theater could serve in the postwar as a secular cathedral, more oriented toward an allegedly unscathed German "Geist" and untarnished by Nazi politics. This view of the theater under National Socialism is not entirely supported by history. Even playwrights who were not card-carrying members of the Nazi party, such as Curt Langenbeck, had willingly supported Nazi ideologies during the war. In the postwar, a proximity to Geist was constructed on the stage, arguably both for the sake of the audiences who responded to spiritual content, and for the theater that—despite appearances—might have had a political stake in performing its own distance from politics. The atomic bomb and the arms race, as politically salient as they were at the time, were good candidates for this because nuclear weaponry could be construed simultaneously as a manifestation of supernatural power on earth and as the most radical departure from the world of the spirit—and into a purely material, technological world—that humanity had ever known. The

rhetoric power of such plays would only be strengthened by the relationship between departure from the spirit and a technology of absolute destruction.

It would be a mistake to suggest that the form and themes of the physicist drama, for however short a period, ever became entirely stable, standardized or ubiquitous. Toward the end of the 1950s, however, the atomic play had begun to transform more recognizably. Given the relationship between the spiritualized physicist drama and the local needs of Germany, perhaps it is unsurprising that the physicist drama was most explicitly rejected by German speaking authors outside of Germany. On the one hand, the Swiss playwright Friedrich Dürrenmatt remained interested in the topic of atomic weapons. On the other, Alfred Gong, relatively unknown, a Jewish author from the Bukovina and a likely Holocaust survivor, eked out a living in various jobs, publishing his poetry along the way in his selected post-war exile in New York. Even authors who had went into exile under the Nazis and returned, such as Carl Zuckmayer and Hans Henny Jahnn, had produced such physicist dramas invested in mysticism (often continuing tendencies they had already established in the 1920s and 1930s). However much their motivations were the result of long-time personal interests, they found in Germany an audience well interested in discussions of the spirit. Dürrenmatt and Gong, by the end of the 1950s, were ready to shake the foundations of the partnership between spirit and stage.

When I write that Gong's *Zetdam* and Dürrenmatt's *Die Physiker* reject the physicist dramas of the 1950s, I do not mean that they discuss these works directly, nor do I mean that they are the only works that both deal with the atomic bomb and diverge from the standard physicist dramas. There are, as I have established, many atomic plays that are not physicist dramas. I mean to show, rather, that each work undermines the principles promoted in the physicist dramas by including the basic tropes of the physicist drama and debasing them, tossing

them out, or denying their validity. They display the struggle between the morally awakened scientist and his environs, and the basic concerns regarding the relationship between materiality and spirit, but only to reject these themes. Specifically, the concern with the spirit as a saving grace in an increasingly materially and technologically determined world is presented as a false claim and an inadequate solution to the problems facing the world. These critiques are achieved by placing greater attention onto the artifice of the theater and its representations, constant attention to the possibility that while the theater might render conflicts comprehensible, it does so by masking as much—or more—than it reveals. The partial critical turn is also a self-reflexive turn.

In what follows, I will first discuss Alfred Gong's Zetdam. This work rejects, step-bystep, the foundations of the argumentative form of the physicist drama by introducing the figure
of the artist into these dramas. Rejecting the dipoles of the physicist drama's authority—the
scientist and the holy man—it leaves only the artist. He, however, is himself grossly inadequate
to his lofty ideals, and argues that one cannot ultimately battle technological destruction with the
whims of the spirit. Then I will turn to Friedrich Dürrenmatt's Die Physiker. Dürrenmatt, like
Gong, ties his play specifically to questions of theatrical representation. To do so, he weaves a
plot not unlike that of the physicist drama into a series of archetypal signifiers, producing a
parallel between theatrical representation and mythologization. He parodies the spiritual moment
of the physicist drama as empty stagecraft, while at the same time reproducing the process of
mythologization for the econo-technical world. While this mythologization appears as a mere
aesthetic gesture, it ultimately presents the most thorough solution to the dramatic formal
problem posed via the atomic plays: the systems that lead to the atomic bomb's production and
use do not merely receive an advocate (such as an irresponsible physicist or Machiavellian

statesman) as they do in other physicist dramas—they are, rather, thoroughly embodied in the figure of Dr. Zahnd, as if she were their symbolic equivalent herself. The idea that spirituality can somehow save the human being from technological determination collapses in these plays, but so does the sharp division between the world of transcendence and the world of material. "Ich bin Sein Schreiber": Alfred Gong's Zetdam Guts the Physicist Drama

Born Alfred Liquornik in 1920, Gong came from Czernowitz in the Bukovina, the border region between Ukraine and Romania, where he was a classmate of Paul Celan. His sister and mother were deported under Soviet rule to the Tomsk Region in Russia. Gong himself, though his biographical data are contested, was held briefly by the Nazis at a camp in Mogilev (in modern-day Belarus), but, it is said, escaped with the help of a Nazi officer. After five years in Vienna, working in the theater, Gong lived in New York City as an exile author from 1951, where he published his poetry in European and North American newspapers and newsletters. In 1960 and 1961 he published two poetry collections, respectively entitled "Manifest Alpha" and "Gras und Omega," in which he addresses the Shoah and the nuclear age; a novel and another poetry collection followed in subsequent decades. Over the past twenty years his literary estate at the University of Cincinnati library has been assessed, several of his unperformed scripts published, and his poetry collections republished, laying the foundations for posthumous appraisal. His Zetdam: Ein Satyrspiel was published in Germany by Rimbaud in March 2017. ²⁴⁰

It is difficult to pinpoint the precise degree to which Alfred Gong was familiar with the wider trend of the physicist drama. He was a fan of Friedrich Dürrenmatt, for whom the nuclear

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²⁴⁰ Biographical information about Gong is available in: Natalia Shchyhlevska, "'Der Abruf ist unterwegs, hat nur eine kleine Verspätung'. Todesnähe in Alfred Gongs Gedichtband Gnadenfrist," Oxford German Studies 44, no. I (March 2015): 85, https://doi.org/10.1179/0078719114Z.00000000077; Natalia Blum-Barth, Alfred Gong: Leben Und Werk (Oxford [u.a.]: Lang, 2009), 19-50.

threat had provided literary and dramatic material since 1946, but wrote *Zetdam* before the Swiss star's physicist drama, *Die Physiker*, premiered.²⁴¹ It is also not unlikely that he would have been familiar with Carl Zuckmayer's *Das kalte Licht*, at least through reviews, given Zuckmayer's stature and the play's success in the 1955/56 theatrical season. But regardless of what he knew of trends in Europe, Gong was likely well-versed in the news that inspired other atomic dramatists. The sharing of nuclear secrets to the Soviets, such as in the case of the Rosenbergs or of the German-born UK physicist Klaus Fuchs, were constant topics in the news of the early 1950s. Increasing trepidation and even political involvement amongst many of the top atomic scientists—exemplified by Oppenheimer's 1953 House Unamerican Activities Committee hearing, Otto Hahn's famous 1955 radio address in Germany, or the 1957 Göttinger Erklärung were likewise popular topics in the media of the decade.

Gong's own literary production evince his proximity to the concerns of the physicist drama. Several of his poems address the nuclear threat and even the conscience of the physicist. In his poem *Professor Einsteins Morgenspaziergang*, for example, published in "Manifest Alpha," the bright light of the morning sun, fractured in the leaves of an orchid, mirrors the light of the bomb and triggers a momentary trauma in the mind of the titular scientist, the man often credited with convincing Franklin Delano Roosevelt to pursue the development of the first nuclear weapon. Gong's proximity to the physicist drama is best of all established in the recognition that he himself authored one: *Die Stunde Omega*. This work,

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²⁴¹ Zetdam was written in the second half of 1958. cf. Blum-Barth, Alfred Gong, 270.

²⁴² For a short review of Gong's attention to the atomic threat in his poetry, see: Blum-Barth, 103–12.

²⁴³ "Der alte hebt die Stirn, sein Auge klagt/ dem Streifen Blau sein Heim- und Weltenweh/ und seine Angst, die nach dem Morgen fragt.// Und Antwort kommt und wächst ihm durch den Raum,/ ein großes Licht eint Himmel und Allee,/ in Flammen blüht der Lindenbaum:// Da kommen ihm zwei Liebende entgegen. Sie lächeln - und der Alte grüßt verlegen." Alfred Gong, *Manifest Alpha: Gedichte* (Aachen: Rimbaud, 2001), 60.

written for radio but never produced, is by far the most condensed physicist drama, having a total length of fewer than 30 pages. Nonetheless, it addresses the primary concerns outlined in the previous chapter. The play addresses the problem of technological advancement and weapons and elicits a call for the end of such advancement. This immediate issue indexes the secondary conflict, in which the tension between positivism and metaphysics is expressed. Like in *Der* Phantast and Das kalte Licht, considerations on the soul and human agency also play a role, though agency is arguably less important here.

Gong's Physicist Drama: Die Stunde Omega

Die Stunde Omega contains three acts and follows the unity of time, place and action, but also experiments with the medium of the radio play. The opening act demonstrates the earnest affection the protagonist, Pan, a flutist and shepherd, has for his young friend, Pipo. They converse on a pastoral hillside, and Pipo reveals that he has discovered Pan's true identity: a local scientist who went missing five years previous. Pipo has only just agreed to protect Pan's identity when a disastrous explosion tears through the countryside. Its effects are explored in the second act, which is narrated by a helicopter-piloting radio reporter. He establishes the extent of the damage: Pan has been blinded, and Pipo has been killed. Everything comes to a head in the final act where Pan, devastated by the death of his friend, feels compelled to reveal his true identity as the physicist Peter Gant, inventor of *Sonnenessenz*, to the people of the local village. Sonnenessenz, a powerful technology, was meant to help the world, but Peter Gant's laboratory had been coopted by the military, and Gant had gone into hiding in an attempt to escape the guilt associated with his discovery. Finally, he calls upon the spirit of the deceased Pipo to reveal the meaning of the disaster to the townsfolk.²⁴⁴ Through these three acts, the play combines elements

²⁴⁴ Alfred Gong plays with the multiplicity of valences inherent in his main character, Peter Gant. The name Peter Gant appears to refer to Ibsen's Peer Gynt, perhaps because he, as an outcast, has succumbed to wandering and

of Greek tragedy with Christian salvific hope, and ultimately suggests that Pan, through his invention of a technology useful in weapons development, accumulated a guilt that was not atoned until the same technology blinded him and killed his friend.

The Grecian moment of the play emerges in numerous references to attic culture: Pan's chosen career as a shepherd, his references to fate and furies, and, ultimately, the fact that he is blinded in the explosion of Sonnenessenz—a moment that evokes Oedipus's self-inflicted blindness at the end of *Oedipus Rex*. Nonetheless, the play transforms into a Christian story of sacrifice and salvation. The consequences effect revelation and possess salvific purpose. Gant had been cursed by his development of Sonnenessenz as an affront against God, rather than through the victimization of Pipo and other locals. His action was a hubristic effort to improve upon the world God had created, and in his moral error he was befallen by "[der] Krebs, der deine Seele anfällt, teilt, und frißt." Astoundingly, it is the victimhood of a loved one that *saves* Gant. In this respect the play turns away from tragedy and to a discussion of martyrdom.

possesses only an ambivalent identity. His alias, Pan, likewise carries significance. As a flutist and shepherd, he is bound to the satyr. The figure of Pan can reflect, likewise, the notion of *panic*, derived from the name pan itself, or *pandemonium*, the chaos that emerges at the release of "all-demons," both of which break out when the small farming community of Terrina falls victim to the waylaid shot of Sonnenessenz. He is likewise bound to the theater more broadly through his false identity and the tragedy of his fate. Beside the references to theater and panic, however, Pan, as shepherd, evokes also the notion of Christian pastoralism. He herds his sheep, but as a goat-man he is also in need of guidance and protection. Peter Gant may guard his sheep well, but by going into hiding as Pan he has neglected his 'pastoral' role as scientist and expert on Sonnenessenz, sorely needed by the public to lead opposition to the development of dangerous technologies. It is in the marriage of these two elements, Greek theatricality and Christian pastoralism, that the short radio play carries its meaning between fatedness and salvation.

²⁴⁵ cf. Gong, *Die Stunde Omega*, 34.

²⁴⁶ It is rare for the physicist dramas, and for the atomic plays more generally, to concern themselves with the victims of nuclear weapons. The focus remains on the scientist and his or her agency or lack thereof. There is an exception to this tendency, nonetheless, in the radio plays. One might consider, for example, the two most successful atomic radio plays, Oscar Wessel's *Hiroshima* and Wolfgang Weyrauch's *Die japanischen Fischer*. *Hiroshima* recounts the last day in the life of a citizen of the eponymous city, as told by his shadow, which has been etched permanently into the earth even as his body had disintegrated in the blast entirely. (Oskar Wessel, "Hiroshima," in *Sechzehn deutsche Hörspiele*, ed. Hansjörg Schmitthenner (München: R. Piper, 1962), 219–34.) Wolfgang Weyrauch's *Die japanischen Fischer*, a fable based loosely on the 1954 crisis in which a Japanese Fishing boat was contaminated by the fallout of a hydrogen bomb test, is narrated by one of the victims as he buries himself alive with his own, blistered, disintegrating hands. In this sense, victimhood is embodied in a voice that survives beyond death,

In the final scene, Pipo's mother, following the death of her son, demands to know why the boy, a symbol of innocence, had to die. She carries the name Maria, establishing a relationship between her son and Christian martyrdom. This demand is readily fulfilled. Pan calls out to the ether: "Pipo, kennst du bereits die Antwort? Verkünde sie dem armen Volk und deiner armen Mutter!" Sure enough, Pipo responds with a thorough proclamation.

Ich sage es euch, warum der Reine leiden muß und zahlen für fremde Schuld: Alltäglich und natürlich scheint es euch, wen einer, der gesündigt hat, dann büßen muß. Dies leuchtet jedem ein als selbstverständlich. Doch wenn der Reine sein Blut muß geben für fremde Schuld, dann geht ein eisiger Wind durch jedes Herz. Das Opfer eines Reinen ist das Licht, das unsere sündige Finsternis zerreißt, das tausend Herzen klärt, das tausend Schuldige bekehrt wie ein Regen großer Gnade ihre Seelen läutert.²⁴⁸

While a nod to the medium of radio, this disembodied voice also carries religious implications, placing the events of the play into a higher order. As Pipo explains, the penitence of the guilty appears 'normal' or perhaps 'deserved' to the everyday onlooker. In this sense, Peter Gant's blindness and loss account for the guilt from which he had attempted to distance himself, even as a tragic bond had formed between himself and his invention. However, the sacrifice of an innocent is truly moving; it is "a light" that "tears through our sinful darkness," "converts a thousand guilty" and cleanses their souls "like a rain of great mercy." The death of the innocent is therefore no mere loss; it serves the purpose of salvation and religious conversion. The speech

living on to tell the stories of the deceased. (Wolfgang Weyrauch, "Die japanischen Fischer," in *Das grüne Zelt. Die japanischen Fischer. Zwei Hörspiele* (Stuttgart: Reclam, 1974), 33–64.) The playwrights strive to create meaning *in* victimhood via an imagined agency of the victim through a warning given to survivors. The victim is not merely victim in the secular, contemporary use of the term, but in the old sense of consecration. Or in the dual German meaning of *Opfer* as both victim and sacrifice. It oscillates between meaningless loss of life and loss as – according to competing etymologies – an *offer*ing or an *oper*ation. Loss gains meaning where it becomes a form of gift or where it is made to 'work.' Here this is through its ability to speak as a warning to the living.

²⁴⁷ Gong, *Die Stunde Omega*, 35.

²⁴⁸ Gong, 35–36.

of Pipo announces the purification of the world.²⁴⁹ This interpretation is later confirmed by the narrator. Although there is no indication that the locals, the people of Terrina, had wandered particularly far from God, he assures the audience that when these people sit together, they furrow their brows more deeply, and "wenn sie beten, werden die Gebete inniger."²⁵⁰ The encounter with tragedy has reinvigorated them spiritually.

These developments help place *Die Stunde Omega* into the category of the physicist drama as it is discussed here; it is yet another spiritually colored meditation on the human ability to engineer self-destruction. For the purpose of comparison to Gong's later play, *Zetdam: Ein Satyrspiel*, it is worth noting that Gong ties his play into the discourse of art and spirit as well. The play ends by concentrating once more on Gant's love of the flute, his most prized possession. Following his injury and Pipo's death, the narrator reports, Gant imagines giving his flute to Pipo, claiming, "[so] lange sie nicht schweigt, so lange noch einer spielen darf und kann, glimmt uns noch Hoffnung."²⁵¹ The flute, symbolizing art in general, possesses a salvific power that dignifies the human being and raises him or her into a sanctified realm of the spirit. The play therefore shares the value system at work in the *Intendantentheater*, wherein the artwork as a

²⁴⁹ In an anthropological sense, the death of Pipo lacks the qualities required to describe it as a "sacrifice" per se. While Pipo can serve as an object of sacrifice, his death lacks the appropriate gestures of intent which would normally accompany such an act. I.e. according to the Encyclopedia of Religion, "Sacrifice involves not only a visible gift but an action or gesture that expresses the offering." (Joseph Henninger, "Sacrifice [First Edition]," in *Encyclopedia of Religion*, ed. Lindsay Jones, 2nd ed., vol. 12 (Detroit, MI: Macmillan Reference USA, 2005), 7999, http://link.galegroup.com/apps/doc/CX3424502695/GVRL?u=unc_main&sid=GVRL&xid=a60a328f.) Nonetheless, his death reflects the etymological binary of the German "Opfer" in that his victimhood is transformed into an operable act of sacrifice insofar as it is accompanied by some of the associations; an act of supplication (consolidating the link with the celestial) and, for Peter Gant, an expiation of guilt (especially insofar as Pipo's death is accompanied by his confession.) (See: Henninger, 8001.) This stands in addition to the Christian messianic tradition according to which the death of Jesus—although performed as a state execution—serves as a sacrifice for salvific purposes. As Ralf Trinks notes, postwar dramas dealing with Nazi guilt also occasionally depended on a martyr-model that exonerated not only the martyr, but also others close to him. cf. Trinks, "Schuldlos schuldbeladen," 223–24.

²⁵⁰ Gong, Die Stunde Omega, 36.

²⁵¹ Gong, 36.

clear path to similar reinvigoration of the spirit—and these stand opposite the destructive tendencies of technology.

Die Stunde Omega, despite having been written for radio, is a physicist drama. A physicist involved in a fantastic scientific breakthrough regrets his decision, both because of its military applications and because it transgresses a boundary, causing affront to God. While in most physicist dramas the catastrophe does not come to pass, here an accident does take place. The author assures that the death of the innocents brings about a religious reinvigoration of those affected (though notably presents no political solutions, nor even an interest in these solutions), leaving the issue of the spirit, along with the catharsis of the tragedy in the highest esteem. He finishes with a thinly veiled note on the value of the artwork—promising, as kitschy as it is—that as long as art persists, there is hope for mankind. Such dreams of artistic salvation were not long lived, however, at least in the mind of Alfred Gong. Only a few years after writing Die Stunde Omega, he wrote a play that rejected the notion of morality and the value of the artwork fundamentally. I turn to this now.

Debasing the Physicist Drama: Zetdam

Zetdam: Ein Satyrspiel, composed in 1958 and 1960, was never performed. The work's unfortunate public laurels are limited to its submission for consideration for the Gerhard-Hauptmann-Preis in 1964, when it lost to Heinar Kipphardt's *In der Sache J. Robert Oppenheimer*. Nonetheless, the script expresses both a distinct insight on the part of the author, as well as a discerning dramaturgical skill and a clever comic wit. What's more, Gong's script articulates a turning point in dramatic practice, which is even symbolized, in a way, in its

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²⁵² Natalia Shchyhlevska, "Komik der Realität im Drama Zetdam von Alfred Gong," in *Witz und Wirklichkeit Komik als Form ästhetischer Weltaneignung*, ed. Carsten Jakobi and Christine Waldschmidt (Bielefeld: transcript, 2015), 408.

critical defeat by Kipphardt's work of documentary theater. Gong's script puts on display a shift from the largely moral rather than political theatrical tendencies of the 1950s, and anticipates a more explicitly intervening art that would follow. To do so, it replaces the role of the scientist and engineer with that of the artist. The artist becomes the primary communicator and agent of intervention in the atomic play.

Alfred Gong's Zetdam rejects the previous form of the physicist drama by delegitimizing it as a mode for commentary on spiritual, technical and moral matters, as well as by attacking the notion that art is an adequate means to comment on geopolitics and oppression. To review, the physicist drama, in part, raises the alarm on nuclear weapons. However, the conflict between the pro- and anti-nuclear camps is actually the tangible form taken by the conflict between a strict scientific positivism that denies the possibility of religion, the soul, and, occasionally, the human as such, and a metaphysics that locates the potential for a post-positivist humanism distinctly in a religious mysticism. The proposal I wish to make here is that the atomic plays organize themselves around a legitimizing rhetoric strategy with respect to the deliberative claims it makes about the dangers of the atomic bomb and the value of a moral rebirth achieved in opposition to it. The physicist dramas do not concern themselves directly with the actual work of the scientist. Nonetheless, the physicist serves as a figure of authority through which claims regarding the political effects of nuclear weapons can be made. Likewise, the physicist is useful due to his direct knowledge of the atomic bomb as well as his potential proximity to positivist, atheist worldviews. He offers a stronger voice than a layman when he critiques nuclear weapons because he knows his science and because his regret in having developed them is an informed regret. The admission of the religious, placed into the mouth of a scientist, is supposed to lend credence to the submission of the merely objective world before the divine. Like Wolters in Das

kalte Licht, he starts from a place of principled *doubt* and resolute materialism, but must ultimately admit the superiority of the transcendental.

As he brings the artist into his play, Gong eliminates the physicist, the figure that enables an appeal to technological expertise, and then vacates also the figure that founds the play's moral appeal—the notion of God or religion. Only the artist remains as an ultimately dubious moral entity and communicator. In other words, Gong engages with the *Sein* and *Schein* of the stage by revealing what the audience essentially already knows: the authors of the physicist dramas legitimize their work on the basis of the two aforementioned "staged discourses": one scientific-disciplinary, the other religious and moral. These discourses do not exist independently, but rather in the service of the artist, the moral integrity of whom is questionable at best. Gong's play stages the self-exposure of the fiction-crafting, legitimacy-seeking artist.

Gong describes his comic plot as a "satyr-play," historically an exponent of the lighter fare that would follow the staging of tragedies in the ancient Greek theater. If this leaves the reader wondering for what tragedies Gong's play serves as a balance, one can look at the tragedy of Pipo and Peer Gant. However, the audience may see its purpose somewhat sardonically expressed by the protagonist, Bubi, when he propounds, "Die Zeiten sind viel zu Ernst. Wir können heutzutage nur heitere Geschichten brauchen." That is, the comic work would provide relief from the horrors of the real world. In truth, however, this feels more like a sarcastic call for optimism that births an underhanded jab at any form of expression, comic or otherwise. What's more, as discussed above, the play follows upon a work within Gong's oeuvre, *Die Stunde*

²⁵³ Alfred Gong, "Zetdam: Ein Satyrspiel" (Typewritten Manuscript, 1955), 11, Alfred Gong Papers, Box 3, Vol. 18, University of Cincinnati, Archives and Rare Books Library.

Omega, that both identifies itself as a tragedy and leans on motifs borrowed from Greek theater and mythology.

The play centers on two figures, Zetdam and Bubi. Zetdam, a pious protestant octogenarian and millionaire survivalist, has confined himself and his family to the "Sauerstoffhöhle," the oxygen cave, a subterranean atomic bunker, and dreams of a future in which he is the progenitor of the human race following the atomic catastrophe. Bubi is a failure absentee father dedicated entirely to artistic pursuits. He carries qualities of the trickster and the antihero; his puckish familiarity encourages the audience to cheer him on, even as it is aware of his moral ineptitude. As Zetdam's indentured servant, he has been ordered to report on developments of the surface world via a large video screen in the middle of the stage. The primary conflict originates between the dictatorial patriarch Zetdam, and his wife and granddaughter, both of whom resist confinement underground. Visits by various figures heighten the tension within the family and help to demonstrate their impalpability until the point at which Bubi decommissions the elevator, the only entrance to the oxygen cave, and traps the family underground. He has transformed Zetdam's sanctuary into a prison, revealing the full irony of the name "Sauerstoffhöhle" in the German Höhle and Hölle, which, while not identical, nonetheless are distinguishable only in the length of the vowel. Zetdam's private cave becomes his own private Hell.

Zetdam is an atomic play insofar as its plot revolves around the location of the bunker in anticipation of nuclear war and its aftermath. It contains numerous references to the titular character's own investment in nuclear weapons development, references to the atom and to theoretical physics. However, it is only to a certain degree a physicist drama. In the physicist drama, the physicist is the vessel of technical expertise, but also often the location of moral

insight. Sometimes this insight originates in the scientist, and sometimes the focus is on the scientist's conversion. However, the plot of Zetdam eliminates its would-be scientist, Omega, the bunker engineer, early on, and leaves in his place only Bubi, a playwright, as protagonist. This playwright proceeds to vacate the authoritative foundations present in the earlier physicist dramas. First, the legitimizing mask of the scientist is vacated: Behind it remains only the artist. Next, the legitimizing mask of religious authority is vacated: Behind the God of the physicist drama stands also only the artist. Finally, Gong casts doubt on the authoritative position of the artist, who himself is a problematic agent, concerned with personal economic stability and renown. Considering the symbolic use of the flute in Gong's *Die Stunde Omega*, and its representation of the salvific power of art, this shift appears to demonstrate that Gong's view of his work changes significantly in the half-decade that passes between writing the two works. In what follows, I will describe these three moments of debasement through which Gong lambasts the structures of the physicist drama and ultimately criticizes the notion of the theater as a vessel of the spirit.

If one is to look at this play against the backdrop of the conventional physicist play, one must begin by looking to the figure of the scientific or technological expert. It is not uncommon for protagonist physicists of the earliest physicist dramas to function as a *Sprachrohr* for warning against the consequences of atomic weapons. Omega, the bunker engineer, is well-positioned for this role at the beginning of the play. Speaking with Zetdam's granddaughter, Zilli, and the artist/servant Bubi, Omega describes the gross inadequacy of public (as opposed to private) fallout shelters, both in terms of capacity and material:

Gelegentlich erfährt man, daß eine Höhle für sagen wir Tausend oder Zweitausend gebaut wurde. Ein Tropfen aus dem Meer soll gerettet werden. Und auch das ist sehr fraglich. Denn diese Massenarchen befinden sich in der unmittelbaren Gefahrzone, zweitens: sind sie aus drittklassigem Material zusammengeschustert worden—und

drittens: wird das Gedränge in der Stunde Zet so groß sein, daß die meisten ersticken, bevor sie noch das Stronium 93 erreicht hat.²⁵⁴

Bubi, for his part, encourages Omega to inform the public of these scandalous conditions, as is his duty as an expert. When Omega counters that he is a "scientist, not a politician," Zilli tells Bubi to spread the word himself. But Bubi answers, "Mir wird es keiner glauben." He, as an artist, lacks the disciplinary authority to comment on the existential danger of the nuclear threat. The self-referentiality of the theater, in which the speaker denies the validity of his political protest, is a wink to the self-destruction of the process that is still coming. ²⁵⁶

If Zetdam were a more traditional physicist drama, it is possible that Omega would eventually be won over to the cause of anti-nuclear activism. Instead, he receives no opportunity to develop as a character when Zilli falls in love with him and Bubi bombs his car at Zetdam's behest, killing him. It is this loss that leaves a space for the artist to become the primary agent in the play. Thus, the mask of the speaking physicist is torn from the physicist drama and replaced by a distinct authoritative instantiation: The artist. Gong's play is no longer about the moral conversion (and political failure) of a physicist, but about the role of a playmaker, a resident artist, as a disseminator of information and proponent of moral principles. The underlying irony of the exchange above is encoded in the tension between artist and protagonist: Gong's apparent attempt to achieve extradiegetic influence (that is, address an audience on topics of public debate) and Bubi's denial of the artist's influence. Omega's words are, in fact, written by a playwright rather than by a scientist; they reach the audience, but, in Bubi's judgment, their

²⁵⁴ Gong, 6.

²⁵⁵ Gong, 6.

²⁵⁶ This also repeats the concerns regarding the incapacity of theater to comment on the atomic bomb effectively, as already expressed by Frisch.

origin as an artistic product, rather than a product of disciplinary expertise, disqualifies them on arrival.

As such, any notion of scientific authority in the physicist drama disappears. There remains—for now—a tentative voice of moral authority, insofar as Bubi acknowledges the inequality inherent in the private bunker industry. Such moral expressions are most often embodied by the protagonist-physicist in the physicist dramas (for example in the figure of Brückmann in *Der Phantast*), but they are often voiced also by other characters (such as Northon in Das kalte Licht), and nearly inevitably ground themselves in a religious or even mystic language. Zetdam is no different; it is littered with expository materials relating it to religious discourse and creating a mysticism of a future age. It opens with enigmatic wall paintings Bubi has prepared for "future anthropologists," depicting, among other things, Bohr's atomic model and a figure referred to as "Kainabel," the symbol of modern man who reached for happiness and only found its inadequate correlate, money. Constructs of a spiritual narrative appear elsewhere as well, primarily where Zetdam's piety transforms into hyperbolic egoism. He and his wife raddle off the 'Generations of Zetdam,' a parody of the biblical genealogies; the pair describe the deeds of Zetdam's ancestors, and alphabetic wordplay is at hand: Zet-dam is the last man, just as A-dam was the first. (The Nietzschean significance goes uncommented, but is not incorrect to point out.) Biblical parodies continue when Bubi recites the future gospel he has composed, describing Zetdam's salvific repopulation of the planet following the catastrophe. It is apparent that the old man is a despotic pervert with dreams of sexual control over wide swaths of the earth (including, it is implied, his own granddaughter). As one can readily acknowledge, all of these references raise the specter of religion while at the same time invalidating it. Like the expertise of the physicist, religion becomes a mere expression of the artist.

This depletion of the religious reaches a crescendo in the second act, when God appears in the flesh to the bunker. It is a moment pregnant with visual puns: The God in Zetdam is a literal deus ex machina, having entered the stage from above, through the diegetic element of the elevator. God also appears as the "Ebenbild" of all who encounter him; and as such appears as Zetdam's Doppelgänger. Such a pun already pokes at the human conception of the divine, suggesting that we do not derive godliness from God, but rather conceive of Him in our image. Zetdam, despite his megalomania, falls to his knees, begging for approval and direction. "Ja, ich wage es sogar mich in meinen Träumen zu vermessen, Du hättest mich zur Bevölkerung und Organisierung Deiner Neuen Erde auserwählt. Hab ich mich geirrt? - - Sag es mir Herr!"²⁵⁷ God, however, does not acknowledge Zetdam's presence. He simply examines the bunker: its decorations, its living quarters, its technological apparatuses, and leaves without saying a word. However, the deus ex machina, now even as an egocentric Ebenbild of the human, offers no guidance and no salvific dramatic resolution. Even in His very presence, Zetdam is utterly incapable of communicating with a divinity who, despite his embodied visual presence on stage, is at best only casually curious about Zetdam's human affairs, and at worst an imposter whose identity cannot be confirmed. In any case, the judgment and guidance of this being is categorically withheld.

It is in part on the basis of God's silence that the second operation of discursive authority is also vacated. Given Bubi's penchant for producing quasi-religious instruments throughout the play, it is perhaps not surprising when he interprets the not-quite-miraculous vision of God himself. Having trapped Zetdam and his family underground in the bunker, Bubi appropriates God's appearance to legitimize his own actions. "Gott war hier erschienen, sah und hörte die

²⁵⁷ Gong, "Zetdam: Ein Satyrspiel," 35.

Causa Zetdam und fällte Sein Urteil mit Schweigen. Ich bin nur Sein Schreiber." ²⁵⁸ Bubi's distinct expression, "Ich bin nur Sein Schreiber," functions on two levels: He both records God's will in his writing, and he *transcribes* the will of God (as he claims to understand it) into the physical realm of human action by acting on God's supposed condemnation of Zetdam and family. Where he would previously follow the orders of his master (for example, as in the murder of Omega), he now executes the will he purportedly believes to be divine. And in his acts of obedience he takes a step from the merely 'theoretical' work of the artist toward a positive intervention of imprisonment and execution (a type of 'practice').

The elevator in the oxygen cave is conveniently prone to malfunction. If the upper door is left open, the lift cannot operate. Empowered by his new religious vigor, Bubi causes this to occur. He prevents Zetdam, Zophia, Zilli and Zyx—a masculine uranium miner who has dug into the oxygen cave from below—from emerging. And after an indeterminate time away, when both morale and provisions in the bunker are running low, Bubi contacts his trapped masters per video screen to observe their brewing madness, ostensibly as research for his play entitled "Die Sauerstoffhöhle" (which is actually the tentative title Gong used as he was writing Zetdam).²⁵⁹ Bubi's refusal to fix the lift—he claims that there are no technicians to be found in the entire country—causes his beleaguered captives to release impassioned rhetoric against him: First they chant "mas-sen-mord," thereafter: "gen-o-cid." Bubi set a precedent in murder when he killed Omega. He appears set to do this again.

It is here that the role of the artist is finally questioned as well. Bubi radically shifts the frame of the conflict at hand. It is no longer whether Zetdam, followed by his family, deserves to

²⁵⁸ Gong, 67.

²⁵⁹ cf. Blum-Barth, Alfred Gong, 270.

die for his selfish implication in nuclear armament and exclusive plan to survive the nuclear catastrophe. Rather, the question becomes whether art, taken alone, has anything to contribute to the struggle against technological oppression. Bubi, in response to his captives' jeers, appeals directly to the audience in his own impassioned speech:

Nennen Sie das, was hier geschieht, Mord? Ich nenne es den Sieg des Geistes über den Ungeist der Materie. Mord? Meinetwegen! Wie sollte sich sonst der Geist gegen Millionäre, Ingenieure und verrückte Frauenzimmer wehren und bewähren? Etwa mit Sonaten und Sonetten? Daß ich nicht lache! Mit ihren eigenen Mitteln muß man sie vernichten. Mit Unverfrorenheit, Heuchelei, Rücksichtlosigkeit. Und vor allem mit ihrer Technik. Dann und nur dann könnte die Kunst den ihr gebührenden Sieg erlangen. Denn, wißt, der Künstler lebt nicht von Inspiration allein. Er braucht Freiheit, Muße und Sicherheit. 260

"The victory of the spirit over the spiritlessness of materiality." This specifically is the solution that one encounters repeatedly in the physicist dramas of the 1950s, where struggles in the material realm seem to be barred from influencing the progression of the arms race. The great irony of Bubi's victory, however, is that he has in fact stepped into materiality entirely, leaving behind artistic means of action, in order to claim his victory. Bubi seems to suggest that overcoming the material world also means succumbing to it, that is, recognizing one's own submission to it. And he acts on this readily. He demonstrates a preparedness for social and political intrigue, and, in having used an elevator to trap his old masters, really has opted to use the technology of the millionaires and engineers against them—a humorously debased inversion of the violent technologies of nuclear annihilation.

At this point the lofty political and moral intentions of the artist are vacated as well. The artist needs freedom, leisure, and security—including financial security. Bubi's systemic dependence becomes apparent where he, in the middle of starving a cellar full of captives, takes

²⁶⁰ Gong, "Zetdam: Ein Satyrspiel," 68.

the opportunity to bill his future publications and theatrical premieres to the audience: "Abgehend, erlaube ich mir, Ihnen meine zukünftige Werke aufs wärmste zu empfehlen [...],"²⁶¹ he says, and then promotes his upcoming poetry collection, radio play, and novel. Ostensibly beholden to the higher qualities of the spirit, moral insight and political rectitude, the tentative pedestal of the artist is toppled when, at a moment of potential aesthetic climax, he behaves as a mere peddler of wares.

Gong's Zetdam begins as a commentary on the Cold War systems of nuclear production and defense, and gradually transforms into a commentary on the staged authority of the artist and of artistic expression in society. Gong achieves this primarily by targeting the physicist drama and its project of persuasion. The dual instantiations of authority in the physicist drama: technical and moral, dissolve when it is demonstrated that the artist has imagined both into being. An artist without the cloak of his works is at best an ambivalent character, susceptible to his own self-interest, violent urges, and the demands of the market. Simultaneously, the comic work admonishes those who think that the material, political horrors of the world can be ameliorated through a retreat to aesthetics and spirit. Vague invocations of moral or divine sentiment might make the speaker publicly appealing, but, taken alone, they represent nothing more than a blind surrender to the violence of the real world.

The play ends on a positive note, but even this is infused with uncertainty. Early in the play, Bubi explains to Omega that he was once a starving artist with numerous starving children. Bubi agreed to become Zetdam's indentured servant for 20 years if Zetdam would take care of his family financially. With a twist: he was not allowed to see them for the period, in order to keep them away from the artist's bad influence. While God appeared on stage as an explicit

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²⁶¹ Gong, 68.

'Deus ex machina,' the lives of Bubi's victims are saved by a second deus ex machina in its broader sense. Bubi's family arrives in full, looking for the father of the oldest daughter's child. This just happens to be Zyx, the adventurer who had burrowed into the cave from beneath, collapsing his mine shaft behind him. Bubi's family fixes the elevator and piles into the oxygen cave; Zyx is delighted by his child. It is almost as if Gong could not stand to keep such a radically cynical work stuck in such a category. Hope is maintained, albeit in a state of ambivalence. Bubi calls for real interventions into the political events of the day. His effort to kill, however, is interrupted by another intervention, which, when viewed through an Arendtian perspective, carries the notion of *natality* and new birth as a basis for change and agency in the world.²⁶² Although surprising, this radical intervention follows the internal logic of the play. Bubi had mentioned the existence of his family to Omega, the engineer, early on. He had, in fact, indentured himself to Zetdam in exchange for financial support for his family. Nevertheless, given its sudden and surprising intervention, this ending might leave the audience feeling that events have concluded in a superfluous distraction. The reader receives a resolution, but it can only half mask Bubi's call to arms.

²⁶² As Arendt writes, "It is the nature of beginning that something new is started which cannot be expected from whatever may have happened before. This character of startling unexpectedness is inherent in all beginnings and all origins. Thus, the origin of life from inorganic matter is an infinite improbability of inorganic processes, as is the coming into being of the earth view from the standpoint of processes of the universe, or the evolution of human out of animal life. The new always happens against overwhelming odds of statistical laws and their probability, which for all practical, everyday purposes amounts to certainty; the new therefore always appears in the guise of a miracle. The fact that man is capable of action means that the unexpected can be expected from him, that his is able to perform what is infinitely improbable. And this again is possible only because each man is unique, so that with each birth something uniquely new comes into the world." (Hannah Arendt and Margaret Canovan, The Human Condition, 2nd Edition, 2nd edition (Chicago: The University of Chicago Press, 1998), 178.) Hannah Arendt's understanding of natality underscores a theory of agency different from the soul as distinct from material surroundings proposed in the earlier physicist dramas, it is concerned here instead with the possibility of the production of something uniquely new against all odds—a possibility resulting from the fact of human birth. Read in this manner, Zetdam, while not providing a solution to the arms race, does provide a moment of hope wherein, despite the cast of deplorable figures that fill his stage, the fact of birth means that the play ends with a new beginning, offering hope amongst a backdrop of greed, squalor, and impending nuclear doom.

Examined beside *Die Stunde Omega*, Gong's later work seems a strange satyr-play. It emits brighter tones, but ultimately, rather than relieve viewers with an uplifting message—as Bubi had seemed to promise—the work instead delivers a harsh satire. The self-serving hypocrisy of Zetdam is lampooned, but the ultimate target is the notion that art could deliver a resistance of the spirit and—even if it could do this—that this resistance is of value in a world of increasing technological domination. This conclusion could not be further from the play he himself had written less than half a decade earlier: a hard rejection of gestures of aesthetic resistance in favor of real, material interventions (trapped, nonetheless in the impotence of the artwork.) This criticism of a theater engaged in self-confirming elicitations of the art-spirit dipole came under increasing criticism as the decade turned.

Like Alfred Gong's *Zetdam*, Friedrich Dürrenmatt's *Die Physiker*, one of the most successful plays of one of the 20th-century's most successful dramatists, also appears as an implicit critique on the values promoted in the physicist dramas of the 1950s, albeit by a very different approach.

An Anthropomorphism of the Apparatus: Dürrenmatt's Die Physiker

Friedrich Dürrenmatt was one of the more prolific writers on the crisis of the nuclear bomb and the arms race in the German language. He had been producing works about apocalyptic technologies and the atomic bomb since the 1940s. Before the Second World War had ended, he had drafted a play (never published), entitled "Komödie," featuring a technologically-rendered apocalypse.²⁶³ In 1945/46 his *Winterkrieg in Tibet* depicted in detailed

²⁶³ The play apparently raises a key concern reflected also in the physicist dramas of the 1950s: The problem of usurping God's agency over the life and death of the planet. "In einem Laboratorium voller Schalter und Hebel wird eine gewaltige Maschine mit ungeheuren Zerstörungsmöglichkeiten geschaffen; Adam aber sagt zum Schöpfer der Maschine – einige Jahre vor der Anwendung der Atombombe –: «Die Gewalt muß dem Stärksten zurückgegeben werden, und das ist Gott.» Er erhält das Verfügungsrecht über die Maschine, doch ein anderer greift ein, und die

and bloody precision a Switzerland torn asunder by nuclear war. Later, his *Unternehmen der Wega* (1954) was a suspenseful science-fiction radio play depicting the psychological tribulations of an earth diplomat weighing the possibility of nuclear genocide against the inhabitants of an imaginary Venusian prison colony (arguably also a metaphor for Switzerland). References to the bomb likewise pepper Dürrenmatt's essays and short stories. Dürrenmatt wrote a review of Robert Jungk's popular *Heller als Tausend Sonnen* in 1956, leading some commentators to posit that he would have never written *Die Physiker* without having read the book. Given Dürrenmatt's previous interest—after all, the first chapter of this dissertation already addressed *Der Erfinder*—this assessment is not airtight, though Jungk's book doubtlessly helped him formulate his ideas.

By 1962, the year *Die Physiker* premiered with great fanfare under Kurt Horwitz's direction at the Schauspielhaus Zürich, ²⁶⁶ Friedrich Dürrenmatt was already a well-known and respected playwright. After stumbling with *Frank V* (*Die Zeit* writes that "Das Stück ist dennoch

Explosion zerreißt alles." (Hans Bänziger, Frisch Und Dürrenmatt: Materialien Und Kommentare (Tübingen: Niemeyer, 1987), 122. cited in: Charbon, Die Naturwissenschaften im modernen deutschen Drama, 174.)

²⁶⁴ Dürrenmatt, "Der Winterkrieg"; Friedrich Dürrenmatt, "Das Unternehmen der Wega, Ein Hörspiel," in *Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett*, vol. 17, 30 vols., Werkausgabe in dreißig Bänder (Zürich: Diogenes, 1980), 77–124.

²⁶⁵ Talbot, whose study of major physicist dramas tends to concern itself primarily with source materials, agrees with other analysts who declare Dürrenmatt's review to be an "excellent commentary" on *Die Physiker* and he cites Elizabeth Brock-Sulzer, who believes *Die Physiker* may never have been written if not for *Heller als Tausend Sonnen*. Talbot, "The Theme of 'the Scientist's Responsibility in the Nuclear Age' in Contemporary German Drama.," 153–54. Dürrenmatt's review is available in the collection *Politik. Essays, Gedichte, Reden.* Friedrich Dürrenmatt, "'Heller als tausend Sonnen.' Zu einem Buch von Robert Jungk," in *Politik. Essays, Gedichte, Reden*, vol. 34, Werkausgabe in siebenunddreißig Bänder (Zürich: Diogenes, 1998), 20–24.

²⁶⁶ The Zeit review notes the high-profile of the cast in the premier as "großes Theater" that similar premiers in Germany will find difficult to emulate. D. I. E. ZEIT (Archiv), "Dürrenmatts Farce vom Weltuntergang," *Die Zeit*, November 21, 2012, sec. Kultur, https://www.zeit.de/1962/09/duerrenmatts-farce-vom-weltuntergang/komplettansicht.

besser als sein Ruf."²⁶⁷), *Die Physiker* saw Dürrenmatt returned to the glory of his 1956 smashhit with *Der Besuch der alten Dame*. *Der Spiegel*, reviewing *Die Physiker's* premier in Zürich, drew on the earlier piece, calling the antagonist Mathilde von Zahnd Dürrenmatt's "jüngste alte Dame."²⁶⁸ Indeed, the treacherous old asylum director was staged in the premier by Therese Giehse—to whom the play was incidentally dedicated²⁶⁹—who had also played Claire Zachanassian years earlier.²⁷⁰ *Der Spiegel* cited the director Horwitz's anticipation that its success would outstrip that of *Der Besuch*.²⁷¹ The play lived up to expectations. It played throughout Germany and opened to audiences in London and New York by 1964.²⁷² It remains one of the most successful German-language plays of the second half of the 20th century, still regularly gracing the stage and gymnasial syllabi alike.

In the first chapter of this dissertation, I discussed the figure of Professor Zweistein, inventor of the atomic bomb in Dürrenmatt's 1949 *Der Erfinder*. Zweistein serves as a late prototype for the deranged nuclear physicist. In Zweitstein's view, human beings had already been reduced to mere material 'means' by political configurations such as the Nazi, Slave, and Capitalist states. His regime of scientific testing, he contends, is therefore liberational. In this

²⁶⁷ ZEIT (Archiv).

²⁶⁸ "DÜRRENMATT: Im Irrenhaus," *Der Spiegel*, February 28, 1962, http://www.spiegel.de/spiegel/print/d-45139187.html.

²⁶⁹ "Die Physiker | Schauspielhaus Zürich," accessed December 11, 2018, https://www.schauspielhaus.ch/de/play/515-Die-Physiker.

²⁷⁰ ZEIT (Archiv), "Dürrenmatts Farce vom Weltuntergang."

²⁷¹ "DÜRRENMATT."

²⁷² Howard Taubman's review in the New York times suggested that the play's timing was awkward and that many of the characters fail to exceed mere caricature, but suggests that "Mr. Durrenmatt is [...] concerned with summing up the overwhelming problem of our time into the simplest and clearest allegory he can devise, and this he has done compellingly." See: HOWARD TAUBMAN, "The Theater: Durrenmatt's 'Physicists': Play About Atomic Era Opens at Martin Beck," *New York Times*, 1964.

context, humans are neither means nor ends, but merely incidental to Professor Zweistein's disastrous nuclear testing program. This alleged marginalization of the human being is a radical take on the problem that the authors of the physicist dramas of the 1950s attempted to address through a turn toward agency-granting spirituality. This section returns to Dürrenmatt's stage treatment of the atomic bomb more than a decade after Zweistein. If the religious appeal of the 1950s physicist dramas by authors such Curt Langenbeck, Curt Becsi, Carl Zuckmayer and Hans José Rehflish indeed belied an effort to mask a deep nihilism already inherent in *Der Erfinder*, however, Die Physiker fully acknowledges the artificiality and misplaced hope of the spiritual solution. Dürrenmatt's work takes aim at the spiritual moment evident in these physicist dramas, presenting it as a form of 'religious imagery' without spiritual intent, a mere narrational instrument in the fallen secular world, albeit an aesthetically productive one. The physicistprotagonist of Die Physiker has more in common with the good intentions of a Konrad Brückmann (Der Phantast) or a Kristof Wolters (Das kalte Licht) than with Zweistein, but his religious 'conversion,' organized around a ghastly spirit of King Solomon, proves disastrous. For Dürrenmatt, this Solomon is one model of contemporary theatrical representation—the model by which complex human realities are summarized artificially in the body of a single imaginative figure. In my discussion of *Der Erfinder*, I have already identified the early development of Dürrenmatt's concept of grotesque, through which complex, and only difficultly representable social, political and economic realities gain a tactile form in the theater. In this section, I will demonstrate how he repeats this process, now matured, in his figure of Dr. Zahnd.

In *Die Physiker*, Dürrenmatt resolves the two primary form problems apparent in the physicist dramas: The undramatic and difficulty stagable nature of the physicist's work, and the diffuse, difficultly parsed, ostensibly non-human systems which seem to define action. The first

of these he solves through a parallel established between scientific research and archaic prophesy, depicting the process of discovery as a struggle between a human and a demon—Solomon. The second is resolved by subsuming the complex relationships of the modern world into a symbolic, stageable human figure that can oppose Möbius on stage. Through these steps, Dürrenmatt saves the dramatic form for the issue of the atomic bomb and the physicist. However, he does so by destroying its core purpose, the depiction of interpersonal conflict.

Even as Dürrenmatt finds an effective solution to the formal problem of the atomic bomb and the physicist, his work presents an implicit critique of previous physicist dramas by recasting their religious element as folly. An episodic moment in the play—a discussion between the inspector, Voß, and patient, Newton, highlights the popularity of discourses in which scientific discovery spills over into religious thought and in which an easily derived humanist ethics is heightened into a quasi-religious statement on human knowledge as sacrilege. Similar ideas are reflected in the physicist dramas such as Langenbeck's Der Phantast and Rehfisch's Jenseits der Angst. In Dürrenmatt's play, however, they are subject to two forms of discursive invalidation: they are spoken, at first glance, by a mentally ill man, and as the audience later discovers, by a man who was simply playing a role. The idea of the prophetic insight of the physicist, as reflected in a play like Der Phantast, emerges once again in Die Physiker as well. Dürrenmatt goes to great lengths to drive this parallel home, carefully selecting King Solomon as the source of Möbius's prophetic insight. This religious moment, too, is presented as a mere hallucination until, as the reader soon discovers, it is even less than this: a mere act. Dürrenmatt thus demonstrates little sympathy for the theatrical renditions of 'spirit' from the 1950s that place modern physics beside religious insight and treat them as mutually informative. At best, the religious implications of the earlier physicist dramas are mistaken. At worst, they are a threat.

Die Physiker relates the story of Möbius, a brilliant physicist. At its core, the plot resembles other physicist dramas. It employs an analytic structure, much as Langenbeck's *Der* Phantast had, 'winding the spring' of dramatic action in a gradually exposed backstory that catastrophically explodes on stage according to an internal aesthetic logic. Having made important discoveries with possibly disastrous consequences, Möbius attempts to hide his knowledge from a violent and irresponsible world. Like Gong's Peter Gant (*Die Stunde Omega*), rather than destroying his discoveries and quitting his research, he reinvents himself. Möbius feigns visions of the spirit Lord Solomon, who he claims has dictated to him these secrets of nature. For his insanity, Möbius has been committed to a luxury asylum managed by famed psychologist Dr. Mathilde von Zahnd, where he continued his research in secret. In the plot of the play, which observes tight unity of action, time, and place (it all takes place within a day in the common room of the asylum), Möbius's gambit unravels. Fellow physicist-patients, apparently in their insanity, have recently murdered their nurses. When Möbius's adoring nurse insists upon his sanity and attempts to convince him to leave the asylum and live with her, Möbius also becomes a murderer, strangling her to death. Apparently under pressure from the district attorney, Zahnd transforms the physicists' ward into a prison. Their missions threatened, the other patients reveal themselves as spies from opposing Cold War blocs, each tasked with recruiting Möbius to their cause. Möbius's philosophy wins out when he convinces them to stay in the asylum with him and shield the world from the disastrous effects of their scientific discoveries. But his scheme has already failed: Dr. Zahnd reveals her belief in Lord Solomon. At the behest of the 'Golden King,' she has already photocopied Möbius's manuscripts page by page and set to work implementing Möbius's discoveries in a scheme toward world domination.

The discoveries of *Die Physiker*'s protagonist, Johann Wilhelm Möbius, are not per se nuclear. ²⁷³ And yet, the play resonates thoroughly with the problem of the role of the scientist in the atomic arms race. "Es gibt Risiken, die man nie eingehen darf," Möbius reasons, "Was die Welt mit den Waffen anrichtet, die sie schon besitzt, wissen wir, was sie mit jenen anrichten würde, die ich ermögliche, können wir uns denken." ²⁷⁴ The statement contextualizes the play squarely in the German theatrical discourse on atomic weaponry—and sets it in contact with the discussion of "scientific responsibility" so commonly discussed regarding the physicist dramas. However, although responsibility and culpability are thematized in the text, it far sooner undermines the possibility of either. Where the possibility of agency (and thus responsibility) appears, it is illusory; a human face plastered over a tightly woven and indecipherable complex of man-made, but deeply inhuman systems. Via an aesthetic technique of thematic layering, Dürrenmatt provides this conglomerate-apparatus the veneer of subjectivity (ultimately in the figure of Dr. Zahnd) to make it productive on stage—but only to demonstrate its infallibility when opposed by human subjects. The technological doom it implies has already arrived.

I will pursue this argument in four steps. I will first discuss how Dürrenmatt employs a technique of creative layering, drawing on the so-called "Welt der Überlieferung" to render his figures into visually significant signs and transform the process of scientific research into an aesthetically productive struggle. I will then examine two instances in which Dürrenmatt plays with the relationship between religion and physics—Newton's discussion of scientific responsibility and Möbius's rendition of Solomon—and propose that these instances implicitly

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²⁷³ As Dr. Zahnd tells inspector Voß, while his fellow inmates had been nuclear physicists, Möbius himself had never worked with radiation.

²⁷⁴ Friedrich Dürrenmatt, *Die Physiker. Eine Komödie in zwei Akten* (Zürich: Verlag der Arche, 1962), 62.

parody the role of religion in the 1950s physicist dramas. Finally, I will turn toward

Dürrenmatt's solution to the formal issue of the arms race. From his perspective, as one element
in the more broadly incomprehensible 20th century complex of world systems, the causes and
outcomes of the arms race cannot be directly represented on stage. However, he transforms this
complex into a unified body capable of dramatic action in the figure of Dr. Zahnd. This
transformation is at once mythological, embodying and granting agency to forces outside of
human control, and conspiratorial, insofar as these forces are not posited as nature, but rather as
an incomprehensibly complex modern apparatus that, while man-made, now exceeds the control
of any one human being, while nonetheless determining the outcome of human actions.

The "World of Tradition" and Visibility in the Theater

If, as Geiger claims, *Die Physiker* responds to previous physicist dramas, then this response is as much the result of his treatment of religion rather than through his the formula of responsibility. The religion of previous physicist dramas, however, is here replaced by 'mythologization.' It is treated in the play as a structural epistemological relationship rather than as a belief from which normative claims are derived. Dürrenmatt's play can arguably be modeled as an aesthetic treatment of Adorno and Horkheimer's philosophical-historical account of mythologization. For these thinkers, the production of myth serves as an early or proto-stage in the process of enlightenment, which, broadly understood, is concerned with the domination of nature and, by extension, human collectives. Initial forms of enlightenment were mythic:

Territorial and climatological phenomena gained subjectivity as demons or gods. The horrifying unknown face of natural processes, having a subjective being, could be made amenable or

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²⁷⁵ It is not my intention to distinguish the two so sharply, but to index the implied relationship between the physical world and the transcendent world.

subject to a human will through ritual, magic, sacrifice, and shamanism. Hence, the process through which nature was subjectivized was first and foremost a measure for control.²⁷⁶ They see a continuation and an inversion of this process in the historical Enlightenment. Just as these ancient religions were concerned with a shorthand that enabled human beings to commune with and subjugate the natural forces of the earth, science serves primarily to subjugate nature, too—albeit not through subjectivization, but through radical objectivization, and by transforming it into the shorthand of scientific notation.²⁷⁷

The people of the mid-20th century could fairly see the natural world to have been laid bare by the scientific method and subjugated by technological advancement—or at least, as Frisch noted in *Die Chinesische Mauer*—they could expect this process would continue to advance toward completion. In Dürrenmatt's terrestrial cosmology, however, humankind's increasing sovereignty over a once-incomprehensible natural world is accompanied by the rise of increasingly complex and unruly man-made systems that appear as an incredible disorder, just as nature once did. Hence, modernity is accompanied by a second phase of mythologization. When Horkheimer and Adorno claim that in modernity "die Aufklärung in die Mythologie zurück[schlägt]," they mean that the progress of systems of technological control over nature and populations are accompanied by the self-perpetuation of positivist ideologies, just as myth was only ever able to confirm what already was.²⁷⁸ When referring to Dürrenmatt, however, the return to mythology is more closely comparable to the an ancient mythologization—in the sense that the products of the scientific revolution, industrialization, mass society, and modern

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²⁷⁶ cf. Max Horkheimer and Theodor W. Adorno, *Dialektik Der Aufklärung: Philosophische Fragmente* (Frankfurt/Main: Fischer, 2011), 11 f.

²⁷⁷ cf. Horkheimer and Adorno, 15 f.

²⁷⁸ cf. Horkheimer and Adorno, 33.

geopolitics can be supplied a false veneer of subjectivity. The manmade world of the technological and econo-political apparatus has become as bewildering and inconceivable as the natural world once was. Just as the atomic bomb was popularly described as if a supernatural force, the human systems, of which it appears the most devastating manifestation, can be represented in art as an anthropomorphized demon-god.

Notably, this process of mythologization was common to Dürrenmatt's aesthetic process, albeit by another name. In his reflections on his early life, he wrote about the importance of the Welt der Überlieferung in his interpretation of daily events. In contrast to the politics of Europe, of the confederation, even the village—the collapsing banks, the social crises, and the rise of the Nazis—which were "zu unbestimmt, zu bildlos" to comprehend, 279 it was easy to understand the very physical, plastic presence of the world of tradition and myth, the world of the flood, David and Goliath, but also Hercules, William Tell and his confederate allies; of the deities, demigods and legends of the world of tradition. According to Dürrenmatt, in his youth, this world, if invented, nonetheless plastic and tangible, melded seamlessly with the ostensibly real, imminent world that surrounded him directly, but remained so distant because it could only be conceived in numerical measurements and conceptual abstractions. God was a benevolent "Überonkel" beyond the clouds; the system of rewards and punishments in the school system was an extension of the cosmic moral order; "[die Schule] setzte das himmlische System auf der Erde fort, und für die Kinder waren die Erwachsenen Halbgötter."²⁸⁰ His recollection shows little distinction between registers of 'tradition'; religious, mythic, legendary, or popular, but all of

²⁷⁹ Daniel Keel, ed., *Über Friedrich Dürrenmatt*, 3rd ed., vol. 30, Werkausgabe in dreißig Bänder (Zürich: Diogenes, 1986), 27.

²⁸⁰ Keel, 30:27–28.

these contributed to a visual—or at least visualizable—symbolic language that dispensed both with disciplinary sophistication (and even accuracy) in favor of a world with which one could more readily commune.

Doubtlessly Dürrenmatt was an imaginative child; the degree to which he exaggerates his childhood dependence on the 'world of tradition' is unclear, but certainly less important than his use of a similar process in his mature production. As an adult, the sense of an incomprehensible reality—a reality eluding direct depiction—provided important creative impulses for his theatrical production. In *Theaterprobleme*, Dürrenmatt not only references the representative inadequacies of the contemporary political and economic system, but relates these to the representative problems of science as well. The state, in his view, is no longer comprised of truly sovereign, individualized, self-responsible agents as it may have been two-hundred years ago (he refers to Schiller's Wallenstein). Instead, the figures 'in power,' even the likes of midcentury dictators, are mere outward expressions of labyrinthine power flows. Power emerges not from the individual, but in the disciplinary mechanisms that surround him or her, a network that "ist zu weitverzweigt, zu verworren, zu grausam, zu mechanisch geworden und oft einfach auch allzu sinnlos" to achieve expression in a visually viable medium. 281 Without saying as much, the world he describes produces a similar anxiety to that embedded in the mechanistic determinism of the earlier physicist dramas, only for Dürrenmatt, the emphasis shifts from determinism to political powerlessness in a hypercomplex world, and to the challenges this powerlessness presents the drama as a representative medium. Modern particle physics, which likewise eschew visual representation, presents the same problem: "Der Staat hat seine Gestalt verloren, und wie die Physik die Welt nur noch in mathematischen Formeln wiederzugeben vermag, so ist er nur noch

²⁸¹ Dürrenmatt, "Theaterprobleme," 59.

statistisch darzustellen."²⁸² The complexity of the physical world, just as the complexity of the state, can no longer be summed up in visual representation, but only in mathematical models.

Just as Adorno and Horkheimer identify the elementary religious-mythical impulse in the first steps of Enlightenment—a rendering conceivable of one's immediate surroundings (in whatever measure 'immediate' might take)—and young Dürrenmatt mastered (or coped with) the complexities of his daily life and the dim notions of world conditions by transforming them into embodied, subjectivized figures, Dürrenmatt as an adult dramatist transformed the abstruse world of politics and science into embodied figures on the stage. This is for him an aesthetic necessity. As he attests, "In der Dramatik muß alles ins Unmittelbare, ins Sichtbare, ins Sinnliche gewandt, verwandelt werden," even when, "sich nicht alles ins Unmittelbare übersetzten läßt [...]"²⁸³ To achieve this visualization in *Die Physiker*, Dürrenmatt returns to his childhood *Welt* der Überlieferung. Möbius's fellow physicists enter the stage in the masks of larger-than-life scientists—historical figures become legendary (Even if the historical Einstein had only died a few years before). Möbius evokes traits of a premodern, studious monk, or even a reclusive prophet, and resonates in character with qualities of his faux-hallucination, The spirit, King Solomon. Dr. Mathilde von Zahnd, for her part, becomes most adequately and embodiment of the economic-political apparatus. The logic of the stage allows this multiplicity of identities to exist simultaneously in a single figure.

²⁸² Dürrenmatt, 69. One can note here the distinction between Brecht's Galileo and Dürrenmatt's Möbius. Both are deeply concerned with mathematical calculation.

²⁸³ Dürrenmatt, 69.

The Sin of Instrumentality without Comprehension

Even as they aligned science with positivism, materialism and determinism, and opposed these with religious belief, normativity, transcendence and freedom, in the physicist dramas of the 1950s there was a simultaneous tendency to collapse the distance between the categories of scientific investigation and religious revelation. This was often achieved by designating the 'deep' insights of advanced and especially nuclear physics to the realm of the divine. Generally, it was then posited that accessing this realm might constitute a violation of the sacred space of God's own knowledge of the universe's secrets. The instrumentalization of this knowledge constituted an even harsher sin. The idea that these knowledges belonged to the divine and should be returned to God occasionally evoked references to Prometheus, or even the story of the Denarius from the bible—the implication being that one should render unto God what is God's advanced physics being one such divine possession. The idea that knowledge of particle physics is both of divine origin and should be returned to this origin is stated by Langenbeck's figure Brückmann, who warns of the coming battle between "Jesus and Prometheus," Hans José Rehfisch's physicist Severin in Jenseits der Angst, who proposes that his manuscripts should be in the possession of the Catholic Church,²⁸⁴ Alfred Gong's Peter Gant, whose sacrilegious efforts to improve upon God's earth had beset him with a cancer of the soul, and elsewhere, for example, in small episodic pairings of religion and science in Zuckmayer's Das kalte Licht. Friedrich Dürrenmatt continues this pattern in *Die Physiker* through an episode between the mental patient named Newton and Inspector Voß. His depiction, however, paints such claims as both erroneous and artificial. He then extends this pattern through constructing a relationship between Möbius and Solomon in which the biblical and folkloric tradition of Solomon—having

²⁸⁴ cf. Rehfisch, *Jenseits der Angst*, 69–70.

derived his knowledge in part through divine and demonic intervention—is repeated in Möbius. Möbius's science appears no longer as science, but as an encounter with transcendence. This, however, is presented, just as in Newton's claims, as deceptive and theatrical. Dürrenmatt builds up the religious references of his play only to tear them back down in the same breath; there is no space for the earnest 'spiritual' language of the 1950s physicist play.

In his encounter with the Inspector Richard Voß, the mental patient called Newton, picking up the mess left by Einstein when he strangled his nurse earlier that day, explains that "[ich bin] Physiker aus Ordnungsliebe geworden [, um] die scheinbare Unordnung in der Natur auf eine höhere Ordnung zurückzuführen." The ensuing conversation is episodic; it does not belong to the logical necessity of the progressing plot, though it does produce a mood of dazed joviality and raise questions of responsibility and moral law. This notion of relating an "apparent disorder" to a "higher order" is self-referential to the theater, and particularly to the figures of Einstein and Newton. The actors on the stage embody a series of figures-as-scientists who are ultimately tethered to legendary scientists. However, in Newton's statement, he also presents science and religion as moments in a unified system—scientific assessment is merely an expression of this higher order. In this statement, the processes of Dürrenmatt's stage are also implicated—as I will show—where the inscrutable forms of the modern world are likewise translated into a system of comprehensible symbols.

This resonates with issues of previous physicist dramas where the collapse of science and religion into a unified higher order produces possibly unanticipated ethical codes. In a series of statements evoking the issues presented in many physicist dramas, Newton—who in the meantime has added another layer to his identity game by claiming to be Einstein claiming to be

²⁸⁵ Dürrenmatt, Die Physiker. Eine Komödie in zwei Akten, 18.

Newton—says the Voß wants to arrest him for having made the atomic bomb possible. He claims, however, that his specific discoveries are distinct from their applications; it is in fact the engineers and not the scientists who are to blame for the bomb. He turns the tables, lecturing the embattled and wary Inspektor Voß on the distinction between the scientist's inquiries and the engineer's applications. Regardless what history tells us (after all, no such sharp division between scientist and engineer figures amongst protagonists of the Manhattan Project such as Oppenheimer), it is the engineer who carries responsibility for the atomic bomb.

NEWTON: Verstehen Sie die Elektrizität, Richard?

INSPEKTOR: Ich bin kein Physiker

NEWTON: Ich verstehe auch wenig von ihr. Ich stelle nur auf Grund von Naturbeobachtungen eine Theorie über sie auf. Diese Theorie schreibe ich in der Sprache der Mathematik nieder und erhalte mehrere Formeln. Dann kommen die Techniker. Sie kümmern sich nur noch um die Formeln. Sie gehen mit der Elektrizität um wie der Zuhälter mit der Dirne. Sie nützen sie aus. Sie stellen Maschinen her, und brauchbar ist eine Maschine erst dann, wann sie von der Erkenntnis unabhängig geworden ist, die zu ihrer Erfindung führte. So vermag heute jeder Esel eine Glühbirne zum Leuchten bringen—oder eine Atombombe zur Explosion. 286

Newton minimizes also the responsibility of the scientist in his or her discoveries. The scientist is an observer of nature. However, as his claim to know "wenig von ihr [der Elektrizität]" implies, he also understands that he never really understood nature *in its essence*. It is difficult or impossible to parse the true thoughts of the figure claiming to be Newton, but if one can take him at his word, the residual distance of the scientist from his or her object of study must be frustrating. At best, the scientists must resort to a symbolic language—mathematics—to attempt to describe nature. While it does not necessarily reveal to them the thing-in-itself, this description is itself an innocuous act. Its application, however, is not. Newton intimates that the engineers

²⁸⁶ Dürrenmatt, 20–21.

responsible for applied science are abusers of these insights because they use these formulae at such an abstract distance from the actual natural insight. Their work is a profanation of the scientific desire to find higher order.

This is not immediately apparent; it is possible, still, at this point, to believe that Newton is merely mundanely identifying the engineers' responsibility for the atomic bomb. However, a moral dislocation takes place when Newton-as-Einstein accuses Voß of negligence, just as he criticizes the engineers for their play with natural forces without having attempted to properly understand them. "Und nun wollen Sie mich für [die Atombombe] verhaften, Richard. Das ist nicht fair," he argues, "[...] Aber warum weigern Sie sich nicht, das Licht anzudrehen, wenn Sie von Elektrizität nichts verstehen? Sie sind hier der Kriminelle, Richard."287 This strange inversion of responsibility seems at first to be the illogical utterance of a madman, and indeed, Newton intends Voß to understand it as such. However, in a broader context it is also proposed as an alternative normative statement. Voß is allegedly criminal because he exploits electricity without understanding it in terms of natural observations and theories, perhaps also in terms of its relationship to the "higher order" Newton had mentioned previously. Of course, turning a light switch produces relatively few victims (if one brackets, as I will for the context of the play, the victims of resource wars and climate change). A single atom bomb can produce tens or hundreds of thousands. The crime to which Newton refers has nothing to do with a normal, 'immanent' guilt, the guilt incurred through injuring another human being. It is a more difficultly identified guilt, committed not against other humans, but a violation or usurpation of a natural order that is ultimately not distinguishable from the supernatural order. It is the profanation of an

²⁸⁷ Dürrenmatt, 21.

arcane knowledge, accessible only to the initiated, through general application, and an abuse of things-in-themselves.

The fundamental process described here is the motion from one sphere of interpretation to another: The appearance to the human observer (empirical phenomenon, such as electrons leaving marks on a screen), its representation in a symbolic system (for example mathematics), its application (the electric grid), and what the object fundamentally is (electricity-in-itself). This moment of description is then subject to the struggle between two valences which Newton-as-Einstein posits as opposed: the abstraction and implementation of the natural phenomenon to human ends constitutes the first of these. The other, marked by Newton's reflection on his motivations (the drive to discover the higher order in the disorder of nature) and his theological drive (As Newton notes at the end of the play, he "schrieb auch theologische Bücher." 288) constitute knowledge not as a moment of instrumentality, but as a religiously-tinted end in itself.

The dynamic shift between multiple valences of meaning—the mundane interpretation of a responsibility for human deaths and the transcendent guilt of a molestation of nature—reflects ideas represented commonly in other earlier physicist dramas. In these, the pursuit of technologies such as the atomic bomb are not merely threatening to human life and therefore forbidden, but are, rather a violation of holy knowledge to profane ends and an affront against a divine order. Dürrenmatt's Newton places the responsibility for these transgressions in the hands of the engineers, rather than the scientists. The creation of this profanity-transcendence dialogue, done well, creates intruiging theater dialogue, and Dürrenmatt pursues it while at the same time tearing it down by placing first of all in the mouth of a mental patient, and second of all—merely

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²⁸⁸ Dürrenmatt, 71.

part of a stage act. Newton is theatrical and false in his claims, a deficiency which arguably reflects on previously staged physicist-prophets as well.

Solomon and Möbius

Dürrenmatt follows a similar pattern in the depiction of Möbius and his relationship to Solomon. Möbius asserts that Solomon appears nightly to dictate to him the "Geheimnisse der Natur," the "Zusammenhang aller Dinge," and the "System aller möglichen Erfindungen." Solomon provides an imaginative dressing for Möbius's scientific labor, transforming an act of strict cognitive concentration and calculation—which, however momentous it may be for the history of the world, lacks stageable drama—into the solemn meditation and feverish penitence of the prophet grappling with the gifts bestowed and sacrifices demanded by an deity-demon harsh and brazen as the Old Testament God. In short, although Solomon is granted no visual stage presence, and at most a doubtful diegetic reality, he nonetheless transforms the distinctly undramatic act of individual scientific research into a potentially dramatic struggle between man and God. This, or at least into a parody or pantomime of one such struggle, given that Möbius readily admits to his invention of the deity.

The numerous qualities and deeds ascribed to the fallen king grant him a physical materiality even in his absence from the stage. At first he appears earthbound and fallen, where he, as Möbius explains, is no longer the golden King, the biblical Solomon, but "hat seinen Purpurmantel von sich geworfen." Solomon "kauert nackt und stinkend in [Möbius'] Zimmer als der arme König der Wahrheit," conjuring the image of a decrepit, forlorn and lost figure.

²⁸⁹ Dürrenmatt, 39.

²⁹⁰ Dürrenmatt, 34.

²⁹¹ Dürrenmatt, 34–35.

He is also a cruel punisher. As Möbius tells his lover, Sister Monika, he "habe Solomons erscheinen nicht verschwiegen," and Solomon "läßt [ihn dafür] büßen. Lebenslänglich." 292 While Solomon regains something of his spiritual and monarchical dignity when Möbius claims he "schwebte vom Park her über die Terasse," this unfortunately enables him to whisper to Möbius through the windowpane and allegedly command that he kill his nurse.²⁹³ Soon, despite the fact that Solomon is a fabrication from Möbius's perspective, communal judgment helps 'materialize' the invisible figure as well. Sister Monika believes in Solomon as an extension of her infatuation with Möbius, and is certain that "Salomo ist [Möbius] erschienen, offenbarte sich [ihm] in seinem Glanz, die Weisheit des Himmels wurde [ihm] zuteil" specifically for the purpose of evangelization.²⁹⁴ Mathilde von Zahnd, at the end of the play, reveals also her interactions with Solomon; he "[...]schwebte [heran]" from the park, and appeared to her as a "goldener König" and a "gewaltiger Engel." 295 Solomon thus remains ambivalent throughout the play, both extant and hallucinatory, invisible yet visualized. In his legendary capacity to capture the imaginations of multiple characters, he is a figure of the Welt der Überlieferung—a figure from tradition.

Möbius is related to Solomon via his intertextual resonance with the biblical and folkloric tales of the old king of Israel and biblical prophet. The Solomon of *Die Physiker* fills the roles of the deity and the demon simoultaneously: Insofar as he blesses Möbius with knowledge and wisdom, he stands in for God; insofar as he is a cruel punisher of Möbius, and imparts

²⁹² Dürrenmatt, 41.

²⁹³ cf. Dürrenmatt, 50.

²⁹⁴ Dürrenmatt, 43–44.

²⁹⁵ Dürrenmatt, 68.

knowledges of a dangerous, dark art—he seems a mythical demon.²⁹⁶ This transforms Möbius's scientific research into a divine—or accursed—imparting of knowledge.

The son of the biblical King David, Solomon is known for his expansion of Israel's wealth, his lavish construction projects, and his reputation for wisdom. ²⁹⁷ He extended the economic success of Israel and brought peace between Israel and its neighbors, and drew visitors from around the known world, curious to see the reputedly wisest man alive. Such wisdom brought financial and political success, and with it, the expansion of Jerusalem, and the construction of a temple to God. Solomon's wisdom was visible in his interactions with his subjects and in his composition of proverbs and songs. However, this also extended to his knowledge of the physical world, and as such "his acquaintance with all that was known in that day regarding trees, fruits, flowers, beasts, fishes, and birds gave him great renown." This renown extended through the centuries: Medieval Islamic scholars later attributed to Solomon the authorship of key works on medicine, mathematics and physics, as well as works on theology. ²⁹⁹ This wisdom was said at least in part to be of divine origin. Solomon received much training to be a wise ruler, but, rising to the throne at a young age, he knew his calling would

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²⁹⁶ Commentators such as Allen Hye have noted Solomon's affinity with Solomon and God, Solomon with science and reason. For Hye, for example, Solomon is a God demanding atonement from Möbius, but also represents the disaster that can develop out of irresponsible uses of technology. "Song of Solomon, to be sung to the Cosmonauts," one encounters the "stirring Faustian vision of pure knowledge" which "can degenerate into the irresponsibility of [Goethe's] sorcerer's apprentice of the dehumanizing industrial society of Kaiser's *Gas* trilogy." Hye, *The Moral Dilemma of the Scientist in Modern Drama*, 161. Of course, the eventual explicit relationship Möbius is established at the end of the play. However, I have not yet seen any previous commentator who noted the distinct thematic parallels in the relationship between Solomon, God, and the demons (once one considers the broader tradition of Solomon), that produces the analogy God and Asmodeus: Solomon: Möbius.

²⁹⁷ cf. Geoffrey Wigoder, "Solomon," *The New Standard Jewish Encyclopedia* (New York: Facts on File, 1992), 877.

²⁹⁸ Hirsch et al., "SOLOMON."

²⁹⁹ Hirsch and et al.

demand yet more wisdom. When Solomon made a sacrifice of one-thousand burnt offerings to God, God granted his selfless wish for greater wisdom.

All these positive traits can be contrasted with a darker side. In the final statement of the play, where Möbius speaks as though he were Solomon himself, he acknowledges that "[seine] Weisheit zerstörte [seine] Gottesfurcht, und als [er] Gott nicht mehr fürchtete, zerstörte [seine] Weisheit [seinen] Reichtum."300 Indeed, in the monotheistic traditions, Solomon's foreign connections—resulting in his many foreign marriages—led him to tolerate foreign religions in Jerusalem. This sowed the seeds for Solomon's own religious deterioration and the dissolution of the Kingdom of Israel.³⁰¹ Such reckless audacity in blasphemous matters takes another form in apocryphal Talmudic and folk traditions, where Solomon's wisdom stretches into the realms of magic and demonology. This is prevalent especially in a Talmudic story of his interactions with Asmodeus, a demon, sometimes considered the king of the demons, commonly present in the Jewish folklore. Solomon is said to have captured Asmodeus through use of powerful chains and the unutterable name of God, and learned from him the powers of subjugating other demons, who in turn were put to work building Solomon's temple. But Solomon, in his curiosity to understand the power of demons over man, was likewise overpowered by Asmodeus, who then, for a period, usurped his throne. 302 Certain traditions relate that Solomon received instruction in magic from Asmodeus, discussed under a variety of titles, a magic book on the subjugation of demons. In a similar vein, and of special interest in the context of *Die Physiker*, some tales report "that Solomon collected the books of magic that were scattered throughout his realm, and locked

³⁰⁰ Dürrenmatt, Die Physiker. Eine Komödie in zwei Akten, 71.

³⁰¹ Hirsch et al.

³⁰² Ḥayah Bar-Yitsḥak and Raphael Patai, "Asmodeus," *Encyclopedia of Jewish Folklore and Traditions [Electronic Resource]* (Armonk, N.Y.: M.E. Sharpe, 2013).

them in a box, which he put under his throne to prevent their being used."³⁰³ In other words, the Solomon of tradition was dedicated to preventing potentially dangerous knowledges from falling into the hands of the broader public.

This more thorough examination of the layered and complex tradition of the figure of Solomon offers many avenues for observing his parallels to Möbius. First, Solomon's wisdom and knowledge are attributed to a supernatural force. In the best scenario, this is a wisdom endowed by God; in the worst scenario, it is lent by a demon. In effect taking the place of the biblical Solomon, Möbius is subject to similar divine gifts and demonic punishments. Next, Möbius's effort to hide his scientific discoveries from the broader public parallels Solomon's effort to control the dissemination of the magic books. Just as these spell books provided instrumental insights into the control over the supernatural and therefore also the natural world, so too does Möbius's System of All Possible Invention promise mastery of the natural world—and must therefore be hidden away. Third, insofar as Möbius's Solomon is a demon, Möbius proves incapable of controlling the demon and is ultimately overthrown by it, just as Asmodaeus overthrew Solomon. As Asmodaeus is to Solomon, so is Solomon to Möbius: A demon keeper of demonic secrets. Here, however, it is in cooperation with Dr. Zahnd, the new plenipotentiary of the Spirit Solomon, that Möbius is oppressed.

Dürrenmatt establishes a binary between the physicist's study and the lair of prophet or soothsayer. The deep physical knowledge of the world is presented as if from on high, like the laws delivered onto Moses from the burning bush. Or, more likely, from the apocryphal Solomon

³⁰³ Hirsch and et al., "SOLOMON."

³⁰⁴ There is a broader parallel here in the "enlightenment" process as described by Adorno and Horkheimer. Demons and deities are subjectivized forms of nature. Religion and magic are the forms through which these a rendered subject to human control. Thus, technology as the subjugation of nature is the demystified relationship between magic and demon.

or Faust—via the subjugation and/or employ of a demon. In the figures of Newton and Einstein, as in Möbius's relationship to Solomon, Dürrenmatt places an emphasis on the Welt der Überlieferung via symbolic layering. The visual format of key scientists place the events of Les Cerisiers into a narrative tradition. The inclusion of Solomon does the same, while also transforming the practice of scientific research into the guise of an intensely experienced religious revelation, making the privately experienced, unsocial—even if tremendously consequential—work of the scientist into tangible figures for the stage. Möbius enters the tradition of the scholarly fools like Solomon and Faust who pushed the boundaries of human knowledge and paid dearly for it. Dürrenmatt plays with the tensions between myth and science, inventing a heightened experience of the latter. Scientific knowledge of the physical world seems an archaic knowledge of a divine sphere; the labor and rationality of research is raised—or reduced—to an archaic mode of revelation. As reflected in Dürrenmatt's discussion of the lacking visual cipher of the modern power, one acknowledges that the mythological steps in as a means of rendering comprehensible the world of science. In the process, the divisions between epistemological categories grow ambiguous. In all cases, however, he reminds his audiences of the artificiality of this theatrical representation. The confusion of affronts to human life and violations of divine wisdom, as one sees in Newton's discussion with Voß, is presented as false nonsense. So too, is the parity of divine revelation and scientific research, as seen in the relationship between Möbius and Solomon.

They Play as Conspiracy: A Visual Cipher for an Incomprehensible World System

This move towards the mythological, the conception of the processes of the physical world and the process of researching it through the implementation of the *Welt der Überlieferung*, constitutes only one element of the system Dürrenmatt has put in place for visualizing complex qualities which defy the stage. I would like to conclude this chapter by

noting that the investigations of the physical world are met in this play also by a visual characterization of the economic, social, and political systems of the world as well. Much as the movement of invisible physical particles evades depiction, so do, with time, the same mechanisms of the sociological world, which, not unlike physics, can now no longer be grasped in distinct anecdotal depictions, but are at best approximately conceived in statistical tables. It is a world-system of compound systems: economic, militarist, and political, but also financial, medical, scientific and technological that achieves a depth and complexity imposing enough to, when properly pondered, substitute itself for the inconceivable imposing awe once reserved for Nature or the Divine. The initial process of enlightenment, by which natural phenomena are embodied in subjective beings (i.e. a demonology of the natural world) is repeated. This time, however, it is not an anthropomorphism of nature, but an anthropomorphism of the apparatus—the systems created by mankind (initially to conquer nature), but have themselves become as complex, ineffable and unruly as nature itself.

It is in this respect that *Die Physiker* gains its broadest analogical significance. This is because the intrigues placed on stage, while constituting a compelling plot also provide an allegorical account of the contemporary world system. The inscrutable system is brought to the fore by the figure of the conspiracy.

Fredric Jameson reflects on the productivity of the narrative conspiracy in his Postmodernism essay. He writes:

[...] conspiracy theory (and its garish narrative manifestations) must be seen as a degraded attempt—through the figuration of advanced technology—to think the impossible totality of the contemporary world system. It is therefore in terms of that enormous and threatening, yet only dimly perceivable, other reality of economic and

social institutions that in my opinion the postmodern sublime can alone be adequately theorized.³⁰⁵

In his account here, Jameson is first and foremost concerned with the

'high-tech paranoia,' in which the circuits and networks of some putative global computer hook-up are narratively mobilized by labyrinthine conspiracies of autonomous but deadly interlocking and competing information agencies in a complexity often beyond the capacity of the normal reading mind.³⁰⁶

Placed beside such supercomputers, the intrigues of *Die Physiker*, which take place wholly in analogue, appear somewhat slow and old-fashioned. But although he is primarily concerned with texts about technological complexity, Fredric Jameson's reflection on the conspiratorial configurations can be adapted to the world of Möbius just as effectively. As demonstrated above, Dürrenmatt was intimately concerned about the impossibility of the rendition of a world—even if he never conceived of it in terms of the "decentered global network of the third stage of capital." As one recalls, one of the prime hurdles to contemporary theater was, for Dürrenmatt, that power no longer rested in the individual, as, he conjectured, it did in the days of Lohenstein or even Schiller, but rather in the mechanisms of the anonymized system itself. In this sense, the actions of the staged figures, the interplay of their intentions and their subjection to coincidence (if one indeed chooses to read it as such), should be read as face of this system rendered as a symbol.

Even as *Die Physiker* emphasizes the importance of coincidence in the unfolding of human events, it hints toward an incomprehensible, hidden world of action in which history is formed in a game of wits and intrigue. Möbius goes undercover to hide his discoveries. Dr.

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³⁰⁵ Fredric Jameson, "Postmodernism, or the Cultural Logic of Late Capitalism," *New Left Review*, no. 146 (July 1, 1984): 79–80.

³⁰⁶ Jameson, 79.

³⁰⁷ Jameson, 79.

Zahnd surreptitiously and systematically chloroforms him and gathers his formulae to develop her business empire. Without detection, and unbeknownst to one another, the physicist-agents Jasper Kilton (disguised as Herbert Georg Beutler, disguised as Newton) and Joseph Eisler (Covered by the alias Ernst Heinrich Ernesti, mistaking himself for Einstein) have infiltrated *Les Cerisiers* to recruit Johann Wilhelm Möbius to their respective security agencies. The fate of humankind unfolds through the interaction of opposed plots, everything hidden from the world behind the walls of an insane asylum. It is as if, in a few strokes of the brush, Dürrenmatt has indexed the shadowy complexity of the faintly detectable true levers of power operating parallel to the world of politics in the public realm.

This intrigue is central to the plot itself. In fact, the figure of Dr. Zahnd is fully embedded in a world of power crisscrossed with, but not reducible to, the public or democratic state.

Möbius admitted himself to the asylum with the express intention of escaping the disastrous conglomerate of academy, politics, industry, and military. However, he has marched directly into a crucible of these spheres. Les Cerisiers is in fact a receptacle of figures who, having embodied this power, have later lost their wits. As Dürrenmatt's extended opening background informs the reader, the asylum houses "vertrottelte Aristokraten, arteriosklerotische Politiker—falls sie nicht noch regieren—debile Milionäre, schizophrene Schriftsteller, manisch-depressive Großindustrielle, usw., kurz, die ganze geistig verwirrte Elite des halben Abendlandes." The asylum houses politicians, but also the aristocrats, the representatives of the old power, as well as of soft moral power (the authors—comic self-depreciation on Dürrenmatt's part), captains of

³⁰⁸ cf. Dürrenmatt, Die Physiker. Eine Komödie in zwei Akten, 62.

³⁰⁹ Dürrenmatt, 12. This is confirmed in dialogue on pages 25-6. Dr. Zahnd remarks to Inspector Voß: "Ich sortiere. Die Schriftstellern zu den Schriftstellern, die Großindustriellen zu den Großindustriellen, die Millionärinnen zu den Millionärinnen und die Physiker zu den Physikern."

finance (the millionaires), and the most important amongst the industrialists. It contains the "entire mentally confused elite of half the Occident," and as such the play implies in addition to the presence of top-tier physicists the presence not only of those who would seem to hold the keys to the political and economic systems and physics also the leaders of other fields as well. Dr. Zahnd is both heir to and producer of this type of power. She finances her asylum through the deaths of rich relatives, but also through the deaths of rich patients, of whom she is inevitably the sole heir. 310 Her own family is marked by the proximity to power. The stage is decorated with a portrait of her father, Geheimrat August von Zahnd, marking proximity to economic strength. And Dr. Zahnd is likewise closely related to a Chancellor Joachim von Zahnd (political power) and General Leonidas von Zahnd (military power).³¹¹ In her heritage, then, one sees the confluence of political, economic and military systems, while she—regardless of how humbly she may present herself—stands for a deep insight into the systems of the human psyche, indexing not only the medical system—by which the biological process of the human being becomes subject to an artificially conceived system—but also the psychological, with its implications for the intimate relief, or the control, of both the mass and the individual.

Each of these systems, now hybrid with a complex knowledge of science, contains deep knowledge of the function of the world, but they do not function independently. They play off of one another. Just as the industrialist Geheimrat von Zahnd "als Wirtschaftsführer" achieved insights into "menschliche Abgründe [, die den] Psychiatern auf ewig verschlossen sind," 312

³¹⁰ cf. Dürrenmatt, 25.

³¹¹ cf. Dürrenmatt, 25, 65.

³¹² Dürrenmatt, 22.

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Mathilde von Zahnd's psychological practice leads her back into the realms of science, technology, and industry.

Les Cerisiers becomes ground zero of conspiratorial action. In one sense, the agreement reached by Kilton, Eisler and Möbius constitutes the primary conspiracy. This moment of confederation, a comic foil to the ancient Helvetian confederation of Uri, Schwyz and Unterwalden, is taken for the protection of mankind. Kilton and Eisler each represent conspiracies, each taking their initial impetus from the directives of their respective secret services. The greatest conspirator of all, however, is Dr. Zahnd. In a moment of ambivalence, where it is unclear whether she truly believes in Solomon (though the audience is left to assume that she does), Dr. Zahnd announces to her newly imprisoned physicists her plans to achieve world domination through the writings of Möbius and with the blessings of Solomon. Year after year, she anaesthetized Möbius and photocopied his records, and through his insights she silently constructed a massive industrial apparatus with only two ends. Firstly, the application of Möbius's thought in technological production.

Frl. Doktor: Ich tat still meine Pflicht. Ich gründete Riesenwerke, erstand eine Fabrik um die andere und baute einen mächtigen Trust auf. Ich werde das System aller möglichen Erfindungen auswerten, Johann Wilhelm Möbius. 313

The precise content of these "all possible inventions" remain hidden to the audience. Because exact predictions would have dated the play, one can perhaps thank this in-part for the Die Physiker's continued contemporaneity. Regardless, one can be certain of Dr. Zahnd's anticipated achievements through Möbius's insight and with Solomon's good will. Secondly, Zahnd's gambit aims at world domination. "Solomon hat durch euch gedacht, durch euch gehandelt" she explains to Möbius, but, as she announces:

³¹³ Dürrenmatt, 68.

Ich aber übernehme seine Macht. [...] Unfruchtbar, nur noch zur Nächstenliebe geeignet. Da erbarmte sich Solomon meiner. Er, der tausend Weiber besitzt, wählte mich aus. Nun werde ich mächtiger sein als meine Väter. Mein Trust wird herrschen, die Länder, die Kontinente erobern, das Sonnensystem ausbeuten, nach dem Andromedanebel fahren. Die Rechnung ist aufgegangen. 314

As Solomon's plenipotentiary, she anticipates absolute power, a conquest of both the world and the solar system. It is difficult to confirm whether Dr. Zahnd sees her selection as a result of her dedication to "Nächstenliebe," or perhaps because of the poverty of her personal life, but in any case her selection depended also on her fearless stance toward the scientific progress recorded by Möbius and ostensibly related by Solomon.

Despite the apparent individuality of her action, against one could contend that a "conspiracy of one" is a contradiction in terms, it turns out, ultimately, that she is surrounded by cooperative elements (without which such economic enterprise would have been impossible).

FRL. DOKTOR: Was euch umgibt, sind nicht mehr die Mauern einer Anstalt. Dieses Haus ist die Schatzkammer meines Trusts. Es umschließt drei Physiker, die allein außer mir die Wahrheit wissen. Was euch in Bann hält, sind keine Irrenwärter: Sievers ist der Chef meiner Werkpolizei.³¹⁵

It is true, only the physicists know that she is Solomon's acolyte, and perhaps, depending on how one chooses to interpret the "Wahrheit" of which she speaks. But she does not work without aid. The male nurses who now control the physicists in the old wing of Les Cerisiers are not nurses at all, but factory police.

Dr. Zahnd has thus made a movement from the psychological to the financial and industrial, and anticipates through this movement a conclusion in a space of absolute control. The important point here, however, is a conceivable aesthetic response to such complexity—a feeling of being both overwhelmed and stripped of agency, and possibly a type of awe. Because

³¹⁴ Dürrenmatt, 70.

³¹⁵ Dürrenmatt, 69.

it is in the complexity of human-designed systems that she appears powerful. It is in the complexity of the human world that Möbius is meant to be overwhelmed and stripped of his agency. If the knowledge she is exploiting, as murky as it may appear to the audience, nonetheless recreates the horror of the monopoly on atomic weapons, it serves as an allegory of the absolute agency of the system, mythologized in Zahnd and her ties to politics, military and finance, against the impotence of Möbius.

Die Physiker in the Tradition of the Physicist Drama

This chapter outlines the significance of *Die Welt der Überlieferung* and symbolic layering to Die Physiker in three steps. First, the figures of Newton and Einstein introduce the technique of multiply layered identities in single figures to the form of the play as a whole. Without erasing what one might call their 'primary identities,' Eisler and Kilton take the identities of Ernesti and Beutler and appear on stage in the visual guise of legendary historical physicists Newton and Einstein, symbolic roles. The fact that they are acting means that this transformation is self-referential to the theater. However, it also indexes nested forms of meaning-making where the stage, allegedly like Newton's scientific pursuits, indexes a higher (in this case archetypal) order of existence. Second, this higher order then appears again in the figure of Solomon. Without immediately embodying him, as Eisler and Kilton embody Newton and Einstein, Möbius nonetheless transforms his scientific practice into a pantomime of Solomon's Faustian pursuit of knowledge. Rendering the process of knowledge production in an alternatively prophetic and demonological guise might index the mixed blessing of scientific advancement, which inevitably brings both gifts and consequences. But this transformation also alters the undramatic task of number-crunching (here still presented as an individual, rather than the more likely team effort), into a dramatic concept more appropriate for the stage: the struggle between man and god. Dürrenmatt then takes this nesting of identities one step further. His

aesthetic representations reach the point of a novel process of mythologization in the figure of Dr. Mathilde von Zahnd. Although she appears on stage as a stable individual, endowed with agency (indeed more agency than any other figure), she is simply the outward expression given to the complex, contradictory, and difficultly parsed forces of the contemporary world system. Dürrenmatt has transformed Solomon, a servant of the deity, into the deity himself. In much the same way, he has transformed Zahnd into a deity: the embodied, subjectivized anthropomorphic manifestation of the human world system.

How does this line up against the other atomic plays? Previous studies have already noted that Dürrenmatt's Die Physiker does not share the same optimism as Brecht's Galileo because it lacks the conviction in the influence of single human beings. It reflects a similar hopelessness to that displayed in Frisch's *Die Chinesische Mauer*, which suggested that human beings were too subject to the determinism of history and to their bellicose natures to overcome the new dangers presented by the atomic era. More importantly for this study, however, it reconfigures the value of religion in addressing agency in the contemporary, technological world by rejecting the notion of belief. The mythologizing process pursued by Möbius parodies the transcendent religious authority that motivates the protagonists of previous physicist dramas and revitalizes their existence. Where previous authors placed value in religious reawakening for rediscovering that which is uniquely human in a space of material determinacy, Dürrenmatt shifts the focus, depicting the religious moment of previous physicist dramas as what it is: a stage show, perhaps aesthetically compelling, but nonetheless artificial. However, his dramaturgy also returns to the arguably foundational mythological impulse at the origin of these religious beliefs: the transformation of a world which one cannot comprehend into a world which one can comprehend. He rejects the notion that this transformation could somehow be empowering.

In the plays to be discussed in the following chapter, this reframing of the atomic bomb will continue. The role of religion, without disappearing, will be reduced further, and in its place one will encounter instead relatively sober attempts to describe the political world of the atomic bomb—a world in which the democratic freedoms held in so high regard by the United States collapse under the pressures of the apparatus and of crisis politics.

CHAPTER FOUR: "POLITISCHE EXEMPEL." THE ATOMIC STATE IN ROLF SCHNEIDER'S *PROZESS RICHARD WAVERLY* AND HEINAR KIPPHARDT'S *IN DER* SACHE J. ROBERT OPPENHEIMER.

As Matthias Uecker has argued, the moral prominence claimed by the literary class in the 1950s had claimed was closely dependent on its suspicion of organized politics. This, however, also condemned literary production to political ineffectiveness. In the early 1960s, the moral leadership of the literary class would gradually surrender prominence to the more decisively political impulses of sociological and historical claims. ³¹⁶ It was seen that this relationship to factuality and analysis could be of greater value in the quandaries of the present day than the primarily philosophical, moral musings of earlier Zeitstücke like Zuckmayer's *Das kalte Licht*.

While it had been the prerogative of many West-German directors to resist outright politicization at a moment where the theater saw benefit in claiming a historical affinity to the spirit in opposition to a crass materialism of politics, the end of the 1950s saw the gradual movement of the theater out of its dedication to philosophical abstraction and back toward political activity. At the end of Alfred Gong's *Zetdam*, Bubi, the protagonist, demands that artists cease to behave as though art could present a serious opposition to the destructive forces of the world—the economic heavyweights and the masters of scientific and technological advancement that supported them. He insists instead that artists understand the necessity of facing these

³¹⁶ According to Matthias Uecker, in the 1950s there was a prominent belief that "Opposition [...] sich in literarischer und ästhetischer Form äußern [sollte] und damit in deutlicher Distanz zum politischen Diskurs" but this tendency began to change in the late 1950s and the 1960s. (Matthias Uecker, "Aufrufe, Bekenntnisse, Analysen: Zur Politisierung der Westdeutschen Literatur in den sechziger Jahren," in *Counter-Cultures in Germany and Central Europe: From Sturm und Drang to Baader-Meinhof*, ed. Steve Giles and Maike Oergel (Bern: Lang, 2003), 274.)

enemies with their own means: "Mit Unverfrorenheit, Heuchelei, Rücksichtlosigkeit. Und vor allem mit ihrer Technik." Dürrenmatt, too, in *Die Physiker*, rearticulated the spiritual resistance put on display in earlier physicist dramas to depict it as both imaginary and ineffectual in the face of a compounding and incomprehensible world system. Though these plays were both written outside of Germany, they arguably reflected the changing tendencies that also found their way to the German stage. In this section, Rolf Schneider's *Prozess Richard Waverly*, a socialist realist radio play, and Heinar Kipphardt's *In der Sache J. Robert Oppenheimer* both reflect such a drive to place aesthetic and philosophical concerns behind the need for direct commentary on the Cold War.

These plays of the early 1960s reflect the political aesthetics of the era through material intimately related to the atomic bomb. Nonetheless, neither socialist realism nor the documentary play was a unique or new development. The documentary play, with its explicit dependence on historical documentary materials, had already been pioneered by Piscator and his colleagues in the late 1920s and early 1930s.³¹⁸ In either case, plays of these categories are arguably discontent with mere philosophical quandaries, of which considerations on the possibility of agency in an allegedly materially (and ultimately technologically) determined world falls.

In their turn toward a professed "reality" through an attention to documentary materials and contemporary public events and conflicts, these two plays propose various theories about the developments of liberal freedoms in the world more generally. The case of Richard Waverly, just as the case of J. Robert Oppenheimer, is treated as evidence of broader developments taking place in the West, and broader developments in the world. Their protagonists are subject to a

317 Gong, "Zetdam: Ein Satyrspiel," 68.

³¹⁸ cf. Brian Barton, *Das Dokumentartheater*, Realien zur Literatur 232 (Stuttgart: J.B. Metzler, 1987), 29 ff.

political configuration that wishes to strip them of their agency. Unlike the technological determinism of previous physicist dramas, however, these apparatuses are no longer presented as simply given results of a historical development. They are, rather, the active projects of a political class dedicated to disassembling popular and individual human agency. The atomic bomb and the nuclear arms race are not necessarily the cause of or even a prerequisite of their project of totalizing power, but these threats establish a crisis situation that accelerates it nonetheless.

Thanks to the possibility of human extinction, nuclear genocide, nuclear accidents, or even the possible dangers incurred by increased atmospheric radiation, the prevalence of the arms race creates a crisis—or the pretense of a crisis—that justify the erosion of liberal freedoms in an ostensibly democratic state. For Schneider and Kipphardt, who present their concerns through the lens of drama, these changes must be embodied in the experience of single individuals and the equally embodied human representatives of the pressures that surround them. Just as the doctrine of atomic deterrence is aimed at the solidification of the geopolitical status quo, the internal structures of the state, these plays suggest, must freeze any elements which could redefine the doctrine of deterrence.³¹⁹ This places limits on the freedom of expression—

anti-constitutional influence on the institutions of that state. In her recent work on the relationship between the philosophy of the liberal state and the nuclear apparatus, Elaine Scarry has also described in-detail the tensions between the nuclear state and liberal democratic principles at the most fundamental levels of American governmental structure. Above all, the existence of nuclear launch codes left in the hands of a single individual, she points out, renders void the constitutional principle (1) by which the right to declare war is reserved for the congress, and (2) the second amendment, the right to bear arms. Each of these clauses are intended to ensure that a consensus is reached in acts of war and occupation, but the treatment of the nuclear weapons, which place the decision to declare war in the hands of a single individual, and the existence of the nuclear arsenal, which renders absurd the notion of a military underpinned by a citizenry or of a citizenry capable of opposing occupation by its own state. The loss of these liberal principles—ultimately functions of the population's capacity to keep its government in check—is underpinned by demands, on the part of security professionals, for speed and expediency in crisis situations. (cf. Scarry, *Thermonuclear Monarchy*, 31 ff.)

The damage rendered to democratic principle by the atomic bomb is likewise implied in more abstract theoretical works. Within the framework of his broader discussions of simulacra in the 1980s, for instance, Baudrillard cast suspicion upon the doctrine of nuclear deterrence, claiming that an "atomic clash" had only been

but possibly also on the freedom of thought. And it also requires a system of surveillance and assessment of the population, and is targeted toward the production of obedient citizens.³²⁰

This is at least the common concern underlying both Rolf Schneider's 1961/64 trial play, *Prozess Richard Waverly* and Heinar Kipphardt's *In der Sache J. Robert Oppenheimer* (1964). Structurally, both plays employ the trial drama form to investigate with greater precision the interests of the critic of the nuclear program, as well as mechanisms of the state as it attempts to eliminate this threat. Both trials feature an "accused" who might be condoned as a perpetrator of

possible at the very beginning of the Cold War, "when one still confused the nuclear apparatus with conventional war." (Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994), 33.) In the meantime, the deterrence apparatus served instead as "a universal security system, a universal lockup and control system" that, rather than deterring nuclear conflict, was concerned with "the much greater possibility of any real event, anything that would be an event in the general system and upset its balance." (Baudrillard, 33.) In other words, the system of nuclear parity and mutually assured destruction, as well as the specter of a possible future conflict, were less targeted at the ostensible enemy in either ideological bloc, than at anything that could disrupt the status quo. Hardt and Negri, writing some thirty years later, mirror this notion, noting that the cold war reimagined the hitherto generally accepted definition of just war. The doctrine of containment meant that just war was "no longer a moral justification for temporally limited acts of violence of destruction, as it was traditionally, but rather for maintaining a permanent stasis of global order." (Michael Hardt and Antonio Negri, *Multitude: War and Democracy in the Age of Empire* (New York: Penguin, 2004), 24.) Arguably, however, the maintenance of this system comes at a cost the internal structures of the state pursuing it.

Arguably, the atomic bomb, as a weapon for mass murder, is most appropriately classified as an artefact of sovereign power. Nevertheless, the plays presented in this chapter suggest that it is ultimately employed also as the motivating moment in projects of disciplinary and biopolitical outlooks. The bomb emerges from, is deployed through, and as argued here, increasingly contributes to a system of strictest disciplinarity. I.e., it is the product of a cautiously hierarchical and surveilled scientific organization. Like this organization, its deployment takes place in a highly-structured and economized military organization. The atomic bomb and the weapons developed thereafter establish an atmosphere of crisis which, if left unchecked, contribute to an already progressing system of societal standardization that, either disallows dissent or render it difficult through an absolutized discourse on survival. This undermines public discussion of national values and threaten the culture of discussion that ostensibly underpins democracy.

³²⁰ The tripartite Foucauldian system of power technologies, sovereign, disciplinary, and biopolitical power, courses through these plays. They remain in the background of this analysis even as they go without explicit mention in the body of the text. I understand these technologies, briefly stated, as such: (1) Sovereign power, which concerns the power to kill and let live, but also includes the visual projection of this power for the demand of obedience. (2) Disciplinary power, which is concerned with hierarchical and efficient systems, as well as subject production through processes of surveillance and personalized training at the level of individual bodies and minds. (3) Biopolitical power, which conceives of a population as if it were a single organism, and is concerned with the delineation of the outer limits of this population, as well as with the broad (rather than individually administered) regulatory incentives and disincentives that encourage this population to develop according to a specified norm. (cf. for example the final chapter of Michel Foucault, "Society Must Be Defended": Lectures at the Collège de France 1975 -1976, trans. David Macey (New York: Picador, 1997).

nuclear violence. However, they are not sanctioned for their involvement in nuclear violence, but for their later opposition to it. This results in a dynamic by which the former perpetrator—previously working with the state directly—is now persecuted by that state following skepticism of the nuclear project. The authors display, alternatively, the horror of nuclear war and radiation poisoning while simultaneously reconstructing the mechanisms by which the state attempts to impose unified support for its projects. In *Prozess Richard Waverly* the state pathologizes opposition and reduces all criticism to a sign of communist infiltration. In Kipphardt's *In der Sache J. Robert Oppenheimer*, the audience faces the possibility of an expansive surveillance state, which aims to map the identity and thoughts of its subjects to their most intimate core. While the scientist is the first subject of surveillance, the play poses the possibility that such oversight becomes ubiquitous. In both plays, the urgency of maximized security in the nuclear world underpins the state's efforts for control. In what follows, I will first discuss the structure and goals of the trial play before moving on to discuss, respectively, Schneider and Kipphardt's works.

The Trial Play

Already in the Weimar Republic the theater had taken the trial as material in the so-called *Justizdramen*, a form of Zeitstück. Features included Bruckner's *Das Verbrechen* (1929), Mühsam's *Sacco und Vanzetti* (1929), and Rehfisch and Herzog's *Die Affäre Dreyfus* (1930). While these works may not have aspired to documentary status, they nonetheless often worked with recent materials and posed to their audiences critical questions about current judicial controversies.³²¹ They represent the antecedents to the trial plays discussed in this chapter

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³²¹ In her introduction to the *documentary trial play* genre in American theater, Jacqueline O'Connor outlines a series of the functions that trial plays perform. The documentary trial play teaches viewers about the history of a significant a court case that had an impact on national culture and the future practice of law. However, it does not merely educate an audience about objectively accessible material. The repetition and display of the significant trial

especially insofar as they presented the justice system as—to borrow words from Brian Barton—"reformbedürftig" and even "autoritär und reaktionär."³²²

Following the Second World War, the trial play was closely associated with questions of agency and responsibility in the wake of National Socialism.³²³ Major trials against Nazi criminals eventually spawned theatrical versions in Germany. Peter Weiss's *Die Ermittlung* (1965), Rolf Schneider's *prozeß in nürnburg* (1968) and Heinar Kipphardt's *Bruder Eichmann* (1983) depict, respectively, the 1964 Frankfurter Auschwitz Prozesse, the Nuremburg Trials, and

serves as a form of "history-making". It contributes to the mode by which legal events are remembered and therefore also affects these collective memory's assessment of these events and is itself an artifact and perpetuator of the trial's sociocultural, if not also political effects. The trial play may also bring the audience into (more) intimate contact with the protagonists of a court case that would have been possible through mere newspaper or mass-media reportage on the events, bringing to light the human and emotional side of a trial. The adversarial nature of the trial means that the trial might have heteroglossic tendencies, displaying a variety of viewpoints on the trial, though various viewpoints can be manipulated or exaggerated. All these effects can be considered true, likewise, of Kipphardt and Schneider's works, whether the reader chooses to view this form of history making as educational or merely propagandistic. Finally, and most importantly for *Richard Waverly* and *J. Robert Oppenheimer*, however, the trial play demonstrates the contradictions, prejudices and inadequacies of the law index the possibility of a higher, or, at the very least, alternative, justice, yet unachieved by the state. The trial play thus expresses its protest against inadequacies of the justice system and calls, either explicitly or by implication, for a more just political and legal world. (See: Jacqueline O'Connor, *Documentary Trial Plays in Contemporary American Theater* (Carbondale and Edwardsville: Southern Illinois University Press, 2013), 1–21.)

³²² Barton, *Das Dokumentartheater*, 36.

³²³ The end of the 1950s and the beginning of the 1960s saw the emergence of perhaps the most important string of court cases since the Nuremburg trials at the end of World War II. Nearly a generation later, the new geopolitical configuration of the world—intricately bound in the consequences of World War II—would likewise be articulated in the public display of the court case. In no other context was this more apparent than the effects of the trial against Adolf Eichmann in Israel, televised throughout the world. In Eichmann in Jerusalem, Hannah Arendt notes that news of the trial's advent helped local West German courts overcome their hesitation to prosecute known National Socialist organizers of the final solution. "For the first time since the close of the war," she writes, "German newspapers were full of reports on trials of Nazi criminals, all of them mass murderers." (Hannah Arendt, Eichmann in Jerusalem: A Report on the Banality of Evil (New York, N.Y.: Penguin Books, 2006), 16.) In East Germany, heavily publicized trials were also common; show trials were televised starting in 1957, with a series of cases against alleged western spies and so-called "human traffickers." Such trials continued into the 60s. They reached a high point also in 1961, where they provided what has been called propagandistic and moral justification for the construction of the Berlin Wall. In 1963, East Germany televised a trial in absentia against Hans Globke, the West German Foreign Minister and Adenauer's Chief of Staff who, among other things, had written the Nuremburg laws in 1936. (Henning Wrage, "Der Staatsanwalt hatte das Wort. Zur Repräsentation des Gerichts im Fernsehen der DDR," in Inszenierungen des Rechts: Schauprozesse, Medienprozesse und Prozessfilme in der DDR, ed. Klaus Marxen and Annette Weinke (Berlin: BWV, Berliner Wiss,-Verl., 2006), 185-86.) Despite the juridical inadequacies of these trials—Arendt notes the reluctance of the German state to adequate punish Nazis, just as others have continually noted the propagandistic purposes of East German trials—the courts marked generationally definitive events of the deepening Cold War and a new stage in the German reception of the Holocaust.

the interrogation of Adolf Eichmann prior to his 1961 trial in Israel. While their production spans several decades, they all return to a central question of the German literary field pertaining to the Second World War. From whence come insights of guilt and responsibility? In a slightly altered phrasing asks, how and when will those responsible for crimes against humanity be punished? How and when will they repent? Most significantly, however, they assign responsibility retroactively, identifying the deed with the doer. For Hannah Arendt, writing in the opening to her collection on the Eichmann trial, the specificity of the *action* and its establishment—alongside the potential architectural parallels, oratory display, and further dramatic pomp—is ultimately basis for the parallel between the court room and the stage:

A trial resembles a play in that both begin and end with the doer, not with the victim. A show trial needs even more urgently than an ordinary trial a limited and well-defined outline of what was done and how it was done. In the center of a trial can only be the one who did—in this respect, he is like the hero in the play—and if he suffers, he must suffer for what he has done, not for what he has caused others to suffer.³²⁴

The trial, like the play, constructs a plot, and through this plot establishes—at least in Arendt's understanding, the guilt and responsibility of a 'protagonist.' The starting point of the theater and the trial, and its ending point, is the attribution of agency to the figure in question. Agency is fundamental in ascertaining guilt and responsibility. Historical quandaries of predetermination (in the religious sense) and later nineteenth-century biological or social determinism already struggle with the human ability to decide for oneself. The Eichmann trial emerged in a climate of the 20th century's discomfort with agency in the bureaucratic, fordized, and/or totalitarian state. It is the ratio of resistance and complicity that forms the red thread through almost all 1950s physicist dramas and that allows them never to stray too far from the concepts plaguing authors

³²⁴ Arendt, *Eichmann in Jerusalem*, 8. Arendt implies that, because the Eichmann trial placed more emphasis on the sufferings of the wronged than the actions of the accused, it comparison to the play is inadequate (as is its credentials as a trial).

on National Socialist crimes. If anything, the trial, and the trial play especially, could be expected in this context to act as a distillation of this process—plotting, establishment of action, assignation of responsibility.

Schneider's *Prozess Richard Waverly* and Heinar Kipphardt's *In der Sache J. Robert Oppenheimer* foreground critiques of U.S. nuclear policy and the politicization of the judiciary, but they also very clearly engage in the debate on individual responsibility. They depict the momentous act of the individual in the struggle to reestablish his own discourse, and therefore personal agency and responsibility in the face not merely of a bureaucratic or disciplinary age that undermines the individual ability to be an agent, but also, specifically, the strategies of the state to enforce the loss of agency and responsibility amongst critical citizenry (in the case of *Richard Waverly*), or to destroy the concept of action as the basis for political responsibility as a whole. The philosopher Günther Anders, reflecting on the plight of the Hiroshima pilot Claude Eatherly, provides a statement that helps outline the treatment of agency in both plays:

Ordinarily the apparatus divests everybody—not even excluding those who seem to decide upon its use—of responsibility; so much so that finally there is no one left to answer for its doings, and far and near there is nothing left but the charred land of the miserable and the radiantly good conscience of the stupid. By taking upon himself the guilt for the act of which he had only been a part, Eatherly is doing the exact opposite: for his is the attempt to keep conscience alive in the Age of the Apparatus. And as conscience, by its very nature, is criticism; and criticism, by its very nature, is non-conformistic, he is being told: 'Conscience off limits.' 325

Eatherly—as well as, one might mention, his fictional counterpart, Waverly—are faced with structures that actively attempt to drain them of their ability to think and act, and to render them ineffectual when they do. As discussed below, this state seeks to re-brand responsibility and

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³²⁵ Günther Anders and Claude Eatherly, *Burning Conscience; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders.*, [1st American ed.] (New York: Monthly Review Press, 1962), 109–10. Note that while the English title of this work leaves the umlaut off of Günther Anders's name, this dissertation will maintain the German spelling elsewhere.

moral reflection as insanity and treachery. Such rebranding is founded already in the basis of 'trials' depicted: They do not take place to establish guilt or responsibility for a crime, but rather to strip the protagonists of the capacity for guilt or responsibility.

It is in this respect that the most pronounced philosophical shift takes place within the atomic plays. The crisis of agency and will was also a problem in all the plays examined thus far, but previously it appeared as a philosophical problem (e.g. can will be reestablished in a world where we are subject to strict physical laws, or a world so complex that we cannot adequately predict the outcomes of our actions?). However crippling the situation might have been, it was still presented as a merely objectively present conundrum, the product of an epoch rather than the project actively designed by a hidden or visible architect. In the trial plays to be examined in this section, however, one sees the government take up the process of and products of deindividualization, the dissolution of agency and responsibility, and promote it as a technology of power; the active denial or destruction of its critics' agency as a means of control. The final effect is a redoubling of the trial's inversion. Not only does the trial display the crimes and injustices of the prosecution. It also becomes the opportunity for the protagonist to reclaim agency in a system that would prefer to dissolve it.

As this happens, alongside Günther Weisenborn's *Göttinger Kantate* (1957), these plays are perhaps also the most explicit attempts amongst the atomic plays to not only employ the atomic bomb as material, but to most explicitly intervene in political discourse on the atomic bomb. They present direct political claims about U.S. motivations in the arms race and an indictment of the U.S. judiciary and propagandistic policy and as such, take present a clear political tendency. This partisanship need not surprise anyone, given the authors' ideological proximity to East Germany, where Schneider still worked and which Kipphardt had only recently

left. However, as these plays relate to previous atomic dramas, formal considerations are of particular interest. The format of the trial opens space for the careful analysis of the conscious objector to nuclear policy and provides him with a platform for his opposition. In the process, however, the atomic play resolutely sheds its pretentions of dramatic form. The authors forfeit embodied human action in its entirety in favor of a more thoroughly deliberative form. While tension is maintained through the conflict between prosecution and defense, the action of the drama is replaced by the speech of the trial. The end of the physicist drama's development becomes apparent in these works: The more directly political dramatists attempt to appear in their works, the less possible it is to embody action on stage.

State Revocation of Agency: Rolf Schneider's Prozess Richard Waverly

At the end of the 1950s, as the Cold War arms race was building towards its first crescendo (reached in the Cuba Crisis, the construction of the Berlin Wall, and the Soviet test of "Tsar Bomba"), international attention began to mount around the unique experience of Claude Eatherly, a member of the team that conducted the mission to bomb Hiroshima on August 6th, 1945. Eatherly was the pilot of the reconnaissance mission that gave the "go-ahead" for the Enola Gay, the plane tasked with dropping the first atomic warhead employed against an enemy target in history. Like the rest of the servicemen on his team, he received a hero's welcome home. Rather than enjoying his small cut of fame, however, Eatherly suffered mounting mental issues and was discharged from the military in 1947.³²⁶ In the years that followed, his life and marriage crumbled under alcohol consumption and gambling, and his psychological state collapsed. Eatherly turned toward petty criminality: "robbery, burglary and writing bad checks,"

³²⁶ Terri Jo Ryan, "Brazos Past: Strange Case of Atomic Bomb, Veteran, Waco," *Waco Tribune-Herald*, August 4, 2012, http://www.wacotrib.com/news/waco_history/brazos-past-strange-case-of-atomic-bomb-veteran-waco/article 6ca62384-c473-5ce7-95c5-6374c4675c27.html.

and he attempted suicide at least twice.³²⁷ Soon he found himself in and out of the Waco Veteran Association Hospital's psychiatric ward. Eatherly's case was unique in terms of his explanation for his psychosis. His anxieties, his neurosis—it all emerged from an intense sensation of guilt for his role in what he saw as the murder of 80,000 inhabitants of Hiroshima. This drew attention not only in his own locality of Dallas and Waco, Texas, but around the United States and in Europe as well, where newspapers as substantial as *Der Spiegel* reported on it.³²⁸ Waverly was heralded by many activists as a rare "guilty conscience" of the nuclear age. With the encouragement of Austrian philosopher and anti-atomic activist Günther Anders, who initiated contact with Eatherly, the former pilot resolved to take his crusade against atomic armament public through letters of solidarity to the citizens of Japan and a planned personal autobiography, which, however, never materialized.³²⁹ Eatherly won a certain amount of prominence and perhaps even made some progress toward resolving his troubled conscience on the way. But

³²⁷ Ryan.

³²⁸ For example, cf. "EATHERLY-BRIEFE: Dreyfus in Waco," *Der Spiegel*, September 13, 1961, http://www.spiegel.de/spiegel/print/d-43366373.html.

³²⁹ Off Limits für das Gewissen is an epistolary exchange between Anders and Eatherly. It opens with Anders's first letter to Eatherly, dated June 3rd, 1959, in which Anders, who has read about Eatherly in European newspapers, provides an initial philosophical interpretation of Eatherly's status, describes briefly his work and travel in Japan generally and Hiroshima specifically, assures Eatherly that he is not hated by the people of Hiroshima, who view him also as a victim of the bomb, and encourages Eatherly to send the city a message of greeting and peace to coincide with the fifteen-year commemoration of the day of the bombing. Eatherly's positive response leads to a gradual, yet sometimes impassioned exchange in which Anders's attempts to provide Eatherly advice for the pilot's antinuclear activism (who to partner with, how to go about composing a biography, and so forth)—which Eatherly appears to readily accept—as well as consolation and support as Eatherly fights his sometimes ambiguously involuntary, sometimes explicitly forced internment in the Waco, Texas, veterans' mental facility. At moments the document evokes notes of the psychological thriller: How far will the Air Force go with suppress the voice of a critical veteran? How is Eatherly's treatment bound to higher political processes? Which letters will be delivered? Can Eatherly evade reinternment when he escapes the mental facility? At other moments Anders's well-meaning concern for his friend appears somewhat overbearing. But ultimately, in addition to providing a glance into the experience of the Hiroshima pilot himself, the work provides a vivid illustration of one of Anders's key philosophical concepts of the midcentury: what he calls "guiltless guilt": Guilt born of the structures of state and industrial organization. For the American edition, cf. Anders and Eatherly, Burning Conscience; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders.

Eatherly's progress was repeatedly halted. Having been in the custody of his older brother, Joe Eatherly, since 1957, he was committed to the VA in Waco once more in 1960. In a 1961 competency trial, "four psychiatrists testified that, though intelligent and personable, Claude Eatherly suffered from schizophrenia and had delusions of leading a great disarmament-oriented peace movement—all stemming from guilt around his participating in the bombing of Hiroshima." Though deemed capable of managing his own affairs, Waverly was committed once more before he escaped for good.

In 1961 Rolf Schneider wrote *Prozess Richard Waverly* on the basis of a newspaper article about the Eatherly hearing. Schneider, born in Chemnitz in 1931, had studied literature in Halle and worked in the mid-1950s as a reader with the Aufbau-Verlag in East Berlin. He became a prolific author of radio plays in the 1960s and despite remaining an often uncomfortable member of the East German literary establishment until the late 70s, received the Western literary prize *Hörspielpreis der Kriegsblinden* in 1967. While Schneider's autobiography lacks explicit reference to nuclear politics and does not address his authorship of *Prozess Richard Waverly* at all, he does note the influence, alongside Borchert's *Draußen vor der Tür* and the works of Günther Eich, of Friedrich Dürrenmatt's *Im Zeichen der Venus* (published under the title *Das Unternehmen der Wega*) on his literary production. Dürrenmatt's science-fictional account of a starship captain tasked with launching a nuclear

³³⁰ Ryan, "Brazos Past: Strange Case of Atomic Bomb, Veteran, Waco."

³³¹ Between his work as a publicist and as an author, Schneider came into contact with a variety of members of the East and West German literary scene, including Georg Lukács, Anna Seghers and Christa Wolf and in 1965 was one of the few East German authors to attend, during a period of cultural detente, a meeting of the Gruppe 47, where he read a work before an audience that included Marcel Reich-Ranicki, Günther Grass, Uwe Johnson and und Peter Weiss. (Rolf Schneider, *Schonzeiten: ein Leben in Deutschland* (Berlin: be.bra, 2013), 100–101.)

³³² Schneider, 116–18.

attack on a Venusian colony was freely invented. In contrast, *Prozess Richard Waverly*, which likewise relates the story of the captain of a nuclear attack, borrows material from real events. This fictionalization of the competency trial that sought to establish Claude Eatherly's mental illness and return him to the Waco Veterans' Association Hospital was originally written for radio and broadcast in 1961, the play was re-written twice more, including, in 1964, as a stage version. ³³³

Prozess Richard Waverly is structured as if to depict a truncated form of the entire competency trial. As the state attorney proclaims, "Dieses Gericht wird damit zugleich endgültig zu befinden haben, ob die Entscheidung des Military Court, der Angeklagte sei geisteskrank, zu Recht bestand." Witnesses for the prosecution include a former general, a chaplain, a police commissioner, members of Waverly's family, and a state psychologist. These take the bench, questioned, in turn, by the state attorney and the defense attorney, generally testifying to confirm the legitimacy of the atomic bombing of Hiroshima and Nagasaki as well as their impressions of Waverly's insanity. Anderson, the defense counsel, draws out the inadequacies in their testimony. Later, he brings a psychologist with an alternative assessment of Waverly's health, a historian, and even Waverly himself to the stand. The play reaches a climax while Anderson's witnesses are on the stand. Anderson has argued adeptly and undermined the claims made by the

³³³ Three versions of Schneider's *Prozess Richard Waverly* are available. The earliest is the audio play script discussed here: Rolf Schneider, "Prozess Richard Waverly," in *Hörspiele* 2, ed. Staatliche Rundfunkkomitee der Deutschen Demokratischen Republik (Berlin: Henschel, 1962). This study will also draw on the (unperformed) stage version, published by Henschel in 1970: Rolf Schneider, "Prozeß Richard Waverly," in *Stücke* (Berlin: Henschel, 1970), 47–106. Additionally, there is a third version from the early sixties, which exists only as a photocopied manuscript. It will be excluded from this discussion due to space constraints, but largely resembles the original version, with the addition of a "mulatto singer" who opens the play in front of the courthouse: Rolf Schneider, *Prozess Richard Waverly: sieben Szenen* (Berlin: Henschelverl. Kunst und Ges., 1963). I have been unable to acquire a recording of the audio play.

³³⁴ Schneider, "Prozess Richard Waverly (Hörspiel Version)," 113.

state attorney's witnesses. But in a sweeping and vehement exhortation, the state attorney casts Anderson and his psychologist as pro-Communist agitators. The trial closes when the witnesses read their decision: Waverly is mentally ill and will be involuntarily committed to the hospital's psychological ward.

The play, especially in its earliest version, corresponds to the standards of socialist realism as defined by Schneider himself in his bibliography, by which a work is realist because it leans on "[die] Mitteln von Biedermeier und Naturalismus" and socialist because it seeks, "den Klassenfeind zu schmähen und die eigenen Zustände zu bejubeln."³³⁵ In this regard, Schneider is not concerned with the specific formal implication of the terms Biedermeier and Naturalism. Rather than the specific generic definitions of styles, he is vaguely indexing the socialist realist commandment of ease of comprehension (which, by extension, carries an aversion to avantgarde formalisms). Prozess Richard Waverly fulfils the ideological requirements of Socialist Realism insofar as it emphasizes the role of anticommunist hysteria in the American 1950s, and concentrates on the imposition of ideological manipulation and "Klassenjustiz" in the American courtroom. When included in a 1962 Henschelverlag collection of successful East-German radio plays, the piece was followed by an afterword that places it squarely in the context of German Democratic Republic cultural propaganda. "Die amerikanische Klassenjustiz," the editors propound, "besitzt [...] eine langjährige und schaurige Tradition." ³³⁶ Eatherly is but one victim of the same tradition that brought Joe Hill, Sacco and Vanzetti and the Rosenbergs to their deaths. Though Eatherly is "alles andere als Kommunist," concerned less with organizational

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³³⁵ Schneider, Schonzeiten, 75.

³³⁶ Staatliche Rundfunkkomitee der Deutschen Demokratischen Republik, ed., *Hörspiele 2* (Berlin: Henschel, 1962), 146.

power than with human self-improvement through recognition of guilt, his plight is parallel to that of the American Communists and all others who, having become suspect of communist sympathies, are threatened with "barbarische Freiheitsstrafen."³³⁷ The work is thus contextualized in the critique not only of American nuclear policy and the decision to drop the bomb on Japan (a critique explicit in the play itself), but also of the American anticommunist hysteria and in American misappropriations of justice in the pursuit of political goals.³³⁸

There are three main facets to Schneider's play. The first facet is the process by which the state strives to strip Waverly of agency. Though this loss of agency will reach its most thorough manifestation in his incarceration, the discursive component of this process is more important to the play. It is based on a double discourse of military discipline and psychiatry that claim that Waverly was not responsible for the Hiroshima bombing and is now not responsible for his own thoughts, either. The state knows best how to pursue the interests of the American people. The second facet of the play concerns the opportunity it opens for criticism of the atomic attack on Japan in World War II. The ostensibly documentary element, introduced by a historian, attests to its non-necessity. A pathetic moment, which evokes the real suffering of victims, is introduced by Waverly's testimony. The third and final point comes in the form of the state

³³⁷ Staatliche Rundfunkkomitee der Deutschen Demokratischen Republik, 146.

³³⁸ Such emphasis on these qualities help contextualize the play amongst other GDR depictions of Western court systems. For instance, as Detlef Kannapin writes of the 1950 DEFA film *Der Rat der Götter*, "Problematisch [...] erscheint die Darstellung der juristischen Arbeit unter US-amerikanischer Ägide, die von wirtschaftlichen und politischen Interessen überformt und als keineswegs frei gezeigt wird. Der Film suggeriert damit die bewusste Abhängigkeit der Justiz im Westen von außerrechtlichen Belangen, während mitzudenken ist, dass das Recht im Osten vor solchen Deformationen geschützt wäre." The justice systems of the West are undermined by interference of the financial and political interests, and in the worst of cases are still subject to fascistic tendencies. This, conversely, helps the East German system to appear particularly just. (Detlef Kannapin, "Vom 'Volksrecht' zum 'Staatsrecht'. Rechtsauffassungen im frühren DEFA-Spielfilm 1946 bis 1955," in *Inszenierungen des Rechts: Schauprozesse, Medienprozesse und Prozessfilme in der DDR*, ed. Klaus Marxen and Annette Weinke (Berlin: BWV, Berliner Wiss.-Verl., 2006), 146.) Despite these direct criticism of the American justice system, it is also important that one consider the possibility that Schneider's play serve as an underhanded critique on the modern state generally, such that his critique also applies to the abuses of the judicial system in the GDR.

attorney's use of anticommunism to counter Anderson's defense. In Schneider's version of the trial, the decision of the jury ultimately hinges on ideological fear of the Soviet enemy rather than on the truth value of statements made during the trial. Via these three points, Schneider presents an *inversion* of the trial. Though Waverly is on the stand, the purpose of his trial is not to ascribe him action, agency and guilt, but, in fact, to minimize it. The spectacle of justice demonstrates its own inadequacy, showing how it is tied up in a web of state interests and ideological blockages.

Despite the play's adherence to a form of socialist realism, it also presents a philosophical argument. In 1961, the Austrian philosopher and public intellectual Günther Anders published his correspondence with Claude Eatherly. The first edition of *Prozess Richard Waverly* was written before this correspondence was published. However, Schneider had access to Anders-Eatherly correspondence by the time he wrote the third version of his play, and readily approved of the Anders's project. He would invite the audience of *Prozess Richard Waverly's* final version to examine the Eatherly-Anders exchange as a document in relation to his own work, writing that his play "möchte [Anders' Briefaustausch mit Eatherly] nicht ersetzen. Es möchte es lediglich interpretieren." Despite the time lag, the correspondence provides a useful lens for interpreting the earliest version as well; this chapter will refer to it and other considerations by Anders. In my discussion here, I will take recourse to the thoughts of Günther Anders on the Eatherly trial.

This Discursive Dissolution of Agency

Waverly's sense of guilt abounds. He finds the discussions of Hiroshima exasperating. "Mein Gott," he stammers to his lawyer at the end of the trial's first day, "ich kann das Wort

³³⁹ Schneider, "Prozeß Richard Waverly," 109. (Note this citation refers to the latest version of the play)

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Hiroshima nicht mehr hören, ohne alles wieder vor mir zu sehen, und ich mach' das seit Jahren durch, seit fünfzehn Jahren."340 The audience learns that Waverly "einen grauenvollen Schuld auf [sich] gelegt [hat],"341 that attempted to submit himself to the Nuremburg War Criminal tribunal "[w]egen Mord an 100 000 Menschen," 342 and that he could not cope with civilian life after having been discharged from the Air Force. His ex-wife and his brother report that Waverly could sleep only unsteadily at night, haunted by the thought of the child victims of the bombing³⁴³ He joined a gang of criminals for the express purpose of seeking the punishment the state would not provide for his acts against the Japanese. From the perspective of Anderson and of Waverly himself, this guilt is only natural. However, these are presented by the state attorney as evidence of Waverly's mental instability.

The language spoken by Waverly, his protests against the state's use of atomic violence, is perceived by both state and populace as a direct threat to the United States. Having been held up as a hero, one with a firsthand account of the experience of nuclear war (even if he did not realize what he was doing), Waverly's criticisms are doubly damning. This is the implication present already in the opening of Schneider's play; it becomes explicit at the play's end. As a result, it is necessary for the state to deny the validity of Waverly's claims. It attempts this on two accounts. First, it highlights the chain of command within the military, indicating that participants at lower levels of this chain do not really possess responsibility for their actions. Second, it ascribes Waverly's guilt to a psychological complex, suggesting that he is incapable of

³⁴⁰ Schneider, "Prozess Richard Waverly (Hörspiel Version)," 120.

³⁴¹ Schneider, 118.

³⁴² Schneider, 199.

³⁴³ Schneider, 126.

feeling guilt in a normal, healthy manner, while carefully attributing his mental illness to experiences preceding his time in the military. Both these points are supported by the public's belief that the atomic bombing of Hiroshima was justified; even if Waverly *had* had responsibility and were not insane, he would still be wrong, because the use of the atomic bomb was legitimate as an act of war.

In the play, several points speak against the idea that Waverly could have been responsible for the bombing of Hiroshima, and that the guilt he experiences is legitimately felt. As the state attorney and his first witness, General Averell Stout, argue, Waverly had no previous knowledge of his mission's purpose. Special missions out of the American base on Tinian, where Waverly was stationed, were no uncommon occurrence; the only indicator of a unique mission was that the runways at Tinian would have to be extended to accommodate a "ziemlich höhen Traglast." Stout "wußte ungefähr, daß es sich bei den Bomben um neue und ziemlich gefährliche Waffen handelte, aber genau wußte [er] nichts," and "die Jungs wußten überhaupt nichts, though, "kann sein, daß sie irgendwas ahnten." It was from this position of ignorance, or at best restrained awareness of the gravity of their bombing mission, that Major Richard Waverly assumed command over the bomber and two escort fighters that took off for Hiroshima on the morning of August 6th, 1945. "Stimmen Sie mit mir damit überein," the state attorney asks the wizened general, "daß die Verantwortung des einzelnen innerhalb eines solchen Kommandos ihrem Wesen nach nicht anders war als bei einer anderen militärischen Aktion? Das heißt: der

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³⁴⁴ cf. Schneider, 115.

³⁴⁵ Schneider, 115.

empfangene Befehl musste ausgeführt werden?"346. Yes, Stout confirms, so it was, precisely. In dropping an atomic weapon on Hiroshima, Waverly was merely carrying out an order.

Through General Stout's testimony, the prosecution seeks to identify in Waverly the divided potential of the strictly disciplinary and uniquely secretive facets of the modern military apparatus in which he is embedded. Waverly and his colleagues are cast as mechanical cogs. The content and purpose of a mission is, for the individual soldier, not a key element of the action. The processes of war are broken into minute steps, industrialized like any large modern undertaking. One masters his or her individual function; it is not necessary to know the broad schematics and goals of the mission, but rather only what is required for the mastery of this function. While Waverly must necessarily be aware of the actions and purposes of those individuals falling under his disciplinary aegis, he—and even his superior, Stout—remain ignorant of the broader purpose of their actions. Where the bomber team is praised as heroes upon their return, this is a praise for submitting themselves to the task. This is the complex binary and curse of a production process made efficient. The individual has been dissolved into the broader project and the capacity for individual action has been dissolved with it. The only remaining responsibility is that of the project in sum, and this responsibility is an instrumental responsibility. It does not ask why an action is taken, but whether it is a success or a failure.

The state in the guise of the attorney argues that Waverly should not feel responsible for the bombing of Hiroshima because individual soldiers stand in a chain of command such that they are not responsible for their actions. And yet, Waverly feels both responsible and guilty. The state attorney has an answer to this as well—claiming that the guilt he experiences is in truth the product of an earlier experience, and not the war. Waverly's brother, when called to the

³⁴⁶ Schneider, 166.

stand, testifies that their father died in WWI, following which Richard Waverly, born just weeks later, had an exceptionally close relationship to his mother and bad relationship with his stepfather. Building on this testimony, the state attorney calls Dr. Lloyd C. Humphrey to the stand, the director of the psychiatric clinic at the Laco VA. Humphrey testifies that Waverly's emotional instability originates in this relationship and therefore precedes his military service.

Man bezeichnet [mit dem Begriff der Projektion] eine Übertragung des eigenetlichen, erotisch begründeten Schuldgefühls auf eine andere, gleichsam neutrale Tat—in unserem Falle: auf einen Schuldkomplex, der scheinbar durch Hiroshima ausgelöst wurde. Es ist bezeichnend, daß dieser Komplex nicht unmittelbar nach dem Angriff, sondern erst nach Kriegsende hervortrat, als die Anspannungen des Kriegsdienstes fortfielen.³⁴⁷

Waverly is indeed haunted by guilt. However, this is not the guilt of Hiroshima, but rather the guilt of an Oedipal attraction he feels towards his mother. The guilt he feels regarding his role in the Hiroshima bombing is a mere projection of this taboo guilt onto the "gleichsam neutrale" act of the bombing itself. With the phrase "gleichsam neutral," Humphrey establishes a standard for psychological normativity that is flagrantly political rather than scientific. While the argument is meant to silence Waverly's concerns about the Hiroshima bombing, this bogus psychologization of Waverly's emotions in fact constitutes the dissolution of Waverly's capacity to legitimately feel guilt at all.

The declaration on the part of the state psychiatrist is explicitly political. It is not targeted uniquely at Waverly, nor merely at his emotional state following the bombing of Hiroshima, but at the effort to protest the atomic projects of the United States and to provide an alternative narrative of the Hiroshima bombing more generally. If Waverly is mentally imbalanced in some of his judgments—and in his anguish he appears to have made some judgmental errors—he must be imbalanced in all his judgements. The assumption of this imbalance is employed by the state

³⁴⁷ Schneider, 129.

attorney in a form of circular logic to argue as to Waverly's insanity. At the beginning of the play, Anderson argues that "es gibt genügend Beweise, in der Öffentlichkeit, daß es sich bei Mr. Waverly in keinem Fall um eine Geisteskrankheit handelt."348 He is referring to Waverly's numerous publications and published letters opposing nuclear armament. The state attorney responds by arguing that he can "aus diesen Beweisen nur eines herauslesen: Richard Waverly ist geisteskrank."349 Where Waverly's oratory power should have come to the forefront, the clearest examples of his ability to think clearly and in the written word, the state attorney declares that he is most insane. In other words, it is precisely his belief in his own responsibility, as well as in the moral criminality of the atomic attack on Hiroshima, that Waverly is most incompetent in judging his own actions and understanding the world in an objective manner. The state attempts to brand his actions as fueled by delusions. Judgment and agency play no role in his behavior.

This effort to delegitimize Waverly's conscientious considerations can best be summed up in the words of Anders in his "Commandments of the Atomic Age." The nuclear state and its apparatuses attempt to establish hierarchy of competency not only in scientific and strategic, but also in moral issues.

The climax of unbearability [...] is reached when those allegedly more competent persons (who are incapable of seeing problems other than as tactical ones) try to make us believe that we have not even the *right to fear*, not even to have a conscience. Whereby they silently imply that conscience presupposes responsibility and responsibility is their business, just the business of those with qualifications in that department; and that we, through our fear, even through our pangs of conscience, overbearingly usurp a department which is not ours. 350

³⁴⁸ Schneider, 114.

³⁴⁹ Schneider, 114. Strangely, this is the only reference Schneider makes to Eatherly's activism.

³⁵⁰ Anders and Eatherly, Burning Conscience; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders., 15.

This aptly characterizes the effort of the state to reduce both Waverly's role in the war and his action in opposition to the bomb. This is the intention behind Humphrey's analysis: Waverly is not competent to feel war guilt because he is psychologically predisposed to project guilt from other experiences onto the war.

The Courtroom Inverted. Putting the US on Trial?

The witnesses called by the state attorney consider the bombing of Hiroshima morally unproblematic. The fact of war necessitates the usage of the bomb. The military chaplain Reverend Miles, whom, thanks to his religious station, would likely have been cast as an arbiter of moral character in earlier physicist dramas, submits readily to the paradigm of necessity over morality. When asked whether he felt guilt for "blessing" the mission, the chaplain "helplessly" exculpates himself: "Sir," he tells Waverly's lawyer, Anderson, "es war Krieg." War becomes a matter of total war. It presents a crisis mentality that overrides all considerations beside a narrowly-presented instrumental rationality. All considerations of scale are bracketed. Instead, the principle of absolute war reigns. The question becomes one of morality in the realm of necessity. The crisis of the Cold War and the arms race (just as the crisis of the Second World War) is said to have precluded the possibility of morally-informed decision making. In fact, it is said to have precluded the possibility of decision-making at all. Human beings and, broadly, the state, act according to the necessity imposed by given conditions. One might conceive this not so much as acting, in the sense of being a cause in one's own right, but re-acting, i.e., the replacement of agency with behavior.

Nevertheless, Anderson adeptly dislodges the arguments presented by the state attorney and his witnesses. Placed under pressure, Chaplain Miles must admit that "ein Schuldgefühl

³⁵¹ Schneider, "Prozess Richard Waverly (Hörspiel Version)," 118.

unmittelbar nach getanem Unrecht eine natürliche Reaktion ist."352 Charles Waverly, Richard's brother is made to appear as though his case against his brother is revenge for an unequal inheritance at the time of their mother's death. 353 A certain Inspector Webbs, tasked with arresting Waverly after the former pilot's participation in a bank robbery, is demonstrated to have followed the directives of the governor rather than the rule of law in his imprisonment and release of Waverly—apparently in an effort to control the media reports on the former pilot. 354 And finally, Doctor Humphrey's testimony on Waverly's insanity is shown to be faulty: His clinic is meant for patients whose mental illness developed during the war; if Waverly's illness developed in childhood as Humphrey claims, then he does not qualify for treatment at the VA. This implies that the Air Force sought to minimize Waverly's capacity to protest. 355 At every turn, Anderson presents a compelling case that the United States government is actively seeking to curb Waverly's ability to pronounce his guilt. Schneider employs these figures, as well as Anderson's critique of them, each to demonstrate a facet of the totalizing, anti-democratic tendencies of a developing state apparatus, from the military, to the police, to the church, to the medical professions, and finally the (ostensibly, but in actuality not independent) branches of the judiciary and local executives.

The suggestion that several witnesses worked illegally or with ulterior motives to restrict Waverly's protests tarnishes the justice system's image. Anderson, however, aims even higher. He attempts to turn Waverly's competency trial into a referendum on the legitimacy of the

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³⁵² Schneider, 119.

³⁵³ cf. Schneider, 123.

³⁵⁴ cf. Schneider, 125.

³⁵⁵ cf. Schneider, 132.

atomic attacks on Japan. His implicit logic: If he can undermine the public belief in the necessity of the atomic attacks, this will demonstrate the legitimacy of Waverly's guilty feelings. To this end, he brings the historian Dr. Raymond Harrison to the witness stand. Harrison is the author of a book on the development and use of the atomic bomb and is by no means opposed to the bomb in principle, nor is he critical of its use in Japan. However, Anderson hopes to show the audience that the atomic attacks were not a necessity, but a geopolitical strategy freely chosen by the United States in lieu of diplomacy.

Anderson reviews with Harrison the motivations for the Manhattan Project and suggests that, once the allies learned that there was no Nazi atomic bomb, the American bomb became redundant. and that the decision to use the bomb against Japan was made despite the protests of its developers, for example in the Franck Report. Those scientists who did support its use, he argued, had been provided the false alternative between the bombing and the loss of 500,000 American soldiers. "Die Kapitulationsbereitschaft der Japaner," he argues "würde verschwiegen." Anderson likewise takes the opportunity to argue the military reasoning for the bombing of Hiroshima and Nagasaki: To prevent the Russian allies from taking part in the battle against Japan and thus have Japan clearly in the hands of the Americans in the postwar. Harrison confirms this intention. Thus Anderson concludes that while Waverly and all present are convinced of the legitimacy of the war against Japan and Germany, the motivation for the use of the atomic bomb "im japanischen Feldzug" was not "mit dem Sinn und den Zielen des Krieges noch vereinbar." The author has two intentions. For one, Anderson exhorts the jury to

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³⁵⁶ Schneider, 139.

³⁵⁷ Schneider, 139–40.

decide "ob die Skrupel Richard Waverlys [...] berechtigt sind oder nicht!"³⁵⁸ In the context of the theatrical presentation, however, it doubles also as a source of information for the audience, meant to condemn the United States for the decision and, by implication, United States nuclear policy in subsequent years. It is not by chance, for example, that this interview comes at the end of the play, near its climax, and serves as an objective historical background preceding Waverly's emotional testimony about the victims of the bomb.

On the stand, Waverly narrates his pain and conjures the trauma of Hiroshima. Schneider makes an incisive change here to his historical material, replacing Eatherly, as reconnaissance pilot, with Waverly as the bomber pilot himself. This allows Weaverly to describe the vision of the exploding bomb, enhancing the visualization for the audience. He describes the now-familiar mushroom of the atomic explosion, following which "nichts mehr zu sehen [ist], nur noch Rauch und Helligkeit," and the "Druck nahm uns hoch und schüttlete uns durcheinander." ³⁵⁹ Waverly says that perhaps he already sensed what it all meant. If this is so, it is possible that Schneider is marking the beginning of his shift from mechanical cog to agent; a moment of blindness and then horror marks the beginning of his turn toward individual responsibility, his glimpse beyond the mere instrumental reason of war. The reality of events, the materiality of the description assures the audience of the excess beyond the mere material human, of the consciousness that exceeds mere functionality.

More important than the description of the mushroom cloud, however, are Waverly's descriptions of his later visit to Hiroshima. At a hospital for victims of radiation poisoning, Waverly saw "Menschen mit Wunden [...], die nicht heilen wollten, seit vier Jahren nicht heilen

358 Schneider, 140.

359 Schneider, 120.

wollten, [...] die Frauen [...], die sich langsam mit den Fingern durchs Haar gingen, und das Haar blieb bündelweise in ihren Händen, und state attorney wußten sie, daß sie sterben mußten." He saw "Erblindete, Entstellte, Verkrüppelte." The living horror of the radiation victims, in all their suffering, however, is only second to horror of the dead, their memory etched into the very earth where they perished.

Aber das Entsetzlichste . . . (*Er spricht fast erstickt.*) . . . das Entsetzlichste waren die Schatten! Sir, es gibt Straßen und Brücken in Hiroshima, in denen die Hitze der Bombe den Asphalt geschwärzt hat. Aber mittendrin sind helle Stellen, die vor der Hitze geschützt waren, helle Stellen, die die Umrisse eines Menschen haben: Hier haben Menschen gestanden, die in einer Sekunde verbrannt sind, und nichts ist mehr von ihnen, nichts mehr als diese helle Schatten im dunklen Asphalt!³⁶¹

While Waverly concentrates on the victims, he, too, brings in the cavalier treatment of Japan on the part of the United States. "Ich habe einen GI gesehen," he reports, "der mit Kreide die Schuhabdrücke dieser Stellen nachgezogen hat. Mit unbeteiligter Miene hat er's getan. Er hat nichts gewußt. Er hat nichts gefühlt."³⁶² Not only have the United States engaged in a war crime in bombing Hiroshima, following the act, they are likewise entirely incapable of recognizing the horror of it. This appears to be a sickness that is not limited to the upper echelons or the elites, but runs through the ranks of the military and dominates public opinion with few spaces of dissent.

The inclusion of this violent imagery places emphasis on Waverly as a living human being as a conscious, independently perceiving being endowed with judgment. Here, as in all the examples of Waverly's suffering, the empathetic imagination is continually displayed. In *Die Antiquiertheit des Menschen*, Günther Anders argued that the destructive power of the atomic

³⁶¹ Schneider, 144.

³⁶⁰ Schneider, 144.

³⁶² Schneider, 144.

bomb far exceeds the human imagination for violence. Humans can perhaps imagine a single victim, maybe, if practiced, ten. But 10,000 dead and countless victims of radiation sickness exceeds the human imagination entirely.³⁶³ In Anders's "Commandments in the Atomic Age," he argued,

You must violently widen the narrow capacity of your imagination (and the even narrower one of your feelings) until imagination and feeling become capable to grasp and to realize the enormity of your doing; until to you are able to seize and conceive, to accept, or reject it—in short: your task is: *to widen your moral fantasy*. 364

Schneider's efforts, couched in Waverly's memories, can only hope to show the way to the expanded moral imagination, producing the image of *one single* victim, cast multiple ways. His goal is even more fundamental than Anders's: produce the image of *a* victim for an audience, possibly for a country (the United States), possibly for a world order (Cold War Divisions) that nearly refuses to acknowledge the presence of a victim at all. This constitutes the second inversion of the trial. It has attempted to deny Waverly agency, but instead demonstrated his vivid inner life and sharp, individual command of experience, thought and behavior. His testimony, with the help of Anderson, has brought the crimes of the state—represented on stage in the visage of the prosecution—before the public.

The Clincher: Anticommunism

Anderson's arguments and Waverly's pathos may have had an effective impact on the jury under other conditions. Schneider's play suggests, however, that this is not possible.

Schneider provides many angles on the American incapacity to recognize he criminality of the atomic bombings of Hiroshima and Nagasaki, including the argument on the necessity of war

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³⁶³ cf. Günther Anders, *Die Antiquiertheit des Menschen. Über die Seele im Zeitalter der zweiten industriellen Revolution* (Munich: Beck, 2010), 269.

³⁶⁴ Anders and Eatherly, *Burning Conscience*; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders., 13.

and evidence of racism against the Japanese, and, of course, the simple nationalist assumption that the United States can do no wrong. The last of these, especially, he attempts to undermine first through an objective approach (in the claims made around the examination of Higgins) and then through a subjective approach (through Waverly's evocative descriptions of human suffering.) However, Schneider ultimately suggests that there is a different defense at work here as well: the American ideology of anticommunism—a critique that reflects Schneider's position as a GDR author.

The righteousness of American military power must be maintained because to weaken it would be to weaken American resolve against the communist threat. Ultimately, Schneider presents this as the primary motivator for the district attorney, who, in a brief, casual discussion with the judge, argues that if Waverly's ideas catch on, the Americans can "[ihre] Nation begraben" because "[die] Armee bald nur noch aus Befehlsverweigerern und Moralisten bestehen [wird]." For this reason, Waverly "hat verrückt zu sein [...] Es gibt keine andere Lösung!"³⁶⁵ This reasoning constitutes a continuation of the inarguable necessity of war. In the Cold War, under the crisis conditions of the arms race, there is no space for free argumentation, but only a society under strict discipline. This very demand, however, overrides due process, liberal principles, and moral action most broadly. Much as the perceived urgency of war bracketed moral reasoning and ushered the use of the atomic bomb, in the postwar a perceived state of crisis and necessity now brackets key democratic freedoms in civilian life. It reduces the categories of public discourse. If ideological convictions form the basis of national survival or death, then there is no space for the toleration of free thought—of distinction from the state apparatus.

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³⁶⁵ Schneider, "Prozess Richard Waverly (Hörspiel Version)," 133–34.

While the state attorney's commentary reflects a deeply-felt paranoia, he is not alone his beliefs, and he is confident that he can count on the sway of the jury, given the right strategy: he knows precisely "wo [er] sie packen muß." 366 This same distrust of a jury system, in which all members of the jury are already thoroughly indoctrinated by and pliable to the arguments of anticommunism, appears in several instances through the play. As Anderson has admitted to Waverly, "[h]ier ist keiner unvoreingenommen, der nur das Geschwätz aus den Zeitungen kennt und nicht [Waverly] selbst."367 The DA, repeatedly turns toward explicit anticommunist convictions in order to undermine Anderson's arguments. When Anderson brings Dr. Edward Martin to the stand to attest to Waverly's mental health, for instance, the state attorney turns the jury's attention to the psychologist's associations with the Republican cause in the Spanish Civil War and brands the witness a communist. He applies this tenuous relationship to disqualify the witness's medical expertise. "Meine Herren Geschworenen," he entreaties, "Ich bitte Sie zu entscheiden, welche Objektivität ein medizinisches Gutachten hat, [...] dessen Verfasser ein Mitläufer der Kommunisten ist!"368 When Anderson objects by noting that accusations of "fellow-travellership" have been used widely to discriminate in the last 10 years, the state attorney suggests that Anderson regrets this because he himself is a communist. He then suggests that Anderson has pursued the defense of Waverly entirely in order to confuse the public and make the country susceptible to communist infiltration.

Eure Ehren: die Verteidigung ist bestrebt, für den Angeklagten einen Freispruch zu erzielen. Nun gut, mag nach allgemeinen Begriffen ihre Pflicht und ihr Recht sein. Aber wer ist der Angeklagte? Ein Geistesgestörter, der die Öffentlichkeit beunruhigen, verwirren und gefährden würde, wie er es schon bisher getan hat. Und wer hat Interesse

³⁶⁶ Schneider, 134.

³⁶⁷ Schneider, 110.

³⁶⁸ Schneider, 136.

daran, unsere Gesellschaft, die Öffentlichkeit unseres Landes zu beunruhigen und zu verwirren? Aus welchem geistigen Lager kann also nur ein Mann kommen, der diesem Geistesgestörten das medizinische Zeugnis der völligen Unbedenklichkeit ausstellt?!³⁶⁹

The state attorney argues from the assumption that Waverly is demonstrably mentally ill—either this, or he is an agent of communism. But if not he himself, then his allies and colleagues must at the very least be working for a communist cause, in order to upset and confuse the public. This is a continuation of his effort to sway the jury in their views based not on the objective facts of the case, but instead to attack the character of the defense and undermine their argument. The judge denies Anderson's objection, declaring that the witness does indeed demonstrate "Kommunistenfreundlichkeit," as if to officially confirm that this disqualifies the witness's testimony and suggests that anyone who would speak for an antinuclear activist is likely plotting against the United States.

Thus the play introduces a second means by which to invalidate antiatomic discourse—by tying it to anticommunism. It frames the court's decision not on the insanity argument, nor even on fear of the bomb. Although it suggests that the structures of the civil executive, the military, and judiciary are corruptly intertwined to promote their personal interests, it suggests that the final decision on the part of the jury—albeit with the support of the court—comes down to a radical reframing of the trial on the part of both the prosecution and the defense. What should have been an objective assessment of the mental health of a single individual is transformed by the defense lawyer into a referendum on the political and moral justifications of the atomic bombing of Japan. The state attorney, however, reframes the trial as a referendum on the admissibility of viewpoints that are either explicitly tied to communist motives or which could undermine the United States' resolve to face down the communist threat. He makes it

³⁶⁹ Schneider, 136.

clear, too, that the jury—which was already predisposed to anticommunist fears—confirms the effectivity of this bias. The play ends with its decision: Waverly is guilty of disobeying the orders of the military court. He is mentally ill. He will be returned to his confinement in the Veterans' Affairs hospital.

The United States have failed morally on all accounts, and they have, in many instances, committed violations of human and civil rights specifically for the purpose of persecuting communists and opposing the Soviet Union. The play poses the thesis that this began already with the bombing of Hiroshima and Nagasaki, but continues in the suppression of Waverly's opposition, which threatens to undermine the moral sanctity of the United States. The executive and the military collude with the courts, the ostensibly independent judiciary colludes with the state attorney, and the jury is too ideologically tainted to understand the suffering of America's victims and to see through the propaganda of the state. Notably, in his later versions, Schneider significantly reduced the thematization of American anticommunist prejudice, which might, in its heavy-handed delivery, distract from the plight of Waverly. In its stead, he places greater emphasis on the economic and political dependencies of the jury. In both cases, however, the plays minimize attention to the historical Eatherly's self-destructive behavior, a process which (whether or not a forced sectioning is legitimate), emphasizes the inadequacies of the court.

Despite its emphasis on anticommunism and the weakness of Western judicial systems, which constitutes a direct, arguably propagandistic political intervention into the day's politics, the play nonetheless allows for an examination of Waverly's reclamation of himself as a living, thinking, acting being. Schneider draws a stark line between the military expectation of discipline without reflection and Waverly's emotional awareness of his actions' consequences. This is best described through analogy to Anders's description of Claude Eatherly. In an open

letter on behalf of Eatherly addressed to President Kennedy, Anders alludes to such issues in reference to the highest-profile trial of the day, that of Adolf Eichmann. Eichmann's trial, however, displays the self-denial of agency. Eichmann's defense is predicated upon the erasure of individuality and judgement within bureaucracies and in hierarchies.

With this excuse: 'I only followed orders' the extermination employees have tried to whitewash themselves; the words resemble in all too macabre a way those words of Eichmann which to-day circulate through the world press, the words: 'In actual fact I was merely a little cog in the machinery that carried out the directives and orders of the German Reich. I am neither a murderer nor a mass-murderer.' (*Life*, January 1961).

Eatherly, on the other hand, constitutes the opposite. Where Eichmann struggled to demonstrate his inculpability, Eatherly struggled to reestablish it.

No, Eatherly is precisely not the twin of Eichmann, but his great and hope-inspiring antipode. Not the man who passes off machinery as a pretext for renouncing conscience, but, on the contrary, the man who recognizes machinery as the fatal danger to conscience. He thereby hits the very center of the heart of the moral problem of to-day. For if we point to the apparatus into which we are incorporated as nothing but ignorant 'cogs', and if we accept the alleged excuse: 'We were not acting but merely co-acting' as being justified under all circumstances, then we abolish the freedom of moral decision and the freedom of conscience; then we even degrade the word 'free', and make the expression 'free world' into an empty and hypocritical protestation. I am afraid, we are already very close to it.³⁷⁰

With these words Anders expresses the problem of agency and responsibility in the atomic drama and in the postwar with greater clarity and brevity than those who have preceded him. Perhaps unwittingly, he has also posited a structural parallel between the topic of responsibility in a state-organized genocide and responsibility with respect to the bomb, though this comparison is not uncommon in the German literature at this time. The structures and belief systems that enable them are likewise dangerous not only because of the possibility of their horrifically violent ends, but because they depend upon corruption of the concept of freedom and

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³⁷⁰ Anders and Eatherly, *Burning Conscience*; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders., 108–9.

the human capacity for free thought. Through his trained empathy, moral acumen, and probity, Schneider's Waverly brings such inner freedom to the stage, and in effect inverts the trial, demonstrating agency where the state proclaims there is none, and morality where the state only sees necessity. In the following section, I will highlight how, on the figure of Oppenheimer, Heinar Kipphardt continues this discourse on necessity in a world in the nuclear crisis.

Heinar Kipphardt's In der Sache J. Robert Oppenheimer

Even before the United States joined the Second World War, in 1939, concerned European scientists Leo Szilard and Eugene Wigner, with Albert Einstein's help, petitioned U.S. president Franklin Delano Roosevelt to fund research for an atomic bomb.³⁷¹ The foundation of their concern was the possibility their former friends and colleagues who had stayed behind in Nazi Germany may be well on their way to developing an atomic bomb for Hitler's disposal. At first the U.S. only paid this possibility modest attention, but following their entrance to the war, the bomb gained a new importance. By the end of 1942, Joseph Robert Oppenheimer had been chosen to lead scientific operations at Los Alamos in the Manhattan project under the military leadership of Leslie Groves.³⁷² He pursued his work there with energy, enthusiasm, and success. The first American test bomb exploded in the desert of Alamogordo, New Mexico, on July 16th, 1945, two months after Germany had capitulated with few signs that their atomic project had shown much success. Less than one month after the successful test, the United States dropped atomic bombs on Hiroshima and Nagasaki, ending the war in the Pacific. Oppenheimer ran his project successfully. However, less than a decade after he took over the lab at Los Alamos, in 1954, Oppenheimer would find himself embroiled in an Atomic Energy Commission (AEC)

³⁷¹ Jungk, Brighter than a Thousand Suns; a Personal History of the Atomic Scientists., 78–79.

³⁷² cf. Rotter, *Hiroshima*, 116.

hearing to determine whether he would maintain his security clearance.³⁷³ The AEC struggled less with what they perceived of as Oppenheimer the scientist than with Oppenheimer the man. He had already been intensely scrutinized both during and following the development of the atomic bomb due to past proximity to the Communist Party—he had donated to the Republican cause in Spain and even been married to an American party member—and inconsistences in his observation of security rules. Now, in the context of McCarthyist anticommunist hysteria and as the American "monopoly" on the hydrogen bomb was lost, Oppenheimer faced renewed scrutiny—now motivated by his interest in a diplomatic, rather than purely military, and militarily flexible, rather than purely nuclear, solution to the rapidly unfolding nuclear crisis. This Atomic Energy Commission hearing is the subject of Heinar Kipphardt's *In der Sache J. Robert Oppenheimer*.

For the first several years of the postwar, Kipphardt was successful as an author and theater director in East Germany. However, by the late 1950s, his repertoires as a director of the German Theater in Berlin would come under suspicion and he would lose his position. Leaving the East for Duisburg in West Germany, he was eventually shut out of the GDR regime party, the SED. But his continued socialist leanings made life difficult in the West as well. *In der Sache J. Robert Oppenheimer* brought his second break. The play was broadcast on Hessischer Rundfunk in January of 1964 and it premiered in October of that year, simultaneously at the Münchner Kammerspiele under the direction of Paul Verhoeven and in West Berlin, at the Volksbühne, under the direction of Erwin Piscator.³⁷⁴ The play was even produced in East Berlin at the

³⁷³ Adolf Stock and Heinar Kipphardt, *Heinar Kipphardt : Mit Selbstzeugnissen Und Bilddokumenten* (Reinbek bei Hamburg: Rowohlt, 1987), 75.

³⁷⁴ cf. Stock and Kipphardt, 76.

Theater am Schiffbauerdamm in 1965, effectively 'rehabilitating' Kipphardt in the East.³⁷⁵ In its success, the play was translated into dozens of languages.³⁷⁶ In the English speaking world, premiered in London in 1965,³⁷⁷ and in Los Angeles and at the Lincoln Center in New York in the 1968-69 theater season to broad critical acclaim.³⁷⁸ Alongside fellow Piscator Volksbühne premieres, Rolf Hochhuth's *Der Stellvertreter* (1963) and Peter Weiss's *Die Ermittlung* (1965), the play is widely acknowledged to be one of the most successful documentary plays written,³⁷⁹ and it is one of the few German atomic plays to possess canonical status.

In der Sache J. Robert Oppenheimer was the product of Kipphardt's meticulous montage and summarization of three-thousand typewritten pages of trial records released following the Atomic Energy Commission hearing into a 150-page script. He organized the material into nine scenes, presented as hearing days, generally preceded by a title introducing the audience to a scene's general theme, such as "guilt through association" and the analysis of human beings ("KANN MAN EINEN MENSCHEN AUSEINANDERNEHMEN WIE EINEN ZÜNDSATZ?" Initial scenes feature Oppenheimer, his lawyers (Lloyd K. Garrison and

³⁷⁵ Uwe Naumann, Nicolai | Riedel, and Michael Töteberg, *In Der Sache Heinar Kipphardt* (Marbach am Neckar: Deutsche Schillergesellschaft, 1992), 41–42. As Naumenn et al. write, following the success of his *Oppenheimer* play, and "Obwohl es keine offizielle Erklärung dazu gibt, ist [Kipphardt] plötzlich in der DDR kein verbotener Autor mehr, sondern ein geschätzter humanistischer Schriftsteller."

³⁷⁶ cf. Naumann, Riedel, and Töteberg, 42.

³⁷⁷ "Briton Buys Oppenheimer Play," *The New York Times*, November 25, 1964, sec. Archives, https://www.nytimes.com/1964/11/25/archives/briton-buys-oppenheimer-play.html.

³⁷⁸ cf. Otis L. Guernsey, Curtain Times: The New York Theatre, 1965-1987 (Hal Leonard Corporation, 1987), 127.

³⁷⁹ cf. Naumann, Riedel, and Töteberg, *In Der Sache Heinar Kipphardt*, 41–42.

³⁸⁰ Heinar Kipphardt, *In der Sache J. Robert Oppenheimer* (Frankfurt/Main: Suhrkamp, 1964), 149–51. Cited in: Ferdinand Fasse, *Oldenbourg Interpretationen mit Unterrichtshilfe. Heinar Kipphardt: In der Sache J. Robert Oppenheimer.*, Oldenbourg-Interpretationen 20 (München: Oldenbourg, 1988), 9.

³⁸¹ Kipphardt, In der Sache J. Robert Oppenheimer, 42.

Herbert S. Marks), representatives of the Atomic Energy Commission (Roger Robb and C.A. Rolander), and members of the security commission (chairman Gordon Grey, Ward V. Evans and Thomas A. Morgan), who preside over the hearing and must ultimately decide whether Oppenheimer's security clearance should be revoked. A radio recording by Joseph McCarthy contextualizes the hearing squarely in the era of the House Unamerican Activities Committee; in the initial sense Oppenheimer is questioned regarding his role in the construction and implementation of the first atomic bomb, his opposition to the hydrogen bomb project, and his past communist leanings. From the sixth scene onward, security officials and other famous physicist colleagues (including, for example Edward Teller) are interviewed as witnesses. The play ends with the security commission's decision. Oppenheimer loses his security clearance, although the commission chair admits that with another set of rules, another decision could have been met.

Many of the qualities apparent in other atomic plays and physicist dramas appear also in *In der Sache J. Robert* Oppenheimer. In the physicist dramas, a scientist once involved in weapons development generally opts out of future military endeavors and is threatened socially and professionally. As Kipphardt's play reconstructs similar events, it functions as a mouthpiece for the dangers of nuclear war more consequentially than earlier physicist dramas, not only because it presents its claims as citations of actual physicists, but because these citations, despite lacking the poetic flourishes of earlier plays, are more rhetorically incisive. For example, Oppenheimer notes plainly that physicists had to calculate whether a bomb "die Atmosphäre in Brand setzt," and consider that a nuclear conflict world produce no victor and loser, "sondern

382 Kipphardt, 93.

nur achtundneunzigprozentig und hundertprozentig Vernichtet[en]."³⁸³ Importantly,
Oppenheimer's increased recognition of the inadmissibility of nuclear weapons research (at least insofar as it supercedes diplomatic efforts), leads also to new views on scientific responsibility.
Early in the play, Oppenheimer emphasized his strictly delimited position in the military-industrial hierarchy during the Manhattan Project and his therefore limited role in the Hiroshima bombing: "Wir machten als Fachleute die Arbeit, die man von uns verlangte. Aber wir entschieden damit nicht, die Bombe tatsächlich zu werfen."³⁸⁴ In his closing commentary, however, he reflects publicly and on the record on his regret for having participated in the atomic bomb project:

Wir haben die besten Jahre unseres Lebens damit verbracht, immer perfektere Zerstörungsmittel zu finden, wir haben die Arbeit des Militärs getan, und ich hab in den Eingeweiden das Gefühl, daß dies falsch war. Obzwar ich die Entscheidung der Mehrheit dieses Ausschusses anfechten werde, will ich fernerhin an Kriegsprojekten nicht arbeiten, wie immer die angestrebte Revision ausfallen mag.³⁸⁵

The play thus ends with a resolute rejection of scientific contribution to military development projects, and its correlate implication. It is not enough for a scientist to divide himself into professional and private selves, to pretend that there exists an absolute division between the scientist's purely inquisitive motives and the responsibility of the politician and his or her instrumental objectives, and act as if he or she were an objective and disinterested advisor to political actors. The decision has come far too late, Kipphardt suggests, but scientists must

383 Kipphardt, 89.

384 Kipphardt, 13.

385 Kipphardt, 147.

acknowledge the grave implications of their complicity in military projects. ³⁸⁶ For the secondary literature on the atomic plays, this is generally the most important moment in *In der Sache J. Robert Oppenheimer*: it reinforces Brecht's emphatic appeal to the individual agency of the scientist and his emphasis on the conscientious objection to participation in harmful state projects. As this chapter argues, however, the statement of regret (and implicit call for scientific responsibility) expressed by Kipphardt's Oppenheimer emerges in a very different context from that of Brecht's Galileo. Kipphardt goes beyond the bounds of 'documentary' in posing the possibility that Oppenheimer's recantation takes place in an increasingly technologically determined system, and this claim differs from those of previous physicist dramas in that it emphasizes that the expansion of this determination does not occur spontaneously or benignly but is fueled by crisis politics and actively pursued by representatives of the state.

These closing words of Oppenheimer, in contrast to much of the play, were freely invented, and they led to a controversy in which the historical Oppenheimer felt himself to have been misrepresented in Kipphardt's work. Nevertheless, the play generally stands apart from other physicist dramas in its use of documentary techniques. Schneider had to imagine the Waverly trial into being from a mere newspaper article about Claude Eatherly; Zuckmayer, though he may have had access to extensive biographical information on Klaus Fuchs, heightened those qualities—such as the material-spiritual dichotomy and notions of regret—to maximize dramatic appeal. Aesthetic techniques and the dramatic principle serve as a benchmark for judgment of such works. In the documentary play, however, the relationship of the play to a

³⁸⁶ Despite this shift, Kipphardt still claimed in his correspondence to Oppenheimer that his play "[sei] nicht im platten Sinne ein Anti-Atombombenstück." (Stock and Kipphardt, *Heinar Kipphardt*, 79., citing: "Brief an Oppenheimer vom 24. Oktober 1964.")

³⁸⁷ Stock and Kipphardt, 77.

historically documented reality ultimately carries greater weight. In reference to concepts explored by documentary dramatists such as Peter Weiss and Heinar Kipphardt, literary scholar Brian Barton noted the importance of the verifiable quality of materials in the documentary drama, meant to ensure an "authentic" relationship to the outside world it describes. "Das historische Material" on which the documentary drama is based, he writes, "soll aus frei zugänglichen Quellen entnommen und auf wissenschaftliche Weise bearbeitet werden." The *Oppenheimer* play fits the bill; it was produced through the montage of original hearing transcripts. However, the documentary process also reflects the unique subject position of the artist. It lays no claim to a perfect reproduction of a posited objective reality, but rather presents its own analysis of events, attempting to provide an alternative interpretation to that presented in the mass media and to foreground "Bedeutungen und Zusammenhänge [...], die isolierte Tatsachen nicht zeigen könnten." ** In der Sache J. Robert Oppenheimer* is no exception to this. Like documentary drama generally, it contains both evidence and commentary, and the comprehensible and transparent relationship between these are key to its success.

While analysis and interpretation takes place already in the process of selection, and in the organization of his montage and in his act titles, Kipphardt's most explicit intervention into his document—beside Oppenheimer's closing monologue—comes in a series of five "Zwischenszenen," or intermezzos, which take place outside the courtroom. They are inserted among the trial days and depict short, off-the-record interactions amongst members of the security commission and the lawyers for and against Oppenheimer. Their short dialogues (and on one occasion, a monologue) comment on the events of the play, transforming the unique events

³⁸⁸ Barton, Das Dokumentartheater, 5.

³⁸⁹ Barton, 4.

of the hearing into a single manifestation of a broader historical development. Through these intermezzos, the play raises, in addition to the issue of the nuclear threat and the responsibility of the scientist, the problem of the advancing technological surveillance state when compounded with the urgency of the nuclear threat. It concerns the unfreedom not only of the scientist in government or in industry, but also of society generally. While the play condemns the violence of the atomic project and criticizes the division between scientific expertise and political responsibility as false, Kipphardt's commentary in these intermezzos presents another facet as well. His interpretation of the hearing is neither limited to an objective depiction of the hearing as an analysis of the contradictions of Oppenheimer the man, nor the technological destruction of the planet, nor the plight of the scientist in an age of science's corporatization. Instead, he provides commentary on the events of the play from three possible viewpoints: (1) The apparently benign, centrist view that government scientists can believe ideologically whatever they wish, but must pack this belief away when working, (2) the alarming, invasive view that scientists must, given the crisis of the arms race, submit themselves fully to state supervision not only their behaviors but also in their beliefs, and (3) the critical, view, that the systems of control practiced in the Oppenheimer hearing reflect the intentionally-fortified state apparatus, in which the control of nature and control of populations and human beings overlap in a system of control. These three viewpoints provide a frame on the hearing through which the audience can interpret its failure to provide liberal protestations. The outcome is that the third option—the fear of comprehensive surveillance, supported by ever greater technological precision, blends together with a more gradual process through which the population is trained into docility.

Oppenheimer's transformation from willing participant in the atomic project to conscientious

objector constitutes the opposite of this process, a re-humanization of the self, and for this reason his changed commitment must be arrested by the mechanisms of the state.

The Hearing as an Affront to Liberal Democracy

Here I will concentrate on the two central, related, but distinct points raised by the play. The first of these is the alleged corruption of the American legal system reflected in the hearing of Oppenheimer. Kipphardt foregrounds the inadequacies of the security hearing as a process of decision making as opposed to that of trial, in large part because the ambivalence of its terms and its lack of protections for Oppenheimer, who is not so much the "accused" of a particular action for which he could incur guilt, as suspected of possible biases through which could emerge conscious or unconscious disloyalty. A third element of this critique, the structural bias of the hearing against Oppenheimer, supports the second point the play foregrounds: This is the possibility that the Oppenheimer trial is part of a project of ideological control on the part of the American government to produce more ideologically disciplined scientists, and later to produce a more ideologically submissive population as a whole.

The fundamental weakness of the hearing, in terms of liberal democratic values, is that it is not a *trial*, but rather a *hearing* that carries decisive and arguably punitive force. The chair of the security committee, Gordon Gray, occasionally reminds the party that "Die Untersuchung [...] kein Gerichtsverfahren [ist],"³⁹⁰ at first to emphasize its secrecy, but on at least one occasion as if to suggest that the trial may be less serious than a true trial; after all, the committee "[wird] kein Urteil fallen."³⁹¹ At first glance, this seems compelling. Oppenheimer is not on trial for a crime he has committed. Neither his freedom nor his life is at stake. Nevertheless his

³⁹⁰ Kipphardt, In der Sache J. Robert Oppenheimer, 8.

³⁹¹ Kipphardt, 131.

professional credentials are. He is threatened with the loss of his security clearance, a document that very well lends quality of life to Oppenheimer, that is bound to his reputation, and ultimately to practice his calling in a strict sense. In reference to his brother, who since having lost his security clearance for having falsely denied his former membership in the Communist Party, Oppenheimer conjectures that he most likely lied in order to work as a physicist, "und nicht als Farmer, wie er das seit dieser Zeit tun muß." Reflecting on this, Oppenheimer says, "daß ein Mensch wegen seiner gegenwärtigen oder vergangenen Ansichten vernichtet wird. Das mißbillige ich." And yet Oppenheimer faces a similar fate for similar reasons. In the words of Robb, if his security clearance is lost, he would "für den Rest seines Lebens nur noch angeln," and this, one can conclude, is likewise a way to destroy a man; a true punishment for a man of Oppenheimer's interests, drive, and standing.

If the hearing produces a condemning force comparable to that of the trial, in that it ruins lives much as a trial might, this status of hearing also eases the work of the Atomic Energy Commission against Oppenheimer. A hearing is 'more casual' than a trial also to the extent that it ultimately grants Dr. Oppenheimer fewer protections than an official jury trial would. For example, as Oppenheimer's lawyer, Marks, notes, "im Unterschied zu einem Strafprozeß," only the lawyers of the Atomic Energy Commission have been given access to the secret FBI files about Oppenheimer, making their defense more difficult.³⁹⁵ An official trial would have also have been difficult and undesirable for the AEC first of all because the case against

³⁹² Kipphardt, 40.

³⁹³ Kipphardt, 40.

³⁹⁴ Kipphardt, 104.

³⁹⁵ Kipphardt, 19.

Oppenheimer does not begin with the accusation of a clear action; it is based on the vague (and ultimately impossible to confirm) assumption that Oppenheimer's lack of interest in the hydrogen bomb led to the delay in its development, and, compounding this, that this lack of interest is a reflection not of objective, unbiased assessment, but instead reveals the continuation of communist sympathies ingrained in the man from his early years. As the physicist Rabi argues, in Oppenheimer's defense, the security committee "hätte eine Anklageschrift verlangen müssen, die unloyale Handlungen behauptet, und nicht unbequeme Ansichten."396 Such 'uncomfortable views' are not unique to Oppenheimer; wide swaths of the advanced scientific community, including Rabi, hold such views. The investigation of 'uncomfortable views' rather than treasonous action, however, seriously reduces the burden of proof against Oppenheimer.

Where the lawyers of the Atomic Energy Commission attempt to build a case against Oppenheimer based specifically on his actions, they also far short. First and foremost, their evidence should be judged inadmissible because it has already been examined in past investigations into Oppenheimer's possible communist sympathies. At the heart of these is Oppenheimer's past proximity to communist organizations, albeit without having been a party member, his relationship to a communist ex-wife and his behavior, in the early 1940s, in a situation where he heard of a possible security breach from a friend and did not immediately inform security officials. Although these events had already been examined and closed in a previous investigation, the prosecution argues they deserve to be reexamined due to the inclusion of a new witness, the former communist functionary Paul Crouch. Crouch has claimed that Oppenheimer participated in a closed communist meeting in his own home in Berkeley, on July 23rd, 1941. As Oppenheimer's lawyer, Marks, notes, "Paul Crouch ist in der letzten Zeit

³⁹⁶ Kipphardt, 131.

ziemlich ausschweifend als Zeuge aufgetreten," as if it were "sein Beruf." ³⁹⁷ Ultimately Crouch's inclusion also draws the impartiality of the FBI investigation of Oppenheimer into question. Couch cannot be present at the hearing to testify, because "die FBI hat die Zeugen für diesen Zweck nicht freigegeben."398 And although Crouch could describe Oppenheimer's home with precision (as relayed through Rob and Rolander), the defense is able to demonstrate that Oppenheimer and his wife were not at all in Berkeley at this time, but rather in New Mexico. Clearly the defense, and, it would seem, the author along with it, sees this quality as suspicious. Marks would have liked to demonstrate, through cross-examination, "dass es Interessenten für derartige Zeugnisse gibt."³⁹⁹ While it does not prove the biased, unjust intentions of the government bodies seeking to strip Oppenheimer of his security clearance, it does, as the security agent Landsdale later complains of the Atomic Energy Commission's approach to the case, allow one to doubt "dass hier [in the hearing] die Wahrheit gefunden werden soll." ⁴⁰⁰ But if finding the truth about Oppenheimer is not the commission's goal, just what might it be instead? The play is concerned intently that the hearing may represent a broader reorganization of political thought in favor of expediency in addressing security demands at the expense of liberal democratic protections. The simple act of putting these inadequacies on display, alongside discussion of the dangers of nuclear warheads, inverts the hearing from the perspective of the audience: From the perspective of the play, it is less Oppenheimer who is on trial (though his contributions to the

³⁹⁷ Kipphardt, 19.

³⁹⁸ Kipphardt, 32.

³⁹⁹ Kipphardt, 32. Emphasis added.

⁴⁰⁰ Kipphardt, 73.

atomic bomb project are subtly condemned), but the system that is subjecting him to a clearly unfair hearing because of his reluctance to pursue the hydrogen bomb.

Making the Scientist? Producing the Public?

It is in the intermezzos that the positions of each member of the committee and the advocacy teams is most purely distilled and in which they appear to most candidly speak of their relationship to the hearing and to the status of individual rights in the nuclear age. They provide a degree of nuance to the characters, especially of the prosecution, that would otherwise be absent from the play, given the hearing's antagonistic form. The intermezzos are distinct from the hearing, distinctly characterized as a separate space from the hall in which the hearing takes place, and comment on it. They present a series of positions on the purpose and the outcome of the trial; they do not, in themselves, provide a final analysis of the hearing's implications. Still, they raise these possible implications, allowing the various members of the presiding security commission, the persecution, and the defense to expound upon their views of the trial, providing various interpretative lenses from the position of moderate pro-state liberalism, strict security-minded anticommunism, and state-skeptical liberalism.

The position of a pro-state 'liberalism' is expressed by the security committee members Gordon Gray and Thomas Morgan. These members desire a means by which scientists can come to understand the necessity of security and understand that their private beliefs have no role to play in their government-employed work, while at the same time maintaining their fundamental independence in their private lives. In the fifth intermezzo, Gray and Morgan reason that the hearing is too focused on Oppenheimer's political history, a quality that might be enough to convince Joe McCarthy of Oppenheimer's disloyalty, but is inadequate to any serious decisions

about security, specifically as regards the physicists, who are "kompliziert[e] Highbrows." 401 That is, the physicists are generally irreducible to a single identity or ideological position they may hold now or may have held in the past. The government can reasonably tolerate a wide range of views, but it must make it clear to scientists, "daß [sie] ihnen nicht die und die Ansichten vorschreiben, privat, daß [sie] von ihnen eine strikte Trennung zwischen ihren subjektiven Ansichten und ihrer objektiven Arbeit fördern müssen. Weil eine moderne Atompolitik nur auf der Grundlage einer wertungsfreien Arbeit möglich ist."402 Morgan compares this to any industrial enterprise. Research must be performed without value judgements, and employees must serve the interests of the enterprise rather than their own. He sees this being no different in Oppenheimer's case. The main goal of their hearing should be to establish whether Oppenheimer's private views, whatever they may have been, have interfered with his work as a physicist and government counsel. But Oppenheimer's subjective views can remain his own, as long as he can separate his private, subjective beliefs from his objective work life, because, in Morgan's view, "Diese Trennung berührt die Prinzipien unserer Demokratie." 403 Thus a strict division between the private and public individual can must be maintained for the sake of democracy.

In contrast to Morgan and Gray, Robb and Rolander, working for the Atomic Energy Commission, are not satisfied with the division of the personality between beliefs and behaviors. They are convinced that the complexity of Oppenheimer's thoughts and behaviors do not indicate that the scientist can keep private and public beliefs distinct, but rather index his

⁴⁰¹ Kipphardt, 48.

⁴⁰² Kipphardt, 48.

⁴⁰³ Kipphardt, 47.

disloyalty. The complexity of the scientist, paired with the limited aspirations of the hearing, leads Robb to candidly to doubt the value of "facts" in the modern security hearing. "Um Tatsachen richtig zu deuten," Robb proposes in the first intermezzo, "müssen wir im Grunde noch die Gedanken, die Gefühle und die Motive kennen, die zu diesen Tatsachen geführt haben, das ganze Archiv des intimen Haushalts einer Person, das unsere Nachrichtenmittel heute ja liefern."404 In other words, he proposes a wholesale 'opening' and exposure of the individual at hand, complete knowledge of their inner life and social context. His assessment shows surprising ignorance of the surveillance to which Oppenheimer had been subjected during his years at Los Alamos, where, as the audience later learns, he was trailed with precision. When asked whether this would mean an invasion of the private sphere, Robb confirms, "Wenn die Sicherheit der freien Welt davon abhängt, müssen wir zu unserem Unbehagen bis an ihre Grenzen gehen."405 In the discourse on security and individual liberty, we must, despite our discomfort, go to its very border—willingly risking its violation—, as Robb later does when questioning Oppenheimer about his interactions with a suicidal ex-wife. The phrase, "bis an die Grenze der Privatsphäre gehen," is euphemistic: the private sphere, it would appear, is either violated entirely, or ceases to exist as a concept.

The fourth intermezzo, in which Robb's colleague Rolander records notes into a Dictaphone, provides a more thorough explanation of this concept relative the security hearing.

Sicherheitsentscheidungen sind pragmatisch: was gegen wen in welcher Lage zu sichern ist. Sie erheben nicht den Anspruch, absolut gerecht und unantastbar moralisch zu sein. Sie sind praktisch. Deshalb wurmen mich Ideologisierungen hier, die Prinzipienreiterei über die heilige Privatsphäre aus dem vorigen Jahrhundert. Wir haben nüchtern zu untersuchen, wie stark Oppenheimers Sympathien waren, wie anhaltend sie sind, welche Folgen das in der Vergangenheit für uns hatte, und ob wir uns das zukünftig leisten

404 Kipphardt, 22.

⁴⁰⁵ Kipphardt, 22.

können. Es ist die Geschichte selbst – die Möglichkeit des Unterganges der freien Welt –, die unsere Sicherheitsbestimmungen scharf und vorbehaltslos macht. 406

Where Robb had merely motioned toward the inadequacy of the means of security assessment, Rolander actively harps against the protective principles of the trial in their entirety. Rolander places his emphasis on the *practicality* of the security commission. He strips the hearing of the appropriately lofty goals of the trial, of the variety of justice and morality oriented toward establishment of truth statements, and the limits placed on the state in terms of their investigative privileges (here represented in the short form as 'the private sphere'). He is utterly unconcerned with the concept of guilt. The concept of guilt has dissolved and is replaced instead by the vague categories of "sympathies," their "consequences," and future prospects. He refuses to distinguish between *action* and *belief* (just as at the hearing the notion of *judgement* is replaced with the mere category of *decision*). Liberal principles protecting the 'accused' are lambasted as mere ideological claims. They must be stripped above all because they are impractical, and impracticality weakens the capacity of the 'Free World' to defend itself against external enemies.

Robb and Rolander view the alleged need to strip the individual of privacy protections on the one hand as a regrettable, on the other as a self-evident necessity of the nuclear age. Much as Gray and Morgan do, they conclude that the security clearance essentially amounts to one portion of a job interview. If this is the case, they reason, then ultimately there is no harm done through this development. Certain positions in the state bureaucracy should naturally require a greater degree of loyalty and confidentiality than others, so it is perhaps not surprising that participants would be vetted.

⁴⁰⁶ Kipphardt, 42.

However, Kipphardt also opens this development into a broader discussion of liberal principles that suggest that the pressures placed on Oppenheimer are not contained to his situation alone, but constitute a broader threat to the public sphere, in which the expression (and ultimately even the experience) of opposition is to be removed. In the third intermezzo, Garrison and Marks, when addressing the inadequate partiality of the hearing, turn to Oppenheimer explicitly and implore him to bring the otherwise confidential hearing to the public.

MARKS: Wir müssen an die Öffentlichkeit! – Die Wissenschaftler von uns aus informieren.

OPPENHEIMER: Ich möchte dabei bleiben, Vorwürfe hier zu entkräften, Tatsachen hier richtigzustellen. Alles.

GARRISON: Wenn es um Tatsachen ginge, wenn es um Argumente ginge. Es geht um Sie als politisches Exempel.

MARKS: Um Unterwerfung der Wissenschaft, Einschüchterung jedes Einzelnen, daß kein Platz mehr sei für Leute, die einen Ochsen einen Ochsen nennen. 407

While Oppenheimer is primarily concerned with defending his own reputation, which he sees as the immediate problem of the hearing, Garrison and Marks place the hearing into a far broader network of political reorganization taking place in the United States. Marks wants to make the hearing, hitherto secret, public. This is because the lawyers do not believe it is primarily concerned with addressing Oppenheimer's person and actions, but instead about creating a political example or template against those who dare refuse to be 'yes men.' This begins, they suggest, with the subjugation of the scientists, but quickly expands to includ the intimidation of "jede[n] Einzelnen" and the expulsion of those willing to speak frankly about their thoughts and opinions.

The evidence that the hearing is not about the facts is familiar, but listed again on the following page, for example that only the prosecution has access to the secret FBI files on

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⁴⁰⁷ Kipphardt, 32–33.

Oppenheimer and that Oppenheimer's own letters have been confiscated by the FBI and he himself is not allowed access to them. Had the Atomic Energy Commission only been concerned about Oppenheimer's loyalty, they could have simply chosen to not extend his contract, which was to end in three months regardless. Instead, he and his lawyers find themselves, in the word of Marks, on a "Schlachtplatz" with bound hands. They are actively ruined for a purpose that stretches beyond Oppenheimer himself. Marks brings these developments to a dark conclusion when he asks: "Soll der moderne Staat der totale Überwachungsstaat sein?" Although it is apparent that the Atomic Energy Commission lawyers see a need for intense surveillance, at the very least of scientists, it is not unreasonable of Marks to see in the violations of Oppenheimer's rights and privacy that have already taken place the possibilities of further, darker erosions of liberal protections in the future.

The security commission member Evans comes to a similar conclusion. At the coffee machine during the second intermezzo, he confides his discomfort with the process to his colleague, Morgan. The hearing, he has decided, has little to do with his conception of science. It is merely insulting and unlikely to produce a more loyal scientist. It would appear as though the process is oriented toward the subjugation of scientific discipline to military discipline, and that the subjugation of physics merely precedes the subjugation of other sciences. Evans, like Marks, asks whether the process reflects broader developments that do not stop merely with scientists or state employees, but threaten to subsume the citizenry in its entirety. He asks whether "der Totalitätsanspruch des Staates unabweisbar geworden [ist]," 410 implicitly raising the specter of a

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⁴⁰⁸ Kipphardt, 34.

⁴⁰⁹ Kipphardt, 34.

⁴¹⁰ Kipphardt, 26.

totalitarian United States. In this respect, he then proposes a relationship between advancing technology and political control.

Ich beobachte zwei Entwicklungen jedenfalls. Die eine, daß wir die Natur zunehmend beherrschen, unseren Stern, andere Sterne. Die andere, gleichzeitig, daß wir zunehmend beherrscht werden durch staatliche Apparate, die unser Verhalten zu normieren wünschen. Die Instrumente, die wir entwickeln, um unsere Augen in unbekannte Sonnensysteme zu schicken, arbeiten bald in unbekannten elektronischen Überwachungssystemen, die unsere Freundschaften, Gespräche, Gedanken zu Daten verarbeiten. Ob es die richtigen Gespräche, die richtige Gedanken, die normativen. Wie kann aber ein neuer Gedanke ein normativer sein?⁴¹¹

Two processes are deeply intertwined: the mastery of the human being over nature and the universe, and the mastery of the state over its population. This glance toward the dialectic of enlightenment concentrates on the potential for negative development scientific advancements are capable of "conquering the stars" are also capable of conquering not only foreign, but local populations. Evans foresees advances in the capacity of quantifying and mapping the beliefs and opinions of both individuals and the population as such through surveillance systems capable of processing our 'friendships, conversations and thoughts' into data and controlling the population for their beliefs. His speech implicitly binds the development of the atomic bomb—this purveyor of mass, undifferentiated destruction, to the precise, cautious avenues of an individualized control mechanism. Oppenheimer's hearing, through its insistence upon minute personal details in his biography, seems to foreshadow a coercive future without privacy—produced by the same systems of knowledge production that resulted in the atomic bomb.

Such erasure of personal privacy melds together also with the broad, long-term possibility of an acquiescent population. In conversation with Evans, even Thomas Morgan's relatively benign tones ring ominously. Although he agrees with Gray that scientist only need to

⁴¹¹ Kipphardt, 26–27.

understand the strict divisions needed between their personal and professional opinions, Morgan nonetheless expresses the need for absolute transparency on the part of scientists, in the expectation that they will gradually grow to fill this role.

Ein, zwei Generationen weiter, und wir haben einen Typ von Wissenschaftler, der sich den wirtschaftlichen und staatlichen Erfordernissen angepaßt hat, der seine Funktion akzeptiert und auch seine Durchsichtigkeit. Es ist eine Frage der Gewohnheit, glaube ich.⁴¹²

He thus foresees a future scientist that has adapted to the demands of the state (and economy), who merely needs to grow accustomed to his 'function' and to the necessary transparency of his position. This apparently innocuous statement provides a mild response to Evans's concern about a future, technologically organized surveillance state, limiting its reach merely to those of the government employee, but Evans does not buy it entirely, asking instead whether a transparent life is worth living. Ultimately Morgan's reflection has a steeper cost as well. He conjectures: "Vielleicht sind die großen einzelnen Ideen vorbei und die einzelnen Persönlichkeiten. Dafür kriegen Sie die Rechenmaschinen von Los Alamos dann für 19 Dollar 90 im Supermarkt."

This is a reflection back on the mass; the end of humanistic individualism in exchange for material comfort. In principle the idea can be as offensive to liberals as it is, potentially, to conservatives, though it remains attractive to a posited class that desires the mechanization and automatization of human interactions for the sake of security and market reliability.

One is thus confronted in this play with three positions on the relationship between the nuclear state and its citizenry, as pertains to it liberal democratic values. (1) Liberal democratic values interfere with security and may have to be neglected for the sake of security, but this is

⁴¹² Kipphardt, 27.

⁴¹³ Kipphardt, 27.

legitimized through the defense of the West. The division between an individual's private subjective views and public objective work is misleading in a security hearing. (2) Liberal democratic values are *the* inherent good of American society and are inalienable, even for the sake of security. The influence of subjective views on work life does not automatically constitute an act of disloyalty against the government. Or (3) Liberal democratic values are an inherent good, but the Oppenheimer hearing does not have much to do with liberal democratic values; it is far more about the scientist's ability to understand the security concerns of the state and his or her particular place of employment. It is necessary for a scientist to maintain strict division between personal views and objective labor and this type of division between public and private self is part of the fundament of liberal democracy.

Arguably, Kipphardt transforms these positions into a binary between, on the one hand, the lawyers of the Atomic Energy Commission and—in degrees—the members of the Security Commission Morgan and Gray, on the other, Oppenheimer's lawyers along with Evans of the Security Committee. Oppenheimer's lawyers and Evans are generally concerned about the erosion of the principles of the liberal state, such as the distinction of the private sphere, individual privacy and free thought. Opposing these views are those of the AEC lawyers, for whom security is paramount in the nuclear state. The principles of the liberal state, where they clash with practical security necessities, lose their validity. In many ways, the opinions formulated by the AEC lawyers confirm the totalitarian fears. The security man, distraught by the 'impracticality' of legal protections of the citizen against the state, is perhaps the most explicit example of this. While these two approaches appear diametrically opposed, they are in many respects mutually self-confirming. The behavior and beliefs of Garrison and Robb confirms Marks, Rolander, and Evan's fears by tentatively putting them into practice.

How do these intermezzos comment on the documentary events? The opinions expressed by the security commission, and the lawyers, remain somewhat balanced. The play, however condemns the hearing as a whole. In other words, even if the thoughts enumerated in the intermezzos are merely voiced, but never confirmed, it is nonetheless clear that the hearing, which fails to live up to liberal democratic principles, is delegitimized. Not a genuine trial, the hearing is subject to inadequate public scrutiny, unequal access to evidence, and the inclusion of suspect testimony. The crisis of the Cold War and of the arms race has been instrumentalized for the suppression of opposition voices, just as Marks has argued. The play outlines a historical movement from Oppenheimer's willing participation in the atomic project, even when he experienced scruples regarding his participation, to a type of 'awakening' in which he rejects his participation, and ultimately to the state's efforts to punish him for his newfound political voice. The gears of state coercion fire up where shifting personal beliefs appear to threaten the plans of the military state. In this respect, one can argue that In der Sache J. Robert Oppenheimer ultimately does not leave these positions balanced, but instead presents a world of new, perhaps still embryonic, perhaps still tentative, but nonetheless still very possible totalitarian tendencies in the name of survival in the atomic age.

If the play poses this as the likely end of the collaboration between science and state, what escape does the play propose? There is also one more remarkable component of the Oppenheimer conscience, and it comes out in Kipphardt's play where one examines between the lines. The underlying impossibility of "einen Mensch wie ein Zundsatz auseinandernehmen," as the prosecution desires to do, runs up against Oppenheimer's own complexity. In this respect Oppenheimer's search for meaning in his life and security in his decisions, ultimately brings the play more in line with the religious or spiritual focus of the plays analyzed above. It is not only

undesirable to take a human being apart 'like a trigger mechanism,' Oppenheimer's motivational structure, underpinned by texts such as the Bhagavad Gita and John Donne's poetry (to which the play obliquely refers) but marked by startling uncertainty, renders him incomprehensible to a security procedure that is not necessarily interested in understanding him in the first place. ⁴¹⁴ The human being who so desires cannot be reduced to the simplistic categories pursued by the Atomic Energy Commission. Ideological boxes, streamlined motivations, etc. will always exceed the possible range of data gathered on an individual. If the human being awakens to this internal complexity and lives it out, there will be a remainder that cannot be reduced to the data and which the state cannot take away. In this respect, where in the physicist dramas authors tended to overcome the determinism of materiality through recourse to a spiritual plane, in the secularized *In der Sache J. Robert Oppenheimer*, it is through promise of human individuality that the state cannot force its citizens into an undifferentiated, submissive, predictable and manipulable population.

Analytical Commentary at the Expense of Dramatic Form

Through the materials he has collected and the manner in which he enhances them with creatively produced side-conversations in the intermezzos, Kipphardt begins to make his play about more than the immediate case of Oppenheimer, and even about more than the state of the scientist specifically, but most broadly, as also in *Prozess Richard Waverly*, about the doubled

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⁴¹⁴ These intertexts subtly appear in references to the "Trinity" test bombing, a reference John Donne's "Batter my heart, thy three person'd God," and through Oppenheimer's citation of the Gita itself, "Wenn das Licht aus tausend Sonnen/ am Himmel plötzlich hervorbrächte,/ das wär der Glanz des Herrlichen." (Kipphardt, 94.) Interesting, both of these reflect more on the desire to submit to the will of a higher being, rather than to become an agent in one's own right, much at the Bhagavad Gita discusses the necessity that one fulfil the duties presented by one's caste. For more information on Oppenheimer's relationship to the Bhagavad Gita, see: James A. Hijiya, "The 'Gita' of J. Robert Oppenheimer," *Proceedings of the American Philosophical Society* 144, no. 2 (2000): 123–67.

problem of juridical inadequacies and about the possibility of a sociopolitical reorganization taking place in the United States of America. The frailty of the rule of law and of liberal democratic principles rests on the surface of the play and is addressed repeatedly and through multiple contexts. It is rendered at times heavy-handedly, at other times with more nuance. On the one hand, the play takes the broad view, asking about the capacity of the state to produce both a wide net of control, organized around the discourse on the security state, while at the same time imposing a coercive ideological apparatus with the intention of eliminating oppositional thinking. On the other, the atomized view, the capacity of the state to examine the inner world of its citizens. In either case, these developments index the decay of individual freedoms and liberal governmental principles in the security state of the atomic era. The only protection comes from the internal drive of the human being to maintain his or her individual reason in spite of this.

The distinction between this and other physicist dramas appears in shades but need not be understated. These constitute some of the most directly political atomic plays insofar as they comment directly on the state of American jurisprudence and most directly argue the irresponsibility and unnecessity of American nuclear attack on Hiroshima and Nagasaki and subsequent nuclear arms development program. Hand-in-hand with this development, they begin to view the crisis of agency in a new light. Where previously the march of determinism, whether through material, technological, or historical influences, appeared as a historical process, by the 60s it is being investigated specifically as a state project; it is the project and target of human action. There has been a shift, too, in the frame through which this determinism is rejected.

Starting from the metaphysical or religious dependence on a space beyond mere materiality, repoliticization places a greater attention on demythologized capacities within the human being—

reason, empathy, and, ultimately, the preparedness to frame and narrate oneself as a free agent against the overwhelming apparatus of the state.

In closing, however, one must note that the new engagement reflected in the political content of these plays is also marked by a decline in their reflection of dramatic principles. Both trial plays are primarily concerned not with the depiction of action on stage, but the reconstruction and narrativization of past events, as well as the examination of the internal psychological state of their protagonists and deliberation over the legitimacy of nuclear weapons development. The conservative moment in German theater represented in the physicist drama has passed entirely; it has become possible for German theater to hearken back to forms it had already begun to develop in the 1920s and 1930s. In the process, however, one increasingly sees a loss of interest or loss of capacity for the theater to depict action. The tendencies of the atomic play to place deliberation above action reach their most thorough expression here.

CONCLUSION

The Lifespan of a Formal Problem

The atomic plays of the first decades of the Cold War attempt to bring the aesthetics of the stage to bear on a distinctly political theme. Multiple factors influenced the transformation of the material of the atomic bomb onto the stage. It is bound to the disappearing, and yet still influential concept of the classical drama, which compels the dramatist to treat the stage as a space for the display of interpersonal conflict. All those themes that emerge beyond the realm of the interpersonal—the complex systems of state relationships on which the development and deployment of new weapons rely, the mental anguish of the indecisive physicist, or the crippling fear of the citizen on high alert—must undergo transformation into the space of interpersonal discursive interaction or be discarded. The atomic plays and physicist dramas reflect the effort to mold a material to an aesthetic form in varying degrees. Frisch and the authors of the physicist dramas who followed him reduced dramatic content in favor of deliberative, expository and episodic content dedicated to increasing the discussion of the bomb and the atmosphere of its threat. Many ultimately held onto the principle of dramatic action in the process. The most successful author to render the material of the atomic bomb dramatically was Dürrenmatt in his Die Physiker. Dürrenmatt may have had his fun at the expense of the drama when, in the opening statement for *Die Physiker*, he notes his effort to maintain space, time and action in his play, claiming that "einer Handlung, die unter verrückten spielt, kommt nur die klassische Form

bei."⁴¹⁵ As much as he succeeds in doing this, however, the statement masks the true paradox of *Die Physiker*: that Dürrenmatt can only save the formal principle of drama by destroying its underlying dependence on distinctly *human* interaction. As he contends, a properly modern 20th-century conception of power, individuality, and action simply does not allow for a directly mimetic visual reproduction of human relationships on stage. Kipphardt's *In der Sache J. Robert Oppenheimer* and Schneider's *Prozess Richard Waverly* ultimately concede the same point. The trial play can potentially be gripping and incisive, but ultimately it foregoes dramatic staging of action in favor of recall, staged narration, and interpretation of events. ⁴¹⁶

Due in part to drama's historic interest in human action, freedom and will, it is particularly apt and inclined to the discussion of the agency and responsibility of the individual in the atomic age. This is one of the dominant, recurring motifs of the atomic play. In general, however, the plays present this world as still strongly subject to determination, whether through historical, biological, technological or mechanical factors. This is only compounded by the structures and relationships human beings have built up around themselves. In the 1940s and 50s, it seemed that if human beings were determined by such factors, they had been determined, too, to build the atomic bomb and would be determined, finally, to eliminate themselves with it. Max Frisch protagonist poses hopefully that the indeterminate moment of decay of a single atom of a radioactive isotope helps break down the powerful narrative of mechanical determinism. His play, however, suggests that human beings viewed collectively tend toward violence and can do

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⁴¹⁵ Friedrich Dürrenmatt, *Die Physiker. Eine Komödie in zwei Akten, Neufassung 1980.*, Werkausgabe in siebenunddreißig Bänder 7 (Zürich: Diogenes, 1998), 12.

⁴¹⁶ The progressive vacating of visually represented action from the stage is not restricted to the atomic play, but its continuation is well illustrated by an even later example. Michael Frayn's *Copenhagen* reflects on Heisenberg's 1941 meeting with Niels Bohr in Copenhagen. The play neither depicts the events directly, nor even deliberates them in courtroom, but rather attempts to reconstruct them as voices from beyond the grave—completely severed from all attempts to depict dramatic action. (Frayn, "Copenhagen.")

little to stand in the way of future self-inflicted extinction. The physicist dramas turned to religion in an effort to break out of the material relationships driving humanity to irrecoverably irradiate the planet. They suggested that reference to a transcendental influence, to a Christian god or another mystical influence, could provide the corrective to the depletion of the human will in the age of the mass and the apparatus. However, even they could not bring themselves to fully believe that this reverence could save human beings from the atomic bomb. The moral victories and spiritual reinvigoration their protagonists help mask the fact that their attempts to intervene in world history did little good, and nonetheless this failure is apparent. Late physicist dramas pick up on this. Gong and Dürrenmatt treat the deity as a joke. In the former, the possibility of its existence is entertained, but its will emerges merely from human beliefs, and as such, it brings neither guidance nor true agency to the protagonist, even when called upon. In the latter, Solomon is not only purely imagined, he also provides a pretext for the continuity of the deadly scientific development. Belief in him does not invigorate one with the spirit needed to rise above the uncontrollable forces of the material world, but merely marks one as insane.

The Decline of the Atomic Play

After 1964, the atomic bomb ceased to be a major topic for new German-language stage writing. The bomb was occasionally mentioned in documentary theater pieces of the late 60s, for example, in Rolf Hochhuth's "Everyman" in *Soldaten*, which features a Japanese survivor of the Nagasaki explosion, or in Peter Weiss's *Viet Nam Diskurs*, in which an American general proposes nuking Vietnam. Hilde Rubenstein's bunker drama, *Das tiefgefrorene Reh*, was written in 1968, and the nuclear theme even returned to some prominence during the second Cold War of the 1980s, making a splash with Harold Mueller's *Totenfloß*. But the fundamental question of these plays had changed. They were no longer about an effort, on the part of an individual, to maintain their agency and conscience in the face of either a forceful material, increasingly

technological determinism or an enormous state apparatus with new means of surveillance and control. They were, rather, in the later documentary dramas more purely about commenting on the horror and irresponsibility of war—points of emphasis in a broader composition about the evil of violent conflict—, and, in Rubenstein and Mueller's plays, about the collapse of family and social relationships in a world environmentally contaminated beyond all recourse. Where the most successful atomic plays and physicist dramas continued to be performed, the lack of new writing can be ascribed, most likely, to historical factors. The political salience of the anti-atomic movement faded in Germany after 1962, when the Kennedy administration, despite the continued encouragement of the Adenauer administration, opted to not arm the Bundeswehr with nuclear capable-missiles and store nuclear warheads on German soil. The Partial Test Ban Treaty of 1963, for its part, helped usher an era of relative calm following the intense nuclear fears of the early 60s, and assuaged the growing public concern in Germany regarding atmospheric radiation. In the years when German literature politicized most rapidly, however, the atomic theme arguably faded simply because other political topics gained greater standing: The new energy about punishing Nazis following the Eichmann trial, the opposition to the Viet Nam War, broader environmental concerns, social revolution and '68, and eventually terrorism. The atomic bomb did not go away, but it was, for a time, superseded by the unique concerns of a new generation.

WORKS CITED

- Anders, Günther. Die Antiquiertheit des Menschen. Über die Seele im Zeitalter der zweiten industriellen Revolution. Munich: Beck'sche, 1956.
- ———. Die Antiquiertheit des Menschen. Über die Seele im Zeitalter der zweiten industriellen Revolution. Munich: Beck, 2010.
- Anders, Günther, and Claude Eatherly. *Burning Conscience; the Case of the Hiroshima Pilot, Claude Eatherly, Told in His Letters to Gunther Anders.* [1st American ed.]. New York: Monthly Review Press, 1962.
- Arendt, Hannah. Eichmann in Jerusalem: A Report on the Banality of Evil. New York, N.Y.: Penguin Books, 2006.
- ——. The Origins of Totalitarianism. New York: Meridian, 1972.
- Arendt, Hannah, and Margaret Canovan. *The Human Condition*, 2nd Edition. 2nd edition. Chicago: The University of Chicago Press, 1998.
- Attenhofer, Elsie. Cabaret Cornichon: Erinnerungen an ein Cabaret. Bern: Benteli, 1975.
- Augustine, Dolores L. Taking on Technocracy: Nuclear Power in Germany, 1945 to the Present, 2018.
- Bänziger, Hans. Frisch Und Dürrenmatt: Materialien Und Kommentare. Tübingen: Niemeyer, 1987.
- Barton, Brian. Das Dokumentartheater. Realien zur Literatur 232. Stuttgart: J.B. Metzler, 1987.
- Bar-Yitshak, Ḥayah, and Raphael Patai. "Asmodeus." *Encyclopedia of Jewish Folklore and Traditions [Electronic Resource]*. Armonk, N.Y.: M.E. Sharpe, 2013.
- Baudrillard, Jean. *Simulacra and Simulation*. Translated by Sheila Faria Glaser. Ann Arbor: University of Michigan Press, 1994.
- Becsi, Kurt. Atom vor Christus: ein Drama in 3 Akten. Berlin: Bloch Erben, 1952.
- Beebee, Helen, Nikk Effingham, and Philip Goff. *Metaphysics : The Key Concepts*. Abingdon, Oxon; New York: Routledge, 2011.
- Blum-Barth, Natalia. Alfred Gong: Leben Und Werk. Oxford [u.a.]: Lang, 2009.
- Blumenberg, Hans. *Shipwreck with Spectator : Paradigm of a Metaphor for Existence*. Cambridge, Mass.: MIT Press, 1997.

- Brant, Sebastian. "Eine Vorrede zu dem Narrenschiff." In *Das Narrenschiff von Sebastian Brant Text im Projekt Gutenberg*. Accessed October 1, 2016. http://gutenberg.spiegel.de/buch/das-narrenschiff-2985/1.
- Brecht, Bertolt. Leben des Galilei. Frankfurt/Main: Suhrkamp, 1963.
- "Briton Buys Oppenheimer Play." *The New York Times*, November 25, 1964, sec. Archives. https://www.nytimes.com/1964/11/25/archives/briton-buys-oppenheimer-play.html.
- Brock-Sulzer, Elisabeth. "Zürcher Schauspielhaus." Edited by Gesellschaft Schweizer Monatshefte. Schweizer Monatshefte: Zeitschrift fur Politik, Wirtschaft und Kultur 26, no. 8 (November 1946): 508–11.
- "BÜHNE UND FILM: Um Das Abendland Zu Retten." *Der Spiegel*, December 11, 1948. http://www.spiegel.de/spiegel/print/d-44421052.html.
- Butler, Michael. The Plays of Max Frisch. New York: St. Martin's Press, 1985.
- Carpenter, Charles A. Dramatists and the Bomb: American and British Playwrights Confront the Nuclear Age, 1945-1964. Westport, Conn: Greenwood Press, 1999.
- Charbon, Rémy. *Die Naturwissenschaften im modernen deutschen Drama*. Zürich; München: Artemis Verlag, 1974.
- Chrambach, Eva. "Schneider-Lengyel, Ilse Maria." *Neue Deutsche Biographie, Band 23*, 2007. https://www.deutsche-biographie.de/gnd119490927.html#ndbcontent.
- Connelly, Frances S. "Grotesque." In *Encyclopedia of Aesthetics*. Oxford University Press, 2014. http://www.oxfordreference.com/view/10.1093/acref/9780199747108.001.0001/acref-9780199747108-e-344.
- Crockett, Roger. *Understanding Friedrich Dürrenmatt*. Columbia, SC: University of South Carolina, 1998.
- "Crystal (n.)." *Online Etymological Dictionary*. Accessed July 1, 2018. http://www.etymonline.com/word/crystal.
- Daiber, Hans. Deutsches Theater seit 1945 [i.e. neunzehnhundertfünfundvierzig]:

 Bundesrepublik Deutschland, Dt. Demokrat. Republik, Österreich, Schweiz. 1. Aufl.

 Stuttgart: Reclam, 1976.
- Denger, Fred. Bikini. München: Drei-Fichten-Verl., 1948.
- "Deutsche Biographie Langenbeck, Curt." Accessed March 10, 2016. http://www.deutsche-biographie.de/register_pnd119520656.html.
- "Die Physiker | Schauspielhaus Zürich." Accessed December 11, 2018. https://www.schauspielhaus.ch/de/play/515-Die-Physiker.

- Dürrenmatt, Friedrich. "Das Unternehmen der Wega, Ein Hörspiel." In Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett, 17:77–124. Werkausgabe in dreißig Bänder. Zürich: Diogenes, 1980.
- ———. "Der Erfinder." In *Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett*, 17:136–51. Werkausgabe in dreißig Bänder. Zürich: Diogenes, 1980.
- ——. "Der Gerettete." In Nächtliches Gespräch mit einem verachteten Menschen, Stranitzky und der Nationalheld, Das Unternehmen der Wega: Hörspiele und Kabarett, 17:127–35. Werkausgabe in dreißig Bänder. Zürich: Diogenes, 1980.
- ———. "Der Winterkrieg in Tibet." In *Der Tunnel und andere Meistererzählungen*, 161–238. Zürich: Diogenes, 2011.
- ——. "Die Panne." In *Der Tunnel und andere Meistererzählungen*, 23–82. Zürich: Diogenes, 2011.
- Die Physiker. Eine Komödie in zwei Akten. Zürich: Verlag der Arche, 1962.
- Die Physiker. Eine Komödie in zwei Akten, Neufassung 1980. Werkausgabe in siebenunddreißig Bänder 7. Zürich: Diogenes, 1998.
- ——. "Geschichte meiner Stoffe." In *Über Friedrich Dürrenmatt*, edited by Daniel Keel, 3rd ed., 30:19–28. Werkausgabe in dreißig Bänder. Zürich: Diogenes, 1986.
- ——. "Heller als tausend Sonnen.' Zu einem Buch von Robert Jungk." In *Politik. Essays*, *Gedichte, Reden*, 34:20–24. Werkausgabe in siebenunddreißig Bänder. Zürich: Diogenes, 1998.
- ——. "Theaterprobleme." In *Theater: Essays, Gedichte, Reden*, 31–72. Werkausgabe in siebenunddreißig Bänder 30. Zürich: Diogenes, 1998.
- "DÜRRENMATT: Im Irrenhaus." *Der Spiegel*, February 28, 1962. http://www.spiegel.de/spiegel/print/d-45139187.html.
- "EATHERLY-BRIEFE: Dreyfus in Waco." *Der Spiegel*, September 13, 1961. http://www.spiegel.de/spiegel/print/d-43366373.html.
- Elsdörfer, Matthias. Ein tiefer blick in "leere" Schubladen: Deutsches im Nachkriegstheater 1945-1948. Frankfurt am Main: P. Lang, 2007.
- Erpenbeck, Fritz. "Brief an einen jungen Dramatiker." Theater der Zeit. January 1947.
- Eybl, Franz M. "Narrenbuch und Totentanz: Frühneuzeitliche Lektüren der Selbstbespiegelung." Internationales Archiv für Sozialgeschichte der deutschen Literatur 39, no. 1 (2014): 204–25.

- Fasse, Ferdinand. Oldenbourg Interpretationen mit Unterrichtshilfe. Heinar Kipphardt: In der Sache J. Robert Oppenheimer. Oldenbourg-Interpretationen 20. München: Oldenbourg, 1988.
- Foucault, Michel. "Society Must Be Defended": Lectures at the Collège de France 1975 -1976. Translated by David Macey. New York: Picador, 1997.
- Frayn, Michael. "Copenhagen." In *Plays: 4 Copenhagen, Democracy, Afterlife*, 1–153. London: Meuthen, 2010.
- Freytag, Gustav. *Technique of the Drama; an Exposition of Dramatic Composition and Art.* B. Blom, 1968.
- Frisch, Max. "Die Chinesische Mauer. Eine Farce (1955)." In *Stücke I*, 149–245. Frankfurt/Main: Suhrkamp, 1969.
- ——. Tagebuch 1946-1949. Frankfurt/Main: Suhrkamp, 1963.
- Geiger, Heinz. Widerstand und Mitschuld. Zum deutschen Drama von Brecht bis Weiss. Düsseldorf: Bertelsmann Universitätsverlag, 1973.
- Gerber, Frank. "«Es dürfte hier eingeschritten werden müssen …» Das Cabaret Cornichon und die Zensur 1939-1945." In *Theater in der Nähe. Beiträge zur Theatergeschichte der Schweiz*, edited by Andreas Kotte, 343–426. Theatrum Helveticum 9. Zürich: Chronos, 2002.
- Girshausen, Theo. "West Germany." In European Theatre, 1960-1990: Cross-Cultural Perspectives, edited by Ralph Yarrow. London; New York: Routledge, 1992.
- Gong, Alfred. *Die Stunde Omega*. Edited by Bärbel Such. Oxford; Bern; Berlin; Bruxelles; Frankfurt am Main; New York; Wien: Lang, 2007.
- ——. *Manifest Alpha: Gedichte*. Aachen: Rimbaud, 2001.
- ——. "Zetdam: Ein Satyrspiel." Typewritten Manuscript, 1955. Alfred Gong Papers, Box 3, Vol. 18. University of Cincinnati, Archives and Rare Books Library.
- Grimm, Herman. "Schiller und Goethe." In *Goethe im Urteil II*, edited by Karl Robert Mandelkov. Goethe im Urteil seiner Kritiker. Dokumente zur Wirkungsgeschichte Goethe in Deutschland, II, n.d.
- Guernsey, Otis L. *Curtain Times: The New York Theatre*, 1965-1987. Hal Leonard Corporation, 1987.
- Guthrie, Catherine. "Refiguring the Sacred: Surreal Theater as the Space of Alterity in the Works of Leonora Carrington, Djuna Barnes, Angela Carter, and Audre Lorde." Washington State University, 1996.

- Hardt, Michael, and Antonio Negri. *Multitude: War and Democracy in the Age of Empire*. New York: Penguin, 2004.
- Hawking, Stephen. A Brief History of Time. 10th Anniversary edition. New York: Bantam, 1998.
- Hays, Julius. "Ist der Krieg dramatisch?" Theater der Zeit, December 1946.
- Henninger, Joseph. "Sacrifice [First Edition]." In *Encyclopedia of Religion*, edited by Lindsay Jones, 2nd ed., 12:7997–8008. Detroit, MI: Macmillan Reference USA, 2005. http://link.galegroup.com/apps/doc/CX3424502695/GVRL?u=unc_main&sid=GVRL&xid=a60a328f.
- Hickethier, Knut. "Das Theater im Bundesrepublik in den fünfziger Jahren." In *Die Kultur der fünfziger Jahre*, edited by Werner Faulstich, 35–52. München: Fink, 2002.
- Hijiya, James A. "The 'Gita' of J. Robert Oppenheimer." *Proceedings of the American Philosophical Society* 144, no. 2 (2000): 123–67.
- Hirsch, Emil, and et al. "SOLOMON." *The Jewish Encyclopedia: A Descriptive Record of the History, Religion, Literature, and Customs of the Jewish People from the Earliest Times to the Present Day.* New York: Funk & Wagnalls, 1906. http://www.jewishencyclopedia.com/articles/13842-solomon.
- Hochhuth, Rolf. Soldaten. Nekrolog auf Genf. Reinbek bei Hamburg: Rowohlt, 1979.
- Höefele, Andreas. "The Rebirth of Tragedy, or No Time for Shakespeare (Germany, 1940)." *Renaissance Drama; Evanston, Ill.* 38 (2010): 251–68.
- Horkheimer, Max, and Theodor W. Adorno. *Dialektik Der Aufklärung: Philosophische Fragmente*. Frankfurt/Main: Fischer, 2011.
- Hye, Allen E. *The Moral Dilemma of the Scientist in Modern Drama: The Inmost Force*. Lewiston, N.Y.: Edwin Mellen Press, 1996.
- Jahnn, Hans Henny. *Die Trümmer des Gewissens. Der staubige Regenbogen*. Edited by Walter Muschg. Frankfurt/Main: Europäische Verlagsanstalt, 1961.
- Jameson, Fredric. "Postmodernism, or the Cultural Logic of Late Capitalism." *New Left Review*, no. 146 (July 1, 1984): 53–92.
- "Job 1 Parallel Chapters." Accessed July 3, 2018. http://biblehub.com/job/1.htm.
- Jonas, Hans. Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation. Frankfurt/Main: Insel, 1982.
- Jungk, Robert. *Brighter than a Thousand Suns; a Personal History of the Atomic Scientists*. Translated by James Cleugh. [1st American ed.]. Harcourt Brace, 1958.
- Jurgensen, Manfred. Max Frisch. Die Dramen. Bern: Lukianos-Verlag Hans Erpf, 1968.

- Kaiser, Joachim. "Die Welt als Irrenhaus." *Theater Heute* 3, no. 4 (April 1962): 5–6.
- Kannapin, Detlef. "Vom 'Volksrecht' zum 'Staatsrecht'. Rechtsauffassungen im frühren DEFA-Spielfilm 1946 bis 1955." In *Inszenierungen des Rechts: Schauprozesse, Medienprozesse und Prozessfilme in der DDR*, edited by Klaus Marxen and Annette Weinke, 141–50. Berlin: BWV, Berliner Wiss.-Verl., 2006.
- Kant, Immanuel. "Fundamental Principles of the Metaphysics of Morals." In *Basic Writings of Kant*, edited by Allen W. Wood, translated by F. Max Muller and Thomas K. Abbott, Modern Library edition., 143–221. New York: Modern Library, 2001.
- ——. "Idea for a Universal History with Cosmopolitan Intent." In *Basic Writings of Kant*, edited by Allen W. Wood, translated by F. Max Muller and Thomas K. Abbott, Modern Library edition., 117–32. New York: Modern Library, 2001.
- Keel, Daniel, ed. *Über Friedrich Dürrenmatt*. 3rd ed. Vol. 30. 30 vols. Werkausgabe in dreißig Bänder. Zürich: Diogenes, 1986.
- Keinking, K. F. ""Der Phantast"." *Die Zeit*. December 16, 1948, sec. Politik. https://www.zeit.de/1948/51/der-phantast.
- Keller, Peter Michael. *Cabaret Cornichon. Geschichte einer nationalen Bühne*. Theater Helveticum 12. Zurich: Chronos, 2011.
- Kipphardt, Heinar. In der Sache J. Robert Oppenheimer. Frankfurt/Main: Suhrkamp, 1964.
- Knapp, Gerhard. Friedrich Dürrenmatt. Vol. 196. Realien zur Literatur. Stuttgart & Weimar, 1993.
- Kubrick, Stanley. *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb.* Comedy, 1964.
- Kurscheid, Raimund. Kampf dem Atomtod! Schriftsteller im Kampf gegen eine deutsche Atombewaffnung. Hochschulschriften Gesellschafts- und Naturwissenschaften 84. Cologne: Pahl-Rugenstein, 1981.
- Lange, Thomas. "China als Metapher: Versuch über das Chinabild des deutschen Romans im 20. Jahrhundert." *Zeitschrift fur Kulturaustausch* 3 (1986): 341–49.
- Langenbeck, Curt. Heimkehr: tragödie. München: K. Desch.
- ——. Wiedergeburt des Dramas aus dem Geist der Zeit, eine Rede. A. Langen, G. Müller, 1940.
- Langenbeck, Kurt. Der Phantast: Schauspiel in drei Akten. München: Verlag Kurt Desch.
- Lewalter, Christian. "Gründgens begann mit Schiller und Zuckmayer." *Die Zeit*. September 8, 1955, 36/1955 edition, sec. Hamburger Präluden.

- Lumet, Sidney. Fail-Safe. Drama, Thriller, 1964.
- Mandelkov, Robert. "Der 'restaurierte' Goethe: Klassikerrezeption in Westdeutschland nach 1945 und ihre Vorgeschichte seit 1870." In *Modernisierung im Wiederaufbau : die westdeutsche Gesellschaft der 50er Jahre*, edited by Axel Schildt and Arnold Sywottek, 541–50. Bonn: J.H.W. Dietz, 1993.
- Marcuse, Herbert. "The Affirmative Character of Culture." In *Negations: Essays in Critical Thinking*, translated by Jeremy Shapiro, 65–98. London: MayFly, 2009.
- "Matthew 22 NIV." Accessed March 13, 2016. http://biblehub.com/niv/matthew/22.htm.
- Mayer, Hans. "Dürrenmatt und Brecht oder die Zurücknahme." In *Über Friedrich Dürrenmatt*, edited by Daniel Keel, 54–79. Friedrich Dürrenmatt, Werkausgabe in dreißig Bänden 30. Zurich: Diogenes, 1986.
- Mennemeier, Franz. *Modernes deutsches Drama : Kritik und Interpretation*. 3., verb. Und erw. Aufl. Vol. 2: 1933 bis 1970er Jahre. 2 vols. Berlin: Weidler, 2005.
- Mews, Siegfried. Carl Zuckmayer. Twayne's World Authors 610. Boston: Twayne, 1981.
- Michael, Friedrich, and Hans Daiber. *Geschichte Des Deutschen Theaters*. 1. Aufl. Frankfurt am Maim: Suhrkamp, 1990.
- Moss, Norman. Klaus Fuchs: The Man Who Stole the Atom Bomb. London: Grafton, 1989.
- Mueller, Harald. "Totenfloss." Theater heute, 1986.
- Müller, Klaus-Detlef. "Brechts Leben des Galilei und die Folgen Physiker als Gegenstand literarischer Phantasie." In *»Scientia poetica«: Literatur und Naturwissenschaft*, edited by Norbert Elsner and Werner Frick, 379–402. Göttingen: Wallstein, 2004.
- Müller, Paul. *Atombombe odder D' Dame han s' Kommando Schwank in e. Akt.* Mulhouse: Editions Salvator, 1950.
- Naumann, Uwe, Nicolai | Riedel, and Michael Töteberg. *In Der Sache Heinar Kipphardt*. Marbach am Neckar: Deutsche Schillergesellschaft, 1992.
- O'Connor, Jacqueline. *Documentary Trial Plays in Contemporary American Theater*. Carbondale and Edwardsville: Southern Illinois University Press, 2013.
- Rehfisch, Hans J. Jenseits der Angst: Schauspiel in drei Akten. Wien [u.a.]: Sessler, 1960.
- Ridder, Klaus. "Der Gelehrte als Narr: Das Lachen über die artes und Wissen im Fastnachtspiel." In *Artes im Mittelalter*, edited by Ursula Schaefer and Mediävistenverband, 391–409. Berlin: Akademie Verlag, 1999.

- Rischbieter, Henning. "Theater." In *Die Geschichte der Bundesrepublik Deutschland*, edited by Wolfgang Benz, Aktualisierte und erw. Neuausg., 4, Kultur:86–130. Frankfurt am Main: Fischer Taschenbuch Verlag, 1989.
- Rotter, Andrew. *Hiroshima: The World's Bomb*. Oxford; New York: Oxford University Press, 2008.
- Rubinstein, Hilde. *Tiefgefrorenes Reh: Stücke, Lyrik, Prosa.* 1. Aufl. Dialog. Berlin: Henschelverlag, 1987.
- Rühle, Günther. Zeit Und Theater: Diktatur Und Exil 1933 1945. Vol. 3. 3 vols. Berlin: Propyläen Verlag, 1972.
- Runge, Gertrud. "Bikini." Die Zeit. January 22, 1948. http://www.zeit.de/1948/04/bikini.
- Ryan, Terri Jo. "Brazos Past: Strange Case of Atomic Bomb, Veteran, Waco." *Waco Tribune-Herald*. August 4, 2012. http://www.wacotrib.com/news/waco_history/brazos-past-strange-case-of-atomic-bomb-veteran-waco/article_6ca62384-c473-5ce7-95c5-6374c4675c27.html.
- Scarry, Elaine. *Thermonuclear Monarchy: Choosing Between Democracy and Doom.* First Edition edition. New York: W. W. Norton & Company, 2014.
- Schmidt, Arno. *Die Gelehrtenrepublik: Kurzroman aus den Rossbreiten*. Karlsruhe: Stahlberg, 1957.
- Schneider, Rolf. "Prozess Richard Waverly." In Hörspiele 2, edited by Staatliche Rundfunkkomitee der Deutschen Demokratischen Republik. Berlin: Henschel, 1962.
 ———. "Prozeß Richard Waverly." In Stücke, 47–106. Berlin: Henschel, 1970.
 ———. Prozess Richard Waverly: sieben Szenen. Berlin: Henschelverl. Kunst und Ges., 1963.
 ———. Schonzeiten: ein Leben in Deutschland. Berlin: be.bra, 2013.
- Schneider-Lengyel, Ilse. "Hier Welle Nullpunkt. Achtung Stickstoff. Ein Atomdrama." Photocopied Manuscript. S.l., Unknown Date. Bayrische Staatsbibliothek.
- Shchyhlevska, Natalia. "'Der Abruf ist unterwegs, hat nur eine kleine Verspätung'. Todesnähe in Alfred Gongs Gedichtband Gnadenfrist." *Oxford German Studies* 44, no. I (March 2015): 85–99. https://doi.org/10.1179/0078719114Z.00000000077.
- ——. "Komik der Realität im Drama Zetdam von Alfred Gong." In *Witz und Wirklichkeit Komik als Form ästhetischer Weltaneignung*, edited by Carsten Jakobi and Christine Waldschmidt, 407–28. Bielefeld: transcript, 2015.
- Staatliche Rundfunkkomitee der Deutschen Demokratischen Republik, ed. *Hörspiele* 2. Berlin: Henschel, 1962.

- Stock, Adolf, and Heinar Kipphardt. *Heinar Kipphardt: Mit Selbstzeugnissen Und Bilddokumenten*. Reinbek bei Hamburg: Rowohlt, 1987.
- Stölken-Fitschen, Ilona. *Atombombe und Geistesgeschichte. Eine Studie der fünfziger Jahre aus deutscher Sicht.* Nomos Universitätsschriften Kulturwissenschaft 3. Baden-Baden: Nomos, 1995.
- ———. Atombombe und Geistesgeschichte: eine Studie der fünfziger Jahre aus deutscher Sicht. Nomos, 1995.
- Szondi, Peter. Theorie des modernen Dramas (1880 1950). Frankfurt/Main: Suhrkamp, 1963.
- Talbot, Joanne Hines. "The Theme of 'the Scientist's Responsibility in the Nuclear Age' in Contemporary German Drama." Diss., Boston University, 1968.
- TAUBMAN, HOWARD. "The Theater: Durrenmatt's 'Physicists': Play About Atomic Era Opens at Martin Beck." *New York Times*. 1964.
- "THEATER / ZUCKMAYER: Der Fröhliche Wanderer." Der Spiegel, September 7, 1955.
- "Theater: Bikini hinterm Bullauge." Der Spiegel, March 1948.
- "Theater: Max Frisch Schlägt Alarm DER SPIEGEL 48/1948." Accessed September 22, 2016. http://www.spiegel.de/spiegel/print/d-44419782.html.
- Trinks, Ralf. "Schuldlos schuldbeladen': Entlastungsstrategien und Schuldbekenntnis in der frühen Nachkriegsdramatik." In *Schuld und Sühne? : Kriegserlebnis und Kriegsdeutung in deutschen Medien der Nachkriegszeit (1945-1961) : internationale Konferenz vom 01.-04.09.1999 in Berlin*, edited by Ursula Heukenkamp, 215–26. Amsterdamer Beiträge zur neueren Germanistik 50. Amsterdam; Atlanta, GA: Rodopi, 2001. https://find.library.duke.edu/catalog/DUKE003073554.
- Uecker, Matthias. "Aufrufe, Bekenntnisse, Analysen: Zur Politisierung der Westdeutschen Literatur in den sechziger Jahren." In *Counter-Cultures in Germany and Central Europe: From Sturm und Drang to Baader-Meinhof*, edited by Steve Giles and Maike Oergel, 273–93. Bern: Lang, 2003.
- Uekötter, Frank. The Greenest Nation?: A New History of German Environmentalism, 2017.
- Vietta, Egon. Katastrophe Oder Wende Des Deutschen Theaters. Droste-Verlag, 1955.
- Weisenborn, Günther. Göttinger Kantate: Den Aufruf der achtzehn Wissenschaftler und die großen Gefahren unseres Jahrhunderts szenisch darstellend, als öffentliche Warnung niedergeschrieben. Berlin: arani, 1984.
- Weiss, Peter. Diskurs über die Vorgeschichte und den Verlauf des lang andauernden Befreiungskrieges in Viet Nam als Beispiel für die Notwendigkeit des bewaffneten Kampfes der Unterdrückten gegen ihre Unterdrücker sowie über die Versuche der

- *Vereinigten Staaten von Amerika die Grundlagen der Revolution zu vernichten.* Frankfurt/Main: Suhrkamp, 1968.
- Wessel, Oskar. "Hiroshima." In *Sechzehn deutsche Hörspiele*, edited by Hansjörg Schmitthenner, 219–34. München: R. Piper, 1962.
- Weyrauch, Wolfgang. "Die japanischen Fischer." In *Das grüne Zelt. Die japanischen Fischer. Zwei Hörspiele*, 33–64. Stuttgart: Reclam, 1974.
- Wigoder, Geoffrey. "Solomon." *The New Standard Jewish Encyclopedia*. New York: Facts on File, 1992.
- Woodfield, Jack. "Surviving the Holocaust with Type 1 Diabetes: The Story of Ernest Sterzer." *Diabetes Blog* (blog), March 26, 2015. https://www.diabetes.co.uk/blog/2015/03/surviving-the-holocaust-with-type-one-diabetes-the-story-of-ernest-sterzer/.
- Wrage, Henning. "Der Staatsanwalt hatte das Wort. Zur Repräsentation des Gerichts im Fernsehen der DDR." In *Inszenierungen des Rechts: Schauprozesse, Medienprozesse und Prozessfilme in der DDR*, edited by Klaus Marxen and Annette Weinke, 175–208. Berlin: BWV, Berliner Wiss.-Verl., 2006.
- Wunderlich, Uli. *Der Tanz in den Tod: Totentänze vom Mittelalter bis zur Gegenwart*. Freiburg i. Brsg.: Eulen, 2001.
- Wyler, Paul Edward. "Der 'Neue Mensch' im Drama des deutschen Expressionismus." Dissertation, Standford, 1943.
- Yarrow, Ralph. *European Theatre*, 1960-1990: Cross-Cultural Perspectives. London; New York: Routledge, 1992.
- ZEIT (Archiv), D. I. E. "Dürrenmatts Farce vom Weltuntergang." *Die Zeit*. November 21, 2012, sec. Kultur. https://www.zeit.de/1962/09/duerrenmatts-farce-vom-weltuntergang/komplettansicht.
- Ziskoven, Wilhelm. "Max Frisch." In *Zur Interpretation des modernen Dramas. Brecht Dürrenmatt, Frisch*, edited by Therese Poser and Rolf Geißler. Frankfurt/Main, Berlin, Munich: Diesterweg, 1970.
- Zuckmayer, Carl. "Das Kalte Licht. Drama in drei Akten." In *Dramen*, IV:351–480. Gesammelte Werke. Fischer, 1960.